

South Africa's chemical and biological
warfare programme 1981 – 1995

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Abstract

In 1981 the apartheid military initiated a chemical and biological warfare (CBW) programme (code-named Project Coast). The programme, terminated in 1993, was aimed at developing novel irritating and incapacitating agents for internal and external use, covert assassination weapons for use against apartheid opponents, and defensive equipment for use by South African Defence Force (SADF) troops in Angola.

The CBW programme was driven by a single individual, Dr Wouter Basson, who reported to a military management committee (the Co-ordinating Management Committee) which comprised a select group of high ranking officers. Practical and financial oversight of the programme was weak which allowed both for the abuse of programme funds and for senior military officers to deny knowledge of aspects of the programme. The biological component of Project Coast was conducted in violation of the commitments of the South African government to the Biological and Toxins Weapons Convention (BTWC). While the state's commitment to the BTWC was one of the factors considered when initiating the programme, it was not a sufficient constraint to prevent the development of the biological weapons programme, but rather influenced its structure such that the programme could avoid national and international detection.

Despite efforts to conceal the military front companies where the chemical and biological warfare (CBW) research and development was undertaken, evidence presented in this thesis shows that the United States had sufficient information about the programme to have been aware of its existence. Yet, it was only in 1993, on the eve of the democratic election in South Africa, that any attempt was made by the US administration to pressure the government to terminate the programme.

This thesis considers the factors which influenced the decision to develop Project Coast; the structure and nature of the programme; the motivations of scientists to become involved in the programme and remain involved; the use of chemical and biological agents against opponents of the state, and the factors which influenced the termination of the programme on the eve of the first democratic elections in 1994. It also considers the nature and extent of international support, both tacit and overt, for the programme and argues that the failure of Western nations to call for the termination of the programme before the early 1990s was a function of political expediency and indicates a significant weakness in the ability of international agreements to constrain the development of such programmes.

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Acronyms

ANC	African National Congress
BWC	Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and their Destruction (commonly known as the Biological and Toxins Weapons Convention)
BW	Biological warfare
BZ	α -hydroxy- α -phenylbenzeneacetic acid, 1-azabicyclo[2.2.2]oct-3-yl ester, 3-quinuclidinyl benzilate. An incapacitating agent,
CBDE	Chemical and Biological Defence Establishment, UK.
CBM	Confidence Building Measure
CBW	Chemical and biological warfare
CCB	Civil Co-operation Bureau
CDC	Centre for Disease Control, US
CDU	Chemical Defence Unit (of the Council for Scientific and Industrial Research)
CEO	Chief Executive Officer
CIA	Central Intelligence Agency, United States
CIO	Central Intelligence Organisation, Rhodesia
CMC	Co-ordinating Management Committee
CODESA	Convention for a Democratic South Africa
CR	dibenz(b,f)-1,4-oxazepine (teargas)
CS	O-Chlorobenzylidene Malononitrile (teargas)

CSIR	Council for Scientific and Industrial Research
CW	Chemical warfare
CWC	Convention on the Prohibition of the Development, Production and Stockpiling of Chemical Weapons and their Destruction (commonly known as the Chemical Weapons Convention)
EMLC	Afrikaans acronym: Electronies, Meganies, Landbou and Chemies (Electronics, Mechanical, Agricultural, Chemical)
FAPLA	Military wing of the Popular Movement for the Liberation of Angola (MPLA)
FBI	Federal Bureau of Investigation, US
FRELIMO	Frente de Libertação de Moçambique (Front for the Liberation of Mozambique)
FXI	Freedom of Expression Institute
IAEA	International Atomic Energy Agency
MDMA	N,alpha-Dimethyl-1,3-benzodioxole-5-ethanamine (3,4-methylenedioxymethamphetamine) or Ecstasy.
MI	Military Intelligence
MPLA	Popular Movement for the Liberation of Angola
MRC	Medical Research Council
NBC	Nuclear, Biological, Chemical
NIA	National Intelligence Agency
NIZA	Netherlands Instituut voor Zuidelijk Afrika
NP	National Party
NSMS	National Security Management System
OSEO	Office for Serious Economic Offences
PAC	Pan African Congress

PLAN	People's Liberation Army of Namibia
RRL	Roodeplaat Research Laboratories
SADF	South African Defence Force
SAHA	South African History Archive
SAMS	South African Medical Services
SANDF	South African National Defence Force (after April 1994)
SAP	South African Police
SAPS	South African Police Service (after 1994)
SIPRI	Stockholm International Peace Research Institute
SIU	Special Investigation Unit
SRD	Systems Research and Development
SSC	State Security Council
SWAPO	South West African People's Organisation
TRC	Truth and Reconciliation Commission
UDF	United Democratic front
UN	United Nations
UNIDIR	United Nations Institute for Disarmament Research
UNITA	National Union for the Total Independence of Angola
USA	United States of America
USMMIIA	United States Military Medical Intelligence and Information Agency
VNOR	Armscor's Defence and Research Council
WHO	World Health Organisation
ZANLA	Zimbabwe African National Liberation Army

ZANU	Zimbabwe African National Union
ZAPU	Zimbabwe African People's Union
ZIPRA	Zimbabwe African People's Revolutionary Army

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CHAPTER 1

Introduction

In 1997 I was an investigator for the Truth and Reconciliation Commission (TRC) based in the Western Cape. Most of the files which filled my desk and fuelled my nightmares contained tales of horror visited upon black families in the Western Cape. Children who had disappeared without a trace, bodies burnt beyond recognition, torture at the hands of the infamous police Security Branch and the mysterious assassination of activists by their comrades. It was not until I happened upon the unusual amnesty application of Dr Jan Lourens, towards the end of 1997, that I became aware that the apartheid government had dabbled in chemical and biological weapons.

Lourens, a scientist who applied for amnesty for his role in the development of assassination weapons for the chemical and biological warfare (CBW) programme, provided the first insight into the workings of this programme. From the start his story was as much about the functioning of a secret military programme as it was about self-enrichment, extravagant international travel, nepotism and betrayal. The making of Project Coast could not be separated from the close relationships between the young men who drove it.

Lourens is a sophisticated, intelligent man and his motives in appearing before the TRC were self-serving and cynical as much as they were about seeking absolution. He knew that the secrets of Project Coast would not remain hidden forever. He also knew that if the details of the programme and his involvement in it were to be revealed, and he were to be implicated in the development of poison "applicators", as he liked to call the assassination devices he designed, it would be impossible for him to work in a post-1994 South Africa. In addition, he would have had to live with the fear of exposure, which may have been followed by charges for his role in crimes which he believed had been carried out under the auspices of the secret CBW programme.

Many of the policemen who applied for amnesty to the TRC, and the handful of military operators who knew that the TRC would uncover their involvement in internal operations, chose their legal representatives from a small group of sympathetic, handpicked lawyers who profited handsomely from the process. Lourens broke the mould, cleverly choosing well-known and respected anti-apartheid lawyer, Brian Currin, whose credentials and easy manner impressed the investigators and allowed them to develop sympathy for Lourens.

Lourens's comprehensive explanation of the way in which the chemical and biological warfare programme had been established and organised, provided sufficient detail for the investigators to begin unravelling the strands of the programme. Most importantly, he provided the names of his former colleagues and accomplices and described their role in the programme.

Over the following six years (1998 – 2003) I conducted interviews with many of the scientists who had worked within the project, military managers who had served on the borders of the project and those who had found it repugnant. Through senior court reporter Marlène Burger's lengthy daily reports about the criminal trial of Dr Wouter Basson, I examined the details of Project Coast which emerged. Each witness at the trial and every person interviewed, provided an insight into his or her life in Project Coast. The compartmentalized nature of the programme meant that few knew its full extent. These snapshots combined to present the view of a top secret military project which was poorly managed, achieved dubious goals and allowed its leader, Wouter Basson, an inordinate amount of freedom. None of the military leaders who were interviewed, nor the Surgeon General who was structurally responsible for the overall conduct of the programme, knew much about the details of the programme. Not even the successive heads of the Defence Force who were interviewed were able to provide a convincing explanation for the reason the programme was established and why it had focussed on the small-scale production of bizarre assassination weapons, large amounts of tear gas and street drugs.

Aim of the thesis

This thesis presents detailed information about the South African chemical and biological warfare programme which was established in 1981 and finally closed down in 1995. The thesis aims to:

- Provide a detailed description of the nature and structure of the programme.
- Analyse the political context in which the programme was initiated and which influenced the nature of the products of the programme.
- Analyse the motivations of the political and military leaders who authorized and managed the programme.
- Consider the significance of the role of Dr Wouter Basson in determining the nature and extent of the programme, and its structure.
- Consider the motivations of the scientists who worked at the front companies which conducted the scientific research and development of the programme.
- Present an analysis of the involvement of other countries in the chemical and biological warfare programme, and its closure.
- Consider the reasons for, and the way in which, the programme was terminated.
- Analyse the lessons which can be learnt about how and why countries seek to proliferate.

Increasing our ability to understand the factors which influence states to make the

decision to develop chemical and biological weapons programmes will allow for the identification of appropriate measures to detect and deter their existence.

In Chapter 2 I examine the experience South Africa gained through the production of chemical warfare agents for the Allies during World War II; present information about the use of chemical and biological warfare agents during the liberation struggle in Rhodesia in the late 1970s and early 1980s; and, examine whether there were links between the use of chemical and biological agents in Rhodesia and the South African CBW programme. I analyse the changing political situation in South and southern Africa in the 1970s and 1980s and the rise of the military under the leadership of PW Botha in order to assess the motivation for the establishment of Project Coast.

Chapter 3 describes the establishment of Project Coast and the significant role that Dr Wouter Basson played in determining the nature and structure of the programme. In this chapter I examine the stated objectives of Project Coast and argue that the programme both failed to meet its objectives and, indeed, was cynically designed in order to fulfil the objectives of the individuals who were involved in the programme. Here I consider the structure and management of Project Coast and present reasons for the apparent failure of oversight over the programme.

In Chapter 4 I consider the operation of Project Coast, the nature and functioning of the front companies and the relationship between the three primary front companies of the programme and the plethora of private companies that were established to support it. I consider the use of chemical and biological warfare weapons by the police and military and the unusually close relationship between this military project and certain members of the police force.

In Chapter 5 the role which was played by other countries is examined and evidence presented to suggest that at least the United States had adequate information to have been able to detect the programme, yet failed to pressure the South African government to terminate the programme until it was clear that there was to be a transition to democracy.

Chapter 6 provides information about the functioning and closure of the programme in the early 1990s. In this chapter I discuss the changing political context in the 1990s and the role of President FW De Klerk in the closure of the programme. I consider the haste with which the programme was closed down and the way in which a few individuals benefited financially from the closure. In this chapter the implications of the inadequate oversight over the closure of the companies are examined.

Chapter 7 provides information about the TRC investigation and hearing and the trial of Wouter Basson which followed a year later.

Finally, in Chapter 8 I draw conclusions about the factors which played a role in the establishment and development of the programme, what motivated scientists to become involved and remain involved, and discuss the lessons which can be learned for disarmament.

Assessment of sources

In 1997 the Project Officer of Coast, Dr Wouter Basson, was arrested by the narcotics division of the South African Police Service (SAPS) on suspicion of dealing in the street drug Ecstasy (MDMA). Shortly after his arrest, trunks containing Project Coast documents were found at the home of one of his associates. These documents were seized by the National Intelligence Agency (NIA) and made available to the TRC, the office of the Attorney General and the Office for Serious Economic Offences (OESO). All three institutions pursued investigations into the activities of the Project and Basson.

The TRC investigation, which began in January 1998, resulted in a public hearing in June that year. The TRC heard testimony from scientists who worked at the front companies, from the managing directors of these companies, from the Project Officer, and from the Project Manager, General Daniel Knobel, who was the SADF Surgeon General from 1988 – November 1997. This testimony, together with formerly top secret military documents made available to the TRC by Knobel and documents found in the trunks, were made public during the hearing. The documents which number 144, have been summarised in a relational database. Many have been

translated from their original Afrikaans into English and are available on the internet.¹

The documents fall into the following categories:

- Minutes of meetings (of the Co-ordinating Management Committee and directorates of the front companies).
- Reports to senior political leaders, including the president, about Project Coast.
- Correspondence.
- Technical research and production reports from the front companies, Roodeplaat Research Laboratories (RRL) and Delta G Scientific.

The minutes of CMC meetings are short on detail and clearly only recorded decisions and discussion that the members believed was essential to demonstrate that they retained sufficient financial control over the programme. While these minutes are not an accurate or detailed record of CMC meetings they are an important record of what the CMC wished to record about the functioning of the body. The reports to senior political leaders about Project Coast are authored by Wouter Basson and varied only slightly, albeit significantly, in content over the years. These reports include the basis for a briefing on Project Coast for President FW De Klerk (1990), the Minister of Defence (1993), and President Nelson Mandela (1994). The documents offer an insight into the factors, presented by Basson to military leaders, in support of the argument that a CBW programme was necessary for South Africa's defence in the late 1970s and early 1980s. The language used in these, and other reports and correspondence, is often vague and in some cases ambiguous. The consistency of this tendency towards obscuring details in all the military documents indicates the likelihood that this was the intention of the author(s), to allow both author and recipient of the document to plausibly deny aspects of the programme were they to be revealed.

¹ The documents can be found on the website of the International Security Network, Zurich, Switzerland, http://www.isn.ethz.ch/infoservice/secwatch/za_cbw/

The technical research reports from RRL and Delta G Scientific provide insight into the search for incapacitating and irritating agents, the obsession of scientists at RRL with finding chemical or biological agents which could be administered covertly and which would be untraceable *post mortem*. The collection of these reports, which have been made public, is incomplete, but together they provide a strong indication of the direction of research undertaken at the front companies. In addition, the reports are supplemented by lists of research projects at RRL during 1985 and 1986.

The documents described above provided the basis for the collection of additional information and oral testimonies through interviews with the scientists and others associated with the programme. Over 50 interviews were conducted between 1997 and 2003. All interviews were recorded and the notes from these discussions returned to the interviewees for verification. The notes from all interviews referred to in this text were verified by the interviewees and form part of the research record. Most interviews were conducted in face-to-face meetings, but some were conducted via e-mail or telephonically. Many of the scientists who were willing to speak about their experiences in Project Coast were interviewed repeatedly over a 5-year period. While it became clear that their recollections were tainted by the desire to present themselves in a particular light, through cross checking the information provided by one individual with that provided by others and referring back to the documents, it was possible to determine an accurate picture of the activities which took place in the front companies, the nature of the relationships between scientists, and between the scientists and Basson. Additional documents were made available by the scientists. I have maintained a personal archive of all documents collected during the research for this thesis. A copy of this collection is held by the South African History Archive (SAHA) at the University of the Witwatersrand.

The criminal case against Dr Wouter Basson began in the Pretoria High Court in October 1999. It was concluded on 11 April 2002 when Judge Hartzenberg found Basson not guilty of any of the charges against him. Evidence presented at the trial was an additional source of information. The trial was monitored on a daily basis by Marlene Burger who made reports of the testimony available to me. These reports formed the basis for weekly summaries of the trial which were widely distributed via the internet. The unpublished daily reports form part of the record of this research. In addition, the record of the trial includes a detailed forensic audit of the programme

and financial and military reports which were analysed and copies of which are both in my own collection and held by the SAHA at the University of the Witwatersrand.

Review of literature

South Africa's chemical and biological warfare programme

In 1975 James Finan submitted his thesis for a doctorate at the University of London² in which he examined the strategic possibilities for South Africa with regard to the use of chemical and biological weapons through a detailed examination of the qualities of known chemical and biological agents and the effect of these agents under different battle circumstances. He drew particular attention to the potentially high political cost to any chemical or biological weapons user. He argued that:

International opprobrium would probably be severe if such armaments were dispersed without due regard for the antipathy which most of the international community holds towards chemical and biological weapons. Given [these] constraints, it is likely that chemical and biological armaments could be effective in disruptive strategies as a military option only if there was reasonable assurance that such activity would not attract undue international attention or if the use of chemical and biological weapons promised to deliver very rapid victory.³

Finan argued that South Africa may have continued the production of chemical warfare agents after World War II. He based his assessment on the fact that South Africa had produced mustard gas during the Second World War and, therefore, had both the facilities and technical knowledge to continue its production. He wrote to South African government officials in an attempt to obtain answers about its chemical warfare production and received a refusal to provide any information. He concluded that,

[W]hile the evidence collected is circumstantial, it is reasonable to conclude that unwillingness to discuss the issue of chemical weapons production and use strongly suggests that South Africa has plans to

² J.S. Finan, "Chemical and Biological Weapons: Their Potential for Nations Outside the Principal Alliances, With Special Reference to the Possibilities Open to the Republic of South Africa Over the Next Ten Years", PhD Thesis, University of London, 1975.

³ *Ibid.*, p46.

disperse these agents in certain contingencies and therefore has produced and stockpiled the agents necessary.⁴

The evidence collected during the course of my own investigations and research suggests that while South Africa may indeed at that time have been considering the possibility of developing a chemical warfare capability, no production or stockpiling of agents (other than tear gas) had taken place until the mid-1980s. Finan was unequivocal in his view that there was no similar basis on which to conclude that South Africa was producing biological warfare agents: “[T]here is no evidence to suggest that the Republic is engaged in the production of biological weapons for military use. Moreover, the acceptance of South Africa of the Geneva Convention prohibiting the use of biological weapons suggests that South Africa is not engaged in such work.”⁵

One of the earliest published references to South Africa’s interest in chemical and biological warfare was made in 1989 when the Stockholm International Peace Research Institute (SIPRI) reported incidents suggesting that South Africa may have developed a military chemical and biological capability. While the author fell short of stating that a CBW capacity actually existed, he analysed the South African evidence and concluded:

Although fiction heavily outweighs the facts of the case... in the psychological climate in southern Africa, reflecting a growing polarization between black and white, there is apparently no limit as to what the South African regime is expected to do in order to preserve white supremacy.⁶

By the time this was written the CBW programme in South Africa had been in existence for six years. Accurate about the programme, SIPRI also identified the motivation underpinning it – anything that would prop up the South African government of the day.

⁴ Ibid., p149.

⁵ Ibid., p152.

⁶ S. Landgren, Embargo Disimplemented: South Africa’s Military Industry, Chapter 11: “The CBW Industry”, Oxford, Oxford University Press, 1989, p151

Before Basson's arrest in 1997, little detail was known publicly about the chemical and biological warfare programme either in South Africa or abroad. Investigative journalists had exposed the existence of the programme and details pertaining to the privatisation of its front companies which did the work of the project. However, little was known about the nature of the work undertaken by the programme, its intentions or products. The public hearing of the TRC in 1998 into the chemical and biological warfare programme not only resulted in extensive press coverage about the nature of the programme, but placed many of the formerly top secret military documents about the programme in the public domain. This opened the way for a detailed examination of Project Coast.

Between 2000 and 2004 I authored and co-authored several publications about the South African chemical and biological warfare programme.⁷ In 2002 the United Nations Institute for Disarmament Research (UNIDIR) published a monograph co-authored by Professor Peter Folb and myself which provided details about the nature of the South African chemical and biological warfare programme, examined the motivations behind its establishment and described the products of the 12-year programme. This was followed by the publication of Secrets and Lies: Wouter Basson and South Africa's chemical and biological warfare programme, co-authored by myself and journalist Marlene Burger. In this text Burger and I relate the stories which emerged during the testimony of witnesses at Basson's criminal trial. The commercially published book was intended to provide the public with insight into the

⁷ C. Gould and P. Folb, "The South African Chemical and Biological Warfare Program: An Overview", The Nonproliferation Review, 7 (3), Fall-Winter 2000, pp10 – 23. C. Gould, "More Questions than Answers: a Review of the Trial of Dr. Wouter Basson", Disarmament Diplomacy, No 52, November 2000. C. Gould (ed), "Chemical and Biological Warfare, Non-Proliferation and the Ethics of Science", Track Two, Vol 10, No 3, Centre for Conflict Resolution, December 2001. C. Gould and P. Folb, "The Role of Professionals in the South African Chemical and Biological Warfare Programme", Minerva, Number 40, Netherlands, Kluwer Academic Publishers, 2002, pp 77 – 91. C. Gould, "Controversial Trial Examines South African CBW Activities", BASIC Reports, Number 81, British American Security Information Council, May 2002. C. Gould and P. Folb, Project Coast: Apartheid's Chemical and Biological Warfare Programme, Geneva, United Nations Institute for Disarmament Research, 2002. C. Gould and M. Burger, Secrets and Lies: Wouter Basson and South Africa's Chemical and Biological Warfare Programme, Cape Town, Zebra Press, 2002. C. Gould, "South Africa's Biological Warfare Programme: Lessons for Disarmament." Presentation at the British Science and Society Trust meeting at the BA Festival of Science, Salford University, 9 September 2003.

programme as exposed during the trial. Both texts show that the chemical and biological warfare programme was initiated in response to an increased sense of threat in South Africa and the region, and argue that the programme was focused on providing the military with covert assassination weapons and crowd control agents, and did not seek to produce or develop weapons for large-scale conventional use. Folb and I argued that the programme, while well resourced, was unsophisticated and the science pedestrian. In this analysis we differed with American military researchers Stephen Burgess and Helen Purkitt.

Burgess and Purkitt⁸ ascribe the establishment of the biological warfare component of Project Coast to the isolation of the apartheid state and the changing threat perceptions in the southern African region in the late 1970s and early 1980s. Their paper describes the programme as “sophisticated” and “secretive”, open to little outside scrutiny. They identify the BW programme as aimed at developing “[E]xotic means to neutralise domestic opponents”.⁹ In asserting that the programme was sophisticated they distinguish their own analysis from those analyses which have claimed that the programme was of little scientific value, a view held by the TRC and myself. Burgess and Purkitt provide little evidence that the programme was sophisticated. Indeed much of the information on which they base this assessment has subsequently been found to be unreliable, particularly the work of BCC journalist, Tom Mangold whose book Plague Wars provides a skewed and inaccurate picture of Project Coast.¹⁰

Burgess and Purkitt intended to determine the factors which led to the closure of the programme in order to understand better the proliferation dynamic. They ascribe the closure of Coast to four key factors: (i) the extensive financial corruption of the programme’s directors, (ii) the changing threat assessment in southern Africa in the

⁸ S. Burgess and H. Purkitt, “The Rollback of South Africa’s Biological Warfare Programme”, Institute for National Security Studies, Occasional Paper 37, Colorado, US Air Force Academy, February 2001.

⁹ Ibid., p xi.

¹⁰ T. Mangold and G. Goldberg, Plague Wars: A true story of biological warfare, London, Macmillan, 1999.

late 1980s and early 1990s; (iii) PW Botha's fall from power and De Klerk's subsequent attempt to bring the security forces under civilian control, and (iv) the desire of the National Party government to ensure that the CBW programme did not fall into the hands of the ANC when they assumed power.¹¹ I will argue that while these four factors did contribute to the motivation to close the programme, increased sensitivity to international pressure and opinion and the signing of the Chemical Weapons Convention (CWC) also played a role in the decision to terminate Project Coast.

In Plague Wars, Mangold and Goldberg provide an overview of the Japanese, Rhodesian, Soviet, South African and Iraqi CBW programmes. While the information presented about the Soviet and Iraqi programmes may be accurate, Mangold and Goldberg made numerous errors with regard to the South African programme. For example, they claim Project Coast scientists worked on "Hepatitis A, HIV, and the terrible Ebola and Marburg viruses."¹² This is not correct. There were no scientists at RRL who were sufficiently qualified to undertake research on viruses. All the scientists I interviewed were emphatic that no work was done at RRL on viruses and none of the available documents show research projects of this nature. Other errors include the statement that Project Coast was the "world's second largest offensive biological warfare programme"¹³ whereas both the Soviet and Japanese programmes were significantly larger than the South African one.¹⁴ Mangold and Goldberg also incorrectly record the names of the front companies and the programme itself, indicating that the information presented was inadequately checked. These and other errors disqualify Plague Wars as a reliable source of information.

During 2004 the Nuclear Threat Initiative and the Monterey Institute of International Studies published on the internet a number of papers which provide a detailed

¹¹ Burgess and Purkitt, "The Rollback of South Africa's Biological Warfare Programme".

¹² Mangold and Goldberg, Plague Wars, p255

¹³ Ibid., p242

¹⁴ A. Kouzminov, Biological Espionage: Special Operations of the Soviet and Russian Foreign Intelligence Services in the West, London, Greenhill Books, 2005.

chronology of South Africa's chemical and biological warfare interests and programme. They draw heavily on the published work of Burgess and Purkitt and my own work.¹⁵

Much has been written about the South African nuclear programme. While the nuclear programme differed from the CBW programme both in scale and in terms of its management, it was a product of the same political context. American academic, Peter Liberman¹⁶ notes that

International ostracism of South Africa because of its policy of apartheid certainly exacerbated its insecurity, and isolated states are often prime candidates for nuclear acquisition. But South Africa remained militarily predominant in southern Africa, and Soviet or Soviet-backed aggression was a remote possibility. Moreover, nuclear weapons would have provided only a limited remedy to this threat, even if it had materialized.¹⁷

However, he argues that military insecurity is not a sufficient explanation for the development of a nuclear programme. Liberman asserts that the fact that South Africa already had the technology and expertise necessary to develop civilian nuclear applications facilitated the decision to develop a military programme. In this regard parallels can be drawn with the CBW programme in that there were sufficient scientific expertise and knowledge as well as equipment and raw materials in South Africa already to run such a programme. Another similarity between the programmes is that in both cases the scientists were unclear about the political strategy behind the development of the unconventional weapons, but were motivated by interest in the science which led to their development.

According to the Minister of Defence, Magnus Malan (1980 – 1990), nuclear weapons would not have been used except in retaliation for a chemical or nuclear

¹⁵ The documents can be found at the following URL: http://www.nti.org/e_research/profiles/SAfrica

¹⁶ P. Liberman, "The Rise and Fall of the South African Bomb", *International Security*, Vol 26, No 2, Fall 2001, pp 45 – 86

¹⁷ *Ibid.*, p46

attack on South Africa.¹⁸ However, if nuclear weapons were considered as a retaliatory measure against chemical attack then it negates the need for chemical weapons as a deterrent. As with the CBW programme, the utility of these weapons to meet the internal and regional threats faced by the South African military were limited at best. As Liberman puts it,

South Africa developed a nuclear weapons option while it was very secure, but political intentions and steps towards actually building nuclear weapons followed closely the emergence of new threats. Yet the danger to the SA homeland of invasion or nuclear blackmail remained remote. More pressing was the threat to South Africa's support of Angolan rebels and its long-standing occupation of Namibia...But the utility of nuclear weapons for meeting these threats, even if they had materialized, was borderline considering the diplomatic and security risks as well as the budgetary costs involved.¹⁹

Where the nuclear programme differed markedly from the CBW programme was that top military and political leaders appear to have believed that the nuclear programme would bring increased status and influence. The CBW programme had no such goal and was not perceived as a significant achievement, except by those directly involved, particularly Wouter Basson and the Surgeon General.

With regard to the termination of the nuclear programme Liberman argues that the decision could be attributed more to De Kerk's "anti-nuclear sentiments than to a change in the threat perceptions or any financial benefit that would derive from not spending money on the program."²⁰ The closure of the CBW programme too was partly a result of the liberalizing influence of De Klerk and the effect of the negotiated settlement which led the state to be more susceptible to pressure and sensitive to international conventions.

¹⁸ Ibid., p57.

¹⁹ Ibid., p58.

²⁰ Ibid., pp56 - 57

Other chemical and biological warfare programmes

In 1972 the Biological and Toxins Weapons Convention (BTWC) opened for signature, shortly after the Nixon Administration in the United States announced its intention to bring to an end its offensive biological weapons programme. While the US continued to develop *chemical* weapons thereafter, the BTWC signalled the intention of the West to reduce the threat of the development and use of biological weapons by states. The BTWC went further than the 1925 Geneva Protocol which had banned the use of biological weapons, by banning the production, development and stockpiling of biological warfare agents. Despite the Soviet Union having signed the BTWC, Dr Ken Alibek and others who were involved in the Russian BW programme revealed in the early 1990s that the Soviet offensive BW programme continued to develop and expand well after it had signed the agreement.

The Soviet biological warfare programme differed markedly from the South African programme, both in nature and intent. There is no evidence to suggest that the apartheid government sought to develop biological weapons for large-scale application, whereas the Soviet programme did.²¹ However, there are important similarities between the two, both in terms of the way in which the programme was structured to avoid detection and in the way in which the scientists involved in it related to the work they were doing. Alibek states that the BW facility he worked in was “ostensibly operating as a civilian pharmaceutical enterprise” and as a result “the agency could engage in genetic research without arousing suspicions.” This also meant that the scientists could “participate in international conferences, interact with the world scientific community, and obtain disease strains from foreign microbe banks – all activities which would have been impossible for a military laboratory.”²² These were the same reasons given by Basson for establishing the front companies RRL and Delta G Scientific as the operating facilities for the South African CBW programme.

²¹ K. Alibek and S. Handelman, Biohazard: The Chilling True Story of the Largest Covert Biological Weapons Program in the World Told from Inside by the Man who Ran it, New York, Random House, 1999.

²² Ibid., p22

In his autobiographical work, Alibek states that he believed that he would return to doing 'pure' science someday. This echoes what South African scientists have said in interviews, that they saw the CBW-related work which they did as a passing phase, something they were doing either in order to further their own careers or because it offered good financial rewards. South African CBW scientists also expressed the belief that they were in control of the work they did - a belief shared by the Russian scientists. When junior RRL scientist, Adriaan Botha, successfully genetically modified the Ecoli organism to express the highly toxic epsilon toxin of Clostridium Perfringens he was aware of the potential military application of his work, but felt confident that he could prevent his managers from demanding large-scale production. This was either an expression of the lack of control, or interest, of the SANDF in the BW programme or, more likely, an expression of Botha's own naivety.

Similarities between the South African CBW program and the Japanese World War II biological warfare programme, as described by historian Sheldon Harris,²³ are striking. While the Japanese programme was significantly larger than the South African one, and made extensive use of Chinese prisoners of war for horrific human experiments, the Japanese programme, like the South African one, was initiated and driven by a single motivated individual, Dr Ishii Shiro. Like Basson, the Japanese military "gave Ishii virtually carte blanche to begin his work",²⁴ and allowed him to travel extensively in the early stages of the programme's conceptualization to collect information and determine the direction it would take. Like Basson, Ishii was admired by his colleagues for his 'brilliance', his photographic memory and his intense patriotism.²⁵ In the same way that Basson motivated the initiation of the South African programme by claiming that other countries were developing a CBW capacity, the Japanese believed that "the Soviets were already engaged in extensive

²³ S. Harris, Factories of Death: Japanese Biological Warfare, 1932 – 1945, and the American Cover-up, New York, Routledge, 2002.

²⁴ ibid., p28.

²⁵ ibid., p77.

BW research”²⁶ and argued that mutual deterrence would increase Japanese security.

The South African focus on the development of covert chemical and biological agents as assassination weapons was also not unique. Indeed, Basson’s thinking about such agents may have been influenced by programmes of the US Central Intelligence Agency (CIA), particularly the clandestine Operation MKNAOMI initiated in 1967.²⁷ A Select Committee of Congress, held during 1973, found that the American intelligence agency had developed a covert programme with the following objectives:

To provide for a covert support base to meet clandestine operational requirements.

To stockpile severely incapacitating and lethal materials for the specific use of TSD (Technical Services Division).

To maintain in operational readiness special and unique items for the dissemination of biological and chemical materials.

To provide for the required surveillance, testing, upgrading, and evaluation of materials and items in order to assure absence of defects and complete predictability of results to be expected under operational conditions.²⁸

The objectives of Project Coast, as articulated in a document authored by Basson and signed by the Chief of the Defence Force, General Jannie Gendenhuys, demonstrate remarkable similarities to those presented above:

The goal of Project Coast is to, in a covert and clandestine matter, conduct research and development and to establish the production technology in the sensitive and critical areas of chemical and biological warfare to provide the South African Defence Force with a CBW capability in line with the CBW philosophy and strategy.²⁹

²⁶ Ibid.

²⁷ 94th Congress, 2nd Session Senate Report No 94-755. Foreign and Military Intelligence. Book 1. “Final Report to the Select Committee To Study Governmental Operation With Respect To Intelligence Activities”. Vol XVII: Testing and Use of Chemical and Biological Agents by the Intelligence Committee.

²⁸ Ibid., p388.

²⁹ J. Geldenhuys, “Bestuursdiriktief: Project Coast”, SADF document GG/UG/302/6/COAST/5/1, 15 June 1900. Appendix A: Purpose and Management of Project Coast, p1.

In the document Basson spelt out the goals of Project Coast in more detail, stating that these goals included the “support of CBW operations (offensive and defensive) carried out by security forces.” He explained that such operations fell into two categories: “conventional” and “covert”, the latter “provided to MD [Managing Director] Special Forces and his organizations, CSI [Chief of Staff Intelligence] and his organizations, the SAP and National Intelligence. This service includes the preparation of equipment, training in the use thereof, the transport thereof, as well as support during use.”³⁰

It is clear that the intention of Project Coast was to provide covert chemical and biological weapons for use by the intelligence services, much like the intention of the CIA’s covert programme of the 1960s. This CIA programme was publicly revealed in a series of Senate Committee hearings between 1975 and 1977 which sought to determine: (i) why the CIA developed quantities of lethal biological poisons, (ii) why these poisons were retained for five years after their destruction was ordered by President Nixon, and (iii) why their retention had remained undetected.³¹ The programme which was associated with the Special Operations Division of the Army Biological Laboratory at Fort Detrick, had as its chief objectives the,

[M]aintenance of a stockpile of temporary incapacitating and lethal agents in readiness for operational use; assessment and maintenance of biological and chemical dissemination systems for operational use; adaptation and testing of a non-discernable microbioinoculator – a dart device for clandestine and imperceptible inoculation with biological warfare of chemical warfare agents – for use with various materials and to assure that they microbioinoculator could not be easily detected by later examination of the target; and providing technical support and consultation on request for offensive and defensive biological warfare and chemical warfare.³²

³⁰ W. Basson, “Project Coast: Moontlikhede vir Privatisering”, SADF Top Secret document GG/UG/302/6/COAST/BFW, 28 November 1989, pp 3 – 4.

³¹ Hearings before the Select Committee to Study Governmental Operations with respect to Intelligence Activities of the United States Senate, 94th Congress, First Session, Vol I: Unauthorized Storage of Toxic Agents, 16 – 18 September 1975, Washington, US Government Printing Office, Washington, 1976, p2.

³² Ibid., p6.

The objectives of the CIA programme are strikingly similar to those of the South African CBW programme. It seems likely that Basson was influenced by the nature of the US programme in conceptualizing the function of the South African programme. However, it is also possible that the objectives of a clandestine CBW programme for special operations are likely to be the same anywhere. Many CBW programmes that were developed after the Second World War included at least a component which focused on the development of covert weapons, including that of the Soviet Union.³³

³³ Kouzminov, Biological Espionage.

CHAPTER 2

The background to and context of the South African CBW Programme

Chemical weapons in South Africa prior to Project Coast

Project Coast, initiated in 1981, was not South Africa's first experience of chemical warfare agent production. The country's involvement dates back to World War II when the Smuts government agreed to assist Britain in the manufacture of mustard gas. According to a report authored by Lt. Col. DJC Wiseman in 1951, chemical warfare production in South Africa was carried out at two factories, one of which was "sent out from the United Kingdom". Wiseman noted that, while the two facilities were established with the purpose of producing mustard gas they also had the capacity to produce phosphine. Wiseman said the intention was that the South African factories would produce a limited number of weapons so that, "had gas warfare started, and, particularly had we [the UK] been involved in a gas war simultaneously with both Germany and Japan, South Africa's potential would have been a valuable reserve for supply to the Mediterranean or the Eastern and Australian theatres."¹

The Head of the Council for Scientific and Industrial Research's (CSIR) Applied Chemistry Unit in the 1970s, Dr JP De Villiers, revealed that the one factory was

¹ Lieutenant Colonel D.J.C. Wiseman, "The Second World War 1939 – 1949 Army. Special Weapons and Types of Warfare", Vol I – Gas warfare, London, The War Office, 1951, p46

located at Chloorkop near Johannesburg and the second was in Firgrove in the Cape.² According to Wiseman:

The question of closing the mustard gas plants in South Africa had been considered in the summer of 1944, but it had been decided that 'trickle' production should be maintained until the close of the war in Europe as an alternative supply for the Far East and Australia in the event of the initiation of gas war in North West Europe. By the end of January, 1945, however, all available empty weapons and storage facilities in South Africa had been filled and it was agreed that production should cease and the plant be put to care and maintenance."³

In July 1945 these plants were closed down. There is no evidence to suggest that South Africa was involved in the production of chemical warfare agents between 1945 and 1960. However, in 1960 a company named Mechem was established as the Chemical Defence Unit of the CSIR under the Department of Trade and Industry. Mechem was contracted by the SADF to investigate chemical compounds and to monitor the chemical and biological warfare threat against the country. Dr Vernon Joynt, then a researcher at Mechem, claims that the CSIR policy of not working with lethal agents restricted their work to compounds such as teargas. They did, however, monitor international literature on lethal agents.⁴ The head of Mechem, Dr JP De Villiers, understood Mechem's brief to include at least a degree of chemical warfare research. In a speech he gave in May 1977 De Villiers introduced himself saying:

I have now been associated with Defence work since 1962 and as I was originally an Organic Chemist, it is obvious that my brief includes Chemical Warfare. ...at the CSIR there are two internal organisations devoted entirely to Defence Research and Development; the very large National Institute for Defence Research and the very small Chemical Defence Unit. I represent the latter. Incidentally, our major tasks are specialised mechanical engineering, and are only remotely chemical.⁵

² J.P. De Villiers, "Handleiding vir die SAW Bevelstelsel Vol I: Nasionale Veiligheid en Totale Oorlog", Hoofstuk 12, Aanwending van Chemiese en Biologiese Aspekte van Totale Oorlog, undated document from the Mechem archives. (This document was probably written in the 1970s).

³ Wiseman, "The Second World War 1939 – 1949", p47.

⁴ Chandré Gould interview with Dr Vernon Joynt, Pretoria, 6 October 1999.

⁵ J.P. De Villiers, "Strategic Implications of Chemical Warfare"; Mechem, 17 May 1977, p1.

While De Villiers made it clear that no large scale production work was undertaken by the CSIR, this document, and others written by him, indicate that there was an interest in chemical warfare at the time, and that the role of his unit was to keep a watching brief over chemical weapons issues. De Villiers mentioned on more than one occasion that while he doubted that South Africa was under threat of chemical warfare, chemical weapons could be tactically useful to the SADF.⁶ In 1971, the Chief of Defence Staff commissioned De Villiers and others to prepare a paper on the subject. De Villiers and his co-authors considered the potential that chemical agents could be used to poison water supplies and argued that fluoroacetates are the “ideal poison for water supplies” and could be used by “terrorists”. They also noted that research was being done on these chemicals in the early fifties at Porton Down in Britain, particularly on their use for poisoning water supplies.⁷

It is possible that the first use of chemical agents by the South African military took place in 1972, before the establishment of Project Coast. This was revealed in testimony before the 1973 United States Subcommittee on Africa in the House of Representatives. The Committee considered testimony in relation to the implementation of the United States (US) arms embargo against Portugal and South Africa. Testimony was given about the sale of herbicides and aircraft to South Africa and Portugal in the light of a newspaper report in the British Sunday Times the previous year. In this report details were given of an operation undertaken by South African mercenaries and the Portuguese Air Force to spray defoliants over rebel-held areas in Mozambique.⁸ It would appear that the use of defoliants was restricted to this incident and the single use of a commercial herbicide, Hyvar X, in the Caprivi

⁶ De Villiers, “Handleiding vir die SAW Bevelstelsel Vol I”, undated.

⁷ J.P. De Villiers, Colonel G.E. McLoughlin, V.P. Joynt, Commandant C.P. Van Der Westhuizen, “Chemical and Biological Warfare in a South African Context in the Seventies”; Mechem, 12 February 1971, p8.

⁸ Hearing of the Subcommittee on Africa of the Committee on Foreign Affairs - US House of Representatives, “On the Implementation of the US Arms Embargo (against Portugal and South Africa, and related issues)”, 22 March and 6 April 1973.

Strip where the SADF believed guerrillas used the shelter of the thick plant growth to hide weapons-smuggling activities.⁹

De Villiers and his team at the CSIR certainly did see utility for chemical agents in an unconventional war. In 1977 he wrote that: “The treatment of terrorist bases with a non-persistent, non-lethal agent just before a security force attack can affect both the terrorists’ ability to defend themselves and their ability to escape.”¹⁰ This shows at least an interest in the possible uses of chemical warfare agents in the South African context.

A document titled “Current Anti-riot Chemicals,”¹¹ written by De Villiers in September 1976, states that O-Chlorobenzylidene Malononitrile (CS) was used in South Africa for anti-riot purposes and that it was available in pyrotechnic smoke munitions, grenades and cartridges, and that equipment had been developed for dispersing it in powder form from aircraft. The document states that there were four chemicals which could be considered for use as anti-riot agents: Chloracetophenone, Phenacyl chloride(CN), O-Chlorobenzylidene malononitrile (CS), Diphenylamine chlorasine, (Adamsite or DM) and Dibenzoxazepine (CR), all of which are standard anti-riot agents. At the time the Chemical Defence Unit (CDU) had in stock some 150kg of CN and 1.5kg of DM (Adamsite). CS was manufactured at the time by AECI for the Armament Corps, and CR had been manufactured in a very small quantity by the Chemical Defence Unit.¹² Project Coast was later to engage in the large-scale production and weaponisation of CR. De Villiers and his team at the CSIR had begun to lay the basis for the initiation of a chemical warfare programme, although this may not have been their intention.

⁹ Gould interview with Joynt, 6 October 1999.

¹⁰ “[D]ie behandeling van ‘n terroristebasis met ‘n nie-nawerkende nie-dodende middel net voor ‘n veiligheidsmag aanval kan beide die terroriste se verdediging en hulle kanse om te ontsnap baie nadelig beïnvloed.” Quoted from JP De Villiers, “Chemiese Oorlogvoeringsmiddels van belang, of van moontlike belang, vir die RSA” [Chemical Warfare agents of importance, or of possible importance, for the RSA], Mechem, 12 July 1977, p3.

¹¹ J.P. De Villiers, “Current Anti-Riot Chemicals”, unpublished, September 1976.

¹² Ibid.

While the CSIR monitored developments in chemical warfare and commented from time to time on the status of the threat against South Africa, there is no indication that between the years 1961 and 1980 the state found it necessary to develop any agents on a large scale or to develop defences against the use of chemical warfare. There is also no record of the use of chemical agents apart from the reported use of herbicides in Mozambique and the use of CS against internal political opponents. According to General R Badenhorst, former Chief of Staff Intelligence in the SADF, there was a Nuclear, Biological, Chemical (NBC) Defence school in Cape Town from 1961, but training there was restricted to the use of teargas and gas masks, at least until the late 1980s.¹³

By mid-1977 it would appear that there was an increased interest in chemical and biological warfare in the SADF. At this time De Villiers authored a chapter in the SADF's "Manual for the SADF Command System, Vol I: National Security and Total War"¹⁴ in which he set out the various categories of chemical warfare agents and made a brief analysis of the Geneva Protocol of 1925. As in earlier writings, he concluded that while there was no threat of chemical warfare agents being used against South African troops, the use of both lethal and irritating agents may be to the SADF's advantage in certain circumstances when fighting its war against 'terrorists'. He pointed out that the Geneva Protocol did not forbid the use of such agents within a country and, therefore, South Africa would not be in violation of the Protocol if it used chemical agents in an internal war. On the other hand, De Villiers stated categorically that biological warfare was not a threat to South Africa and that no specific training in biological warfare was necessary.¹⁵

It is significant that three years before the initiation of Project Coast, De Villiers concluded that there was no threat of chemical weapons being used against South African soldiers, even though he recognised the usefulness of these weapons for the

¹³ Chandré Gould interview with General R. Badenhorst, former Chief of Staff Intelligence, SADF, Pretoria, 16 January 2001.

¹⁴ J.P. Villiers, "Handleiding vir die SAW Bevelstelsel Vol I: Nasionale Veiligheid en Totale Oorlog", undated.

¹⁵ De Villiers, McLoughlin, Joynt, Van Der Westhuizen, "Chemical and Biological Warfare in a South African Context", 1971.

Defence Force. Similarly, he saw a limited clandestine use for biological weapons but did not consider them a threat. It is, therefore, likely that the establishment of Project Coast was less a response to a direct and specific CBW threat, than it was a response to the general threat articulated through the policy Total Strategy, as discussed later in this chapter.

Dr Vernon Joynt has claimed that the possibility of establishing a chemical warfare capability was on the minds of military leaders from the early 1970s. He recalls having been approached by Wouter Basson at that time:

In the early 1970s a young medical major, Wouter Basson, approached me to do a threat assessment and make suggestions on what the implications for South Africa would be and what would have to be done if it was decided to start a chemical warfare industry. I wrote him a ten page report which he presented to the Surgeon General of the SADF. The most important point was that I judged that in the light of the Soviet CW capabilities we would have to spend about R500 million to develop a significant capability.

Wouter left with the report.

A few months later he approached me at home (early 1970s) and informed me that they were prepared to start such an industry and would I resign from the CSIR and start it.

The best thing I did was not to tell my wife of the offer because as a number two in a unit of some five people I was earning the normal low CSIR researcher's salary!

I turned down the offer on the grounds that I considered a deterrent capability as a sterile component to the active war. At that point I was achieving some success in mine and countermine warfare and wanted to continue. A life of not being able to talk about your work did not appeal to me.¹⁶

It would appear that Joynt's refusal to become involved resulted in the matter being put on hold for a few years. In the meantime, between 1978 and 1981 the war in Angola escalated, starting with a series of co-ordinated attacks on South West African People's Organisation (SWAPO) bases in Cassinga, southern Angola.¹⁷ A

¹⁶ Vernon Joynt, written communication with Chandre Gould, 17 August 1997.

¹⁷ P. Stiff, The Silent War: South African Recce Operations 1969 - 1994, Johannesburg, Galago, 1999, p204.

1976 CIA assessment noted a build-up of Soviet support in Angola during 1976, which may have fueled the escalation of conflict in the following years. According to the CIA estimate the value of the Soviet contribution to the war effort of the MPLA government in Angola in 1976 amounted to some US\$88-million.¹⁸ This might explain the change in the threat analysis between 1977, when De Villiers wrote a chapter for the SADF manual, and 1981, when Project Coast began. A more cynical analysis may be that the escalation of the war in Angola merely provided an additional excuse when increasing internal pressure was a more important factor in the decision to initiate the programme than any conventional, external threat.

The CSIR's Chemical Defence Unit was an ideal recruiting ground for the Defence Force when the need for specialised services was identified. In the early 1970s Dr Jan Coetzee, head of the Chemical Defence Unit's Department of Special Equipment, was personally recruited by the head of the SADF, General Magnus Malan,¹⁹ to lead the Defence Research Institute. Coetzee was instructed to develop special counter-intelligence equipment for the Special Operations Group of the SADF, the forerunner of Special Forces. After being recruited by Malan his job remained much the same, except that he now worked from Armscor premises and from the Armscor budget.²⁰

Eventually problems with procurement of materials and equipment led PW Botha to personally authorise the establishment of a new Armscor subsidiary named Elektronies, Meganies, Landbou en Chemies (EMLC), headed by Coetzee to represent the four components envisaged: Electronic, Mechanical, Agricultural and Chemical. According to Coetzee, EMLC never engaged in chemical synthesis or extraction, and his staff did not include scientists capable of advanced chemical work. Coetzee said that no production envisaged by the agricultural component of

¹⁸ "Soviet and Cuban Aid to the MPLA in Angola during January 1976, Central Intelligence Agency document ER M 76-1009, 2 March 1976, release date November 1998. (<http://www.foia.ucia.gov/browse>)

¹⁹ Malan was Chief of the Defence Force from September 1976 to October 1980, when he became Minister of Defence.

²⁰ Testimony of Dr Jan Coetzee in The State vs Wouter Basson, South African High Court, Transvaal Division, 6 November 2000.

EMLC took place. EMLC had a staff of two botanists and access to anthropologists and ethnologists who were responsible for identifying edible and poisonous plants during Special Forces survival courses. In August 1980 the company moved to the Special Forces headquarters, Speskop.²¹

Coetzee was replaced by Sybrand Van der Spuy as head of the unit in November 1981. (Much later Van der Spuy was to act as CEO of the chemical warfare facility, Delta G Scientific, during the process of its privatisation). While inspecting the premises before he was to take control, Van der Spuy came across a room which contained bulk chemicals and a carton of what appeared to be clothing. He said that as he moved across the room to inspect the clothing, one of his new employees warned him not to touch it. Asked why not, the employee told Van der Spuy: "Because those clothes are poisoned and if you put those underpants on, you'll be dead by tonight."²² Van der Spuy claims that he had the contents of the room destroyed immediately and could shed no light on the origin of the items. Coetzee could not explain their existence either. This raises the possibility that either the chemical division of EMLC was responsible for the contamination of the clothing or the clothing came to South Africa with members of the Rhodesian Selous Scouts who joined SADF. EMLC had employed a number of former Rhodesian security force members including an armourer Philip Morgan. Morgan later went on to do work for the Civil Co-operation Bureau (CCB), manufacturing specialised items such as rings with compartments to hold poisons and screwdrivers which could inject liquids into a victim.²³

²¹ Ibid.

²² Testimony of Sybrand Van der Spuy in The State vs Wouter Basson, South African High Court, Transvaal Division, 6 November 2000.

²³ Chandré Gould and Jerome Chaskalson, interview with Jan Lourens, Cape Town, 23 January 1998.

South Africa and the region²⁴



The history of colonialism and the resultant conflicts in Southern Africa from 1960 to 1990 are complex and have been the subject of much analysis. There is no dispute that these conflicts played a central role in determining South Africa's military strategy and the development of its unconventional arms programmes. Conflicts in the sub-region, including Angola, Mozambique, Zimbabwe, Namibia and South Africa, were inextricably linked. For much of the 1970s the SADF was engaged in conflicts on four fronts - in Mozambique, Angola, Namibia (then South West Africa) and Rhodesia - which had a determining effect on the scale and duration of these wars.²⁵

The announcement on 18 July 1966 by the International Court of Justice that it could not rule on the disputed territory of South West Africa led to SWAPO making its

²⁴ Map from <http://www.cia.gov/cia/publications/factbook/geos/sf.html>

²⁵ For a thorough examination of the conflicts in Angola and Mozambique and the role of the South Africans in these conflicts see W. Minter. *Apartheid's Contras: an inquiry into the roots of war in Angola and Mozambique*, London, Zed Books, 1994.

statement of war, the Dar es Salaam Declaration. Although a few battles took place between SADF soldiers and SWAPO fighters, the period 1970–74 saw the intensification of the political mobilisation of SWAPO members and their allies. In 1972 the SADF was deployed in the northern areas of South West Africa on a large scale. Two years later, in 1974, the independence of Angola after a coup in Portugal by the Armed Forces Movement changed the face of the war in South West Africa. The guerrilla soldiers of the People's Liberation Army of Namibia (PLAN), SWAPO's armed wing, were able to move through Angola more easily to establish a permanent presence in that country.²⁶

In January 1979 the SAP responded by launching a new unit in Ovamboland, called Operasie Koevoet [Operation Crowbar]. The unit adopted the modus operandi of the Rhodesian Selous Scouts. Eugene de Kock, a veteran of the Rhodesian war,²⁷ was assigned to the unit. He describes it in his book, A Long Night's Damage:

The Rhodesian Selous Scouts were based in essence on Orde Wingate's Chindits and the American Green Berets: unconventional soldiers, able to move about and subsist as well as their opposition in hostile terrain, and used to pinpoint infiltration, unconventional warfare (poisoning food supplies, for example) and surprise attack. The Mozambican Renamo movement was based on using dissatisfied members of the population and the armed forces against the government of the country... Our idea in Ovamboland was to start a local force to fight against SWAPO, like Renamo, while a second group would operate more along the lines of the Selous Scouts.²⁸

The unit was disbanded in 1989.

²⁶ T. Weaver, "The South African Defence Force in Namibia", in L. Nathan and J. Cock (eds). War and Society: The Militarisation of South Africa, Cape Town, David Philip, 1989.

²⁷ Some members of the South African police were required to perform tours of duty in Rhodesia during the war of independence. The South Africans received training from the Rhodesian Light Infantry and the Rhodesian Special Air Services. During training courses they were exposed to the way in which members of the Selous Scouts and other covert units of the Rhodesian security forces operated. See E. De Kock and J. Gordin, A Long Night's Damage: Working for the Apartheid State, Saxonwold, Contra, 1998, p58.

²⁸ De Kock and Gordin, A Long Night's Damage, p71.

The importance of the SADF and police involvement in the Rhodesian war of independence should not be underestimated. It proved to be a training ground for South African Police (SAP) and Defence Force members in counter-insurgency techniques which they would put to use both in South West Africa and in South Africa. South African police units began training with the Rhodesian Light Infantry and Special Air Services from as early as 1968.²⁹ Members of the Reconnaissance Unit of Special Forces began working with the Selous Scouts in 1976,³⁰ and here they learnt the techniques known as pseudo operations: black operators, and white operators with blackened faces, would masquerade as guerrillas, making it possible for them to get close to guerrilla bases before launching an attack. Alternatively, this cover would provide them with opportunities to capture and 'turn' members of the 'enemy'. When the Rhodesian war ended in 1980 many of the former Rhodesian security force members came to South Africa where they joined the police and Defence Force. Many of the Selous Scouts, both black and white, who joined the SADF, became Special Forces operators, working within clandestine units. According to former Special Forces operators, their Rhodesian counterparts did not fit into the SADF milieu easily, nor were they adequately prepared for the conventional warfare situation in which they were to find themselves in Angola. Few remained in the SADF for long.

Before 1974 the SADF had operated in Angola with the support of the CIA. By 1974 overt assistance had been stopped and South Africa operated alone, although unopposed by the US. In 1975 South Africa invaded Angola in an attempt to regain its influence, lost through the independence of that country. The conflict in Angola continued in the following years with South Africa arming and organising the National Union for the Total Independence of Angola (UNITA) in its war against the MPLA government. The Angolan war was fought in several conventional battles between the SADF and MPLA between 1980 and 1988.³¹ Allegations were made by both sides that chemical weapons had been used, although none of the allegations were ever proved. From 1986 claims were made by Belgian academic Aubin Heyndrickx

²⁹ Ibid.

³⁰ Stiff, The Silent War.

³¹ J. Grest, "The South African Defence Force in Angola", in Nathan and Cock. War and Society.

that chemical weapons had been used by Angolan government forces against UNITA. Heyndrickx, who visited Angola in 1986 and again in 1988, received his briefings from UNITA. His reports, to UNITA leader Jonas Savimbi, relate allegations of poisoning and conclude that chemical weapons were used against UNITA forces and civilians. In a 1988 report Heyndrickx claims that the analysis of blood and urine samples collected from 8 patients on 16 February 1988 indicate that “nerve gases with a high probability (sic) have been used on them.” Heyndrickx also reported that a war gas identification kit given to him by Savimbi, allegedly confiscated from captured Cuban soldiers in Cuito Cuanavale, was of Russian origin. He stated that the kit was the same as those found in Afghanistan on Russian soldiers who were taken prisoner by the Mujahiddin.³²

Heyndrickx’s reports lack substance and his conclusions are based on questionable arguments. Nonetheless it is probable that his reports would have been sent to the South African authorities, and that they would have provided the military with reason to believe that there was a threat of the use of chemical weapons in Angola during this period.

The SADF did, however, have real reason for concern. Former Special Forces operator, Stuart Sterzel (a former Group Commander at 5 Reconnaissance Regiment who was a member of the Directorate of Special Tasks during the 1987 war), told me that,

There was a concern prior to the outset of the battle in the Lomba River Valley in 1987 that the Russian, Cuban and Angolan forces were armed with chemical weapons. In 1987 prior to the commencement of the war in Cuando Cubango province in Angola, my colleagues and I were informed that FAPLA had possibly brought chemical weapons with them for use in the coming battles. SADF intelligence and western intelligence agencies confirmed the possible threat analysis.

During the battles which occurred in the Cuando Cubango province between the Lomba River Valley and the Cuanevale river, the SADF destroyed 12 brigades of FAPLA and Cuban forces, with Russian, East German and other Warsaw Pact elements. In my opinion, the potential chemical weapons threat posed by Soviet and Soviet-aligned forces

³² A. Heyndrickx, “Toxicological report on the second mission, February 15 - 20, 1988 in Angola”, addressed to UNITA - Mr. Savimbi, 8 March 1988.

definitely required the establishment of a deterrent – or the appearance of the existence of a deterrent - which would create the impression that South African forces could counter a chemical attack in kind.³³

The war in Mozambique began shortly after the country won independence from Portugal in 1975. The Mozambican Liberation Front, Frelimo, which had gained political control of the country, aligned itself with the Zimbabwean liberation struggle, providing Zimbabwean guerrillas with refuge. The white Rhodesian government responded by supporting the Mozambican National Resistance, which later became known as Renamo, in its fight against the Frelimo government. When Zimbabwe gained independence in 1980, support for Renamo shifted from the Rhodesian to the South African military. Under the guidance of South African Military Intelligence, Renamo became a fighting force to be reckoned with, resulting in a conflict that, despite peace talks in 1984, continued until a cease-fire was signed between Mozambique and South Africa in October 1992.³⁴

These events all have to be understood in the context of Cold War politics. Between 1970 and 1975 UNITA found support in South Africa and the United States, while the MPLA on the other hand found support in Cuba, the USSR and China. Minter argued that

It was the US government which urged South Africa to send in its troops in 1975, and which sustained UNITA's guerrilla campaign after South African supplies dwindled following the independence of Namibia in 1990. The presence of Cuban troops in Angola evoked bitter antagonism to Havana in Washington policy-making circles. Angola might not have seen peace even without Washington's unrelenting hostility and the military involvement of the Soviet Union and Cuba on the other side. But these factors surely had significant effects on the character and duration of the conflict.³⁵

Washington's involvement in the conflict in Angola was limited to small-scale covert support, much to the annoyance of the South African military. General Constand Viljoen, head of the South African Defence Force in 1980, said that if the international

³³ Chandré Gould interview with Stuart Sterzel, Former Officer Commanding Alpha Group, 5.2. Commando, 5 Reconnaissance Regiment, Johannesburg, 1 November 2002.

³⁴ Minter, *Apartheid's Contras*, p6.

³⁵ *Ibid.*, p7

community had provided the South African government with the necessary information and protective gear and masks to protect its troops against the threat of chemical warfare, it would not have been necessary for South Africa to develop its own programme.³⁶ He said it was difficult to understand why, after allegations of the use of chemical warfare agents by Cuban troops, Washington refused to assist South Africa in protecting its troops against this threat. Washington's reluctance to assist the South African Defence Force might be explained by the fact that credible proof was never provided for the threat of chemical weapons in Angola. Yet, if Viljoen's statement is correct, there is no explanation for the fact that defensive training and protective clothing was only available to the SADF in the later 1980s and by many accounts protective clothing never reached the fighting troops in Angola. Even if the clothing had reached the soldiers, it would have been of limited use due to the environmental conditions under which the troops were fighting, particularly the extreme heat.

The South African government and military may have been additionally concerned in the early 1980s when the United States accused the Soviet Union of producing "chemical and biological weapons on a large scale"³⁷ and when in 1982 chemical weapons were allegedly used by the Soviet-backed Ethiopian army against guerrilla forces in the lengthy war in that country.³⁸ Claims that the Ethiopian army was stockpiling chemical weapons for use against the forces in favour of Eritrean independence were made as early as 1980 (the year in which Project Coast was launched). According to an appeal by the Eritrean Relief Agency, "the Ethiopian government is stockpiling lethal nerve gas (GA) and other deadly weapons in Asmara for use against Eritrean fighters and civilians..."³⁹ While there is no conclusive evidence that chemical weapons were used or stockpiled in the Eritrean conflict, the reports would have concerned the SADF.

³⁶ Chandré Gould interview with General Constand Viljoen, Cape Town, 18 May 2000.

³⁷ "Moscow 'producing chemical weapons on large scale'", The Guardian, 17 February, 1982.

³⁸ "Ethiopia makes new attack in Eritrea with 90 000 troops", The Guardian, 17 February, 1982. "Eritrean guerrillas face nerve gas attacks", The Observer, 9 May 1982.

³⁹ "Urgent Appeal to Stop the Use of Poison Gas and Other Chemical Warfare by the Ethiopian Government in Eritrea Asso", Eritrean Relief Association, 17 June 1980.

These factors, in combination with the massive build up in 1976 of Soviet and Cuban aid to the MPLA, ⁴⁰ might have led the SADF to conclude that the best way to prevent Soviet use of chemical weapons in Angola, would be through the establishment of a chemical warfare programme which would, at least, create the impression that South Africa would be able to respond in kind to any use of chemical weapons. Such a deterrent may indeed have offered SADF troops better protection than NBC (Nuclear, Biological, Chemical) clothing.

The Rhodesian CBW experience

The Rhodesian war of independence in the late 1970s may have been one of the first instances in Africa where poisons were used as weapons of war. Fragmented information about Rhodesia's use of poison has been published in at least four books,⁴¹ but senior Rhodesian military personnel have never conceded what the late Ken Flower, Director General of the Central Intelligence Organisation, said in a paragraph in his book Serving Secretly⁴² - that poisons were used with devastating effect.

By mid-1977, the small conventional multiracial Rhodesian security forces were engaged in a war they could not win, a vicious war punctuated by acts of terrorism by all sides. The two organisations committed to liberating Rhodesia from minority white rule, the Zimbabwe African National Union, ZANU, and the Zimbabwe African Peoples Union, ZAPU (now the ruling ZANU-PF), both had military wings which operated from Zambia and Mozambique and inside Rhodesia. ZANU's military wing was the Zimbabwe African National Liberation Army, ZANLA, and ZAPU's was the

⁴⁰ US intelligence estimates put the number of Cuban troops in Angola at that time at some 12 000 and estimated the cost incurred by the Soviets and Cubans for aid delivered in January 1976 at the equivalent of US\$88 million. "Soviet and Cuban Aid to the MPLA in Angola during 1976", CIA document ER M 76-1009, March 1976, released in terms of the Freedom of Information Act in 1999. (http://www.foia.ucia.gov/browse_docs.asp)

⁴¹ H. Ellert, The Rhodesian Front War, Gweru, Mambo Press, 1989. K. Flower. Serving Secretly, Johannesburg, Galago, 1987. P. Stiff. See you in November, Johannesburg, Galago, 1985. Mangold, and Goldberg, Plague Wars.

⁴² Stiff, See you in November.

Zimbabwe African Peoples Revolutionary Army, ZIPRA. Although both liberation armies were feared by the Rhodesian forces, their greatest effort was put into attacks against ZANLA, as its operations had succeeded in clearing whites out of vast areas of the country along the border with Mozambique. ZANLA, less selective than ZIPRA about its victims, routinely committed acts of terrorism, mainly against black civilians. ZIPRA, on the other hand, with the exception of the downing of two civilian aircraft, was engaged in a more conventional war.

From 1976 all normal mechanisms of justice were abandoned by the Rhodesian government. Special courts were gazetted which allowed captured guerrillas to be tried in situ, without referral to district courts or the Supreme Court. Defence for guerrillas was often provided by the Rhodesian security forces from legally trained conscripts. Some executions were carried out in situ, and no records were available of who was tried or when executions were carried out. A diesel powered crematorium was uncovered in the late 1980s in the bush near the maximum security prison at Chikurubi (near Harare) which had the capacity to incinerate four or five bodies at a time.

By the late 1970s the Rhodesian security forces were involved in unconventional warfare and a number of devices were released into the civilian community, such as booby trapped radios. An armourer, Phil Morgan, who was later to work for Project Coast, was involved in the manufacture of these devices.⁴³ Rhodesia's amateurish and short foray into chemical and biological warfare made use of three substances:

- Organophosphates, put onto clothes, especially onto parts of the fabric which would touch the soft parts of skin, under the arms and the groin areas.⁴⁴ Organophosphates were also put into tinned food and drink or other materials to be ingested, such as aspirin.

- Cholera, twice released into the Ruwenya River.

⁴³ Peta Thornycroft interview with Jan Lourens, Johannesburg, 1997.

⁴⁴ The underwear found by Van Der Spuy at EMLC may, therefore, have been of Rhodesian origin.

- Anthrax, deposited near Plumtree, inside the Botswana border.⁴⁵

Documents made available by Peter Stiff record the use of poisons by the Rhodesian Police's Special Branch and the Selous Scouts. These documents indicate that the use of poisons began in 1977. Former Special Branch operatives have said they were aware of the use of poisons as early as 1973.⁴⁶ One official document, dated 24 June 1977, records 809 deaths resulting from poisoned items distributed by the Selous Scouts. Another document lists poisoned items showing where they were distributed, including 12 sets of clothing at Gwelo, 15 at Enkeldoorn, 34 at Mount Darwin as well as poisoned meliemeal, tins of corned beef and sweets. A document dated August 1977 records that between August 8 and August 17 of that year, 59 sets of poisoned clothing, two sets of poisoned cigarettes, one set of medical supplies and two sets of "assorted food and drink" resulted in three direct deaths and 19 deaths of civilians killed by guerrillas who believed they had been responsible for the poisonings. The last report for November 1977 records that 79 "terrorists" were killed after more contaminated food and clothing had been distributed.⁴⁷

MJ McGuinness, the man who facilitated the chemical programme at the Bindura Fort, as it was called, and the most senior Special Branch Officer seconded to the Central Intelligence Organisation who was afforded the title Officer Commanding Counter Terrorist Operations, said that about a dozen times during 1977, 25 gallon drums of foul-smelling liquid were delivered to the officer in charge at the Fort.⁴⁸ The

⁴⁵ Peta Thornycroft interview with M.J. McGuinness, Officer Commanding Counter Terrorist Operations, Central Intelligence Organisation, Pretoria, October 2000.

⁴⁶ Mike Woods, e-mail communication with Peta Thornycroft, 2000.

⁴⁷ Reports from the Officer in Charge of Operations to Officer Commanding Special Branch Headquarters and the Director-General Central Intelligence Organisation. Rhodesian Special Branch documents dated June – November 1977.

⁴⁸ "Selous Scout 'Forts' were constructed by the military; police members merely being afforded office and cell accommodation therein. Irrespective of rank, the senior Army member in situ would automatically be in charge of the Fort. The prime objective of a fort was to facilitate the clandestine movement of Pseudo operators, provision of hospital facilities for friend and foe alike, and a secure communications network." Written communication from M.J. McGuinness to Chandré Gould, 4 April 2001.

chemicals were poured onto large sheets of tin and dried in the sun. When the liquid had dried, the resulting flakes were scooped up and pounded in a mortar with a pestle. That powder was then brushed onto clothes and also mixed into processed meat such as bully beef, and then re-packed into new tins. The poison was injected, using a micro needle, into bottles, most of them containing alcoholic drinks. McGuinness insisted that “every contaminated item that left the Bindura Fort, the only location at which they were being manufactured, had to be signed for and subsequently accounted for by the recipient.”⁴⁹

According to McGuinness, the poisoned items were distributed by uniformed branch members who were co-opted by the provincial Special Branch officers for what was known as ‘Ground Coverage’, which involved gleaning low level intelligence and running sources in the rural areas. Each police officer involved in the distribution required the authority of his immediate commanding officer before being issued with the contaminated items.⁵⁰ There was no way McGuinness could verify the number of people allegedly killed. In some instances he believed that one of the Special Branch men was falsifying deaths. Some of the bottles of alcohol were distributed by the Selous Scouts. In one case, near Rusape in Manicaland province, several guerrillas died after a furious fight among them following consumption of a bottle of liquor poisoned with pure alcohol. McGuinness told me that “the distribution of contaminated items, e.g. clothing and food, was not as a general rule carried out by the Scouts but by the Projects Section of the British South Africa Police (BSAP) Special Branch. Scouts in the field acted in a reconnaissance role, calling in strike forces to engage the enemy where this was feasible and only as a last resort compromising their true identity in any given area.”⁵¹

According to McGuinness, two unsuccessful attempts to infect the Ruwenya River in north-eastern Zimbabwe with cholera were carried out by members of the Selous Scouts.⁵² If the Selous Scouts were given cholera to put in a river to infect guerrillas,

⁴⁹ M.J. McGuinness written communication to Chandré Gould, 21 June 2002.

⁵⁰ Ibid.

⁵¹ Written communication from MJ McGuinness to Chandré Gould, 4 April 2001.

⁵² Thorneycroft interview with MJ McGuinness, Pretoria, October 2000.

they were misinformed about the nature of cholera, which cannot survive in a running river. McGuinness recalled that he was surprised to learn from conversations with his colleagues that on one occasion anthrax had been deployed. He said the Selous Scouts had been asked to use anthrax, but their officer in charge, Lieutenant Colonel Ron Reid Daly, had refused because he believed this operation was too dangerous for his men. It was left to the Special Air Service to drop the anthrax from an aircraft (in an unknown form).⁵³ The question of whether the anthrax outbreak in Zimbabwe between 1979 and 1980 was a natural occurrence or a deliberate act of biological warfare has been raised by, amongst others, Meryl Nass, who analysed the nature of the outbreak and concluded that a detailed investigation was necessary to reach a conclusion.⁵⁴ Nass notes that the large area affected by anthrax during 1979 and 1980 strongly suggests the deliberate use of anthrax as a biological warfare agent. She said that anthrax was detected in the following areas:

Nkai (November 1978)

Western Kwekwe (June 79)

Lupane (October 1979)

Essexvale (October 1979)

Insiza/Filabusi (November 1979)

Umzingwane (November 1979)

Bubi (Bembezi) (November 1979)

Plumtree (February 1980)

Kezi (February 1980)

Tjolutjo (March 1980)

Nyamandlovu (March 1980)

Gwanda (March 1980)

Beitbridge (March 1980)

Wankie (June 1980)

⁵³ Ibid.

⁵⁴ M. Nass, "Zimbabwe's Anthrax Epizootic", Covert Action, Number 43, Winter 1992/3.

Matopos (June 1980)

By October 1980, anthrax was present in all the districts of Matabeleland except Binga.⁵⁵ Anthrax is, however, endemic in Zimbabwe and these outbreaks could have been naturally occurring, the result of particular weather conditions and the breakdown of veterinary services during the civil war. Even if the security forces had used anthrax, it was not within the scope of this thesis to determine whether the infections resulted from the deliberately spread anthrax spores or from natural sources. The information provided by McGuinness, however, confirms the need for a thorough investigation into the matter. All my attempts to locate SAS officers, or others who could confirm the use of anthrax have failed. Former SAS officers form a fiercely loyal, tight knit community and it is unlikely that any will speak out about the operations in which they are alleged to have been involved. In the absence of testimonial evidence about the form in which anthrax may have been used, and the areas in which it may have been used, it is impossible to draw a final conclusion about the nature of the Rhodesian anthrax operations. Dr Stuart Hargreaves, head of veterinary services in both Rhodesia and post-independent Zimbabwe, ascribed the increase in anthrax cases to a breakdown of fences during the war and the halting of vaccination programmes. Journalist David Martin⁵⁶ points out that there were no outbreaks of anthrax in the white commercial farming areas during the later stages of the war. This may be explained by the fact that in those areas the fences were still in place and farmers could afford to pay for their animals to be vaccinated.

In late 1977, when Commissioner of Police Peter Allum was told by a Medical Officer of Health (probably from the Manicaland Province) that there were indications that there were mysterious deaths of black people, he suspected chemical poisoning.⁵⁷ He immediately put out an order that it be stopped. Allum was known to have tried hard to limit Rhodesian security force atrocities against the civilian population. His role in stopping the chemical warfare project is confirmed by himself and by several

⁵⁵ Meryl Nass, electronic communications with Chandré Gould and others, 31 January 2003.

⁵⁶ D. Martin, "The Use of Poison and Biological Weapons in the Rhodesian War", Harare, The Southern African Research and Documentation Centre, 1993.

⁵⁷ Peta Thornycroft telephonic discussion with Peter Allum, September 2000.

key sources. He had not heard of any attempt to introduce cholera during the war and was astonished to learn that anthrax may also have been used.

The line of command in the poison operations is not clear. Lieutenant Colonel Reid Daly surmised that Central Intelligence Organisation (CIO) Director, Ken Flower, was in charge of the operation.⁵⁸ Reid Daly confirmed he knew some of what had been going on. He said it was unlikely that the chemical project was discussed at the National Joint Operational Command. Lieutenant-General Peter Walls, Chief of Combined Operations, said he had no idea that either chemical or biological warfare agents had been used in 1977.⁵⁹

According to Stiff, Professor Robert Symington was the scientist behind the poisonings. Symington was employed in the Anatomy Department at the University of Rhodesia. In a book published in 1985, Stiff records a conversation in which Symington (who he calls Sam Roberts) offers an operator thallium with which to kill a man:

It was said there were some months when Sam Roberts had killed more terrorists than the Rhodesian Light Infantry. In April 1978 a group of 17 ZANLA terrorist guerrillas, who had been on operations staggered across the Mozambique border to the safety of their protected rear bases. They were vomiting, defecating and writhing with pain. Transported to Beira where they were hospitalized, they died mysteriously, one by one, over a period of three days. The operator asked how this had happened and Symington replied: Special Branch knew where they were based. We doctored some sacks of meal with thallium and deposited them in a farm store they were going to raid for food. They did, naturally burning it down afterwards, as is their practice.⁶⁰

Symington later moved to South Africa where he worked as a lecturer at the University of Cape Town. He died some years ago. His laboratory assistant, Victor Noble, who worked at the University of Pietermaritzberg until his retirement, declined to speak to me and it is not known whether he knew about the poisons Symington provided to the operators, although it is likely that he would have.

⁵⁸ Peta Thornycroft telephonic discussion with Lieutenant Colonel Reid Daly, September 2000.

⁵⁹ Peta Thornycroft telephonic discussion with Peter Walls, September 2000.

⁶⁰ Stiff, See You in November, pp308-310.

Martin tells how many guerrillas died of poisoning, particularly in neighbouring Mozambique.⁶¹ He recalls that an American doctor, Dr Paul Epstein, working in Mozambique in 1978, sent a sample of fat from one victim for analysis by a laboratory in South Africa. Warfarin, a rat poison was found in the fat sample. Warfarin causes internal haemorrhaging, symptoms apparently displayed by victims treated by Dr Epstein at Beira Hospital.

There is documentary evidence that Rhodesian security forces used poisons to contaminate food and clothing which was distributed carelessly among civilians. If the documents recording the items poisoned and the number of deaths that resulted are correct, then at least 900 people died from ingesting poisoned food or wearing contaminated clothing. It is likely that the Rhodesian soldiers and policemen who came to South Africa after the war brought with them tales of the use of poisons which may have influenced the thinking of the South African military. However, I have found no link between the South African programme and the Rhodesian use of poisons, except for a single line in a 1977 report of the Officer in Charge of Operations to the Special Branch commanding officer. This states: "It will be noted that there is a considerable decrease in the quantity of materials directed into the field during the fortnight under review, this being due to (a) staff shortages in the field and subsequent inability to recruit contact men and (b) the shortage of necessary ingredients which are to be obtained from South Africa within the next two weeks."⁶²

The assimilation model analysis of the motivation for Project Coast

Later in this chapter I consider the political and military context for the establishment of Project Coast. Before presenting evidence of the military mindset in South Africa during the 1980s and 1990s it is useful to consider the way in which various factors influence the decision to develop CBW programmes. According to the assimilation

⁶¹ Martin, "The Use of Poison and Biological Weapons in the Rhodesian War".

⁶² Report from the Officer in Charge of Operations, Special Branch Headquarters to the Officer Commanding, Special Branch Headquarters and the Director-General Central Intelligence Organisation, Issue of Equipment: 8.8.77 – 17.8.77, 25 August 1977.

model proposed by Dr Jean Pascal Zanders⁶³ (see diagrammatic scheme below), a country's decision to develop a CBW programme is a function of the interaction between a number of factors. At the simplest level the material base of a country – its geographical situation, territorial size, population size, the presence of natural resources and easy access to resources from elsewhere, will have an impact (albeit unconscious) on the decision by political and military leaders to develop a CBW programme, or not. If a decision is ultimately taken to develop chemical and biological weapons, these factors will also influence the nature and structure of the programme. Any one of these factors could act as an unpassable threshold to the assimilation of a CBW programme. If, for example, a country which is considering the development of a chemical and biological weapons capacity has few natural resources, and limited access to resources from elsewhere, the development of a chemical and biological warfare programme may be too costly an undertaking or extremely difficult. The cost may outweigh the perceived benefit which may be derived from possessing such weapons.

On the other hand, to a country like South Africa which has an abundance of natural resources, a reliable electricity supply, a cheap labour force and access to materials and equipment from abroad, the material base is not an inhibiting factor in the decision to develop a CBW programme, but rather an enabling factor. Playing an equally important role in the decision-making process are political factors, the level of education in society, the extent of the science and technology base and the level of economic and industrial development.

By the late 1970s South Africa was highly industrialized, had an existing chemical industry, a strong educational system for whites, and a scientific community from which researchers for the CBW programme could be drawn. These factors contributed to lowering the threshold which had to be crossed in order to make the decision to develop the CBW programme. It was also possible for the front companies to obtain equipment and raw materials relatively simply, either in South Africa or elsewhere. The fact that South Africa did have an established chemical

⁶³ J.P. Zanders, "Dynamics of Chemical Armament: Towards a Theory of Proliferation", PhD Thesis, Free University of Brussels, February 1996.

industry made it easy to purchase equipment under the guise of it being for commercial purposes.

Had South Africa been entirely dependent on imports, or if scientific expertise had to be sought outside the borders, or if the equipment had to be imported, the cost of the project, not only in financial but also political terms, may have been too great. In the absence of serious deterrents at this level, the decision to develop a CBW programme was influenced by the level of threat South Africa was perceived to be subject to, and South Africa's adherence, or not, to international norms as well as its security policies.

By 1980 South Africa was politically and economically isolated, fighting a conventional threat in Angola and desperately holding back the forces of change internally. As far as the political and military leaders were concerned, South Africa was at war, a war which would have to be fought alone without external assistance. The country's isolation and the high level of threat to the white minority government were strong motivating factors in the decision to develop a CBW programme.

The South African military leadership was apparently led by Basson to believe that during the 1960s and 1970s, "[T]he United States of America, on the side of the West, produced chemical weapons and had stockpiled huge quantities of these. The USSR was responsible for the production and stockpiling of chemical weapons on the side of the Warsaw Treaty."⁶⁴ Basson argued that the US and Soviet Union controlled CBW weapons and their production capacity strictly, resulting in a relatively stable global situation with regard to proliferation. He stated that: "[W]ithin this relatively stable milieu the SADF gradually phased out all CBW capacity. The USSR did not represent a direct threat to the RSA and all training and research were halted."⁶⁵ These statements were made by Basson in a document which was provided to President FW De Klerk in 1990. There are no documents dating to the initiation of Project Coast which provide a contemporaneous rationale for its initiation.

⁶⁴ W. Basson, "Project Coast: Briefing of the State President", SADF document GG/UG/302/6/C123/BK, 16 March 1990.

⁶⁵ Ibid.

This situation, Basson argued, changed in the 1970s and early 1980s with changes in technology and the nature of chemical weapons. Despite Basson's claims being false, his argument that chemical weapons were now more easily available may have influenced the military's threat perception. The implication that other countries were not taking the ban on chemical or biological weapons seriously removed a further obstacle to the decision to develop a chemical weapons programme by providing a justification for South Africa not to adhere to its treaty commitments. Although in this document, no specific mention was made of the biological weapons threat, Basson conflates the two categories of weapons, referring to chemical and biological weapons at the same time while not being specific about the BW threat. At the time South Africa was a States Party to the Biological and Toxins Weapons Convention (BTWC) and had signed the Geneva Protocol.

Basson's argument that during the 1970s and 1980s the nature of chemical weapons began to change was based on incorrect assertions. Nevertheless, his argument was likely to have determined the focus of the programme on so-called "non-lethal" chemicals, chemical agents which would (in limited doses) have an irritating or incapacitating effect on subjects. Whilst implying that a number of countries did not regard the international norms against chemical and biological weapons as deterrents to their proliferation efforts, Basson also pointed out (again incorrectly) that the non-lethal weapons which were in favour at the time, were not discussed in any of the disarmament agreements, and concludes with the statement: "The USA conducts this research [into chemical weapons] in several clandestine and covert laboratories and they are doing a very good job of keeping it a secret."⁶⁶

It can be argued, therefore, that the international norms were not an inhibiting factor in the decision to develop the CBW programme, rather that justification was provided for the programme on the basis that the norms were not effective in deterring other countries from the development of similar weapons programmes. That Basson was mindful of the international agreements, making specific reference to the fact that they did not cover the development of incapacitants or irritants, may have been due

⁶⁶ Ibid.

to the fact that his audience, President FW De Klerk, was more concerned about the contravention of such agreements than his predecessor had been.

By the mid-1980s the internal threat to the apartheid government was increasing while the conventional threat in Angola and other neighbouring states was decreasing. In 1987 the SADF largely withdrew from Angola and the focus of South African security policies was on internal security. The threat was now posed by civilians inside South Africa and the liberation movements who were operating underground. The CBW programme's focus on the production and development of crowd control agents and chemical and biological assassination weapons can be understood to have been a response to this changed threat.

Another factor which may have influenced the decision to establish Project Coast was the success of the development of the arms industry in South Africa. The development of this industry started as early as 1968 with the establishment of the state-owned Armaments Development and Production Corporation (later the Armaments Corporation of South Africa, Armscor). Armscor's growth had been given impetus by the Minister of Defence, PW Botha. By the time a mandatory arms embargo was imposed in 1977 by a decision of the United Nations (UN) Security Council, "the South African arms industry was already either producing, or in the process of acquiring, the knowledge to produce a wide spectrum of armaments."⁶⁷ Batchelor and Willett have argued that:

[T]he growing power and influence of the military, the South African Defence Force's involvement in a number of regional conflicts, which required a guaranteed source of appropriate armaments and military equipment, and the imposition of a mandatory United Nations arms embargo in 1977 prompted the apartheid government to invest considerable national resources in developing a domestic arms industry with across-the-board capabilities.⁶⁸

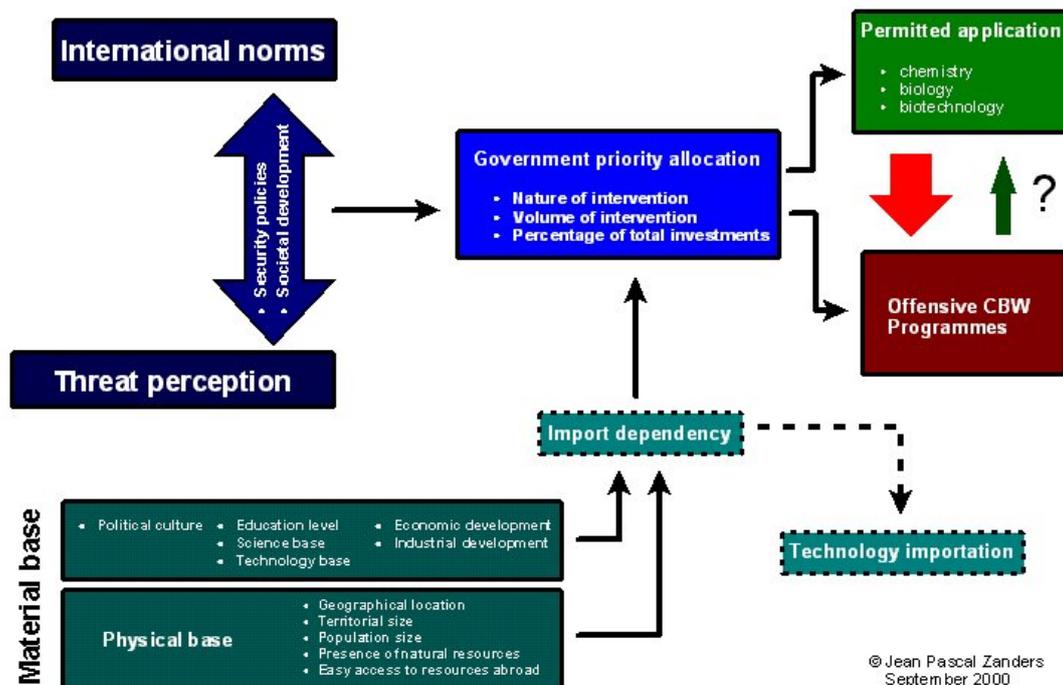
By the late 1980s the arms industry had developed into one of the most significant sectors of the country's industrial base. "The country had also become a major

⁶⁷ P. Batchelor and S. Willett, Disarmament and Defence: Industrial adjustment in South Africa, New York, Oxford University Press, 1998, p32.

⁶⁸ Ibid., p2

developing-country arms producer and was actively engaged in the international arms trade. During its build-up from the mid-1970s onwards, the arms industry became a major site for Afrikaner political and economic empowerment.”⁶⁹

The threat perception of the apartheid government, combined with a strong material base and knowledge capable of developing and producing armaments necessary to counter both domestic resistance and external conventional threats, provided the context for the initiation of both a nuclear and chemical and a biological warfare programme. Despite the arms embargo, South Africa developed a strategic nuclear capability, and despite the country’s commitment to the BTWC, a chemical and biological warfare programme was established.



⁶⁹ Ibid., p2

The Botha Regime and Total Strategy

The appointment of PW Botha as Minister of Defence in South Africa in 1966 signaled a change in the understanding of the security situation both in South Africa and in the southern African region. Instead of focusing on threats directed at South Africa, Botha espoused a broader vision of security, encompassing the East-West global ideological conflict and South Africa's role in it. Three themes predominated in his speeches: that the West was threatened by Soviet expansionism, that South Africa was part of the West, and that Soviet strategy was to cut Europe off from South Africa's essential raw materials.⁷⁰ Seegers identifies this not as a departure from National Party thinking but a solidification of that thinking. Since 1958 the National Party had believed that "South Africa had an important role to play in the Cold War, both as a strategic geopolitical asset of the West (because of its position in terms of the Cape sea route), and as a provider of strategic assets such as minerals and labour. Their anti-communist theme was to remain in place well into the 1980s."⁷¹

South Africa's neighbouring states were important in Botha's security thinking. They were South Africa's first line of defence against Soviet expansionism. In the late 1960s the South African government concluded security agreements with Portugal and Rhodesia, so that Angola, Mozambique and Rhodesia became South Africa's front line. Influenced by the findings of the Potgieter Commission of Inquiry, Botha drew no distinction between the external conflict on the country's northern borders and the internal conflict. He argued that the external conflict was merely an extension of the internal war between his government and the South African liberation movements. The Commission had concluded that: "it is no secret that the enemies of the Republic are trying to attack in all fields",⁷² and argued that South Africa was

⁷⁰ B. Mortimer, "SA Defence Force involvement in the internal security situation in the Republic of South Africa", Submission in respect of the former SADF to the TRC, Cape Town, 21 October 1996.

⁷¹ A. Seegers, "The Role of the military in State Formation in South Africa", in P. Batchelor, K. Kingma and G. Lamb (eds), Demilitarization and Peace-Building in Southern Africa, Vol III, Aldershot, Ashgate, 2003, p96.

⁷² G. Cawthra, Brutal Force. The Apartheid War Machine, London, IDAF, 1986, pp24-25

faced by a “total onslaught” from beyond its borders, and recommended the adoption of a “total national strategy.”⁷³ According to the 1975 Defence White Paper, the “total strategy” was to include “economic, ideological, technological, and even social matters,”⁷⁴ in developing a defence against the threat.

The theory of “total strategy”, originally put forward by the French general, André Beaufre, was based on his experiences of World War II and the Indo-China war. Beaufre saw a role for politicians in the development of military strategy. He argued that a war can be won through the effective co-ordination of all elements of the state with a single purpose – to engage the enemy on all fronts: military, economic, psychological and political. Beaufre’s thesis was considered so important in South Africa that it became the basis of lectures on strategy at the Joint Defence College.⁷⁵ The primary objective of “total strategy” was to ensure the survival of a society in which “the principle of the right of self determination of the white nation must not be regarded as being negotiable.”⁷⁶ The South African government, its security forces and its electorate (most white South Africans) saw themselves as being at war with whoever opposed this “right”, that is, at war with the majority of South Africa’s population and most of the world. In the preface to his 1973 Defence White Paper Botha said:

The Republic of South Africa is a target for international communism and its cohorts – leftist activists, exaggerated humanism, permissiveness, materialism and related ideologies. In addition, the RSA has been singled out as a special target for the by-products of their ideologies, such as black radicalism, exaggerated individual freedom, one-man-one-vote, and a host of other slogans employed against us on the basis of double standards ... Because the RSA holds a position of strategic importance, these ideological attacks on the RSA are progressively being converted into more tangible action in the form of sanctions, boycotts, isolation, demonstrations and the like. This renders us – and the Free World – the more vulnerable to the indirect strategy applied by the radical powers in the form of undermining activities and

⁷³ J. Hanlon, Beggar Your Neighbour, London, James Currey Press, 1986, p7.

⁷⁴ Ibid., p25

⁷⁵ J. Selfe, “The Total Onslaught and the Total Strategy: Adaptations to the Security Intelligence Decision-Making Structures under PW Botha’s administration”, MA Thesis, University of Cape Town, 1987, p119.

⁷⁶ Cawthra, Brutal Force, p29.

limited violence, whether employed openly or dissimulated behind ideological fronts.⁷⁷

In September 1978, twelve years after being appointed minister of defence, PW Botha became prime minister and shortly thereafter elaborated on the concept of the total onslaught. The 1979 White Paper on Defence recorded "...increased political, economic and military pressure on South Africa" and expressed concern that "...the military threat against the RSA is intensifying at an alarming rate". The idea that South Africa was "...Moscow's stepping stone to world conquest", became the departure point for security-related government policy.⁷⁸

This view was supported by the United States. In the mid-1970s CIA assessments of the situation in Angola noted that the Soviet Union had increased its material support for the MPLA's armed wing, FAPLA, in Angola and had increased the number of Soviet advisors to FAPLA.⁷⁹ A 1985 CIA assessment stated that: "[T]he continued build-up of Soviet-supplied arms in Angola will help further Moscow's long-term objective of ensuring a Soviet role in southern Africa."⁸⁰

In 1982 the Steyn Commission Report upheld and reinforced Botha's view that the Soviet Union's aim was world domination, stating that the Soviets' methods included subversion, disinformation, psychological war, espionage, diplomatic negotiations, military and economic aid programmes, terrorism and guerrilla warfare. The Steyn Commission concluded that the ANC, SWAPO, the South African Communist Party (SACP) and "other related organisations" were Soviet surrogate forces.⁸¹ This thinking enabled Botha to present to his electorate and security forces the view that they were at war with their fellow citizens.

⁷⁷ Quoted in Selfe, "Total Onslaught", p120.

⁷⁸ Mortimer, Submission to the TRC, p4.

⁷⁹ "Soviet and Cuban Aid to the MPLA in Angola During January 1976", Central Intelligence Agency document ER M 76-1009, available at <http://www.foia.ucia.gov>.

⁸⁰ "Soviet Military Support to Angola: Intentions and Prospects", Special National Intelligence Assessment, Central Intelligence Agency, October 1985 p15, available at <http://www.foia.ucia.gov>.

⁸¹ Mortimer, Submission to the TRC, p5.

The SADF drew a distinction between terrorists and guerrillas,⁸² arguing that the former targeted civilians and the latter engaged unconventionally with military targets. The SADF viewed the liberation movements as terrorist organisations, which implied that every white South African was a potential target. Fear was instilled in ordinary white South Africans, reinforced by reports of ANC speeches in which members were called upon to arm themselves. Racism and appeals to whites' fear of Africans became the basis of the total strategy mentality. This created an environment in which it was possible for the scientists who were to drive the chemical and biological warfare programme to justify their actions to themselves as being patriotic.

An extract from a speech delivered by General Magnus Malan, Minister of Defence in 1981, illustrates the government's view:

As a point of departure we have to accept that the onslaught here in Southern Africa is communist-inspired, communist-planned and communist-supported ...Stalin said it for the first time in 1923 and Brezhnev subsequently reiterated quite a number of times what communism was striving for, was world domination. The onslaught is aimed at the prevailing State structure i.e. the present South African democratic (sic) way of life as represented and symbolized by Parliament..... the security of the Republic of South Africa must be maintained by every possible means at our disposal. Therefore, the Defence Force must be prepared to guarantee orderly government by maintaining law and order and securing the country's borders.... owing to the communist threat and the instability which is increasing in Southern Africa, the Defence Force must also be prepared at all times to ensure the security of the territory of the Republic of South Africa by taking offensive pro-active steps.⁸³

The military gathered more power than ever, and in the 1970s and 1980s many South Africans lived in a state of fear.

Botha's ascent to power was followed by a massive shake-up in the civil service and in the way in which state structures interacted. He had already, as Minister of Defence, initiated structural changes in the SADF which led to, amongst other things, the scrapping of the position of Defence Secretary in 1973. This was a civilian, political position which acted as a check on the power and spending of the Defence

⁸² General Magnus Malan, Submission to the TRC, 7 May 1997, p9.

⁸³ Ibid., p13.

Force, and through which all acquisition by the military had to be approved. Up to this time the Defence Secretary had the same authority as the Commandant General (head of the Defence Force). After 1973, the position of Defence Secretary was scrapped and in its place the position of Comptroller General was created, a military position which fell just below the Chief of the Defence Force. This event signalled the loss of civilian control over the military.⁸⁴

During the early and mid-1970s most of the World War II veterans who were still serving in the SADF retired. There was a changing of the guard which allowed for the rapid promotion of individuals who shared Botha's views. Constand Viljoen, who was a Colonel in 1975, held the rank of General and Chief of the Defence Force some five years later. The border war had required a change in tactics, and the old ethos of the Defence Force vanished. There was, in short, a 'tradition of no tradition' from the mid-1970s.⁸⁵

In the years preceding 1972/3 it would have been more difficult to launch a clandestine project such as Project Coast than it was thereafter. The Defence Secretary may have curbed the influence of the military in anything other than military operations. After 1973 the responsibility for these secret projects fell to the Chief of the Defence Force. The Defence Headquarters became a huge, powerful and centralised operation. PW Botha personally saw to it that General Magnus Malan, a close ally, was brought back from South West Africa, where he was serving as General Officer Commanding of South West Africa Command to take up the position of Chief of the Army. In 1975 Malan became Chief of the Defence Force.⁸⁶ According to military analyst Willem Steenkamp, even before becoming Chief of the Defence Force, Malan's relationship with Botha circumvented the Chief of the Defence Force, Admiral HH Biermann.⁸⁷

⁸⁴ Chandré Gould interview with Willem Steenkamp, independent military analyst, 7 December 2000, Cape Town.

⁸⁵ Ibid.

⁸⁶ Ibid.

⁸⁷ Ibid.

These personal relationships, which defied rank and authority, played an essential role in clandestine operations such as Project Coast. Former senior military officials concur that the military was run by powerful cabals, hidden by the formal, legal military structures. Magnus Malan was central to the establishment of these alternative power structures. His confidantes and supporters included General Jannie Geldenhuys (chief of the SADF during the 1980s) and General AJ (Kat) Liebenberg, Chief of Special Forces, later to become Chief of the Army and Chief of the SADF.⁸⁸

Military officers I interviewed repeatedly testified to the power of these invisible structures,⁸⁹ confirming that anyone who questioned their ways of operating, or who questioned projects close to the sources of power, were immediately moved to positions where they could not act against the cabals, and often ultimately were forced to resign. General Pierre Steyn identified Liebenberg as a powerful member of the informal structures. It was Liebenberg's practice to restrict the flow of information, by-pass normal chains of command and ensure that people in positions of power were those who toed the line.⁹⁰ This modus operandi was similar to that of the secret Afrikaner organisation, the Broederbond, which was a powerful yet invisible force behind security thinking at the time and played a central role in determining defence policy and strategy.⁹¹

The way in which the cabals acted to maintain their power was clearly demonstrated when in 1992 General Pierre Steyn was instructed by President FW De Klerk to

⁸⁸ Chandré Gould interview with General Pierre Steyn, former Deputy Chief of the Defence Force, 17 January 2001, Pretoria. A second former senior military officer, who I agreed not to name, has confirmed the contents of the interview.

⁸⁹ Ibid.

⁹⁰ Ibid.

⁹¹ Gould interview with Steenkamp, 7 December 2000.

investigate the allegations of 'third force'⁹² activities and the increased levels of political violence which accompanied negotiations between the liberation movements and the government. Liebenberg reacted to Steyn's appointment by warning him, "Don't scratch where it does not itch".⁹³ Steyn was constantly harassed during the 'third force' investigation. His house was broken into, his personal computer stolen, and he was kept under constant surveillance. A car was permanently parked outside his house. When Steyn challenged Liebenberg about the surveillance he was told, "I can watch anyone I want"; and Liebenberg commented, "You are messing with the system".⁹⁴ The cabals were ruthless with people they considered internal enemies or traitors.

In December 1992, when Steyn reported verbally to De Klerk, his report was based on investigations conducted by members of the National Intelligence Service (NIS). The written report upon which he based his verbal report, revealed that a few members of the SADF, some in high ranking positions, were involved in illegal activities, either with criminal intent, or with intent to disrupt the negotiations towards democracy.⁹⁵ Due to the intense rivalry which existed between the NIS and the military, and the complex nature of the incidents which were recorded in the report, it is impossible to determine with any degree of certainty, whether the individuals named in the report were truly involved in the alleged activities or whether the report was constructed by the NIS to put the Intelligence Service in a favourable light during

⁹² During the political transition in the 1990s South Africa experienced a surge in levels of political violence. This was blamed on a 'third force', which was understood to be disgruntled apartheid security force members and their paid assistants, people who were resistant to the imminent political change. The TRC's final report refers to the 'third force' in the following way: "the term 'third force' began to be used increasingly to describe apparently random violence that could not be ascribed to political conflict between identifiable competing groups. Rather it appeared to involve covert forces intent on escalating violence as a means of derailing the negotiations process." TRC Final report, Vol 11, Chapter 7, 1999. (<http://www.polity.org.za/govdocs/commissions/1998/trc/2chap7.htm>)

⁹³ "Moenie krap waar dit nie jeuk nie."

⁹⁴ "Jy sukkel met die stelsel."

⁹⁵ "Staff Paper prepared for the Steyn Commission on Alleged Dangerous Activities of SADF Components", December 1992, Top Secret document made available to the TRC and public during the TRC hearing into chemical and biological warfare, Cape Town, June 1998.

the transition period in South Africa. It is likely that the report contains some valuable information and some which is elaborated.

The relationship between Botha, Malan and Liebenberg was to become important to the growth of Wouter Basson's personal power. Throughout his tenure as Project Officer of Project Coast, Basson reported to Liebenberg as Chief of Special Forces. The direct reporting continued when Liebenberg was Chief of the Army, and, in the final stages of Project Coast, Chief of the Defence Force. When Malan was Minister of Defence and Liebenberg Chief of Special Forces, it is likely that this special relationship would have circumvented Chief of the Defence Force, Constand Viljoen, (although Viljoen did authorize the establishment of the chemical and biological warfare programme). Basson, who reported to Liebenberg on operational matters, would, therefore, have had a direct line to the Minister of Defence⁹⁶ and to the State President.

The structural changes in the state machinery took place at a time of rising political pressures inside South Africa and in the region. The fall of the Portuguese government in April 1974 and the consequent rise to power of revolutionary governments in Angola and Mozambique, combined with the struggle for liberation in Rhodesia, "traumatised the apartheid regime in Pretoria".⁹⁷

In explaining the context in which the nuclear programme was born, Fig argues that the regional changes:

precipitated a renewed rise of social struggle, typified by the events of June 1976 in Soweto, the emergence of the Black Consciousness Movement and a stronger ANC underground ... [the] state responded with intensified domestic repression and external aggression. Not only had the front line moved closer, it had taken shape in the dusty streets of South Africa's townships. The decision to build nuclear weapons [taken in 1974] arose in this atmosphere, during the paranoia about external attack and internal subversion, and as a part of a growing move

⁹⁶ Gould interview with Steyn, 17 January 2001.

⁹⁷ D. Fig, "Apartheid's nuclear arsenal: Deviation from development", in J. Cock and P. McKenzie (eds), From Defence to Development: Redirecting Military Resources in South Africa, Cape Town, David Philip, 1998, p164.

to create a 'total strategy' against the 'total onslaught' of apartheid's enemies.⁹⁸

There was an increased level of internal resistance to apartheid following the massacre of school children in Soweto in 1976, the murder of Steve Biko in 1977, and increased levels of conflict in Angola and northern Namibia. There was consequently, a need perceived by the SADF leadership to research and develop crowd control agents. The search for chemical agents which could effectively be used against crowds coincided with the Soweto massacre in 1976. Both former South African Police Forensics chief, General Lothar Neethling, and General Constand Viljoen, have recalled the military's interest in finding agents that would calm a crowd. As Neethling stated to the Truth Commission:

When the riots started in 1976, the South African Police were caught unawares. They had nothing apart from guns, shotguns, and sharp point ammunition. Nobody wanted to use that and that's why there was a surge for various techniques to be applied ...I went overseas three times to Germany, England, Israel, America to find the best techniques available.⁹⁹

Viljoen concurred with Neethling, saying that the purpose of the chemical warfare programme was, on the one hand, to provide SADF troops with protection against the use of chemical weapons, and on the other hand to seek other forms of crowd control which would give the police an alternative to live ammunition.¹⁰⁰

Viljoen explained to me that the killing of school pupils in Soweto in June 1976, after the police had opened fire on a student protest gathering, had resulted in a diplomatic setback for the South African government. The incident focused the attention of the military on the need to develop alternative crowd control agents. A situation such as that in Soweto had to be prevented in the future, not only because it was morally unacceptable, but "because it was bad for internal relations and because of the effect it had on South Africa's international relations."¹⁰¹ Viljoen said that the

⁹⁸ Ibid.

⁹⁹ Testimony of General Lothar Neethling in the transcript of the TRC hearing into chemical and biological warfare, Cape Town, 11 June 1998.

¹⁰⁰ Chandré Gould interview with General Constand Viljoen, Cape Town, 18 May 2000.

¹⁰¹ General Constand Viljoen, correspondence with Chandré Gould, 30 March 2001.

focus of the programme was, therefore, initially on the development of agents to be used inside South Africa for purposes of riot control and on “the development of defensive measures and tactical doctrine in defending and protecting [our] own troops”.¹⁰²

Viljoen’s statements appear, however, to be concealing other motives since the chemical company, AE&CI (later renamed AECI) had been producing CS teargas for riot control purposes since the early 1960s.¹⁰³ The CS gas had been used to fill grenades by Swartklip products under the code-name Project Liomar. The police did, therefore, have stocks of CS available for use, but chose instead to use live ammunition to quell the 1976 riots. Viljoen’s assertion, in the press, that the SADF sought a riot control agent which would calm a crowd does not explain Project Coast’s focus on CR, a more irritant form of teargas. It was only after the establishment of Project Coast that any attempts were made to find alternatives to the CS gas. When confronted with the evidence that a calming agent was not weaponized, former Chief of the Defence Force (1985 – 1990), General Jannie Geldenhuys, said that he was surprised to hear that CR was not a calming agent.

Chandré Gould: Can you please explain to me why it was that CR or New Generation Teargas was decided on. What was wrong with CS? Keeping in mind that you were looking for a calming agent and CR is more irritating than CS and is certainly not a calming agent.

Jannie Geldenhuys: It is not? It was my understanding that it was more calming. That is what Liebenberg told me. It was the intention to mix the MDMA [“Ecstasy”] with the teargas.

Chandré Gould: I have not seen any evidence to suggest that the MDMA was weaponised and certainly no evidence that the MDMA was going to be mixed with CR. Swartklip Products said that they had never done any weaponisation of MDMA and they were the people responsible for the weaponisation of CR.

Jannie Geldenhuys: That was at the end of my tenure. When the issue of a calming gas became prominent Kat [Liebenberg] told me that they were doing that – making a calming teargas. It was what had been ordered and what was going to be produced.¹⁰⁴

¹⁰² Gould interview with Viljoen, 18 May 2000.

¹⁰³ Chandré Gould telephonic interview with Dr Vernon Joynt, 27 August 2001.

¹⁰⁴ Chandré Gould interview with General Jannie Geldenhuys, Pretoria, 4 September 2001.

CHAPTER 3

Project Coast

Overview of Project Coast: Motivations and Intentions

During the 1970s and 1980s South Africa's white minority regime felt threatened from within and outside its borders. The survival of the state was paramount in the minds of politicians and the military. Politicians and military leaders shared a common belief that the country was at war, a total war which required a total response. It was partially for this reason that a nuclear programme was initiated in the 1970s and the arms industry grew to considerable size.¹ The chemical and biological warfare (CBW) programme was a product of the same era.

The chronology leading to the initiation of Project Coast in 1981 can be summarised as follows:

1972	South Africa becomes a State Party to the BTWC.
Between 1975 and 1980 ² (date unspecified)	Wouter Basson, under authorisation of the Surgeon General, ³ approaches CSIR employee Vernon Joynt to prepare an assessment of the threat of use of chemical weapons against South African troops. Joynt concludes the cost of developing a chemical warfare capability is comparable to that of the Soviet Union will be R500 million. Wouter Basson reports back to the Surgeon General and returns to Joynt with an offer to head the establishment of a chemical warfare programme. Joynt refuses. At this time there is no mention of biological weapons.
1976	Uprisings by schoolchildren in Soweto against the use of

¹ Batchelor and Willett, Disarmament and Defence Industrial Adjustment in South Africa, p37.

² Chandré Gould interview with Dr Vernon Joynt, Pretoria, 6 October 1999.

³ General N. Nieuwoudt.

Afrikaans as the compulsory medium of education. The police suppress the uprisings using live ammunition which results in the death of students. Vocal international opposition to the incident increases pressure on Pretoria.

- 1977 JP De Villiers (head of the Applied Chemistry Unit of the CSIR) prepares a chapter on chemical and biological warfare for inclusion in a handbook for military commanders. He concludes that there is no immediate threat of chemical weapons being used against SADF troops, but asserts that chemical weapons could have tactical utility in the fight against terrorism. He states that biological weapons too could have utility in clandestine military operations.
- In September black consciousness leader, Steve Biko, is killed in detention.
- In November the United Nations Security Council adopts Resolution 418, instituting a mandatory arms embargo against South Africa.⁴
- 1978 – 1980 Escalation of conflict between the SADF and MPLA forces which have Soviet and Cuban support in Angola.
- 1981 Meeting of the Minister of Defence and military leaders to assess the threat of chemical weapons being used against SADF soldiers in Angola. The conclusion is reached that the threat is imminent and Basson is authorized to collect information internationally about chemical and biological warfare programmes to inform a South African approach to the problem. In August SADF funds are allocated for the completion of a feasibility study into the establishment of a chemical and biological warfare programme for South Africa.
- Towards the end of the year the Minister of Defence authorizes the establishment of Project Coast and allocates additional funds for this purpose.

The idea that chemical and biological weapons would have tactical utility in the apartheid government's effort to maintain white rule was established by De Villiers in 1977. At the same time the South African government (i) faced increased international pressure to end apartheid discrimination; (ii) was isolated by the imposition of a United Nations Security Council arms embargo; (iii) faced increased internal resistance to apartheid; (iv) as a result of the international pressure and attention focused on the activities of the security forces, had to find alternative ways

⁴ K. Mokoena (ed), South Africa and the United States: The Declassified History, New York, National Security Archive Documents Readers, The New Press, 1993, p24.

of suppressing the growing internal resistance to apartheid policies; (v) experienced an increase in the escalation of conflict in Angola and assessed that chemical weapons may be used by the MPLA.

The decision in late 1981 to establish Project Coast was influenced by these factors which also informed the focus of the programme on: crowd control agents, covert assassination weapons and protective clothing for troops. The official documentation of Project Coast summarises the objectives of the CBW programme as follows:

- To develop chemical warfare agents that could be used by security forces to control crowds.
- To do research into offensive and defensive chemical and biological warfare.
- To develop offensive chemical and biological weapons for operational use.
- To develop defensive training programmes for troops.
- To develop and manufacture protective clothing.⁵

The South African Defence Force philosophy with regard to chemical warfare included “the right to reactively use non-lethal chemical warfare”, “the integration of chemical warfare into all conventional actions”, and “the acceptance of the use of chemical warfare on a proactive basis to ensure the survival of the state, for example, in controlling the massive violence in the current revolutionary situation”.⁶ The stated objectives of the programme reveal that chemical warfare operations

⁵ Truth and Reconciliation Report of South Africa, Vol 2, Chapter 6: Special Investigation into Project Coast: South Africa’s Chemical and Biological Warfare Programme, Cape Town, Juta & Co, 1998.

⁶ “Verkleinde Verdedigingsbevelraad: Notule van vergadering gehou om 07H30 op 25 Oktober 1990 te Samik. Aanhangsel A: Voordrag aan Verkleinde VBR: Voorgestelde filosofie vir chemiese oorlogvoering vir die SA Weermag – Beginsels en teurgvoer oor huidige stand in die SA Weermag”, SADF document HS PLAN/DP/302/6/COAST.

were envisaged which would have included the use of CW agents inside the country and imply that external use was also considered.⁷

Very few military documents exist in the public domain which date to the initiation of the CBW programme and none which provide a contemporaneous explanation of what motivated those who set it up. Such documentation as is available, together with testimony from those involved in the decision-making process leaves little doubt that the principal motivation was the need to provide SADF troops fighting in Angola with protection against chemical weapons. A subsidiary goal was the provision of novel crowd control agents to the SAP.⁸ Neither of these aims, however, provides any persuasive reason for establishing the biological component of the programme.

While the need for chemical defence equipment and crowd control agents would explain the existence of a largely defensive programme and small offensive one (for producing tear gas munitions supposedly only for internal use), the biological component is less easily explained. Documents assessing the threat to South Africa in the late 1970s specifically note that there is no immediate, or envisaged threat from biological warfare,⁹ despite recognizing that biological weapons could be utilized for clandestine operations. The BW programme itself appears to have had only a limited defensive component, most of the evidence suggests that the aim was offence. Some military officials have argued that the primary reason behind the development of the biological warfare facility at the Roodeplaat Research Laboratories (RRL), was to provide an animal testing facility for chemical agents developed at the sister company, Delta G Scientific.

Both RRL and Delta G Scientific were military front companies, established to conduct research, and to both develop and produce products for Project Coast. In the

⁷ Ibid.

⁸ Chandré Gould interview with General Constand Viljoen, former Chief of the South African Defence Force, Cape Town, 18 May 2000.

⁹ De Villiers, McLoughlin, Joynt, Van Der Westhuizen, "Chemical and Biological Warfare in a South African Context in the Seventies"; 12 February 1971.

event of detection the front companies were meant to shield the CBW programme and disguise its military connections. They also made it easier to import dual-use equipment and other items which may have raised alarms had it been known that they were destined for a military organisation.¹⁰ There is certainly documentary evidence that chemical agents were tested on animals at RRL. As for the BW programme, however, the scientists involved claim that it was intended to supply the military and police with covert assassination weapons for use against individuals regarded as a threat to the apartheid government.¹¹

No publicly available document about Project Coast provides a clear indication of either the extent or nature of the biological programme. The emphasis is rather on the perceived chemical threat to South African forces fighting in Angola and the need to defend them, as well as developing agents to control internal opposition to apartheid.¹² In many of the documents the two categories of weapons (chemical and biological) are conflated. Documents which do reveal the motivation behind the BW programme and its development are retrospective. In addition, these documents were prepared for the Minister of Defence, Eugene Louw, and the President, FW De Klerk, in the early 1990s. Both men needed to be seen to be making a break with the past,¹³ and it is likely that the briefings they received would have deliberately obscured aspects of the programme which might cause discomfort. Unlike his predecessor, PW Botha, De Klerk was not a militarist and soon after becoming president replaced General Magnus Malan with a civilian minister of defence. Many members of the Defence Force felt threatened by the changes and it is unlikely that De Klerk would have been told about the more sinister aspects of the CBW

¹⁰ Testimony of General. D.P Knobel in The State vs Wouter Basson, South African High Court, Transvaal Division, 15 November 1999.

¹¹ Testimony of Daan Goosen in The State vs Wouter Basson, South African High Court, Transvaal Division, 22 May 2000.

¹² W. Basson, "Projek Coast: Voorligting aan Staatspresident", SADF document GG/UG/302/6/C123/BK, 26 March 1990.

¹³ De Klerk succeeded PW Botha as President in 1989. In February 1990 he unbanned the African National Congress and other formerly banned political organisations. Negotiations towards a democratic transition began with the ANC behind the scenes.

programme, particularly since the development of BW assassination weapons which were a part of it put South Africa on the wrong side of the BTWC.

De Klerk's 1990 briefing paper refers to the BW programme in two short paragraphs stating:

It is not possible to describe the current biological threat to the world because of the speedy development of techniques to produce new bacteria as well as other organisms. Our biological capacity is focused on staying up to date with the changing threat. To do this we are constantly producing new organisms in order to develop a preventative capacity as well as treatment.¹⁴

On the objectives of the CBW programme the briefing is obscure:

The aim of Project Coast is that of covert research and development of CBW and the establishment of production technology in the sensitive and critical areas of chemical and biological warfare to provide the South African security forces with a CBW capacity following the CBW philosophy and strategy.¹⁵

Neither the so-called CBW philosophy nor the strategy are explained. With regard to BW the objective of Project Coast was to, "[E]stablish a research, production and development capacity with regard to biological warfare".¹⁶

In 1990 Basson presented a document outlining the proposed philosophy with regard to chemical warfare to the Reduced Defence Command Council; no corresponding document on biological warfare has been made public. It is far from clear whether a philosophy was ever outlined on biological warfare and it is unlikely that a document describing it exists. Basson provides some insight into why this may have been the case, noting:

This philosophy does not cover any aspects of Biological Warfare (sic). Because of the more controlled nature of Biological Warfare there are

¹⁴ Basson, "Voorligting aan Staatspresident", 26 March 1990.

¹⁵ Ibid.

¹⁶ Ibid.

many more international control measures. The production of Biological Weapons is not allowed anywhere in the world.¹⁷

This suggests that there may have been a policy with regard to the development of biological weapons, but that given the nature of the ban on these weapons, the policy remained unwritten.

The initiation of Project Coast and the role of Wouter Basson

In early 1981 the Minister of Defence, Magnus Malan, met with the Chief of the SADF, General Constand Viljoen, and members of the Defence Command Council to discuss the threat of chemical weapons being used by Cuban forces in Angola. Viljoen was convinced that there was a strong chance that the Soviet-backed forces both had access to chemical weapons and would use them. He convinced Malan who instructed the SADF to find a solution to the problem. A young military doctor, Wouter Basson, was ordered to travel abroad to collect, covertly, information about the chemical and biological warfare programmes of the West and to use these models as the basis for developing a blueprint for a South African programme. Basson was also instructed to make contact with organisations which might provide information about the CBW capabilities of Eastern bloc countries.¹⁸

Basson joined the SADF as a medical officer in January 1979, the year after PW Botha became prime minister. He held the rank of lieutenant, and worked at 1 Military Hospital until February 1981. If Joynt is correct in his claim that Basson approached him in the mid-1970s on behalf of the Surgeon General, it would indicate that Basson had a relationship with the military, and particularly the Surgeon General, before 1979. If this is true, Basson would have indicated his interest in CBW matters before he officially joined the military. Between 1979 and February 1981 Basson completed

¹⁷ W. Basson, "Voordrag aan verkeinde VBR: Voorgestelde filosofie vir Chemiese oorlogvoering vir die SA Weermag – Beginsels en terugvoer oor huidige stand in the SA Weermag", SADF document GG/UG/306/3, 25 October 1990.

¹⁸ W. Basson and D.P. Knobel, "Voorligting aan die Minister van Verdediging oor die verloop en huidige status van Projekte Coast en Jota te George op 7 January 1993", SADF document GG/UG/302/6/J1282/5, 7 January 1993, p1.

various courses and became a specialist in internal medicine with a military rank of substantive commander.¹⁹ He must have caught his commanders' eye, because from March 1981 he served as a specialist adviser at defence headquarters and as Project Officer for the Special Projects of the Surgeon General. He was under the operational command of the Commanding Officer Special Forces of the Defence Force at the time he was appointed Project Officer of Project Coast.

Basson's rise was meteoric. In January 1985 he obtained the rank of colonel and became head of a new division, the 7th Medical Battalion, which provided medical support to Special Forces, the Parachute Division, the SAP and the NIS. In this capacity he underwent various courses and became a Brigadier in 1988 at the same time as becoming the head of Medical Staff Operations.²⁰ He remained in this position for nine months until the Surgeon General, Knobel, appointed him Head of Research and Development in the South African Medical Services (SAMS). At the same time as becoming head of Medical Staff Operations and Head of Research and Development in SAMS, Basson was head of Project Coast. It is unlikely that he would have been able to perform all these functions simultaneously which raises the possibility that some of these positions were held in name only. His rapid rise in rank and status in the military would seem to support the contention that he had a relationship with the Surgeon General before joining the military.

Knobel summed up the position of Basson in Project Coast in his testimony to the TRC:

...here is a man who became a brigadier at a very young age just before I became Surgeon General. He obviously had the trust of the entire Defence Force and of the Cabinet because that type of appointment is approved at that kind of level. He had the total support of my predecessor. The system that was created to run this project and the way that he had operated was then running already for 8 years when I took over. It is quite impossible to then begin to question the way that he

¹⁹ D.P. Knobel, "Ondersoek kragtens Artikel 5 van die Wet op die Ondersoek van Ernstige Ekonomiese Misdrywe, 117 van 1991: Krygkor, met spesifieke verwysing na Brigadier W Basson", 11 January 1992.

²⁰ Ibid.

carries out his dealings. His word was accepted. I say that and it is true.²¹

Knobel told the TRC that, "Clearly the person you wanted to be the ideal Project Officer would have to be a person with detailed knowledge of chemistry and certainly would have to be also partly a person with a higher degree in medicine. These qualities (sic) is what Dr Basson had and I take it that that was exactly why he was chosen."²² Knobel believed he had a very close, fatherly relationship with Basson; he spoke of Basson being like a son in his house and trusted Basson completely.

In August 1981 funds were allocated by Constand Viljoen to complete a feasibility study for the establishment of a CBW programme in South Africa. Towards the end of that year the Minister of Defence officially approved the establishment of Project Coast and funds were made available for the purpose.²³ According to a retrospective report by Knobel and Basson, it was initially envisaged that the parastatal arms manufacturer, Armscor, would assist the SADF in developing the CBW programme.²⁴ In a meeting with the Surgeon General at the time, General NJ Nieuwoudt, Armscor officials apparently said that it would be too sensitive a task for them. It was therefore decided that the SADF would be solely responsible for the project. Knobel reported in his briefing to the Minister of Defence that Nieuwoudt and Basson met with Piet Marais and Fred Bell of Armscor, who said they would not be in a position to recruit or maintain the scientists necessary for the programme as they had too much work already.²⁵ This was an incongruous position since Armscor was responsible for procurement for the nuclear programme. A senior Armscor official has stated that it was more likely that Armscor's decision not to host the CBW programme related to issues of power and control: Armscor would not have taken on the responsibility for a

²¹ Testimony of General D.P. Knobel at the TRC hearing into chemical and biological warfare, Cape Town, 18 July 1998.

²² Ibid.

²³ Basson and Knobel, "Voorligting aan die Minister van Verdediging", 7 January 1993, p1.

²⁴ Ibid.

²⁵ Ibid.

programme over which it did not have full control and for which it would not get full credit. It is equally unlikely that Basson and Nieuwoudt would have wanted to hand over a project which they had invented, and for which they could gain the favour of the Minister of Defence and State President.

In 1981 the Minister of Defence approved the establishment of Project Coast under the sole auspices of the SADF and, at the same time, approved the establishment of its management committee. This committee, known as the Co-ordinating Management Committee (CMC), included the Chief of the SADF, the Surgeon General, the Chief of Staff Finances, the Chief of Staff Intelligence and other co-opted members.²⁶

When Basson returned from his information-gathering trip in 1981 to the United States, England and Taiwan, he reported back to the Defence Command Council.²⁷ He told them that CBW programmes elsewhere in the world used civilian front companies to conduct all offensive research and development to the point of weaponization.²⁸ In fact, this was not the way the Russian, American or British programmes were structured. Yet on the basis of this information, it was decided that front companies would be used, as opposed to structures within the Defence Force. These front companies were to become an important component of the labyrinthine arrangements of the CBW programme.

²⁶ Ibid.

²⁷ W. Basson and D.P. Knobel, "Voorligting aan die Minister van Verdediging", SADF document GG/UG/302/6/J282/5, 10 August 1993, p2.

²⁸ Weaponization means the making of a chemical or biological agent into an actual weapon, which is to say a war fighting device that a potential user service has accepted into its operational inventory after due consideration. A weaponized agent is a substance that has been selected for its aggressive properties and for which routes to acquisition in adequate quantity have been worked out; that has then been formulated into disseminable payload for a munition whose dissemination characteristics are both militarily useful and predictable; and for which that same munition has been made into a weapon by virtue of acceptance into the arsenal and doctrine of potential user services. Chandré Gould electronic communication with Professor Julian Perry Robinson, Sussex University, 19 August 2000.

Basson also reported that in the late 1970s and early 1980s the emphasis of the USA and USSR chemical weapons programmes shifted to the weaponization of non-lethal chemical warfare agents.²⁹ Presumably this was to support the position that South Africa should pursue the development of non-lethal agents. In fact, the US wrote its first paper on incapacitating agents in 1949 and had incapacitant programmes running during the 1950s under the concept of "the bloodless war" which developed after the bombing experiences of the Second World War. Indeed it was under this banner that the US military lobbied Congress to increase their CBW budget. The incapacitant programme was then stopped, but resurfaced in the US in the form of two programmes: one called Advanced Riot Control Agent Technology (ARCAT) and the other Advanced Riot Control Agent Device (ARCAD).³⁰ Basson's statement to his superior officers was incorrect in claiming that US chemical weapons programmes had shifted to focus on non-lethal weapons in the 1970s and 1980s, both because the work on non-lethal agents began much earlier and because the US was at that time doing work on lethal nerve agents through the binary chemical weapons programme.

Assessing the threat

None of the publicly available SADF documents provide a clear and explicit threat analysis at the time of the initiation of Project Coast. Most of the documents dealing with the threat and consequent programme are authored by Basson. They tend to focus on international trends in chemical warfare and on broad statements about the Angolan threat. Little detail is provided about the internal political situation, although it was a time of extreme state violence and growing resistance.

The international context for establishing Project Coast was set out in a briefing that Wouter Basson gave to a meeting of the Reduced Defence Command Council, which

²⁹ "Verkleinde Verdedigingsbevelraad: Notule", 31 November 1990, Appendix A, p3.

³⁰ Chandré Gould electronic communication with Caitroina McLeish, Harvard Sussex Programme on CBW Armament and Arms Limitation, University of Sussex, 16 January 2001. Chandré Gould electronic communication with Professor Julian Perry Robinson, Science Policy Research Unit, University of Sussex, 18 August 2001.

included the Chief of the Defence Force and other top ranking officers. While the basis for many of Basson's statements were false, the enormous amount of trust which senior military officers placed in him, and his reputation as a brilliant scientist, meant they did not question his claims. The fact that Basson motivated for the CBW programme with such ardour indicates his own desire for the programme to be established.

Basson claimed that during the 1960s and 1970s South Africa had been dependent on the US and UK and "various NATO committees"³¹ for its approach to chemical defence, although this is unlikely and no evidence has been found to support the claim. He also claimed that during the 1970s and 1980s developments in the European chemical industry resulted in the production of chemical warfare agents in Europe. This, he said, led to an increased availability of the agents and resulted in Iraq, Iran, Egypt, Syria, North Korea, Cuba and Libya "acquiring the ability to produce chemical weapons which upset the power balance of the earlier years".³² Based on these factors, Basson concluded that, "The threat now lay in the existence of a large number of potentially undisciplined distributors of chemical weapons, who would make them available to anyone with money or the correct ideology - potential chemical chaos."³³ He added that the US and the Soviet Union had shifted their emphasis from lethal agents to non-lethal agents in the late 1970s and early 1980s because the use of lethal agents on the battlefield and resultant loss of life would be 'unacceptable', given the increased consciousness of social responsibility in the West in these years.³⁴ In fact it was precisely at that time that the United States Department of Defence (DOD) was seeking approval from Congress to lift the moratorium on up-grading its stockpile of lethal chemical weapons.³⁵ According to an

³¹ "Verkleinde Verdedigingsbevelraad: Notule", 25 Oktober 1990, p2.

³² Ibid.

³³ Ibid.

³⁴ Ibid.

³⁵ The problem of chemical and biological warfare. Volume I: The Rise of CB weapons, Stockholm, Almqvist & Wiksell, 1971. The Problem Of Chemical And Biological Warfare. Volume II: CB Weapons Today, Stockholm, Almqvist & Wiksell, 1973.

article in the journal *Science* published in 1979: “[The] DOD wants to build a plant for arming 155 millimetre artillery shells with binary nerve gas projectiles.”³⁶ By 1982 the Pentagon was asking chemical firms in the US to manufacture the intermediates for nerve gas.³⁷

Basson, nevertheless, argued that the increased availability of chemical warfare agents, and the international tendency towards the development of non-lethal agents would lead to CW being an integral part of conventional warfare. As far as he was concerned, an appropriate response would have been to develop effective protective clothing and training for troops and to include non-lethal chemical weapons in the Defence Force’s arsenal. At the same meeting Basson explained that the SADF’s operational philosophy included the “right to reactively use non-lethal chemical weapons” and “the integration of chemical warfare related actions in all conventional actions”. Indeed the philosophy of the SADF included also the “acceptance of the use of chemical weapons on a pro-active basis to ensure the survival of the state, for example in the prevention of the massive violence in the current revolutionary situation.”³⁸ So while pointing to external factors forcing the initiation of a programme, this statement is an admission that the need for a CW programme was directly related to the need to suppress internal opposition to apartheid. Basson, however, also referred to the conventional battleground threat. Having established in the minds of the generals that Cuban soldiers had access to chemical weapons, he implied that these weapons could be used at any time in the Angolan war.

In 1993 the Minister of Defence, Eugene Louw, was briefed on the background to the 1981 initiation of Project Coast. This briefing was more specific about the threat in Angola. The Surgeon General, Knobel, informed the Minister that in the late 1970s and early 1980s there was a concern that CW agents could be used in the Angolan

³⁶ J. Luther, “Carter, Approval Sought for Nerve Gas Pilot Plant”, *Science*, Vol 206, 7 December 1979, p1164.

³⁷ L.R. Ember, “Army seeks firm to make nerve gas chemicals”, *Chemical and Engineering News*, Washington, 23 August 1982, p32.

³⁸ “Verkleinde Vededigingsbevelraad”, 25 October 1990, Appendix A, p7.

war, and that the build-up of Russian and Cuban forces in Angola, with access to chemical weapons, presented a threat to South Africa. He argued that these forces could attack South Africa by moving through Namibia, and that if they were to use chemical weapons, South Africa would not have been able to defend itself.³⁹

More recently, Knobel told the Pretoria High Court⁴⁰ that during the height of the Angolan war between 1975 and 1980, South African troops confiscated vehicles from Cuban soldiers deployed there. These vehicles were taken to a South African military base in Namibia and were found to be fitted with air filters. Knobel told the court that he had personally inspected the confiscated medical bags and found them to contain nerve gas antidotes and gas masks. This, Knobel claimed, led the SADF to believe that there was an intention by Cuban troops to make use of chemical agents.⁴¹ The South African military may or may not have known that the USSR standard vehicle units, including armoured personnel carriers, would routinely have been fitted with these features. Helmoed Heitman, a soldier in the SADF during Operation Protea in Angola in the early 1980s, has stated that he was present when a vehicle was captured from Cuban troops which was believed to have been a decontamination truck. Heitman claims it was this truck which caused consternation in SADF ranks and convinced the SADF that there was a real threat of chemical warfare being used during the conflict. On closer examination of the truck Heitman realized that it was an embalming vehicle, although this does not seem to have been conveyed to senior military officers.⁴²

The real threat of CW use seems to have come much later, after the establishment of Project Coast. There were allegations, repeated in SADF briefing documents, that in

³⁹ Basson and Knobel, "Voorligting aan die Minister van Verdediging" 7 January 1993, p1.

⁴⁰ Knobel was testifying in the trial of Dr Wouter Basson.

⁴¹ Knobel in The State vs Wouter Basson, South African High Court, Transvaal Division, 22 November 1999.

⁴² Chandré Gould, telephone conversation with Helmoed Heitman, July 2000. Heitman is the South African correspondent for Jane's Defence Weekly and spent 26 years as a serving SADF soldier and ranking officer.

the late 1980s the MPLA used chemical weapons against UNITA troops, this caused havoc in the UNITA camps. Soldiers were afraid of any battleground smoke and were demoralized.⁴³ However, many SADF witnesses for the prosecution in the Basson trial stated that they had no knowledge of any incidents of chemical attacks during the Angolan war, despite having spent years at the front.

The alleged chemical attacks against UNITA soldiers were never proven. It is possible that the reaction of UNITA soldiers was the result of the claims made by Professor Aubin Heyndrickx that chemical weapons had been used between 1986 and 1992 in Angola. It is clear that the SADF accepted Heyndrickx's findings, since official documentation cites the discovery of shrapnel (by Heyndrickx) in 1986 in Angola which tested positive for a CW agent (Adamsite) as evidence of a chemical warfare threat on the South African border.⁴⁴ Dr Johan Koekemoer, an organic chemist at the chemical warfare facility, Delta G Scientific, was responsible for analysing the shrapnel and allegedly did find traces of the incapacitant.

In October 1990, when Basson spelled out the SADF's philosophy on chemical warfare to the generals, he also claimed that modified weapons had been used against UNITA soldiers in Angola:

Developments in the field of applied toxicology have been successfully incorporated by the USSR in conventional ammunition. Through changes in the composition and proportions of the components of conventional smoke screen ammunition and light giving flares, this ammunition is changed into deadly chemical weapons. This ammunition can practically be used at will, seeing that it would be very difficult to control it through the Conventions. This ammunition can even be explained away as factory faults. In two types of this ammunition that has been used against UNITA, it was found that the normal content of the projectiles had been adapted. In the one type, Strontium metal (which is normally found in small amounts in weapons) was found in concentrations of up to 50 times the normal concentration. A certain nylon type was used for bonding. The burning of the impure 'nylon' causes saltpetre and cyanide to be released in the smoke.

⁴³ Basson, "Voordrag aan Verkleinde VBR", 25 October 1990.

⁴⁴ Basson, "Voorligting aan Staatspresident", 26 March 1990.

The second type of projectile which to our knowledge has been used against UNITA makes use of a similar mechanism. In this case the normal metals of the light giving flares are bound by a 'PVC' which uses an abnormally high percentage of tricresolphosphate as a softener (up to 5 - 10kg tricresolphosphate per bomb). Ignition of this flare releases tricresolphosphate as well as a very poisonous gas, phosphine, along with metal phosphides which can poison soil (and water) for a long time. It is this last mentioned bombs with their peri peri smell which causes the paralysis that we have seen in hundreds of UNITA soldiers.⁴⁵

This statement too appears to rely heavily on the reports generated by Heyndrickx and was intended to highlight the threat of chemical warfare agents being used against South African and UNITA soldiers. Heyndrickx adopted a definition of chemical weapon which is much broader than the conventional definition. As far as he was concerned, any artillery that released any chemical agent during detonation was a chemical weapon.

If the South African Defence Force had a justifiable concern about the use of chemical agents in the conflict in Angola, it would have been expected that the focus of Project Coast would have been on the purchase and manufacture of protective clothing for soldiers and on the training of fighting troops, or the creation of a plausible deterrent. But this did not happen. The focus on the development and manufacture of protective clothing, training of troops, and physiological research, only began to take place in the programme after 1986.⁴⁶ According to Dr Brian Davey, the scientist responsible for developing training programmes and the defensive CBW philosophy for the SADF, the training of troops in defensive responses to chemical weapons only began in 1988.⁴⁷ Willem Steenkamp, a former citizen force member and defence analyst, has stated that he was called up in the late 1980s to a Defence Force training camp where lectures were given on chemical weapons and nuclear fall-out. At the lectures those in attendance tried on NBC suits.

⁴⁵ "Verkleinde Verdedigingsbevelraad: Notule", 25 October 1990, Appendix A.

⁴⁶ B. Davey, "Degradation of Human Performance with use of chemical protective clothing: Overview of Research Programme". Paper presented at the Fourth International Symposium on Protection against Chemical Warfare Agents, Stockholm, Sweden, 8 – 12 June 1992.

⁴⁷ Testimony of Dr Brian Davey in The State vs Wouter Basson, High Court of South Africa, Transvaal Division, 4 September 2000.

They found that after five minutes in the suits, in the African summer, they would collapse from heat exhaustion. After the course Steenkamp was told by a highly placed source that the lecture was a propaganda exercise, with the intention that news of the course would spread and if the war in Angola accelerated there would be an impression that the SADF was well prepared.⁴⁸

Certainly the SADF response to the alleged conventional threat seems to indicate that they did not take the threat very seriously. A national serviceman who worked with Brian Davey, Danie Du Toit, said that chemical protection courses were only offered to select groups, not the SADF in general. Du Toit was in Angola in 1987 as a member of the SADF's 7 Medical Battalion during Operation Modular. He claimed that there were no NBC suits available for troops in the field. They were briefed that in the event of a suspected chemical attack, they were to "dig foxholes, crawl in and cover themselves with their standard-issue ponchos". Du Toit acknowledged that this was by no means the ideal solution, "but it was all we had". According to Du Toit, even the 7 Medical Battalion Specialist Group had only between 10 and 20 NBC suits available.⁴⁹

The internal threat was far more definable for the SADF. There was no doubt that the South African government considered itself in a state of war against its own citizens from the late 1970s until the early 1990s. Basson's assertion that chemical weapons would be an appropriate way of fighting this war would have had credence.

⁴⁸ Chandré Gould interview with Willem Steenkamp, Cape Town, 7 December 2000.

⁴⁹ Affidavit of Daniel Du Toit, entered into the court record on 13 November 2000 in The State vs Wouter Basson, South African High Court, Transvaal Division.

Table 1. Projects and operations associated with the CBW programme

Name of Project/Operation	Purpose	Dates
Project Coast	Chemical and biological warfare programme.	1981 – 1992
Project Jota (the code-name Coast was changed to Jota for security reasons in 1992)	Chemical and biological warfare programme.	1992 – 1995
Operation Spyker	Military Intelligence operation to supply UNITA with ammunition from Armscor factories or from SADF ammunition depots.	Unknown
Project Muly/Keyboard/Koma/Kea	SADF and Armscor project to develop a limited offensive CW capacity for the SADF. The Surgeon General decided on CR as the fill substance for ammunition. ⁵⁰ The names of the project changed successively as indicated.	1985 – 1993/4 (Project Keyboard was officially closed down during 1993/4) ⁵¹
Operations Hooper, Packer and Modular	An SADF operation in Angola. The SADF was responding to a call for help from UNITA leader, Jonas Savimbi, who was under attack from FAPLA forces. The name of the operation changed when the SADF forces changed. ⁵²	June 1987 – April 1988
Project Academic	Project Academic was an SADF/Armscor procurement project which involved the procurement of CBW defensive capabilities for the SADF. Academic was started as a project study in 1986/7 and during operations Hooper, Packer and Modular shifted to an extraordinary acquisition phase due to the perceived CW threat. ⁵³	

⁵⁰Chandré Gould electronic communication with Rudolph Louw, former Project Officer of Project Keyboard, 21 August 2001

⁵¹ Ibid.

⁵² Chandré Gould telephonic discussion with General Jan Breytenbach, 21 August 2001.

⁵³ Gould electronic communication with Louw , 21 August 2001.

Project Galvanise	A broad Armscor research and development project which included a sub-project to research and develop chemical and biological warfare defensive equipment. ⁵⁴	
Project Fargo	When the chemical and biological warfare defence research and development sub-project of Project Galvanise grew and expanded it was made a separate project with the name Fargo. Protechnik Laboratories was the primary contractor to Armscor in this regard. ⁵⁵	

Structure and management of Project Coast

Wouter Basson was given an extraordinary amount of freedom to conduct the business of Project Coast. He reported not to the formal military chain of command, but rather to informal structures that explicitly by-passed the chain of command. The multiplicity of reporting channels were to provide the justification for those who bore ultimate political responsibility for the programme to claim, after 1994, that they had no knowledge of the aberrant aspects of Project Coast. This section of the thesis considers the nature of the decision-making in Project Coast and examines the consequences of poor management and control over the top secret project.

None of the documents, or evidence presented during the testimony of those associated with the CBW programme, provide any indication of the extent to which PW Botha himself had knowledge of the programme. While Botha would certainly

⁵⁴ Ibid.

⁵⁵ Ibid.

have been informed about Project Coast, and would have been involved in the decision to establish Coast, the documents which are currently available do not reveal the extent of his involvement. According to the documents, political decision-making was the responsibility of the Minister of Defence, who for most of the duration of Project Coast was General Magnus Malan (from October 1980 – August 1991). The Chief of the Defence Force reported to the Minister, and the heads of the branches of the military reported to the Chief of the Defence Force.⁵⁶ An intermediary structure between the Minister of Defence and the Chief of the Defence Force, the Defence Command Council, was the most senior military decision-making body. The nature of top secret projects such as the nuclear programme, the CBW programme, and the covert units of Special Forces, was such that a minimum number of people were made aware of their existence. For this reason the Defence Command Council, did not, as a whole, discuss top secret projects. A “Reduced Defence Command Council” consisting only of those people who had a “need to know” met after the Defence Command Council meetings to be briefed by Basson and to take decisions about SADF philosophy with regard to the use of chemical weapons. These meetings were chaired by the Chief of the Defence Force and usually excluded the Chiefs of the Air Force and Navy.⁵⁷

Project Coast was managed by a committee appointed by the Minister of Defence. This committee, the Co-ordinating Management Committee (CMC), was under the chairmanship of the Chief of the Defence Force. Although the committee was responsible for the project, it was never fully informed of the details. Nevertheless it was the committee’s responsibility to ensure that the project was run efficiently, accountably and according to plan. The CMC included the Surgeon General, the Chief of Staff Finance, the Chief of Staff Intelligence and other co-opted members

⁵⁶ Knobel in The State vs Wouter Basson, 15 November 1999. Chandré Gould interview with General Jannie Geldenhuys, Pretoria, 4 September 2001.

⁵⁷ Chandré Gould interview with a former military officer and member of the Defence Command Council, who requested not to be named, Pretoria, 17 January 2001.

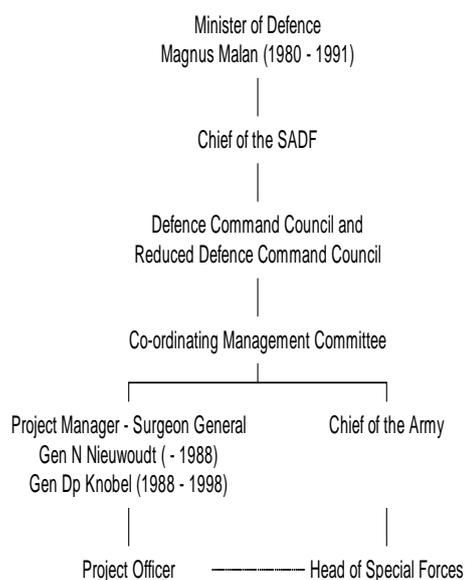
who became permanent members: the Chief of the Army, the Commanding Officer of Special Forces, and the Chief of the Air Force.⁵⁸

Members of Armscor and at some stages, representatives of the Auditor General also took part in meetings.⁵⁹ As Project Officer, Basson (succeeded in 1993 by Colonel Ben Steyn) acted as Secretary to the Co-ordinating Management Committee. In that role Basson was responsible for all the documentation of the CMC and was the direct link to the front companies.

⁵⁸ A table listing CMC members can be found at the end of this chapter.

⁵⁹ For example Mr Wally Van Heerden, representative of the Auditor General, took part in a meeting of the CMC on 31 March 1993 where one of the issues for discussion was the privatisation of the front companies, RRL and Delta G. "Notule van die vergadering van die Beheer Komitee van Projek Jota gehou op 31 Maart 1993 in die HF Verwoerdgebou, Kaapstad", SADF document GG/UG/302/6/J1282/5.

Project Coast structures of command and control⁶⁰



According to Knobel,⁶¹ Basson reported back to the CMC about the achievements of Coast objectives only in broad terms. Knobel justified this to the TRC by saying that the members of the committee did not have either the scientific knowledge or background to deal with the detail of projects. Again, an indication that Basson's status as a scientist gave him special standing and credibility in the eyes of senior military officers. Knobel claimed that: "[T]here was never an opportunity to really discuss in detail what particular experiments were carried out about the very vast numbers of chemicals that had to be studied."⁶² In fact, the technical reports from the front companies contradict this assertion and indicate that there were few chemicals considered for weaponization.

Knobel explained the process of authorization for Coast activities as follows:

⁶⁰ Testimony of General DP Knobel at the TRC hearing into chemical and biological warfare, 11 June 1998.

⁶¹ Ibid., 12 June 1998.

⁶² Ibid.

The CMC would approve a study of chemical agents, as a broad guideline. The Project Officer would then say: "We are now embarking on the classical lethal chemical weapons. We're going to study 500 different chemicals". The CMC would then say: "What sort of requirements do you need to be able to fulfil that objective, namely to look at all the classical lethal chemical weapons?" The Technical Work Group would then do an estimate of what experimentation would be required, what kind of staff would be required to do that work, what kind of laboratory, etc. They would translate it into budget terms and would come back to the CMC and say: "If we want to do this during this year, we are going to require these resources..."⁶³

Knobel, therefore, passed responsibility for the details of the project to the Technical Working Group which supposedly included the Project Officer, the Managing Directors of the front companies, and a select group of scientists within those companies. The task of the Technical Working Group was to plan the research for each company.⁶⁴ However, this group was a fluid concept at best. The only constant member of this committee was Basson himself. Other members of the Technical Working Group varied from one meeting to the next, depending on the scientists involved. According to Knobel, the reason for this loose arrangement was that scientists working on one sub-project were not supposed to know what their colleagues were researching. In theory, the Technical Working Group involved a meeting between Basson, a scientist with a specific need, and usually the Managing Director of the front company concerned. The information prepared by the Group was to be taken to the CMC by Basson, for approval of expenditure. In reality, scientists at RRL told me, meetings with Basson seldom took place,⁶⁵ and many of the scientists testifying in the case against Basson said they had never even known of the existence of the Technical Working Group. One can conclude that such a structure existed only in name and concept, providing a cover for the less formal structures of command and control.

⁶³ Ibid.

⁶⁴ Knobel in The State vs Wouter Basson, 15 November, 1999.

⁶⁵ Chandré Gould and Peta Thornycroft, interview with Drs Daan Goosen, Mike Odendaal and Adriaan Botha, Pretoria, 1 December 1999.

Apart from the Technical Working group, the CMC had two other sub-committees:⁶⁶ a General Administration and Financial Committee and a Security Committee. The General Administration and Financial Committee was under the control of the Project Manager (the Surgeon General) who was assisted by the Chief of Staff Finance and the Project Officer. This Committee was responsible for broad budgetary planning on behalf of the CMC. After 1990 the financial and budgetary planning was done at the CMC itself so this sub-committee fell away. The Security Committee was officially responsible for the security aspects of the project. The Chief of Staff Intelligence, the Surgeon General and the Project Officer were supposedly members of this committee, which was responsible for ensuring that the project remained secret. However, it is likely that this committee too existed only in name. General R. (Witkop) Badenhorst claimed he never attended any meetings of the committee.⁶⁷ Badenhorst was head of Military Intelligence at the time when the front companies were privatised and were, therefore, vulnerable to breaches of security. The fact that he was never involved in meetings of the Security Committee indicates that security decisions must have been made elsewhere. Testimony in the Basson trial indicates that Basson himself was responsible for making decisions pertaining to the security of the Project.⁶⁸

The CMC was an ineffective mechanism for maintaining control. Its members knew very few details about the project, and the committee usually only met on an annual basis. In fact, according to Knobel, after 1981 the CMC only met for budgetary purposes. Instead, Basson was expected to brief the Chief of the Defence Force, Chief of Staff Finance, Chief of Staff Intelligence and the Surgeon General on a more regular basis, although the frequency and detail of these meetings is unknown. Basson stated during his application for bail that there would often be two or three

⁶⁶ Knobel at the TRC hearing into chemical and biological warfare, 18 June 1998.

⁶⁷ Chandré Gould interview with General R. Badenhorst, Pretoria, 16 January 2001.

⁶⁸ Judgement in The State vs Wouter Basson, South African High court, Transvaal Division, 11 April 2002, paragraph 113.

months when he would not see Knobel at all and would take orders from the Chief of Staff Intelligence or the Commander of Special Forces.⁶⁹

None of the witnesses who testified at the TRC hearing claimed to know where ultimate control of the project lay. General Knobel, the official Project Manager, said repeatedly that he relied solely on Basson for all his knowledge of the programme. He denied having had any real authority. Control over Project Coast and Basson was further clouded by the fact that Basson could take orders from any branch of the security forces without the knowledge of Knobel or the Chief of the Defence Force.

After his appointment as Project Officer in 1981, Basson was under the command of the Surgeon General and had to report to him on all medical and related activities. He was also under the operational control of the Commanding Officer Special Forces from March 1981 and all his military activities were authorised from that office. To complicate matters further, the products delivered by Project Coast were determined by the end-user, and instructions given directly to Basson by the end-user. This could have been the Minister of Defence, the Head of the Defence Force, the Commanding Officer Special Forces, the Chief of Staff Information, the Commissioner of the SAP, the Commanding General of the SAP, the Director General of the NIS, or the Chief of the Army.⁷⁰

The precedent for this unusual arrangement was set in 1987 at a National Security Management System (NSMS) meeting, attended by Magnus Malan - Minister of Defence, Adriaan Vlok – Minister of Law and Order, Police Commissioner Johan Coetzee, Security Police chief Johan van der Merwe, National Intelligence Service director-general Niel Barnard, and SADF Chief of Staff Operations, General van Loggerenberg. Although Knobel was not yet Surgeon General, he represented the Surgeon General, General Nieuwoudt, at the meeting. He was “extremely surprised” when Malan told the meeting that Wouter Basson was to brief them on potential riot

⁶⁹ “Borgaansoek van Dr. Wouter Basson in die Streekhof vir die Streekafdeling van Noord-Transvaal gehou in Pretoria”, Vol 8, 3 November 1997.

⁷⁰ Testimony of Knobel at the TRC hearing, 18 June 1998.

control methods and the new generation teargas. Project Coast was such a closely guarded secret at the time, said Knobel, that he believed no other state department knew of its existence. Even more disturbing for Knobel was Malan's instruction to the meeting that should any branch of the security forces need the product (CR), they should contact Basson directly. He would also be able to advise them on the most effective use of the new generation teargas (NGT) and about protective measures to be taken. This "worried" Knobel a great deal - in his mind it exposed Basson on too broad a front. However, when he raised his objections with Nieuwoudt, he was told the Defence Minister had made his decision. This shows that even the Minister of Defence apparently showed scant regard for structures of command and control which could ensure accountability and was prepared to grant Basson special status.

To make matters more obscure, Basson's defence team told the court during the cross-examination of Knobel, that General AJ (Kat) Liebenberg, erstwhile Special Forces commander and Chief of the Army, had paid little regard to the SADF chain of command and that on becoming Chief of the SADF, Liebenberg had used Basson as his personal soldier. At times, Knobel admitted, while Liebenberg was chairman of the CMC, he would adjourn meetings to hold private conversations with Basson.⁷¹

In his testimony to the TRC and in Basson's trial, Knobel said this multiplicity of reporting structures was the reason he knew nothing of the assassination weapons developed. A claim which is unlikely to be true since Jan Lourens told the TRC that he had informed Knobel about the production of assassination weapons in 1993:

Just before I left the organisation (Protechnik), I made an appointment to see General Knobel. I just felt that the project was going wrong, it was going to strange directions. ... I said [to him] do you bear knowledge of these chemical weapons, these applicators as you call them, that we have been manufacturing?... General Knobel replied to me, he said I had to bear in mind that as far as the offensive is concerned he bore no knowledge of it, it's not his project. Wouter had another reporting line.⁷²

⁷¹ Knobel in The State vs Wouter Basson, 23 November 1999.

⁷² Testimony of Jan Lourens in the TRC hearing into chemical and biological warfare, Cape Town, 8 June 1998.

The chain of events which followed this meeting reveals that Liebenberg may have had more insight into and control over the programme than Knobel. Lourens attempted to relate his concerns directly to the Minister of Defence, Roelf Meyer. Meyer refused to see him but discussed the matter with Lourens' attorney, an old school friend, and instructed Lourens to speak to the Surgeon General that same afternoon. Knobel too refused to see Lourens again saying, "I am not going to talk to you, you are going to have to see General Kat Liebenberg." When they arrived at Liebenberg's office he told them there was no story to be told, his words were: "You must remember those toys are mine, I want them back."⁷³ Lourens knew that Liebenberg was referring to the assassination weapons. Instead of handing the weapons back to Liebenberg, Lourens buried them on his farmland. In 1997 they were dug up under the supervision of the Attorney General who was investigating the case against Basson. It was clear to Lourens that Liebenberg knew about the production of assassination weapons and the process had met with his approval. They were apparently never discussed at any meeting of the CMC or the Reduced Defence Council.

Badenhorst (Chief of Staff Intelligence from 1989 – 1991) discounted the possibility that Knobel would not have known what was going on in a project which he managed.⁷⁴ Yet the nature of the reporting structures of Project Coast meant that Knobel could plausibly deny responsibility for certain aspects of the programme.

Both managerial and financial control were poorly exercised over Basson and Project Coast. Evidence presented at the TRC and at the Basson trial by Knobel and project auditor, Pierre Theron, suggests that Basson's word on financial matters was accepted as truth by his superior officers and indeed by the auditor. They imply that Basson was ultimately in control of all aspects of the Project and that the CMC and the financial auditors relied on him for their understanding of the programme. An inverted command system was in place.

⁷³ ibid.

⁷⁴ Gould interview with Badenhorst, 16 January 2001.

Financial Management

The secrecy of the programme and the steps taken to ensure that no aspect of the programme which could result in international embarrassment, if revealed, could be traced back to the SADF ensured that Basson's authority was never questioned. This was particularly true of the financial arrangements of the programme. Basson explained the process of financial control to the TRC in the following way:

The basic process of financial control in the South African Defence Force and specifically Project Coast, worked as follows. Annually there was a budget meeting and during this budget meeting certain goals and objectives were approved and specific amounts of money were allocated to them. After these amounts were allocated, the projects for the year were then further implemented. When the money was needed for a specific goal, the CMC or the financial management work group got together and if the amount was above a certain level, I can't remember the level, then approval was once again given that this amount of money be spent. Now if this amount had to be spent, General Knobel wrote an authorisation where he authorises the spending of the amount of money. If the spending of that money was authorised, then I could have taken that authorisation to the financial official of the project, and then he could get the funds to flow. I had no signing authorisation, there was no way for me to control it. If there were transfers to abroad, then we received authorisation from the South African Reserve Bank. The CMC went to the South African Reserve Bank to explain to the officials why the money was needed, in broad terms of course with regards to the secrecy, and to make sure that it's an official state transfer through the proper channels. After this was done, the financial official then went back and the funds were then spent.

Once again I'd like to say I did not have control over millions of dollars, I couldn't pick up the phone and do transfers or arrange transfers, I couldn't just phone people and give them codes, there was quite an integrated approval process. I concede that at certain times when certain operational decisions were made quickly, I did have some discretion, but those discretions was (sic) not unapproved, and if I used my own discretion, it was approved de facto.⁷⁵

Badenhorst explained the situation differently. He said that when he took over the position of Chief of Staff Intelligence in April 1989 he found that Military Intelligence was responsible for controlling the budgets of secret projects. Military Intelligence paid the annual budgets for these projects to the project officers who would spend it at their discretion. In the case of Project Coast, millions of rand from the secret defence account were transferred to foreign bank accounts by a junior officer on the

⁷⁵ Basson at the TRC hearing into chemical and biological warfare, 31 July 1998.

strength of Knobel or Basson's signatures.⁷⁶ Instructions for transfers, Badenhorst said, contained no more information than an order to transfer a specific amount to a designated foreign bank account. There was no motivation for the expenditure and Military Intelligence could not control what happened to the funds after transfer.

This was not acceptable to Badenhorst who introduced a system which required project officers to motivate all expenditure in detail for his authorisation. At the same time, the three members of the Auditor-General's staff permanently allocated to Military Intelligence were given free access to all secret defence account expenditure. Full audits were to be conducted on all classified projects run by Military Intelligence.⁷⁷ However, because Project Coast was a SAMS (South African Medical Services) project, Badenhorst was unable to enforce this system. Project Coast was untouchable. In 1989 he requested the Chief of the Defence Force, Jannie Geldenhuys, to transfer financial control of Project Coast to the Chief of Staff Finance. Badenhorst said he was not prepared to accept responsibility for expenditure when he had no way of knowing what happened to the money.⁷⁸ In June 1990 Geldenhuys instructed the Chief of Staff Finance to assume control of Project Coast's budget, and Vice-Admiral Murray took over the problem when he assumed the position of Chief of Staff Finance in 1990. Interestingly, Badenhorst never attended a CMC meeting during his tenure at Military Intelligence, despite being an official member of the committee. He explained this by saying that he had been instructed to investigate the operations of the CCB and had been too busy to attend meetings.⁷⁹

When Murray took over he became aware of the ineffective management of Project Coast funds. On July 2, 1992, he wrote to Knobel seeking details of past expenditure. He was unhappy with the way Coast had been financially managed. The Project

⁷⁶ Testimony of General R Badenhorst in The State vs Wouter Basson, South African High Court, Transvaal Division, 7 November 2001.

⁷⁷ Ibid.

⁷⁸ Ibid.

⁷⁹ Gould interview with Badenhorst, 16 January 2001.

Coast files at the office of the Chief of Staff Finances did not contain any contracts for acquisitions by the CBW programme, whereas all contracts entered into on behalf of the SADF should have been signed by the Chief of Staff Finance. Murray's department was expected to make payments for Project Coast's contracts for which there were no record.

Murray requested the contracts from Knobel,⁸⁰ but received a response from Basson, listing outstanding contracts such as those for research and protective clothing and equipment. This did not satisfy Murray, who wanted the actual contracts, or at the very least, copies of them. He went back to the Surgeon General with his request, but still did not receive copies of any Project Coast contracts. Various excuses were offered such as: the contracts were locked up in a safe "somewhere"; the only person with access to the contracts was abroad; the contracts had been preserved in a safe place and were not readily available.⁸¹

Murray said it was clear to him that the correct procedures had not been followed regarding Coast expenditure. Again he wrote to Knobel, on September 24, 1992, demanding copies of the contracts and minutes of the CMC meetings at which the contracts were approved. By this time he had received a letter from the Auditor-General's office expressing concern over the project's finances.⁸² Murray said none of Knobel's responses were satisfactory.⁸³ This led to a meeting, in 1992, at the Military Intelligence training college, during which Knobel was closely questioned by the Head of the SADF, the Chief of Staff Finances and the Chief of Staff Intelligence.⁸⁴ Murray claims that by the time the meeting took place, no one involved in the control of SADF finances was satisfied with the way in which Project Coast had been managed. The Auditor-General's office too had tried, and failed, to obtain

⁸⁰ Testimony of Vice-Admiral Paul Murray in The State vs Wouter Basson, 20 February 2001.

⁸¹ Ibid.

⁸² Ibid.

⁸³ Ibid.

⁸⁴ Ibid.

minutes of the CMC meetings. This raised the possibility that CMC minutes may have been destroyed to cover up mismanagement, or that the minutes did not exist at all. But, a letter to Murray from Knobel dated November 10, 1992, claimed that CMC minutes did exist. The letter, written by Basson, and signed by Knobel, stated that the “CMC meets two or three times a year to approve the broad guidelines of the project in relation to the budget approved by the Chief of the SADF, Chief of Staff Finances and the Surgeon General. There would thus be no point to perusing the CMC minutes”. Basson referred Murray to the project budget and the audit reports.⁸⁵ Basson claimed that the CMC did meet before 1992 and there were minutes to prove it. Yet it was impossible for anyone, even the Chief of Staff Finance, to get copies of these minutes. Whether the CMC did or did not meet in the years preceding 1992 cannot be verified. It is possible that no such meetings were held, which would confirm that the SADF had handed *de facto* control of the Project to Basson alone.

On the basis of evidence before the court during Basson’s trial, Badenhorst and Murrays’ fears about the lack of control were justified. Major Hercules Orffer, who served in Military Intelligence from 1987 to 1990, and who was responsible for making the foreign fund transfers on Basson’s orders, explained to the court how funds were moved in such a way that they could not be traced back to the SADF.⁸⁶ The process was as follows: Basson would call Orffer from his car phone and tell him he was on the way to Military Intelligence headquarters. Orffer would wait for Basson outside the Military Intelligence offices in Vermeulen Street, Pretoria. When Basson pulled up in his car, he would hand Orffer a brown envelope, and drive away.⁸⁷ Inside the envelope Orffer would find the necessary instructions and authorisation for foreign transfers.

Basson’s signature alone was sufficient to facilitate the transfer of millions - his bona fides was accepted by Military Intelligence without question, and no one, not even

⁸⁵ Ibid.

⁸⁶ Testimony of Major Hercules Orffer in The State vs Wouter Basson, South African High Court, Transvaal Division, 1 March 2000.

⁸⁷ Ibid.

General Knobel, was required to co-sign the request for fund transfers or confirm the usually sparse details of the purpose.⁸⁸ This contradicts Basson's testimony at the TRC hearing, quoted earlier in this chapter. All further arrangements were made by Military Intelligence through the Reserve Bank. Various accounts were used by Military Intelligence to launder funds. "Executive Services", "Karko" and "Herpeco" were the most frequently used accounts, while other accounts such as "Global Capital Investments" and "Dynamic Services" were used less frequently.⁸⁹ Orffer accepted the explanations for expenditure at face value because of the need-to-know principle, which again provided ample cover for poor control.

Brigadier Hein Pfeil of Military Intelligence was responsible for the internal audits of the project. He served as internal auditor on secret projects with Military Intelligence from 1984 to 1988.⁹⁰ He told the court that he reported verbally to General Knobel about once every three months on the matter of Project Coast finances. His reports were based on audits confined to the paperwork for transfer of project funds abroad. Like Orffer, Pfeil's mandate was merely to ensure that the correct signatures were on the authorisation documents. He never knew what the reason for the expenditure was, beyond the vague and fairly general descriptions given on the fund transfer requests by the Project Officer. This process applied to all top secret projects, and was not unique to Project Coast.

Pfeil never saw, nor did Military Intelligence receive, any proof of payment or invoices to show that the equipment ordered had been received. Once funds had been placed in foreign accounts, Military Intelligence had no further control over them. Since Pfeil never knew exactly what equipment was being purchased, or where it would be

⁸⁸ Ibid.

⁸⁹ Ibid.

⁹⁰ Testimony of Brigadier Hein Pfeil in The State vs Wouter Basson, South African High Court, Transvaal Division, 2 March 2000.

deployed, there was no way he could check that the SADF received what it paid for.⁹¹

When questioned in court, Pfeil could not remember if he was ever requested by the SADF Inspector-General to submit a report on Project Coast finances. He was asked once by external auditor Pierre Theron to provide a reconciliation statement, but this showed only expenditure to date against annual budget. Pfeil also audited two of the front companies of Project Coast: Infladel and RRL and the CCB. In none of these audits was a physical stocktaking done. All that was checked was that the paperwork was in order, and that budgets were not exceeded. At Infladel, RRL and the CCB, he checked the cash book entries.⁹²

His reports to Knobel contained nothing more than assurances that Project Coast was operating within its budget in any given period. He did check that office equipment in the Infladel offices tallied with the SADF records. At RRL no stocktaking of scientific equipment or CBW agents was carried out.⁹³ Although his job was to audit the Project Coast budget, Pfeil never saw a breakdown of the funds allocated from the secret defence account. He knew only the total figure. The CMC; therefore, had no way of ensuring that Project Coast funds were spent as authorised, and none of them ever visited the front companies or verified that the equipment Basson bought actually existed. Knobel stated that he visited Delta G Scientific only once, on a Sunday, and he made only two after-hours visits to RRL.⁹⁴ Basson's word was the CMC's only assurance that procurements had been made. The appointment of an internal and an external auditor made little difference. External auditor Petro Theron, appointed by the auditor-general, said he and Basson saw Knobel annually to assure him that everything regarding the project's finances was in order. Internal audits were in the hands of D John Truter and later, at the suggestion of Chief of Staff Finance,

⁹¹ Ibid.

⁹² Ibid.

⁹³ Ibid.

⁹⁴ Knobel in The State vs Wouter Basson, 15 November 1999.

André Bezuidenhout.⁹⁵ Theron confirmed in the Basson trial that during the course of his audits he never carried out a physical inspection of Project Coast facilities. He relied entirely on the documentation sometimes produced and kept by Basson or Military Intelligence, and on Basson's word. Since the documents Theron was shown were signed by Knobel, he had no reason to doubt their veracity.

Theron relied entirely upon Basson for the justification of expenditure. He told the court that in clandestine deals, the responsible project officer must be above reproach, since his word alone is usually all an auditor has to work with.⁹⁶ Knobel testified that on one occasion⁹⁷ when the SADF Inspector-General requested an independent audit of the Project Coast books, Basson advised the CMC that this was not a good idea, citing the possible security problems. The need-to-know principle prevailed. According to Knobel and Theron, therefore, the financial affairs of the project were in the hands of Basson alone.

Knobel justified this by arguing that the international sanctions against South Africa during the 1980s, and the need for the project to procure equipment and substances, meant that extraordinary measures had to be taken to ensure that the origins of project funds in foreign accounts were not detected, otherwise banks could have frozen or seized the funds. Military Intelligence channels had to be protected. Knobel said that the CMC did not want to know which individuals or countries Basson dealt with, or what foreign bank accounts were used. The important thing was that foreign agents and suppliers were never to know the SADF was involved.⁹⁸ Foreign intelligence services would have been able to make the link between a huge outflow of money from South Africa and a specific supplier, unless the deals were well disguised. Knobel acknowledged that the SADF, like the South African Police and other state departments, routinely used bank accounts in the names of friendly

⁹⁵ Ibid.

⁹⁶ Testimony of Pierre Theron in The State vs Wouter Basson, South African High Court, Transvaal Division, 1 August 2000.

⁹⁷ No date was provided during the evidence.

⁹⁸ Knobel in The State vs Wouter Basson, 23 November 1999.

foreign nationals for secret projects. He admitted that the entire procurement process, including the moving of funds, was largely left to Basson, provided he operated within the broad guidelines laid down by the CMC. In effect, Knobel admitted, Basson was told “here’s the project money, get us the results we want”. The end justified the means, and if this meant that Basson had to lie, steal, or bribe people, his measures were condoned by the SADF.⁹⁹ The CMC appears to have laid down few guidelines. One exception was that Basson was not allowed to transport chemicals on commercial airlines because of the potential hazards.¹⁰⁰

The Judge in the Basson trial accepted Knobel’s assertions and found that,

[T]he accused had to take decisions about procurement. The handling of threats to security were left up to him. The suppliers were not to know that they were delivering to the SADF. The SADF did also not want to know who the suppliers were. The CMC did not want to know the detail. The broad guidelines were the following. It did not concern the CMC what happened outside of South Africa. There was not allowed to be self-enrichment. A reasonable summary of the situation was: ‘We give the money. You bring the product. It does not matter where you get it. You can buy it on the black market, or through bribery, and if you must, you can steal it.’¹⁰¹

Security of Project Coast

It would appear that the security measures of Coast were as ineffective as the financial accounting measures. Lieutenant-General Dirk Verbeek, SADF Chief of Staff Intelligence from October 1994 to June 1998, was the Chief Director: Counter-Intelligence from January 1988 to the beginning of 1993. In this capacity, he was in charge of SADF and Armscor security, both physical and personnel clearance, as well as anti-espionage measures.

⁹⁹ Ibid.

¹⁰⁰ Ibid.

¹⁰¹ Judgement in The State vs Wouter Basson, South African High Court, Transvaal Division, 11 April 2002, paras 113 and 114.

Verbeek testified during the Basson trial that Project Coast first came to his attention in 1987, when he was in charge of personnel clearance. Security, he said, was of prime concern to Project Coast, due to the danger of exposure through espionage.¹⁰² Verbeek knew that Basson and Knobel were the key people in the project and knew about Roodeplaat Research Laboratories, Delta G Scientific, Medchem and Aeromed, but he was uncertain about the precise relationships of some of the companies associated with the project.

Normally, clandestine SADF projects had a designated security officer or security working committee attached to them.¹⁰³ If no front companies were involved, the security officer would be a serving SADF officer. When front companies were used, the security officer would assume a civilian identity. The nuclear weapon project had SADF security officers, while Verbeek said Coast was served in this capacity by Charl Jackson (specifically at RRL), Jan Marais and Johan Theron (all of whom first resigned from the SADF) - and by Carel Koen.¹⁰⁴

A project security officer's tasks included personnel clearance, access control, physical security of equipment and materials, correct classification and handling of documents, control over unauthorized copying of documents, travel and accommodation arrangements and advice on the best channels for payments that could not be traced back to the SADF. In order to carry out his tasks, a security officer had to know who was involved in deals and transactions conducted by the project, and would have to have access to all facets of the project. The need-to-know principle, as applied to the security officer, would demand that he needed to know everything about the project. Access to information by others would normally be determined by the project leader, the project officer and the security officer together.¹⁰⁵ The Project Coast security officer should have known the names of all

¹⁰² Testimony of General Dirk Verbeek in The State vs Wouter Basson, South African High Court, Transvaal Division, 6 November 2000.

¹⁰³ Ibid.

¹⁰⁴ Ibid.

¹⁰⁵ Ibid.

decision-makers in the project, including directors of foreign companies through which project funds were channeled, details of all foreign bank accounts used for Coast funds, the signatories to such accounts, details of safe houses used by project employees, all companies linked to the project, and contact between the project officer and anyone else.¹⁰⁶

However, Johan Theron, senior intelligence officer for Project Coast, testified that he was denied access to any transaction conducted by Basson.¹⁰⁷ Basson's legal team countered Verbeek's testimony saying it appeared that there was never a need for Verbeek to know the details of any Coast transactions, since the line functions were that the security officer reported to the Project Officer, who reported to the project leader, who reported direct to the SADF Chief.¹⁰⁸ Because the security officer reported to the project officer, the usefulness of his appointment as a check on the Project Officer was negated. This apparently left the way clear for Basson to conduct business as he chose.

Project Coast thus appeared to evade both the normal financial accounting systems of the Defence Force as well as the standard security checks which secret projects should have been subjected to. It is unlikely that Basson alone would have been able to manipulate the structures in this way. It is more likely that there was agreement from his superiors, including the Minister of Defence, who was ultimately responsible for the financial accounting of the project, that Coast should operate with minimum checks and balances. It is probable that the intention was to ensure plausible deniability for those in positions of authority, including the Surgeon General, the Chief of the Defence Force, the Minister of Defence, and the State President.

¹⁰⁶ Ibid.

¹⁰⁷ Testimony of Johan Theron in The State vs Wouter Basson, South African High Court, Transvaal Division, 4 May 2000.

¹⁰⁸ Comments made during the cross examination of General Dirk Verbeek in The State vs Wouter Basson, South African High Court, Transvaal Division, 6 November 2000.

The phases of Project Coast's development

After approval of the chemical and biological warfare programme by the Minister of Defence in 1981, Basson began recruiting scientists to lead the front companies. According to one of the first scientists to be recruited to Delta G Scientific, work at the front company started as early as 1982 from laboratories at Special Forces Headquarters.¹⁰⁹ The earliest document from Roodeplaat Research Laboratories is dated November 1983. It is a list of income and expenditure which shows that the company was in the process of being established. Minutes of directors meetings in 1984 reveal that the recruitment of staff was underway.¹¹⁰

Both companies expanded and developed throughout the mid-80s under the leadership of veterinarian Dr Daan Goosen at RRL and former chemistry lecturer Dr Willie Basson, at Delta G Scientific. Both companies underwent changes between 1987 and 1988 when their managing directors were replaced by former Special Forces colleagues of Basson. Special Forces dentist and hospital administrator, Dr Wynand Swanepoel, took over as Managing Director of RRL, and a medical doctor, Philip Mijburgh, replaced Willie Basson as Managing Director of Delta G Scientific. The timing of the change in leadership is significant since the period March 1988 – April 1990 was the “commercialisation phase” of the programme.¹¹¹ Both men were close associates of Basson and had interests in companies that provided services to Project Coast. Both were to benefit financially from the privatization of the companies.

¹⁰⁹ Chandré Gould interview with Geoff Candy, former scientist at Delta G Scientific, Johannesburg, 24 May 2000.

¹¹⁰ D. Goosen and D. Spamer, “Ontvangstes en Betalings: Oktober/November 1983”, RRL document. D. Goosen, A. Immelman and D. Spamer. “Presensielys van die Tweede Direksievergadering gehou op 28 Februarie 1984”.

¹¹¹ Basson and Knobel, “Voorligting aan die Minister van Verdediging”, 10 August 1993, pp4 – 5.

Official Project Coast documents¹¹² (written towards the end of the programme) set out the phases of the programme as follows:

Phase 1: the Establishment Phase (April 1982 – March 1988).

During this phase the front companies and production facilities: Delta G Scientific, Roodeplaat Research Laboratories and Inffadel were established. Also during this period some 20 tons of CR were produced by Delta G Scientific of which 10 tons were used by the army and the South African Police for weapon production.¹¹³

Phase 2: The Commercialisation Phase (March 1988 – April 1990)

During this phase representations were made to the CMC regarding the privatisation of the front companies. After this the front companies were prepared for privatisation. The companies' balance sheets were restructured to create manageable commercial packages. This is said to have been completed by September 1988.¹¹⁴ During this period RRL was producing a range of assassination weapons.¹¹⁵ It was also during this period that the defensive component of the CBW project was moved to fall under Armscor's authority.

Phase 3: The Privatisation Phase (April 1990 – September 1991)

This phase saw the cancellation of all research contracts with the two front companies. From August 1991 the companies were 'sold' to the management and workers. In September 1991 a submission regarding the privatisation was made to

¹¹² Ibid.

¹¹³ W. Basson, "Projek Coast: Moontlikhede vir privatisering", 28 November 1989, Exhibit 23B in The State vs Wouter Basson, South African High Court, Transvaal Division.

¹¹⁴ Basson and Knobel, "Voorligting aan die Minister van Verdediging", 10 August 1993.

¹¹⁵ A. Immelman, "Verkope" [Sales], 1989. RRL document made available to the TRC and public during the TRC hearings into chemical and biological warfare, Cape Town, June 1998.

the parliamentary committee which dealt with all sensitive state projects. The Committee included Finance Minister, Barend du Plessis; Minister of Justice, Kobie Coetzee; Minister of Trade and Tourism, Dawie de Villiers; and Minister of Constitutional Development, Gerrit Viljoen.¹¹⁶ Military analysts Willem Steenkamp and Paul Grobbelaar claimed that this committee was unlikely to have been much more than window dressing because the people involved in the committee were not close to PW Botha and it was unlikely that Botha would have allowed them to make important decisions.¹¹⁷

Phase 4: The Normalisation Phase (September 1991 – 1993)

This phase saw the completion of the production of two “new crowd control incapacitants” which were in fact MDMA and methaqualone. After privatisation Delta G Scientific produced almost a ton of MDMA, and continued work on the weaponisation of CR. South Africa signed the Chemical Weapons Convention on 14 January 1993.

Project Coast was officially closed at a meeting of the Coordinating Management Committee in January 1995.¹¹⁸

¹¹⁶ Basson and Knobel, “Voorligting aan die Minister van Verdediging”, 10 August 1993, 1993.

¹¹⁷ Chandré Gould interview with Willem Steenkamp and Paul Grobbelaar, Cape Town, 7 December 2000.

¹¹⁸ Notule van die vergadering van die Beheerkomitee van Projek Jota wat gehou is op 9 Januarie 1995 by die Kantoor van HNW, SADF document G/UG/302/6/J1282, 9 January 1995.

Table 2 Membership of the CMC and Reduced Defence Command Council¹¹⁹

Structure	Date	Member's name	Designation
Reduced Defence Council	25 October 1990	Lieutenant General AJ (Kat) Liebenberg	Chief Defence Staff
		Vice-Admiral MA Bekker	Chief of Staff Finance
		Lieutenant General DP Knobel	Surgeon General
		Lieutenant General GL Meiring	Chief of the Army
		Lieutenant General KM Pickersgill	Chief of Staff Army
		Lieutenant General AJS van der Lith	Chief of Staff Planning
		Vice-Admiral P Murray	Deputy Chief of Staff Finance
		Major General PD Steyn	Deputy Chief of Staff Operations
		Brigadier W Basson	Project Officer: Coast
		Colonel D Metaxas	Project Officer: Keyboard (the project to arm the ammunition with CR) ¹²⁰
		Brigadier WA Kempen (Secretary)	Department of Planning
Co-ordinating Management Committee	29 January 1993	General AJ (Kat) Liebenberg	Chief of the Defence Force
		Lieutenant General G Meiring	Chief of the Army
		Lieutenant General	Chief of the Airforce

¹¹⁹ This information is derived from selected minutes of meetings of the CMC. The dates provided correspond with dates of the meetings: "Verkleinde Verdedigingsbevelraad: Notule van Vergadering gehou om 07h30 op 25 Oktober 1990 te Samik", SADF documents HS Plan/DP/302/6/COAST and HS PLAN/Dp/302/6/KEYBOARD. "Notule van die vergadering van die Beheerkomitee van Projek Jota gehou op 31 Maart 1993 in die HF Verwoerdgebou, Kaapstad", SADF document GG/UG/302/6/J1282/5. "Notule van 'n Spesiale KBK Vergadering wat gehou is op 2 Desember 1994 in die kantoor van HNW", SADF document GG/UG/302/6/J1282. "Notule van die Beheerkomitee van Projek Jota wat gehou is op 29 Maart 1994 by die Kantoor van HSAW", SADF document GG/UG/302/6/J1282. "Notule van die vergadering van die Beheerkomitee van Projek Jota gehou op 24 Januarie 1994 in die kantoor van HSAW", SADF document GG/UG/302/6/J282. "Notule van die vergadering van die Beheerkomitee van Projek Jota wat gehou is op 9 Januarie 1995 by die Kantoor van HNW", SADF document G/UG/302/6/J1282. "Notule van die vergadering van die beheerkomitee van Projek Jota gehou op 29 Jan 1993 in die HF Verwoerd gebou, Kaapstad", SADF document GG/UG/302/6/J1282/5.

¹²⁰ Testimony of Floris Laubscher in The State vs Wouter Basson, South African High Court, Transvaal Division, 7 June 2000.

		James Kriel	
		Lieutenant General DP Knobel	Surgeon General
		Brigadier G Sonnekus	Personal Staff Officer to the Chief of the Defence Force
		Brigadier W Basson	Outgoing Project Officer
		Colonel BP Steyn	Newly appointed Project Officer
Co-ordinating Management Committee	31 March 1993	General AJ (Kat) Liebenberg	Chief of the Defence Force
		Lieutenant General DP Knobel	Surgeon General
		Vice-Admiral A Malherbe	Chief of Staff of the Army
		Vice-Admiral P Murray	Chief of Staff Finances
		Major General Hamman	Deputy Chief of the Army
		Major General Dirk Verbeek	Head of Department Counter Intelligence
		Brigadier G Sonnekus	Personal Staff Officer to the Chief of the Defence Force
		Brigadier W Basson	Outgoing Project Officer
		Mr W van Heerden	Representative of the Auditor General
		Colonel BP Steyn (secretary)	Present project Officer
Co-ordinating Management Committee	24 January 1994	General GL Meiring	Chief of the Defence Force
		Lieutenant General Pretorius	Chief of the Army
		Lieutenant General DP Knobel	Surgeon General
		Vice-Admiral A Malherbe	Chief of Staff Army
		Lieutenant General B Raubenheimer	Chief of Staff Finances
		Mr W Van Heerden	Representative of the Auditor General
		Colonel BP Steyn	Project Officer
Co-ordinating Management Committee	29 March 1994	General GL Meiring	Chief of the Defence Force
		Lieutenant General DP Knobel	Surgeon General
		Vice-Admiral A Malherbe	Chief of Staff of the Army
		Lieutenant General B Raubenheimer	Chief of Staff Finances
		General Maj Verbeek	Acting Chief of Staff Intelligence
		Colonel BP Steyn	Project Officer
Co-ordinating Management Committee	2 December 1994	General GL Meiring	Chief of the National Defence Force
		Lieutenant General DP Knobel	Surgeon General

		Lieutenant General D Verbeek	Chief of Staff Intelligence
		General Maj CL Bröcker	Acting Chief of Staff Finance
		Brigadier GJ Coertzen	Department of Finances
		Brigadier W Basson	No designation
		Colonel BP Steyn	Project Officer
Co-ordinating Management Committee	9 January 1995	General GL Meiring	Chief of the National Defence Force
		Lieutenant General DP Knobel	Surgeon General
		Vice-Admiral A Malherbe	Chief of Staff Army
		Lieutenant General B Raubenheimer	Chief of Staff Finances
		Major General Erasmus	Deputy Chief of Staff Intelligence
		Brigadier W Basson	No designation
		Colonel BP Steyn	Project Officer, Project Jota (by this time Coast was referred to as Jota)

CHAPTER 4

The operation of Project Coast

Introduction

Like the programmes of the Soviet Union, Iraq, Iran and Libya, the South African programme was run through companies which on the surface appeared to be civilian research and production facilities, while in fact their central purpose was to research, develop and produce chemical and biological warfare agents and weapons for the military. Also like the CBW programmes of other countries the suitability of biological and chemical weapons for covert military operations resulted in their development for use by intelligence agencies and special forces.¹ In the case of South Africa this meant that there was a close relationship between the covert operational units of the police and military, and the chemical and biological warfare programme. The need for secrecy meant that this relationship was clear only to a few individuals and a handful of senior managers.

While the most obvious advantage of utilising front companies was that they hid the military's involvement in chemical and biological warfare and prevented detection of the programme, they offered additional advantages. Front companies were able to procure equipment and substances more easily than official military structures, an appealing feature in the light of economic sanctions against South Africa. The use of front companies also allowed the scientists access to the international scientific community² and scientists could be attracted by the higher salaries offered at these institutions; salaries which were far higher than could have been offered to military personnel within the strict military hierarchy. Koblentz has argued that the inherent

¹ G. Koblentz, "Pathogens as Weapons: The International Security Implications of Biological Warfare", PhD thesis, Massachusetts Institute of Technology, 2004, p22.

² Knobel in The State vs Wouter Basson, 15 November 1999.

dual-use nature of biotechnology makes for the easy concealment of military programmes in apparently civilian companies.³ This certainly was the case with regard to Roodeplaar Research Laboratories, the biological warfare facility. The Soviet Union made use of apparently civilian companies for the conduct of their biological warfare programme for much the same reasons. Former deputy director of Biopreparat, the Soviet BW research institute argued that, “[O]sensibly operating as a civilian pharmaceutical enterprise, the agency could engage in genetic research without arousing suspicion. It could participate in international conferences, interact with the world scientific community, and obtain disease strains from foreign microbe banks – all activities which would have been impossible for a military laboratory.”⁴

The focus of the military work at Roodeplaar Research Laboratories (RRL) was on the production and development of biological weapons for use in covert operations. As will be discussed later in this chapter, scientists at RRL sought to identify and develop chemical and biological substances which could be used to kill individuals while leaving no trace. In this regard, as noted by Koblentz, the South African programme was typical in that almost all biological warfare programmes have had an association with intelligence agencies and other organisations interested in clandestine means of assassination and sabotage. Japan used biological weapons against Chinese forces for the purpose of sabotage or counterinsurgency. The Iraqi biological weapon programme was started in the 1970s by the intelligence service for the development of clandestine weapons for use against internal enemies. The Soviet biological weapons programme was initially administered by the internal security services which retained an interest in developing biological and toxin agents for assassination purposes, and the CIA was both a sponsor and customer of American biological weapons research. In addition, most of the biological munitions stockpiled by the United States in 1969 were designed for use by the Army’s special forces behind enemy lines.⁵

³ Koblentz, “Pathogens as Weapons”, p37.

⁴ Alibek and Handelman, Biohazard, p98.

⁵ Koblentz, “Pathogens as Weapons”, p23.

This chapter describes the establishment of both the officially approved front companies of Project Coast, and the private companies which were established to provide services to the programme. It considers the process of recruitment of scientists to the companies and their motivations for joining. The effects of secrecy on the quality of the work conducted and on the generation of a moral economy which allowed the scientists to justify unethical behaviour, are considered and described. The chapter also reveals the nature of the relationship between the CBW programme and the covert units of the police and military and the use to which chemical and biological agents and weapons were put by these units.

Getting down to business

Front companies had to be authorised by the Minister of Defence. In the case of Project Coast the Minister approved the formation of three companies: Delta G Scientific, the chemical warfare facility; Roodeplaat Research Laboratories, the biological warfare facility and evaluation and testing facility for the chemical agents produced at Delta G Scientific; and Inffadel⁶, the administrative and finance company.

Initially Delta G Scientific and Roodeplaat Research Laboratories were the only two facilities where research and production of chemical and biological agents was carried out. Later the private company, Protechnik would produce small amounts of agents to test protective clothing. Inffadel, was responsible for the technical information system,⁷ operational coordination of the programme, and the security and safety systems of the other two companies. This company was used to channel funds from the SADF's Secret Defence Fund to RRL and Delta G Scientific. In 1990 Inffadel ceased to exist and its tasks were assumed by Sefmed Information Services, which served until 1994 as the information front of the project. The financial and

⁶ According to Jan Lourens, a close one-time associate of Basson, the name was an abbreviation of the Latin term *In flagrante delicto* – translated as “caught in the act”.

⁷ Inffadel was established before the internet and had access to computerized international search vehicles including a link to US databases. Inffadel was one of only two facilities in South Africa which had this capability at the time. The person responsible for this was Antoinette Lourens.

administrative aspects of Inladel's work after 1990 were contracted out to D John Truter Financial Consultants⁸ and two other companies were formed to own the properties where Delta G Scientific and RRL were situated.⁹

Although Delta G, RRL and Inladel were the only official front companies of the project, a number of other "private" companies were associated with the programme. Knobel outlined the relationship of the official front companies and these other companies as follows: Delta G's task was offensive chemical research, while RRL was responsible for the defensive biological programme. Tests were carried out on their behalf by a "private company", Protechnik Laboratories. Another "private" company, Lifestyle Management, was contracted to do the physiological research.¹⁰ Another company, Technotek, was contracted in 1986 to do research to find suitable protective clothing materials. The SADF was, therefore, the chief client of Protechnik, Lifestyle Management and Technotek. While these companies relied on SADF contracts for their existence, they were not official front companies authorised by the Co-ordinating Management Committee.¹¹ Most of the men who came to hold senior positions in these companies started as members of the Special Operations Unit, which provided medical assistance to Special Forces operators and of which Basson was the Commanding Officer. While this arrangement ensured that knowledge of the programme (both offensive and defensive) remained within a small group of like-minded individuals, it also meant that close associates of Basson benefited financially from the programme. Self-enrichment was to become the defining feature of the programme towards the end.

Dr Hennie Jordaan, a senior organic chemist at Delta G Scientific, told me that on a visit to the home of Philip Mijburgh, a member of this unit who was later appointed

⁸ Jan Lourens, telephonic discussion with Chandré Gould, 21 May 2000.

⁹ Judgement in The State vs Wouter Basson, paragraph 48 (in reference to the testimony of Knobel regarding the structure of Project Coast and its front companies).

¹⁰ Knobel in The State vs Wouter Basson, 15 November 1999.

¹¹ Ibid.

Managing Director of Delta G,¹² he was struck by a photograph on the wall. Pictured is a group of macho young men posing in two rows in the style of a team photograph in the setting of an army camp. The men are bare-chested, wear army boots and boxer shorts and most are holding heavy firearms. All were linked to Project Coast: Wouter Basson, Philip Mijburgh, Wynand Swanepoel, Jan Lourens and others - all had gone on to run the front companies of Project Coast or the companies which relied solely, or partly, on lucrative military contracts for their existence.¹³ Since Basson had been given the single authority to recruit all Project Coast staff and to ensure that the programme was operational he had the freedom to appoint his close associates and friends to positions where they (and he) could benefit from the programme.

Jan Lourens who applied to the TRC for amnesty for his involvement in Project Coast had a unique position in the system. He was Project Manager responsible for overseeing the construction of the Delta G research and production facility in Midrand and he interacted with RRL scientists and provided them with specialised equipment. He was also successively the Managing Director of three service companies of Coast: Systems Research and Design (SRD), Protechnik and Hazmat. Lourens also oversaw the manufacture of highly specialized assassination weapons. For the first five years he had a very close relationship with Mijburgh and Basson and was married to Antoinette Lourens, the librarian at Inladel. This close relationship meant that he was one of the few people who had knowledge of most parts of the project.

After completing a BSc Engineering in Physical Metallurgy at the University of the Witwatersrand in 1982/3 Lourens joined the Air Force and was based at 1 Air Depot, in the Chemical and Metallurgical Laboratories. These laboratories serviced the manufacturing department of the Air Force; Lourens's activities focussed on the testing of fuels and metals. During this time he completed an MSc in Industrial Engineering. Whilst working for the Air Force, he was approached by Philip Mijburgh, an old school friend, and now a member of the Special Operations unit for assistance

¹² Chandré Gould interview with Dr. Hennie Jordaan, organic chemist formerly employed by Delta G Scientific, Pretoria, 18 January 2001.

¹³ Ibid.

with a pistol modification, and Lourens obliged. Mijburgh suggested to Lourens that he join Special Forces and at the same time further his studies in Biomedical Engineering. About a month after being approached by Mijburgh, Lourens met Wouter Basson, Mijburgh's commanding officer. Basson offered Lourens a position at Special Operations which included a programme for him to finish his studies.¹⁴

The Special Operations Unit which later became known as 7 Medical Battalion was a structure in which rank was not tied to salary or levels of responsibility. Seldom, unless operationally deployed, were the members of the unit required to wear uniforms. According to Lourens, Special Operations' conventional functions — to act as medical back-up to special forces operatives — melted into other functions. Lourens' role in the unit was to provide technical support to the doctors of Special Operations. He was responsible, for example, for modifying firearms to include special features, such as a gun with a fold-away barrel that could fit easily into a doctor's bag, or silencers for pistols. As Lourens's relationship with Basson developed, these skills were extended to the production of covert chemical and biological assassination weapons.¹⁵ From his position at Special Operations Lourens moved on to successively own two companies closely linked to Project Coast. His colleagues in Special Operations also moved into positions of influence. Mijburgh was to become Managing Director of Delta G Scientific (and a number of other companies established by himself and Basson), Wynand Swanepoel became Managing Director of RRL and Brian Davey was set up by Basson as owner of Lifestyle Management.

Establishment of Delta G Scientific

When Wouter Basson was tasked with recruiting a scientist to establish and direct Delta G Scientific he approached the most obvious candidate – the head of the Chemistry Department at his *alma mater*, the University of Pretoria – Professor Willie

¹⁴ Lourens opted for a thesis-based degree and used the CSIR laboratories for his research. This was completely separate from any work that he was doing for Special Forces and the CSIR was not aware that he was also employed by Special Forces.

¹⁵ Testimony of Jan Lourens at the TRC hearing into chemical and biological warfare, Cape Town, 8 June 1998.

Basson.¹⁶ According to Willie Basson, Wouter spoke “vaguely” about the threat of chemical weapons being used against South Africans and claimed that chemical stockpiles had been found in Mozambique and Angola.¹⁷ The two men held several meetings after which Wouter asked the academic to develop a proposal to establish a chemical defence facility. Soon afterwards the Surgeon General, Dr Nico Nieuwoudt, approached the Rector of Pretoria University and asked his permission for Basson to conduct the work required. Permission was granted and soon Basson had three young scientists working with him in developing a model for a chemical defence unit, and a brief to recruit more. Initially Basson remained at the University of Pretoria while some of the scientists worked from basic laboratories at Special Forces Headquarters in Pretoria where a process was developed for the manufacture of the tear gas CR and a decontaminant. From April to September 1982 the facility moved to a house in Brooklyn near to the university whereafter offices were rented in an office block in a Pretoria suburb called Val de Grace.¹⁸ When Lourens joined the unit in 1983 he shared a laboratory with Delta G staff. He assisted in the development of plans for an up-graded research and production facility and oversaw its construction. In early 1985 the new facility, situated at Midrand, between Pretoria and Johannesburg, was ready. A substantially larger Delta G moved into its new premises.¹⁹

In the early stages of Delta G’s existence Willie Basson had monthly meetings with Wouter and the Surgeon General to discuss the direction and intention of research and development at the company. However, a few years into the process Willie Basson became uncomfortable with the situation he found himself in. He had lost contact with the Surgeon General, whom he had admired, and experienced a change of attitude in Wouter.²⁰ In 1985 work that Willie Basson had been conducting for a

¹⁶ Despite having the same surnames, Willie and Wouter Basson are not related.

¹⁷ Chandré Gould interview with Professor Willie Basson, former Managing Director of Delta G Scientific, Cape Town, 2 April 1998.

¹⁸ Chandré Gould interview with Candy, 24 May 2000.

¹⁹ ibid.

²⁰ Gould interview with Willie Basson, 2 April 1998.

private company, Protea chemicals, throughout his time as head of Delta G and of which he had informed Wouter, became the basis for an apparently trumped-up allegation of fraud.²¹ Willie Basson left the company and claimed later that he had had misgivings about the direction which the programme was taking for some time before he left but, did not say why.²² Basson was immediately replaced by Philip Mijburgh, a close friend and associate of Wouter Basson and nephew of the Minister of Defence, Magnus Malan. This process was to be repeated at RRL with the replacement of Dr Daan Goosen by Special Operations Unit member and Basson-associate, Dr Wynand Swanepoel in 1986. By the end of 1985 most of the Delta G staff were based at the substantial Midrand factory with its four laboratories and three production plants.

Chemical Production at Delta G Scientific

The SADF's philosophy with regard to chemical and biological warfare included the "right to reactively use non-lethal chemical warfare", the "integration of chemical warfare into all conventional actions", and "the acceptance of the use of chemical warfare on a pro-active basis to ensure the survival of the state, for example, in controlling the massive violence in the current revolutionary situation."²³ Indeed the objectives of the programme make it clear that military operations were envisaged which would have included the use of chemical weapons agents inside the country.²⁴ The search for chemical agents which could effectively be used against crowds began as early as 1976. Both former South African Police Forensics chief, General Lothar Neethling and former Chief of the Defence Force, General Constand Viljoen, stressed the interest in finding agents that would calm a crowd. Neethling explained to the Truth Commission that,

²¹ Ibid.

²² Ibid.

²³ "Verkleinde verdedigingsbevelraad: Notule van vergadering gehou om 07H30 op 25 Oktober 1990 te Samik"; 1990. Aangangsel A: "Voordrag aan Verkleinde VBR: Voorgestelde filosofie vir chemiese oorlogvoering vir die SA Weermag – Beginsels en treugvoer oor huidige stand in die SA Weermag", SADF document HS Plan/DP/302/6/COAST.

²⁴ Ibid., p3

When the riots started in 1976, the South African Police were caught unawares. They had nothing apart from guns, shotguns, and sharp point ammunition. Nobody wanted to use that and that's why there was a surge for various techniques to be applied ...I went overseas three times to Germany, England, Israel, America to find the best techniques available.²⁵

Despite the early interest in the development of such agents it was only 3 years later, after the establishment of Project Coast that any serious attempts were made to find alternatives to traditional CS gas which was produced in South Africa and used by Swartklip products to fill munitions. In 1983 the Commissioner of Police, General Johan Coetzee; the Surgeon General, General Nico Nieuwoudt; and, the Minister of Law and Order, Louis Le Grange, held a meeting to which they invited Neethling. The meeting determined that Neethling was to assist Basson by providing him with drugs confiscated by the SAP's Narcotics Bureau to be used for research purposes by Delta G Scientific. Neethling explained that they were of the view that "under certain circumstances one could provide or use sleeping drugs which could possibly decrease the anger of the crowds so that the principle of minimum violence could be used maximally."²⁶ Three conventional street drugs were identified for further research with a view to using them in this way, drugs that Neethling, as head of the police Forensic Laboratory would have had easy access to: methaqualone, lysergic acid (LSD) and cannabis. It is interesting to note that whilst other drugs such as valium and dystopian were available, only these three street drugs were identified for possible conversion into chemical weapons agents.

Dr. Klaus Psotta a conscript who was assigned to work with Neethling and who later was employed at both RRL and Delta G Scientific, was instructed to extract the active ingredient from bags of cannabis provided by Neethling. Psotta was supposed to find a formulation of cannabis that could be used in grenades or as a powder. His work was taken over by organic chemist, Dr Johan Koekemoer and fellow scientist, R.I. Thompson who proposed the synthesis of cannabis analogues in 1989.²⁷ Some

²⁵ Testimony of General Lothar Neethling at the TRC hearing into chemical and biological warfare, Cape Town, 11 June 1998.

²⁶ Ibid.

²⁷ J.M. Koekemoer and R. I. Thompson, "An investigation into the synthesis of FP/00/T52 analogues with particular reference to their psychological impact", 28 August 1989.

experiments were even done on the combination of cannabis and methaqualone, a mix which was common on the streets. Despite the work done on cannabinoids at Delta G Scientific in the six years between 1983 and 1989, by the closure of the programme in 1993 no cannabinoid formulation had been produced for weaponization.

Confiscated mandrax tablets were also made available to Delta G Scientific researchers. According to Neethling, the research established that methaqualone was inefficient in a pyrotechnic formulation. Nevertheless, methaqualone was weaponized and in 1987, the Surgeon General authorised tests to determine the possibility of using methaqualone as a crowd control agent. Knobel told the TRC hearing that although he was not Surgeon General in 1987 (having only taken up that position in March 1988) he believed that volunteers from Special Forces and 7 Medical battalion took part simulation exercises: “in which they tested these few mortars to see what the effect would be on humans within battle conditions.”²⁸ It was found that those exposed to the substance in the field experienced swelling, stress and severe tension, the substance took a long time to be effective and had little if any effect on the test subjects. This, claimed Knobel, led to a search for more effective analogues,²⁹ rather than the abandonment of this particular project.

Despite its drawbacks as a crowd control agent, Delta G Scientific manufactured at least 1000kg of methaqualone, and production reports indicate that the manufacture of methaqualone was still taking place in August 1988³⁰ although Knobel was convinced that Delta G was producing superior analogues at this time, under authorisation by the Co-ordinating Management Committee. The raw materials for this purpose were imported by the procurement front company, Organochem. Interviews conducted with employees of Delta G indicate that the recipe for the

²⁸ Correspondence between the Office for Serious Economic Offences and D.P. Knobel, “Ondersoek kragtens Artikel 5 van die Wet op die Ondersoek van Erenstige ekonomiese Misdrywe, 117 Van 1991: Krygkor, met spesifieke verwysing na Brigadier W. Basson”; 11 January 1993, p12.

²⁹ Knobel in The State vs Wouter Basson, 17 November, 1999.

³⁰ “Production: Mosrefcat”, Delta G document, author unknown, 31 August 1988.

methaqualone was handed to them by the Managing Director of Delta G, Dr. Philip Mijburgh.

Doubts remain about whether methaqualone was only intended for use as a crowd control agent since evidence emerged in the TRC investigation and subsequently in the Basson trial that the methaqualone was made into tablets. The further particulars to the charges against Basson refer to Basson having ordered Steven Beukes (a young pharmacist who was doing his national service) to establish a pill manufacturing plant at the Head Quarters of Special Forces at Speskop, near Pretoria, in 1985. The prosecutors alleged that Basson gave Beukes the money to purchase the necessary equipment for the manufacture and packaging of the tablets. Basson also gave Beukes the substance from which the tablets were to be manufactured and a stamp that would mark the tablets with an MX on the one side and RL on the other (for Roussel Laboratories, legal manufacturers of Mandrax). Once the tablets had been manufactured they were handed back to Basson. According to the document this took place over a period of 3 months during 1985.³¹ Beukes's testimony during the trial confirmed these allegations.³² Basson's defence counsel, on the other hand, claimed that it was possible that Beukes had manufactured placebos for use by Special Forces to infiltrate ANC trading routes. Other evidence suggests that the purpose of producing the tablets was bribery or self-enrichment. Former Civil Co-operation Bureau (CCB) Counter Intelligence head, Danie Phaal, claimed that almost two years after the disbanding of the covert unit, in 1992, Basson offered him 100 000 mandrax tablets to sell for personal gain.³³ Also in 1992 Basson was tasked by the CMC to purchase 500kg of methaqualone, from Croatia. Knobel told the TRC that the reason for this purchase was that the substance that could be obtained from this source was purer than could be manufactured in South Africa. This deal is discussed in detail in Chapter 5.

³¹ "Nadere Besonderhede Ten Aansien van Klagtes 25 – 64 Soos Vervat in Volume 2 Van Die Akte Van Beskuldiging", in The State vs Wouter Basson, 1999, p10.

³² Testimony of Steven Beukes in The State vs Wouter Basson, South African High Court, Transvaal Division, 29 October 2000.

³³ Testimony of Danie Phaal in The State vs Wouter Basson, South African High Court, Transvaal Division, 8 May 2000.

The reason for the production of the methaqualone tablets will remain a matter of speculation. There are at least three plausible explanations: the sale of the mandrax tablets could have generated funds for covert operations or for personal gain; the tablets could have been infiltrated into ANC trade routes to compromise ANC members and so to win them over as sources for the security forces; or a third, and far more sinister possibility is that these tablets could have been used to undermine communities, particularly in the Western Cape where mandrax addiction is common.

The production of MDMA at Delta G raises just as many questions. On 30 July 1992, Dr. Philip Mijburgh, Managing Director of Delta G Scientific, wrote a letter to Basson in which he quoted for the production of 1000kg of MDMA (also known as the rave drug ecstasy). The total cost of the production was quoted as being R840 000. The letter states that the delivery of the product could take place some 6–8 weeks after production.³⁴ About a week later the Surgeon General confirmed the order in writing and provided Mijburgh with provisional immunity against prosecution for the production of the drug.³⁵ Between February 1992 and January 1993 Ecstasy was produced at Delta G Scientific under the code-name BAXIL³⁶ or ADAM. While the SADF, and the Surgeon General consistently claimed that the MDMA produced at Delta G was intended for use as a crowd control agent, the organic chemist tasked with its manufacture, Dr. Johan Koekemoer, doubted its efficacy for this purpose and was concerned that there were other motives behind its production. Ultimately 912kg of 90-95,5% pure MDMA in crystalline form was produced by the end of the programme. The MDMA was made in Plant 3 at the Midrand Delta G factory and after production was packed into plastic bags in white metal drums – between 30 and 40kg per drum – which were double sealed. Koekemoer was instructed by Basson to personally deliver the drums to a basement room below the offices of Medchem

³⁴ Correspondence between Dr Philip Mijburgh, Medchem Technologies and Brigadier Wouter Basson, "Offer for the manufacture of 'Baxil'", 30 August 1992.

³⁵ Correspondence between D.P. Knobel and Dr Philip Mijburgh, Medchem Technologies, "Produksie van d-N-,s-Dimethylphenethylamine (Baxil)", 7 August 1992.

³⁶ Testimony of Dr. Johan Koekemoer at the TRC hearing into chemical and biological warfare, Cape Town, 11 June 1998.

Consolidated Investments³⁷ in Centurion.³⁸ From there, at least a portion of the amount produced was taken to pharmacist Steven Beukes for encapsulation. Beukes estimated that in total, he made one million capsules on Basson's orders, some of which were confiscated by the police during a raid on Delta G in 1997.³⁹

On the 9 November 1992, Basson wrote a letter which was signed by Knobel stating that the SADF had 1000kg of product B (BZ); 500kg of product M (methaqualone) and 30kg of product C (cocaine) in its stores and that these products would be used during the 1993/4 financial year. According to a briefing document prepared for the Minister of Defence in 1993,⁴⁰ 1000kg of a locally produced BZ variant was manufactured and intended for weaponisation in that year. Basson's defence counsel stated in court that large quantities of BZ (between 3 and 4 tons) were purchased as a precursor to the Croatian methaqualone deal in 1992 (see Chapter 5 for further details). Knobel seems to have understood the BZ and other incapacitating agents would be used for crowd control purposes in the run-up to the first democratic election in 1994. He told the TRC,

We were involved in - or we were very much aware of mass action and riot control and emergency situations which were declared by the President, and the emphasis then turned to what we called "dual use" chemical agents. CR was already available as an outstanding anti-riot agent, but also as an alternative to a retaliatory agent which could be used on the battlefield. The battlefield threat was diminishing, the riot situation was increasing. That is why the emphasis fell onto the incapacitating agents and the four varieties that were investigated.⁴¹

³⁷ Of which Philip Mijburgh was Director.

³⁸ Koekemoer in The State vs Wouter Basson, 29 October 2000.

³⁹ Beukes in The State vs Wouter Basson, 26 February 2001.

⁴⁰ Colonel Ben Steyn, "Voorligting aan die Minister van Verdediging oor die verloop en huidige status van Projekte Coast en Jota te George op 7 Jan 1993." SADF document GG/UG/302/6/J1282/5, 7 January 1993.

⁴¹ Knobel in the TRC hearing into chemical and biological warfare, Cape Town, 1998.

The four varieties mentioned included an irritant in the form of CR and three incapacitating agents: BZ, a methaqualone derivative and a MDMA.⁴²

CR, manufacture, weaponization and use

Interviews with scientists from Delta G Scientific indicate that research work and small-scale production of CR began in the early 1980s in the laboratories at Special Forces Headquarters. However, it was only in 1986, after the establishment of the Delta G Scientific production facility in Midrand that the process for the large-scale production of a “new generation tear gas” (NGT) was developed. Weaponisation of the NGT began in the same year.⁴³ Biochemist and former Delta G employee, Jan van Jaarsveld, said that at the height of production, Delta G supplied Basson with a ton of CR on a monthly basis.⁴⁴ By 1989 20 tons of CR had been produced of which 10 tons had been used by the army and the SAP for weapon production.⁴⁵

Gerald Cadwell was a long-serving employee of Project Coast having joined Delta G Scientific in 1983. Although he had spent his working life as a chemist, he had no formal qualifications in this field. His function in the company was to develop scale-up processes for products developed in the laboratories.⁴⁶ His first task was to produce the new generation teargas. The project was given the code FP003. Hennie Jordaan described this early attempt at CR production as “a horror show” for its incompetence. After an accident in which a 50-litre flask cracked, spilling CR over the floor of the Val de Grace offices, Delta G management realised the laboratory used by Cadwell was too small for the task. The project moved to a laboratory at the Special Forces Headquarters, Speskop. After a second accident the project moved to

⁴² Steyn, “Voorligting aan die Minister van Verdediging” 7 January 1993, p 7.

⁴³ Ibid., p5 paragraph 14.

⁴⁴ Testimony of Johan van Jaarsveld in The State vs Wouter Basson, South African High Court, Transvaal Division, 5 June 2000.

⁴⁵ W. Basson, “Projek Coast: Moontlikhede vir privatisering”, 11 November 1989. SADF document GG/UG/302/6/COAST/BFW, 28 November 1989. Exhibit 23B in The State vs Wouter Basson.

⁴⁶ Testimony of Gerald Cadwell in The State vs Wouter Basson, South African High Court, Transvaal Division, 8 November 2000.

its own laboratory building, known as the Pilot Plant, which was connected to the main Speskop building by a tunnel. In December 1984, during the clean-up of the second CR accident, a fire broke out in the laboratory adding urgency to the need to move the operation.

In addition to the conventional production of CR in powder form, Basson instructed Cadwell to dissolve CR in methanol. A “couple of hundred” litres of which were prepared for testing. By the time the entire operation had moved to Delta G Scientific’s Midrand plant in August 1985, Cadwell estimated that only about 50kg of CR had been produced.⁴⁷ Once in the Midrand facility the production rate increased dramatically. Cadwell estimated that 24 tons of CR was manufactured between mid-1985 and late 1986/early 1987 for which both a 250-litre reactor and a 1 000-litre reactor were used.⁴⁸ The production of CR continued, even after the privatisation of the company. According to Jordaan, one of the post-1991 Delta G research contracts was for the synthesis of analogues of CR. One of the variations (a compound which had a pyridine moiety in place of one of the benzene rings of FP003) caused severe blisters on the skin. Jordaan said he was sure that this compound was never made on a large (kilogram) scale at Delta G.⁴⁹

The idea of making a binary⁵⁰ dibenzoxazepine was discussed informally between researchers Gert Lourens, Johan Koekemoer and Jordaan, but was never demonstrated on any practical scale. Jordaan was adamant in interviews that any claim that substances other than CR were developed to the stage of weaponization had no basis in fact.⁵¹ Basson, on the other hand, claimed repeatedly throughout his trial that the weaponisation process developed to the point that there were prototypes of weapons filled with methaqualone and weapons filled with a mixture of a BZ

⁴⁷ Ibid.

⁴⁸ Ibid.

⁴⁹ Electronic communication between Hennie Jordaan and Chandré Gould on 12 March 2001.

⁵⁰ CR which would be produced through the mixing of two chemical compounds in a munition.

⁵¹ Ibid.

variant and cocaine.⁵² This raised the question of whether facilities, other than Delta G, could have been used to fill munitions with chemical agents, a question which remains unanswered as it has proved impossible to independently verify Basson's claim.

Floris Laubscher, a qualified chemist, physicist and 22-year veteran of pyrotechnic projects at Denel subsidiary, Swartklip Products, was in charge of CR weaponisation from 1987 to 1994. According to Laubscher, Armscor supplied Swartklip with CR powder to load into 11 966 hand grenades, rifle grenades, 81mm mortar bombs and 1 373 155mm G5 projectiles. The powder was transported from 91 Ammunition Depot at Naboomspruit in the Northern Province to Swartklip's factory at Phillippi on the Cape Flats at regular intervals. Hand and rifle grenades were routinely filled by Swartklip and the CR weapons were created from their own stock. The mortar shells were provided by Armscor and 155mm projectiles normally loaded with smoke by Swartklip were used.⁵³ The project to arm the ammunition with CR was variously referred to as *Newly*, *Keyboard* and *Cargo*.⁵⁴

Whilst the hand grenades and small calibre ammunition may have been intended for use by security forces for crowd control, the arming of G5 ammunition clearly indicates an intention to use the agent in conventional warfare. The 155mm projectiles would have a range of up to 40km. Basson has claimed that 120mm mortars filled with CR were authorised for shipment to UNITA on the instruction of General AJ (Kat) Liebenberg.⁵⁵ Again, this has proved extremely difficult to independently verify.

The CR was regarded by the military as South Africa's most effective weapon against mass action. In 1993 Knobel told the Minister of Defence that if South Africa were to

⁵² Judgement in the State vs Wouter Basson, paragraph 2131, point 46.

⁵³ Testimony of Floris Laubscher in The State vs Wouter Basson, South African High Court, Transvaal Division, 7 June 2000.

⁵⁴ Ibid.

⁵⁵ Statement by Adv. J. Cilliers in The State vs Wouter Basson, Pretoria High Court, 24 February 2000

declare its stocks of CR immediately after the signing of the Chemical Weapons Convention (CWC), in January of that year, “those responsible for mass action would have the opportunity to get tips about defences against the NGT from their international advisors”, if defences were obtained “the most effective weapons which the SA Army possesses to handle internal unrest could be neutralised.”⁵⁶ The military’s intention to keep the CR a secret and, therefore, to prevent affected people from knowing what agents were used against them, was a clear violation of human rights. Perhaps even worse was the intention to use incapacitating agents in the same way. Knobel was clearly aware of the dangers of the use of the highly irritating CR when he told the Minister of Defence that,

the SADF has two incapacitating agents which would be weaponised in 1993. These substances work on the brain functions of the target people and cause a change in their emotions, in this case both substances are strong calming agents. These substances offer certain advantages over the NGT [new generation tear gas] in that the NGT, if used incorrectly in big crowds can cause panic and in restricted areas such as in a big city, this could lead to damage to people and facilities. These substances will not have this effect and will in fact make the crowd easier to handle.⁵⁷

Aside from the production of the incapacitating and irritating agents, Delta G scientists dabbled in the isolation of the lethal ricin toxin from castor beans and the development of an assay process, in the early days of the company’s operation. According to both Jordaan and Candy, the project ‘appealed to the James Bond elements of the programme’ but was totally unsuccessful and ultimately abandoned.⁵⁸ There was a small scale-up plant available where larger quantities could have been produced but, according to all the scientists interviewed, no scale-ups were ever done for lethal agents. Jordaan said in interviews that his position in the company was such that he was aware of all the chemical products of both a commercial and military nature that were produced on larger than laboratory scale at Delta G. He told me that the products made for the military included:⁵⁹

⁵⁶ Steyn, “Voorligting Aan Die Minister Van Verdediging”, p 6.

⁵⁷ Ibid., p 9

⁵⁸ Gould interview with Jordaan, 18 January 2001. Gould interview with Candy, 24 May 2000.

⁵⁹ Ibid.

- Approximately 20 tons of CR and its intermediate precursor.
- Approximately 1 ton of CS (a milder crowd control agent) which had previously been made by AECI.
- Approximately 1 ton of Methaqualone (mandrax), made by Gert Lourens and codenamed MosRefCat (Mossgas Refinery Catalyst). This name gave it a plausible cover in case there were questions from the process operators on the plant.
- Just under a ton of MDMA⁶⁰ made under the personal supervision of Johan Koekemoer.

Delta G's procurement needs were met by an in-house procurement officer, Johan van der Westhuizen, whose task it was to procure equipment and chemicals. Delta G also made use of a procurement company called Organochem, established by Wouter Basson and headed by Armscor "sanctions-buster" Jerry Brandt. The experience gained by such procurement agents in international black market deals, and the use of false-end-user certificates in order to circumvent sanctions was valuable to Project Coast, however, it was not without risk. During a procurement trip in 1990 Brandt and his colleague, Grant Wentzel, were arrested in the United States for trying to export ion implanters, used for making microchips, to Hungary. Brandt was also accused of trying to buy a calibration handbook for missile guidance systems. The US prosecutor allowed the two men, who pleaded guilty, to return to South Africa, on condition that they returned to the US a year later for sentencing. Wouter Basson paid Brandt's airfare and accompanied him to the US attorney's office and to court where he was sentenced.⁶¹ Why Basson did this, despite the fact that it may have resulted in a breach of security is not clear, although Wentzel was later to be implicated in drugs deals allegedly orchestrated by Basson.

⁶⁰ MDMA is the technical term for the rave drug commonly known as Ecstasy.

⁶¹ United States of America vs Jerry Brandt, United States District Court Eastern District of New York, Judgement including sentence under the Sentencing Reform Act, Case No CR 90-0919, Conspiracy to violate Export Administration Act, 2 June 1992.

According to the forensic audit of Project Coast, in 1992 Organochem was paid R600,000 from Project funds. No earlier or later payments are recorded.⁶² Organochem was known to have been requested to purchase PMK, (piperonylmethylketone, a starting material used in the preparation of MDMA) for Delta G when the company was planning for the production of Ecstasy. Instead, testimony in the Basson trial revealed that the PMK was produced in the garage of Delta G's marketing manager, Barry Pithey⁶³ who was assisted by Hennie Jordaan and Johan Koekemoer, at the request of Jerry Brandt who could not find PMK for purchase through his procurement network. According to Jordaan the scientists were hoping to make some money on the side.⁶⁴ The process failed when a fire broke out, nearly destroying Pithey's home. Pithey was reprimanded by Mijburgh who accused him of threatening the security of the project. Although a small quantity of MDMA was manufactured from the PMK, Koekemoer found a more efficient route to manufacture just under a ton of the street drug.⁶⁵

Management and reporting at Delta G

Basson himself seldom visited Delta G. When on the few occasions, the scientists reported to him it was at the offices of the private company, Medchem, whose directors were Basson himself and Philip Mijburgh.⁶⁶ One of the scientists at Delta G, Dr Lucia Steenkamp, explained to me how she had reported to Basson. Steenkamp's PhD research was on "The synthesis of peptides and peptide-conjugates and the evaluation of their binding to CD4 receptors". She said that in 1989 she was instructed to get reports on her AIDS research ready for Basson. Her first report-back to him took place in the Medchem offices in Centurion. She thought that there may be some link between Medchem and the military, because she had heard that

⁶² H.J. Bruwer, "Projek Coast. Forensiese Ondersoek. Aanvullende Verslag van HJ Bruwer". Presented in The State vs Wouter Basson by the State, 10 August 2000, p6.

⁶³ Testimony of Barry Pithey in The State vs Wouter Basson, South African High Court, Transvaal Division, 8 November 2000.

⁶⁴ Gould interview of Jordaan, 18 January 2001.

⁶⁵ Jordaan in The State vs Wouter Basson, 15 August 2000.

⁶⁶ Bruwer, "Project Coast Forensiese Ondersoek", 10 November 1999, p30.

Mijburgh was Magnus Malan's nephew. But she was not aware of Basson's link to the SADF, nor that Delta G Scientific was a military front company. She was under the impression that Basson was a client of Armscor. He had been introduced to her as a representative from Armscor. She reported to him every four months. She said that in all the meetings she held with him, he made very little comment and was cold and intimidating. Steenkamp did not question why Armscor had an interest in AIDS research. She was of the impression that her PhD was paid for by Armscor and that the arms manufacturer had classified her work. She believed it was still classified ten years later.⁶⁷ Steenkamp's naïveté demonstrates that staff at the front companies may have remained unaware of the links between the company they were working for and the military. Certainly junior scientists like Steenkamp who enjoyed the opportunity to do work that interested them at state-of-the-art facilities did not ask awkward questions about the military links to the programme.

During Mijburgh's management Jordaan and other scientists at the company were struck by the lavish scale of entertainment and general extravagance displayed by senior Delta G employees. Business lunches and dinners were frequent, directors and higher officials lived the life of successful businessmen with all the appropriate trappings.⁶⁸ There was a private box at the Loftus rugby ground in Pretoria, a lodge at the exclusive Fancourt golf estate in George and frequent overseas trips. In his analysis of the effects of secrecy in the obstruction of civilian oversight of biological warfare programmes, Koblentz has argued that the experiences of South Africa, Japan and the Soviet Union in the conduct of such programmes demonstrates that the requirement for secrecy is both inimical to effective oversight, but more importantly, allows BW organisations to achieve a significant degree of autonomy which increases the risk of corruption, insubordination, and proliferation.⁶⁹ None of the senior military managers of Project Coast were aware of the numerous companies which Basson and his close associates established, nor their personal financial interests in these companies. Indeed, although while he was Surgeon

⁶⁷ Chandré Gould and Professor Peter Folb interview with Lucia Steenkamp, former Delta G junior scientist, Johannesburg, 27 June 2000.

⁶⁸ Gould interview with Jordaan, 18 January 2001.

⁶⁹ Koblentz, Pathogens as Weapons, p94.

General, Knobel authorised the production of MDMA and was aware of the production of methaqualone, he relied solely on Basson's word that these products would be used to develop incapacitating agents for use by the military, and never ascertained that the products were in fact made available to the military. Oversight of the activities of Basson and others in managerial positions in the programme was sorely lacking, the result of which was that individuals were able to use the programme to amass huge personal wealth. The forensic auditor put the total cost of Delta G to Project Coast at R127,467,406, of which some R40 million went into the fixed assets of the company and R50,467,406 for running costs. The cost of privatisation to the state was R37 million.⁷⁰

A quarterly report for the second quarter of 1987 put the number of staff employed by Delta G at 165, as follows: 102 permanent white employees; 14 temporary white employees and 49 permanent black employees (the number of black employees had been reduced from 55 to 49 after 'problems' had been experienced with the Chemical Workers Union. It was decided that more whites would be employed).⁷¹ Racism underlay every aspect of the project. Of the 165 people employed by the company, it is estimated that 20 were scientists involved in research, development and production.

In 1989 Delta G was taken over by Medchem Consolidated Investments. A year later the company was privatised and some staff were given shares⁷² in the newly private company. The final SADF contracts were completed in March 1993.⁷³ At the time of privatisation, Delta G had a staff complement of about 200 (including non-scientific staff). Mijburgh, a director of Delta G and Medchem, gained enormously from the

⁷⁰ Bruwer, "Projek Coast Forensiese Ondersoek", 10 November 1999 p 6.

⁷¹ "Delta G Scientific (Pty) Ltd Kwartaalverslag vir die Tweede Kwartaal 1987 (1/6/1987 – 31/8/87)", a Delta G Scientific document, p17.

⁷² Gould interview with Jordaan, 18 January 2001.

⁷³ W. Basson and A.J. Liebenberg, "Voorstelle mbt die Beeindiging van Kontraktuele verbintenisse met die Medchem Groep miv 1 September 1991 – Implikasies en opsies: Projek Coast", SADF document HSF/UG/302/6/C123, 19 August 1991.

privatisation of the Delta G, making a profit of about R15 million.⁷⁴ A company directed by Basson, WPW Investments Inc, based in the Cayman Islands, had a 50% interest in Medchem Consolidated Investments,⁷⁵ which suggests that Basson also benefited from the sale of the company.

The establishment of RRL

In 1975 Daan Goosen qualified as a veterinarian at the University of Pretoria. Three years later he obtained an Honours degree in clinical pathology, toxicology and pharmacology and joined the lecturing staff at Pretoria University's veterinary faculty. Soon afterwards he was appointed director of the HA Grové Animal Research Centre attached to HF Verwoerd Hospital (now called Pretoria Academic Hospital). As indicated by the name of the institute, the chief function of the research facility was to develop animal models for testing purposes. Research animals at the centre included mice, hamsters, beagle dogs, pigs and primates (chiefly baboons and vervet monkeys). This experience was to qualify him to head the biological warfare facility. One of the research projects carried out by the HA Grové Institute on behalf of the SADF dealt with the treatment of trauma. The research was led by a Professor Schlag, of Vienna. Extensive research was done on primates regarding trauma treatment with civilian interest being in the trauma treatment of vehicle accident victims.⁷⁶

Some time during 1982, Goosen was approached by scientists from Delta G Scientific for guidance on the use of animals for experiments with the "household chemicals" they were manufacturing – "like swimming pool acid". This was certainly a cover story. He advised them on the basics of dealing with laboratory animals. Later that year he met Basson when giving a presentation to the Surgeon General about the trauma project and how it could benefit victims of landmine explosions. Testifying

⁷⁴ "Alternatiewe tot die verandering van die SAW se belang by CO navorsing & ontwikkeling mbt die Medchem groep van maatskappye", SADF document RNDCHNGE 12.8.1991, 12 August 1988.

⁷⁵ Bruwer, "Projek Coast Forensiese Ondersoek ", p 30.

⁷⁶ Testimony of Dr Daan Goosen in The State vs Wouter Basson, South African High Court, Transvaal Division, 22 May 2000.

in the Basson trial, Goosen said that from early 1983, he and Basson frequently discussed the use of chemical substances in a war situation. They wrote reports together about the threat of chemical attack on the SADF, about biological warfare agents, and about the use of rats as landmine detectors. Goosen and Basson talked about sensitive matters and had to trust one another implicitly.⁷⁷ So close was their relationship that in 1983 Basson had no qualms about asking Goosen to provide him with a black mamba and its venom. Goosen claimed that Basson told him “they” had access to a State enemy who would be offered a few drinks while in a remote setting and would be then injected with the venom. The snake would be killed, and its fangs pressed into the dead man’s flesh to indicate a bite. The cause of death would be recorded as a snakebite.⁷⁸ This was the first indication that the front company which Goosen was to establish (RRL) would be used to develop assassination weapons. Goosen established the size of a lethal dosage of mamba venom for a baboon and before dawn one morning he, Basson and Dr James Davies (a member of Special Forces and thus not considered a security risk) injected a baboon with the venom. Within a minute the baboon was dead. Goosen gave Basson the rest of the venom and a “huge” mamba.⁷⁹ If Goosen’s version is correct, the clandestine manner in which this incident took place shows that those involved were aware that what they were doing was both dangerous and illegal. It set a precedent for future activities at RRL. A few months later Philip Mijburgh brought the snake which had been nicknamed “Fielies”, back to RRL.⁸⁰ He said it had served its purpose and could be destroyed.

In his criminal trial Basson was charged with the conspiracy to murder Roland Hunter, an SADF conscript who had been passing information about the SADF’s support to Renamo in Mozambique to the ANC. The state charged that the mamba

⁷⁷ Goosen in The State vs Wouter Basson, 22 May 2000.

⁷⁸ Ibid.

⁷⁹ Ibid.

⁸⁰ Ibid.

was intended to be used to kill Hunter.⁸¹ Fortunately for Hunter he was arrested by the security police before the plan could be executed. It was not proved in the trial that Basson had sought the snake from Goosen for this purpose. However, what it demonstrated was Goosen's willingness to please Basson even if that required his complicity in murder.

Having proved his willingness to respond to unusual and dangerous requests, in mid-1983, Goosen was asked to establish a military facility where chemical substances could be tested on animals. Originally only an evaluation centre for outside products (envisaged as coming from Delta G) was proposed, this idea expanded to a full biological research and development centre. Jan Lourens designed equipment for the company which in time included a perspex restraining chair for primates; a gas chamber which could accommodate the restraint chair; a filtration system, and a primate semen extractor to be used in virility tests.⁸²

Basson delegated the task of recruiting RRL staff to Goosen who began drawing in colleagues he knew and trusted, including veterinarians Dr André Immelman, Dr James Davies and microbiologist Dr Mike Odendaal. Dawid Spamer was appointed director of the company in charge of all administration. Dr Schalk van Rensburg, recruited from the South African Medical Research Council (MRC) by Basson himself, was one of the directors. The company's chief client was the SADF. Equal share certificates were issued to the directors - Goosen, David Spamer, André Immelman and Schalk van Rensburg. Simultaneously, they had to sign undated and blank share transfer forms. None of them was expecting to reap any personal benefit from their shareholding. It was clearly understood that this was a state-funded facility.⁸³

⁸¹ "Akte van Beskuldiging", Vol II; in The State vs Wouter Basson, South African High Court, Transvaal Division, 1999.

⁸² Chandré Gould and Jerome Chaskalson interview with Jan Lourens, Cape Town, 22 and 23 January 1997.

⁸³ Ibid.

The company, then known as Interlaboratories, started out as a few offices in a shopping centre in Sinoville, north of Pretoria. Shortly thereafter a 350ha piece of land was bought north of the peaceful Roodeplaat Dam outside Pretoria and building began in earnest. In order not to draw attention to the construction of a high-tech facility just outside Pretoria, RRL was built in phases - the animal centre first, then the basic laboratories. Five research laboratories were shared by microbiology and reproductive physiology. The laboratories were fully operational from 1985 (in the same year that Delta G Scientific moved to its new production facility). Before the construction of the laboratories, the existing farmhouse on the property was the centre of operations, housing the administration. Close by, small buildings each containing up to five laboratories were erected where chemical substances were synthesised and some microbiological work took place. A Containment Laboratory, planned by Immelman, worked specifically on lethal chemical agents including Sarin, Tabun and VX. Security at this laboratory was extremely high and access restricted. The laboratory was visible through a large glass window from an adjoining room. Scientists would don protective suits with independent air supply before entering. A qualified nursing sister was on duty in case of accidents while the laboratory was in use.⁸⁴ This was a bio-safety level 3 (P3) facility.

Immelman headed the chemical and pharmacological departments. His staff included scientists Klaus Psotta, Johan Schreuder, and Johan Niewenhuis, with James Davies in charge of toxicology. Schalk van Rensburg ran the animal research laboratory with staff including Mike Odendaal, Dr Woody Meltzer and Dr Riana Bornman. Dr Bornman was in charge of reproductive physiology. Later Odendaal headed a separate department of Microbiology.⁸⁵

As was the case with Delta G, Goosen was replaced as managing director just as the facility was about to go into full production in 1986. He was accused of having breached security by talking recklessly at a scientific conference held in the Kruger Park, having received a subsidy from the company to which he was not entitled and

⁸⁴ Testimony of André Immelman in The State vs Wouter Basson, South African High Court, Transvaal Division, 29 May 2000.

⁸⁵ Ibid.

having misused funds allocated to the building of RRL facilities.⁸⁶ Both Goosen and the state prosecutor believed that he was set up to lose his job so that he could be replaced by Special Forces dentist Wynand Swanepoel, who had a close relationship with Basson, and suspect that Goosen was given a psychotropic drug at the conference.⁸⁷ After losing his job at RRL, Goosen became head of Roodeplaat Breeding Enterprises, a facility established on the same property as RRL, which bred dogs for the security forces.

Roodeplaat Research Laboratories' (RRL) cover story was that it was a contract research facility in the pharmacological, agricultural, biological, veterinary and medical fields. Covert projects undertaken by the company on behalf of the military or the police were initially classified as H projects, or hard projects, a coding later changed to R. According to Schalk van Rensburg, RRL's head of laboratory services, commercial projects represented 5% in the early stage of operations and gradually grew to about 30%; he claimed that the costs of these projects did not account for more than 10% of the budget.⁸⁸ Good Laboratory Practices were not introduced at RRL until just before privatisation in 1991⁸⁹ which was a hindrance to effective marketing.

Goosen said, in his testimony during the Basson trial, that of the 203 project files found in Basson's trunks after his arrest in 1997, 177 dealt with biological weapons. The other 26 related to "soft" or commercial projects. Of the 177, 34 dealt with antidotes and treatment for biological agents and of these, only three were final reports. This surprised Goosen, since by his reckoning, there should have been 76

⁸⁶ Cross-examination of Goosen, as reflected in the judgement in The State vs Wouter Basson, paragraph 966.

⁸⁷ Gould and Chaskalson, interview with Goosen, 17 March 1998.

⁸⁸ Testimony of Dr Schalk van Rensburg at the TRC hearing into chemical and biological warfare, Cape Town, 9 June 1998.

⁸⁹ Chandré Gould and Peta Thornycroft interview with Drs Daan Goosen, Mike Odendaal and Adriaan Botha Pretoria, 1 December 1999.

final reports,⁹⁰ which raises a question about whether, when the company was privatised, the scientists retained their final research reports. During the height of its operation it is estimated that 31 technical professionals were employed at RRL. According to one of the directors, there were 11 graduates and 20 technicians in the 6 departments at the facility. Each department having had one expert.⁹¹

Chemical and biological warfare agent production at RRL

While Goosen was at HA Grové, he and Basson had discussed substances that could be used as biological weapons. The trauma research conducted at the Centre had shown that if *Clostridium Perfringens* was injected into a healthy primate, it would suffer identical symptoms to those of post-traumatic shock, specifically with regard to lung function. Within 24 to 36 hours the primate would develop violent pneumonia which could lead to death. The use of *Clostridium Perfringens* was debated by Goosen and Basson as a biological weapon. A small amount was made by RRL microbiologist, Dr Mike Odendaal. Goosen testified that he knew that the company he was to head was intended to develop biological weapons⁹² and to do animal tests of chemical substances. The evidence certainly shows that RRL's primary focus was research and development of lethal chemical and biological agents which were untraceable post mortem. Testimony from scientists showed that they believed that the substances were to be used in covert operations to assassinate individuals.

Goosen claimed that he and his colleagues agreed very early that they never wanted details about how the substances they produced were to be used. When asked to supply a substance, all they needed or wanted to know were the circumstances under which it would be administered, as this could influence the dosage required. The advantage of this decision was that the scientists were not directly compromised. But it also meant they never had precise data for the weight of the target, or the climate in which the substance was to be used, both factors which influence the

⁹⁰ Goosen in The State vs Wouter Basson, 22 May 2000.

⁹¹ Telephonic communication between Chandré Gould and Dr Schalk Van Rensburg on 23 May 2000.

⁹² Goosen in The State vs Wouter Basson, 22 May 2000.

effectiveness of chemical and toxic agents. Goosen said he and Basson agreed on this arm's-length way of operating, and it was also discussed with former Surgeon General General Nicol Nieuwoudt and Knobel. They all agreed the need-to-know principle would be strictly applied.⁹³ Despite this, the RRL directors were still worried about the selection of targets. Goosen said he spoke to Basson seeking reassurance that they were "legitimate targets". Goosen regarded legitimate targets as those who threatened the security of the apartheid state. In contradiction to the claims made by Goosen, Basson said that he was never asked to supply toxins to anyone, nor would he have done so if asked. Basson denied Goosen's allegations and although the state prosecutors were unable to prove in court that Basson himself had authorised and was aware of the production of chemical and biological agents for assassinations, the documents and testimony of the scientists tell a different tale.

Goosen was adamant that he was party to discussions about chemical and biological assassination weapons⁹⁴ which concluded that the ideal substance would be an organophosphate which research had shown to be effectively absorbed through the skin. DMSO - dimethylsulphoxide - was selected as the most suitable carrier for the poison, because it was quickly absorbed through the skin in liquid form.⁹⁵ Paraoxon was believed to be the best organophosphate for the intended purpose. It was synthesised from Parathion, a potent poison widely used in agriculture which has been responsible for the deaths of both animals and humans on farms. According to Goosen, the objective was to develop the ultimate murder weapon - a lethal poison that could not be traced during an autopsy (or, if traced, could not be traced back to RRL or the military).⁹⁶

Some RRL research reports appear to support Goosen's claim that RRL was single-minded in this objective. The reports demonstrate an obsession with finding substances that would be impossible to trace post-mortem. A report headed:

⁹³ ibid.

⁹⁴ ibid.

⁹⁵ ibid.

⁹⁶ ibid.

“Product information about botulinum toxin” informs the reader that the toxin is soluble in tap water, dam water, milk, beer and wine and warns that mixing the toxin with strongly alcoholic substances such as whisky and gin should be avoided.⁹⁷ Research done into ionophore antibiotics⁹⁸ showed that RRL was investigating the substances for clandestine use, “because the advantage is that if it can cause acute or sub-acute heart failure, the ionophore will not be traceable”.⁹⁹ Overdoses of antibiotics were also investigated through animal experiments. Overdoses of the veterinary antibiotic monensin was known to attack the heart muscles in ruminants.¹⁰⁰ A horse used for an RRL experiment had nearly died of heart failure. These findings, according to the report, had led RRL to investigate the possibility of using the drugs for covert operations against human beings. To this end, tests had been done on baboons. When mixed with alcohol and administered intravenously, the antibiotics killed the baboons within six hours. No damage to the heart muscle could be found during autopsy, and the substance was undetectable in the post-mortem toxicology results.

Goosen recalled how during an informal discussion about organophosphates there was discussion about how effective they would be in assassinations. African National Congress leaders and “Communists” were mentioned as suitable targets for elimination. There was some talk about how hard, for example, it would be to get to SACP leader Joe Slovo, and what substances could be used if an assassin had only one minute in which to use it. Nelson Mandela, too, was discussed - if he could somehow get cancer before being released from prison, his release would present

⁹⁷ “Produkinligtingstuk oor Botulinum Toksien”, an undated report from RRL found in trunks at the time of Basson’s arrest in 1997 and used by the TRC in its public hearing in 1998.

⁹⁸ Ionophore antibiotics are widely used in the poultry industry as growth promoters. Their mode of action links with their ability to transport cations across biological membranes. They have antiparasitic properties and are commonly used as growth promoters. Ionophores are potentially toxic for susceptible species.

⁹⁹ “Verslag aangaande die ionofoor antibiotika en hulle gebruik”, a report to the RRL shareholders in August 1985.

¹⁰⁰ K. Psotta and E. Joubert, “Roodeplaat Navorsingslaboratorium Projekverslag: Isolasië van Monensin”, 13 May 1986.

less of a political problem.¹⁰¹ Mike Odendaal recalled being asked for Salmonella by André Immelman, to be told that it would be used to poison ANC members at a meeting which he thought was in Soweto. Odendaal heard subsequently that the ANC members had become very ill, but had not died.¹⁰² Such people were considered legitimate targets by the scientists.

The synthesis of paraoxon was an ongoing project and there was always “plenty” available.¹⁰³ RRL synthesised paraoxon because it was “reasonably easy” to make and required a fatal dose of only 1mg per kilogram of body weight. It was quickly absorbed. If detected post-mortem, death could always be attributed to the common agricultural organophosphate parathion. Research into paraoxon also offered an ideal cover for establishing the laboratory in which research would be done on the nerve agents Sarin, Tabun and VX, since the same stringent biosafety standards applied.¹⁰⁴ Immelman believed the parathion research could result in a new way of treating people with organophosphate poisoning and a biochemistry project was registered for this purpose.¹⁰⁵ This was one of the few research projects that could be classified being for defensive purposes. On the other hand, paraoxon was added to lip balm, shampoo and roll-on deodorant. Scientist, Kobus Niewenhuisen was involved in the toiletries project while Klaus Psotta (his predecessor as head of the chemical department) carried out research on paraoxon mixed with tobacco. And alcoholic beverages.¹⁰⁶

¹⁰¹ Goosen in The State vs Wouter Basson, 22 May 2000 and “Die Moontlike Vrylating Van Mandela”, State Security Council document 22/3/1/2/38, March 1986.

¹⁰² Testimony of Dr Mike Odendaal at the TRC hearing into chemical and biological warfare, Cape Town 9 June 1998.

¹⁰³ Immelman in The State vs Wouter Basson, 29 May 2000.

¹⁰⁴ Ibid.

¹⁰⁵ WA Augustyn, “Biochemie Projekte”, July 1991, RRL document.

¹⁰⁶ K. Psotta, “Roodeplaat Navorsingslaboratoriums: Aansoek om ‘n projek te registreer, Tabak as ‘n toedieningsroete”, 23 July 1986 RRL research document, Exhibit 63U4 in The State vs Wouter Basson,. A. Immelman, “Roodeplaat Navorsingslaboratoriums Werksopdrag: Opmaak van 50mg PXN”, 27 January 1986, RRL research document, Exhibit 63U5 in The State vs Wouter Basson.

Psotta was an organic chemist who worked at both Delta G Scientific and Roodeplaat Research Laboratories. He refused to talk to me, though he did testify in the trial against Basson. Psotta was employed by the CSIR when he was recruited to Delta G in 1982. He worked in the synthesis department of Delta G until he was transferred to RRL in February 1984, where he continued to synthesise chemical compounds. At RRL Psotta synthesised the chemical agents paraoxon, tabun, and monensin. The synthesis of the lethal chemical warfare agent VX was a complicated and difficult process and he progressed only as far as the first two or three steps. A file shown to Psotta during his testimony in the Basson trial contained the test results of a project he carried out from 22 August 1985 to 26 September 1986 on the stability of paraoxon in nicotine.¹⁰⁷ A month after being mixed with nicotine, Psotta's research showed 24% of the paraoxon was still left. At the end of the 13-month experiment, his conclusion was that paraoxon remained extremely stable in nicotine. The paraoxon research then progressed to animal testing. An experiment was conducted by Dr James Davies, under the direction of André Immelman, to determine the effects of the paraoxon/nicotine combination in dogs. Nine adult beagles were to be orally dosed, three with paraoxon, three with nicotine and three with a combination.¹⁰⁸ No documents which showing the results of these experiments were retrieved from the trunks. Psotta was also instructed to test the stability of paraoxon in water, cooking oil and petroleum jelly (Vaseline). He found that when heated, paraoxon remained potent in water. It did not mix well with cooking oil and Vaseline. Results of his experiments on paraoxon mixed with alcohol, specifically whisky and gin, were given to Dr James Davies and the Austrian researcher, Dr Schreuder (who was based at RRL doing research into organophosphates used in the farming industry.)¹⁰⁹ Psotta was asked during the Basson trial if, while engaged in this work, he ever envisaged the use of paraoxon against enemies of the state. He replied that given the political climate at the time, it would have been almost impossible to envisage any other purpose for paraoxon mixed with whisky, gin, and in cigarettes.

¹⁰⁷ Exhibits 63U5 and 63U4 in The State vs Wouter Basson.

¹⁰⁸ J. Davies and A. Immelman, "Bepaling van die toksiteit van P.O. en nikotien as 'n kombinasie in die hond", Roodeplaat Research Laboratories Research Protocol, 20 July 1986.

¹⁰⁹ Chandré Gould interview with Dr Daan Goosen, Pretoria, 18 January 2001.

He added that, in principle, he had no qualms about the use of paraoxon against “the enemy”.

Human and Animal Experimentation

Testing of organophosphates on animals was extensive. Research reports revealing the use of dogs and primates as test subjects were found in the trunks discovered shortly after Basson’s arrest in January 1997. These reports showed that organophosphates were tested on large numbers of primates while little concern was shown for the well-being of the animals. Other tests included the effect of brodifacoum on rats, a poison that causes death by blood loss and brain haemorrhage.¹¹⁰ Far more horrific was evidence presented in court by Barnacle and CCB¹¹¹ operator Danie Phaal which suggests that brodifacoum may also have been tested on a prisoner of war in Namibia¹¹² and demonstrates the close relationship between the CBW programme and operational units of the SADF.

According to Phaal, Basson met him at the Waterkloof Airbase early one morning and gave him a small bottle - the size of a bottle of eye drops - containing a liquid which he was told to mix with orange juice and give to the victim. As soon as the man showed signs of illness, Phaal was to transport him to 1 Military Hospital on the first available flight. He claimed to have been told by Basson that it was an experiment.¹¹³ Phaal presented himself at Ondangwa as a doctor and was taken to the detention cells by the intelligence officer. The SWAPO soldier he saw was in good health. After talking to him, Phaal offered him orange juice, with which he mixed, out of sight, the contents of the bottle from Basson. The following day, Phaal was summoned urgently

¹¹⁰ Brodifacoum is classified as a superwarfarin. It prevents the clotting of blood and is used in rat poison. It is an off-white powder, highly poisonous by ingestion. It blocks the blood clotting cascade causing bleeding for weeks to months. Bleeding starts 36 – 48 hours after ingestion. Death is caused by blood loss and brain haemorrhage.

¹¹¹ Covert military units which fell under the command of the head of Special Forces.

¹¹² Phaal said that he recalled the operation taking place between 1983 and 1986, although the indictment places it as 1985.

¹¹³ Phaal in The State vs Wouter Basson, 8 – 9 May 2000.

by the intelligence officer, who told him something was wrong. When he got to the cell, it was obvious the man had suffered extensive blood loss. There was blood on his calves, on the toilet bowl and on the cell floor.¹¹⁴ Phaal arranged for the detainee to be flown to Grootfontein on the first available transport aircraft and from there, to be flown to Pretoria. On arrival at Waterkloof air base that evening, an ambulance was waiting to take the man to 1 Military Hospital. During the flight, he had injected the victim with “something” he was given by a doctor at Grootfontein. Some time afterwards, Phaal was told by Basson that the man had died.¹¹⁵ While Basson denied having giving Phaal any substance or having been involved in such an experiment and the court found that Phaal’s testimony was motivated by a desire to obtain indemnity for his role in murder which had caused him to implicate Basson,¹¹⁶ neither the judge nor Basson could deny that the incident had taken place. Indeed, while Basson’s personal role in the incident could not be verified by the court, the fact that the incident took place, and was almost certainly a horrific human experiment was not disputed.

Also during the trial, a medical doctor, Kobus Bothma recalled how he had carried out a gruesome human experiment with a member of the Special Operations Unit. One day in the mid-1980s,¹¹⁷ he said, he was told that orders had been issued for three people to be killed in an operation that would involve him and Special Forces operator, Johan Theron. Bothma claimed that Basson gave him a bottle containing a jelly-like substance and told him to smear some of it on the victims and observe the results.¹¹⁸ According to Bothma and Theron, the next day they left for Dukuduku, a

¹¹⁴ Ibid.

¹¹⁵ Ibid.

¹¹⁶ In terms of Section 204 of the South African Criminal Procedures Act, witnesses who testify against an accused and in so doing incriminate themselves in criminal acts can be indemnified against prosecution for those acts if they are found to have testified honestly and accurately.

¹¹⁷ Bothma put the date at 1983 whereas Johan Theron could recall that the incident took place in December 1984 – he remembered that he and Bothma had slipped away to vote in the referendum that took place at that time. Testimony of Dr Kobus Bothma in The State vs Wouter Basson, South African High Court, Transvaal Division, 12 – 13 June 2000.

¹¹⁸ Ibid.

remote SADF training camp in KwaZulu Natal, in Theron's vehicle. Somewhere outside Pretoria, they were met by men with a minibus. Three young black men in their 20s were being held in the bus. Theron told Bothma to sedate them. Having been told by Basson to use Medazolam (a sedative sold commercially as Dormicum¹¹⁹) Bothma injected the substance into cans of cold drink given to him by Theron. The three victims, bound hand and foot, drank the cold drink and fell asleep.¹²⁰

On arrival at the Dukuduku military base, Theron shackled the three men to trees overnight. The next morning, Bothma and Theron went to the men. One of them had almost sawed through the branch to which he was handcuffed in an attempt to get free. Although the three men were conscious, Bothma claimed that he did not think they realised what was happening.¹²¹ Bothma donned a surgical glove and smeared some of the jelly onto the upper arm of one man. He and Theron waited a while to see if the victim showed a reaction. When he did not, Theron told Bothma: "It's time for these three to say goodbye". Bothma said he knew Theron meant the three men had to be killed. It is at this point that the testimonies of Theron and Bothma differed. Bothma claimed that he could not stomach the thought of murdering the men so he walked away while Theron administered the lethal doses of muscle relaxants. Theron claimed the two men took turns to inject their victims. The men's bodies were loaded into an aircraft and flown out over the sea where the bodies were thrown from the aircraft. Bothma said he reported back to Basson, saying the jelly had no effect on the victims. He told the court that he had been traumatised by the incident, and had

¹¹⁹ Dormicum is the trade name for the well known benzodiazepine midazolam. More than 20 of these agents are on the market of which Valium (diazepam) and Ativan (lorazepam) are well known representatives. The benzodiazepines are primarily indicated for the treatment of anxiety states and as hypnotics (sleeping pills). They are relatively safe in overdose, but intravenous administration may cause respiratory arrest. Midazolam is a short acting benzodiazepine. It is effective for the induction of general anaesthesia and as an agent to induce sleep before minor, non-painful and short surgical procedures. For the above indications it is given intravenously.

¹²⁰ Bothma in The State vs Wouter Basson, 12 – 13 June 2000.

¹²¹ Ibid. Testimony of Johan Theron in The State vs Wouter Basson, South African High Court, Transvaal Division, 3 – 8 May 2000.

been through “20 years of hell” since it happened.¹²² Bothma is now practicing as a medical doctor in Richards Bay in KwaZulu Natal.

Judge Hartzenberg found Bothma and Theron to have been poor witnesses. He said that testimony of the two men had been contradictory and that Bothma’s reasons for having accompanied Theron on the operation were hard to understand. Bothma said that he had needed to sedate the victims, something which Theron could have done himself. He said that he had to test the effect of the ointment, which Theron could also have done, and lastly he said that he had to certify the men dead, a claim which the judge found absurd. Basson denied having given Bothma the order to accompany Theron, or having given Bothma the ointment. The judge found that because the two witnesses’ versions of events were contradictory it was impossible to find that Basson could be involved in the incident.¹²³ Again, despite the difficulty of proving the involvement of Basson in the incident, it is certain that it took place and that the intention was to test the efficacy of chemical agents on human subjects. Neither Bothma nor Theron would have had any reason to fabricate their involvement in an incident such as this.

Interaction between the front companies

While there was a need for compartmentalisation within Project Coast in order to maintain secrecy, and certainly many of the junior staff at both institutions were unaware of the work being done outside of their own facility, there was some interaction between the two companies. Delta G undertook some of RRL’s biochemistry projects and RRL conducted animal tests of Delta G products. One example of this interaction involved anti-fertility work. According to documents from RRL, the facility had a number of registered projects aimed at developing an anti-fertility vaccine.¹²⁴ This was a personal project of Goosen who had done research into embryo transplants. Goosen told the TRC that he and Basson had discussed the

¹²² Ibid.

¹²³ Judgement in The State vs Wouter Basson, paragraphs 1990 – 1993.

¹²⁴ Researchers at the facility were required to submit research proposals to the managers, projects that were authorised were registered internally.

possibility of developing an anti-fertility vaccine which could be selectively administered – without the knowledge of the recipient. The intention, he said, was to administer it to black South African women without their knowledge. This was confirmed by Dr Schalk Van Rensburg who oversaw the fertility project. The chief researcher on this project, Dr Riana Bornman, denied that she was aware that this was the project's intention¹²⁵ or that it was a military project. Many projects were registered at RRL to investigate the production of a male and female anti-fertility vaccine, but ultimately it was never produced because of the technical complexities involved.¹²⁶ Peptide synthesis was initially undertaken for this purpose. The researchers thought that if the formation of HCG in women shortly after conception could be prevented, the result would be effective contraception. To this end Delta G purchased a peptide synthesiser¹²⁷ and assisted RRL in this aspect of the research project.

Van Rensburg, who oversaw the fertility project, told the TRC that “fertility and fertility control studies comprised 18 percent of all projects.”¹²⁸ Van Rensburg said he had received the initial instruction to conduct the anti-fertility work from Basson. He had been told that the purpose was to prepare a contraceptive that could be given to women soldiers of UNITA. Although van Rensburg was sceptical of the reasons given by Basson, he was aware that the World Health Organization (WHO) supported research into contraceptives and that there was a possibility of the project making money for RRL. He estimated that there was little chance of the research producing positive results for at least 10 years and; therefore, it was unlikely to be abused by the military in the short term. Press reports at the time of the TRC hearing stated incorrectly that an anti-fertility vaccine that would only work on black women had been produced. By the time RRL was privatized, the research had not yielded a usable end product. Van Rensburg's belief that he, rather than the military, was in

¹²⁵ Freek Swart, “Onvrugbare swart vroue Tukkie-professor praat oor WVK se valse propaganda”, Rapport, 9 August 1998.

¹²⁶ Goosen in TRC hearing, 10 June 1998.

¹²⁷ Gould interview with Jordaan, Pretoria, 18 January 2001. Gould and Folb interview with Steenkamp, Johannesburg, 27 June 2000.

¹²⁸ Testimony Van Rensburg at TRC hearing, 9 June, 1998

control of the fertility research was not unique. Other scientists interviewed expressed similar views, saying they would not have made certain aspects of their work available to the military for offensive application.

Work done at RRL for Delta G included a study of the toxicity of phenylsilitrane.¹²⁹ Little is known of this substance. Dr James Davies and Dr André Immelman, who were responsible for most of the military work for RRL, conducted tests on rats to determine the toxicity of the substance. Twenty-five rats were used in the experiment, in groups of five. Each group was given different doses. The experiment was unsuccessful because, although many of the rats died, the rats in different groups died in no particular pattern.¹³⁰ The state prosecutors in the Basson trial believed this poison may have been intended for use in covert assassinations. Tests were conducted on three baboons with phenylsilitrane. The RRL report notes that all the baboons suffered muscle spasms and disorientation after five minutes. After twelve minutes they still showed signs of muscle spasms along with difficulty in breathing. All died from suffocation within fifteen minutes.¹³¹ Further research showed that the substance was not stable in solution. Throughout 1987, Davies and Immelman sought to determine the LD50 (toxicity) of the substance. It was made into various formulations and tested on the skin of laboratory pigs but no absorption was found to have taken place.

Chemical and biological agents for covert use

In 1997, shortly after the arrest of Wouter Basson, trunks containing documents were found at the home of his associate, Samuel Bosch. The documents included research at RRL and Delta G Scientific, some personal documents, and documents relating to various companies associated with Project Coast. One of the documents

¹²⁹ J. Davies, "Fenielsilitrane in Bobbejane", Roodeplaat Research Laboratory research report, 26 February 1987. Exhibit 54D in The State vs Wouter Basson.

¹³⁰ A. Immelman, and J. Davies, "Evaluering van die absorpsie van Salitrane deur middel van verskeie toedieningsroetes", Roodeplaat Research Laboratories research report, 5 January 1988. Exhibit 54D in The State vs Wouter Basson.

¹³¹ Davies, "Fenielsilitrane in bobbejane", 26 February 1987.

found in a trunk was a list of poisons RRL had for sale. This list, the Verkope (Sales) list was compiled by head of research at RRL, Dr André Immelman, who testified in the Basson trial that the document was a list of items he gave to people introduced to him by Basson. They included members of the SAP, a medical doctor linked to the CCB, and a psychologist, Johnny Koortzen.¹³² In his testimony, Basson said that he had been instructed by the Chief of the SADF to assist the Security Police, who were experiencing 'problems in relation to incapacitants'. Basson said he decided to introduce three Security Police members – Chris (Smit), Gert (Otto) and Manie (Van Staden) – to Immelman, since Immelman had access to all the substances tested for Delta G, and knew the properties of each. Basson said he was personally too busy to deal with the Security Police, but for security reasons, arranged that Immelman should meet with the three men in his office in future. However, Basson claimed, he was never told what Immelman gave them, or what the intended use was. Basson also said he did not know of the existence of the Sales List, and never saw it before being confronted with it during his bail application. He could not comment on the contents of the list, except to say that the items against his own name would have been needed either for personal research, or for training purposes.¹³³ Throughout the trial it was clear that Basson had ensured that plausible deniability was built into the management system. The Verkope List nevertheless, provides a unique insight into the covert work of scientists at RRL. The following are (in alphabetical order) the items that Immelman made available to security force operators¹³⁴:

Aldicarb is a pesticide. Its white crystals have a slightly sulphurous odour. It is toxic. The probable oral lethal dose for humans is less than 5mg/kg (1/15th of a teaspoon for a 70kg person). It is poisonous by ingestion and skin contact. Death is caused by muscle weakness, accumulation of fluids in the lungs, respiratory and heart failure, epileptic fits and coma. RRL offered aldicarb dissolved in orange juice.

¹³² Immelman in The State vs Wouter Basson, 29 May 2000.

¹³³ Basson in The State vs Wouter Basson, 30 July 2001.

¹³⁴ Testimony of Dr Gerbus Muller in The State vs Wouter Basson, South African high Court, Transvaal Division, 8 June 2000. The descriptions of lethal doses and the effects of these poisons described below are drawn from the testimony of this expert witness.

Anthrax/Bacillus anthracis is a highly infectious and virulent micro organism. Human infection in the natural state is usually through the skin but also follows after inhalation or ingestion. Inhaling B. anthracis spores (dormant form) may result in pulmonary anthrax, which is often fatal. Anthrax of the lungs follows 2 – 5 days after exposure and is characterized by a mild initial phase of fever and malaise followed by sudden onset of severe acute illness with high fever. The lymph nodes in the chest become swollen and ulcerate, and these festering, bleeding ulcerations spread to other important organs in the chest. Respiratory distress develops, followed by cyanosis, shock, coma and death. Dr Mike Odendaal told the TRC and the court that he had put anthrax spores on cigarettes and on the gum of an envelope.

Azide (sodium azide, hydrazoic acid) salts are used industrially in the manufacture of explosives and preservatives. It is a cell poison causing death by a mechanism similar to that of cyanide. Sodium azide crystals are colourless and odourless. Azide is poisonous by ingestion, inhalation and skin contact. According to Dr G Muller, the medical expert who testified in the Basson trial, an individual who ingested 700-800mg (1/6th of a teaspoon) died three days later as a result of failure to breathe. Death is caused by a fall in body temperature and blood pressure, respiratory failure, epileptic fits and coma. RRL offered 3 doses of 1,5g of this substance mixed in whisky - well over a fatal dose. RRL research reports relate that this poison was tested on dogs, pigs and baboons.¹³⁵

Botulinum is a nerve poison produced by the micro organism Clostridium botulinum. It is the most poisonous biological toxin known, about 1 million times more poisonous than arsenic. Ingestion in food causes progressive paralysis of nerves and voluntary muscles (from half an hour to several days after ingestion) resulting in respiratory failure and death. (RRL offered 4 beer bottles contaminated with botulinum).

Brodifacoum is classified as a superwarfarin. It prevents the clotting of blood and is used in rat poison. It is an off-white powder. Poisonous by ingestion, it blocks the

¹³⁵ "Natrium aside", RRL report which was found in the trunks at the time of Basson's arrest and made available to the public during the TRC hearing into chemical and biological warfare in 1998. This report is undated and no author is identified.

blood clotting cascade, causing bleeding for weeks to months. Bleeding starts 36 – 48 hours after ingestion. Death is caused by blood loss and brain haemorrhage. According to an RRL report prepared by James Davies and André Immelman, this substance was tested on 8 blue-apes, who all bled to death, starting with their gums, over a 24 hour period. The researchers suggested that a larger group of primates be tested and other species be included in the experiment.¹³⁶ RRL offered two peppermint chocolates contaminated with brodifacoum.

The pathogenic micro organism B. melitensis causes the disease known as brucellosis (Malta Fever). This infectious disease is characterized by an acute fever stage and a chronic stage with relapses of fever, weakness, sweats and vague aches and pains recurring over months or years. A single dose is listed as having been given to a security force operator in October 1989.¹³⁷

Cantharidine is a biological poison derived from blister beetle (Spanish fly). The crystals are colourless and odourless. As little as 10mg of this toxin has been fatal. Systemic poisoning can develop after ingestion or by skin contact. Physical contact causes potent skin and mucous membrane irritation and blistering. Oral poisonous doses cause extensive organ damage characterized by a burning sensation of the mouth and throat, followed eventually by kidney and respiratory failure, shock and coma (Immelman gave 70mg, enough to kill 7 people, to a policeman in 1989).¹³⁸

Colchicine is an anti-inflammatory agent used in the management of severe gouty arthritis. It is a pale yellow nearly odourless substance which darkens on exposure to light. As little as 7mg can cause death. Symptoms and signs of poisoning, 2 to 12 hours after ingestion, include severe nausea and vomiting, bleeding from the gut, and shock. This progresses to multiple organ failure, especially heart and respiratory failure, and bleeding tendencies. Death, which may occur 7–36 hours after ingestion,

¹³⁶ J. Davies and A. Immelman, "Projekverslag (Nr1), Projektnommer 86/H/010/50; Doel: Bepaling van toksiteit van Brodifakoum in die blou-aap", 23 June 1986.

¹³⁷ A. Immelman, "Verkope", 1989.

¹³⁸ Ibid.

is usually due to respiratory failure and cardiovascular collapse. Immelman gave 75mg of colchicine, enough to kill 10 people, in whisky, to a policeman, in September 1989.

Digoxin is a well-known drug classified as a cardiac glycoside. It is commonly used in the management of heart failure and abnormalities in heart rhythm. Digoxin powder is composed of odourless, white crystals. The therapeutic dose is close to the lethal dose. The usual therapeutic dose ranges from 0.125 to 0.25mg per day. Adult patients with normal hearts (those not on digoxin) rarely develop life threatening poisoning with less than 5mg in an acute ingestion. However, acute ingestion of 2mg in patients on long term digoxin therapy may result in potentially serious poisoning. Acute digoxin poisoning usually presents with nausea, vomiting, diarrhoea, abdominal pain, fatigue, delirium, hallucination and seizures. Death is caused by severe heart rhythm disturbances, resulting in heart failure and cardiac arrest. Immelman gave 5mg away. The state prosecutors alleged that the intention was to use this to poison ANC leader Dullah Omar.¹³⁹ Basson was acquitted on the charge of having been involved in this incident.

The mamba is a dangerously venomous snake. The venom is a neurotoxin. Prodromal symptoms of neurotoxicity, including drowsiness, vomiting, hypersalivation, increased sweating, trembling, skeletal muscle fasciculation and circumoral sensation of pins and needles may appear within 5 – 10 minutes. More specific and classical neurotoxic symptoms and signs, which may develop within 30 – 120 minutes, include: blurred speech and difficulty in swallowing. Progressive respiratory muscle paralysis, leading to respiratory failure, is the most serious neurotoxic effect, usually developing within one to three hours and is usually the cause of death. Immelman gave away an unspecified amount of mamba toxin.¹⁴⁰

Mercuric oxycyanide is a white crystalline powder. It contains both mercury and cyanide. The clinical picture of acute organic mercury poisoning includes vomiting, a bloody diarrhoea, a profound circulatory collapse (shock) and kidney failure within 24

¹³⁹ "Akte Van Beskuldiging", in The State vs Wouter Basson, 1991.

¹⁴⁰ Immelman, "Verkope", 1989.

hours. Immelman gave the policeman identified only as “Koos” four grams of this poison.¹⁴¹

Methanol (wood alcohol) is a poisonous alcohol. It is an inherent cell poison. At room temperature it is a colourless liquid with a slight alcoholic odour. Methanol is converted in the human liver to formaldehyde and then to formic acid. It is these two metabolites, rather than the methanol, that are highly poisonous. If untreated, methanol poisoning can lead to visual changes, severe acidosis, kidney failure, coma and finally respiratory or heart failure and arrest. Three doses of 30ml are recorded on the RRL “Sales” List.

Paraoxon is an organophosphate pesticide. It is a potent nerve poison which is poisonous by ingestion, by mucous membrane as well as skin contact. The probable oral lethal dose for humans may be as low as 1/50th of a teaspoon for a 70kg person. One drop in the eye may be fatal. Death is caused by muscle weakness, accumulation of fluids in the lungs, respiratory and heart failure, epileptic fits and coma. Ten doses of 2ml, far more than what is needed to kill one adult, were made available by Immelman.¹⁴²

Paraquat is a domestic and commercial herbicide. It is a potent cell poison causing multi-system organ failure and lung damage in fatal cases. Paraquat is a colourless to yellow salt and may have a mild ammonia smell. An estimated lethal dose of the concentrated solution is 10 – 15ml, and 1 – 2g of the salt. Ingestion causes chemical burning of the mouth and throat with ulceration. Paraquat poisoning may result in severe toxicity and death within 24 hours as a result of lung, heart, liver and kidney damage. Survivors usually develop progressive fibrosis (scarring) of the lung within 5 – 10 days after exposure. Patients eventually die of respiratory failure. Paraquat poisoning is almost always fatal. RRL offered 75ml of this poison in whisky, enough to kill 5 people.

¹⁴¹ Ibid.

¹⁴² Ibid.

Phencyclidine (PCP) (also known as Angel Dust) has been a drug of abuse since the 1970s. It is a standardised chemical warfare agent known as agent SN. It can be described as a psychedelic agent. It was originally developed as a general anaesthetic agent and its effects are similar to those of ketamine. It is a white crystalline powder, readily soluble in water and alcohol, with a bitter taste. Catatonic posturing is produced, resembling that of schizophrenia. Abusers may appear to be reacting to hallucinations and exhibit hostile or dissociative behaviour. Severe psychological disturbance can be produced by toxic doses. Immelman gave 5 doses of 100mg to psychologist Johnny Koortzen in 1989.¹⁴³

Salmonella typhimurium and S. typhi are pathogenic micro-organisms which can cause various disease states, e.g. food poisoning and typhoid fever. Salmonella typhimurium patients usually present with vomiting, severe watery diarrhoea, colicky stomach pains, blood in the stools. Duration varies from 1 or 2 days to weeks or longer. RRL offered 3 bottles of deodorant contaminated with this pathogen. Salmonella typhi is the cause of typhoid fever. The incubation period (3 – 25 days) is related directly to the number of organisms ingested. Typhoid fever is a generalized infection causing fever, headache, chills, backache and nose bleeds. Stomach pains dominate, heart rate slows down and diarrhoea occurs late. Delirium and confusion are common. Complications include bleeding from the bowels. Bowel perforation is the most frequent fatal complication.

Sodium cyanide is a white solid which may be powder, granular, egg shaped or flake form. It is odourless when dry but may have the characteristic bitter almond odour when wet. The ability to detect this odour is genetically determined and most people are unable to detect its presence. The fatal dose of cyanide salts is estimated at 200-300mg for an adult (1/25th of a teaspoon). Cyanide is absorbed by ingestion, inhalation, through eye and intact skin. Sodium cyanide exposure may produce death within minutes. Exposure to smaller amounts may produce nausea, vomiting, palpitations, confusion, rapid breathing, vertigo and dizziness. Fatal doses rapidly progress to agitation, seizures, accumulation of fluid in lungs, coma, respiratory arrest and death. The "Sales" list records 50 capsules having been given to "Koos" in

¹⁴³ Ibid.

August 1989. In addition, three peppermint chocolates contaminated with cyanide were offered by RRL.¹⁴⁴

Thallium acetate is a thallium salt, used as an insecticides and rodenticide. Due to the toxicity of thallium salts these have been banned in many countries. Thallium is a cellular toxin causing cell death. It is colourless, odourless and tasteless and extremely toxic. The lethal dose is 12mg/kg of body weight based on animal data. Thallium salts are well absorbed after ingestion, inhalation or skin contact. Symptoms of acute poisoning are usually delayed for 12 to 24 hours and may only reach their peak effect in the second or third week after exposure. This may lead to complete paralysis and death. Nerve damage may be permanent in survivors. One gram of the substance was offered by RRL – enough to kill a large person.¹⁴⁵

Vibrio cholerae is the causative organism of the cholera. Cholera is an acute infection involving the entire bowel. It is characterized by profuse watery diarrhoea, vomiting, muscular cramps, dehydration, kidney failure and collapse. Cholera can be a fulminant, rapidly lethal disease. The incubation period is 1 – 3 days. Children and the elderly are the first and most severely affected in a cholera outbreak. Thirty-two bottles were offered by RRL – enough to affect the health of more than one community.

Vitamin D (cholecalciferol) is one of the fat soluble vitamins and is used as a rodenticide. It is a white, odourless crystalline salt. Daily ingestions in excess of 2000IU in children or 1,88mg in adults may produce toxic symptoms within weeks or months. Most of the acute toxic effects of Vitamin D overdose are due to a rise in blood calcium. In acute overdose, patients may present with nausea, vomiting, diarrhoea, headache, itching, weakness, peripheral nerve damage, depression, confusion, heart rhythm disturbances and myocardial infraction. Four grams were offered by RRL.¹⁴⁶

¹⁴⁴ Ibid.

¹⁴⁵ Ibid.

¹⁴⁶ Ibid.

Other substances investigated at RRL, not on the Sales List, but allegedly used by the operators in some cases include:

Ketalar or Ketamine which can be classified as a general anaesthetic. It is also a potent analgesic (pain reliever). It is commercially available as a solution, under the trade name Ketalar. Because ketamine can be given intramuscularly, it is relatively easy for a lay person to administer the drug. General anaesthesia is induced within four minutes after injection. Bothma testified that he gave Theron Ketalar with which to anaesthetise the three men at Dukuduku before injecting them with muscle relaxants.¹⁴⁷ Theron testified to having used it more than once under similar circumstances.¹⁴⁸

Aluminium phosphide or Phosphine is used as a fumigant/rodenticide (for rats and moles). Upon contact with moisture, the pellets release the poisonous gas phosphine. If ingested, phosphine is released from aluminium phosphide by action of the stomach fluids. Pure aluminium phosphide is a grey or yellowish salt. Phosphine is a colourless, flammable gas with a decaying fish or garlic-like odour. It is highly toxic. The normal lethal dose in a 70kg person is reported to be less than 500mg. All patients who died had consumed 3 or more aluminium phosphide tablets. Inhalation of phosphine causes severe irritation of the airways, with cough, headache, tightness of the chest, coma, epileptic fits, heart failure and fluid on the lungs. Death can occur within 24 hours.

BZ (α -hydroxy- α -phenylbenzeneacetic acid, 1-azabicyclo[2.2.2]oct-3-yl ester, 3-quinuclidinyl benzilate). BZ is an incapacitating agent. Approximately 30 minutes after exposure to BZ aerosol, symptoms appear such as disorientation with visual and auditory hallucinations. The symptoms peak in four to eight hours, and may take up to four days to pass. Other symptoms can include distended pupils, dry mouth, and increased body temperature. The action of BZ on the central and peripheral

¹⁴⁷ Bothma in The State vs Wouter Basson, 12 June 1999.

¹⁴⁸ Theron in The State vs Wouter Basson, 8 May 2000.

nervous systems resembles that of atropine. Like atropine, BZ binds to muscarinic acetylcholine receptors.¹⁴⁹

RRL microbiologist, Adriaan Botha claimed that he worked with the additional following organisms, which were part of the RRL culture collection (maintained by Odendaal and Botha).¹⁵⁰

Escherichia coli. This was used in the cloning of the Clostridium perfringens epsilon toxin gene for vaccine development purposes. Although Botha's intention was to produce a vaccine as a result of this work, he was aware of its potential military application. If the cloned gene could be placed in E. coli it would have been able to produce the deadly toxin at a far higher rate than the Clostridium would have been able to do.¹⁵¹

Clostridium perfringens. The cloning of the epsilon toxin gene for introduction into Escherichia coli for vaccine development purposes.¹⁵²

Flavobacterium sp and Pseudomonas sp. Both used in the development of a method for detoxification of organophosphorus compounds for both defensive and commercial purposes.¹⁵³

Hormoconis resiniae. This organism can grow in diesel and aviation fuel leading to problems such as engine problems in tanks and ships as a result of clogged fuel

¹⁴⁹"Psychogenic Agents", <http://www.mitrotek.org>, 3 July 2000 and A.W.M. Hay, "Surviving the impossible: the long march from Srebrenica. An investigation of the possible use of chemical warfare agents", Medicine in Conflict and Survival, London, Frank Cass Journals, Vol 14, 1998, pp120 – 155.

¹⁵⁰ Electronic communication between Chandré Gould and Adrian Botha, 19 March 2001.

¹⁵¹ Ibid.

¹⁵² Ibid.

¹⁵³ Ibid.

lines. It is suspected that this organism had caused several airplane crashes. Botha was investigating this organism for both defensive and offensive purposes.¹⁵⁴

Included in the RRL culture collection were the following micro organisms:

- *Shigella flexneri*
- *Salmonella typhimurium*
- *Salmonella typhi*
- *Yersinia enterocolitica*
- *Escherichia coli* H157
- *Vibrio parahaemolyticus*
- *Escherichia coli* EP
- *Brucella melitensis*
- *Brucella abortus* (terminates pregnancy in cows)
- *Bacillus anthracis*

The above pathogens were listed in a document which described the RRL culture collection, the organisms were grown and freeze dried in 10ml and 25ml quantities which contained a high concentration of the organisms.¹⁵⁵

Table 3. Dosage and suspected use of RRL products offered on the “Verkope” list¹⁵⁶

Item	Number of doses offered	Evidence of use
<i>Chemical agents</i>		

¹⁵⁴ *Ibid.*

¹⁵⁵ M.W. Odendaal, RRL research document, 6 February 1989.

¹⁵⁶ Immelman, “Verkope”.

Phencyclidine	5 x 100mg doses	No information available
Alidcarb	6 x 200mg doses in orange juice and 3 peppermint chocolates contaminated.	No information available
Azide	3 x 1,5g doses in whisky and 4g.	No information available
Paraoxon	10 x 2ml doses	No information available. Evidence before the court in <i>The State vs Wouter Basson</i> suggested that Reverend Frank Chikane may have suffered from paraoxon poisoning but this was not proved. ¹⁵⁷
Vitamin D	2 doses of 2grams each	No information available.
Thallium acetate	1g – sufficient for a fatal dose for two small people or one large person. Five bottles of beer were contaminated with thallium.	No information available.
Aluminium phosphide	30 tablets	No information available.
Sodium cyanide	64 capsules and three peppermint chocolates.	No information available.
Paraquat	1 x 75ml dose in whisky	No information available.
Mercuric oxycyanide	4g	No information available
Digoxin	1 x 5mg dose	According to the evidence of CCB operator Abram (Slang) Van Zyl it was the intention of the CCB to murder ANC leader, Dullah Omar by tampering with his heart medication. ¹⁵⁸ It was not proved that the digoxin on the Sales List was used for this purpose.
Colchicine	75mg – 10 fatal doses	No information available.
Cantharadine	170mg – enough for fatal doses for 17 people and three peppermint chocolates contaminated.	No information available.

¹⁵⁷ Summary of the evidence used in the State's argument against the acquittal of Dr Basson on the human rights violation charges in *The State vs Wouter Basson*, South African High Court, Transvaal Division, 24 May 2001.

¹⁵⁸ Testimony of Abram Van Zyl in *The State vs Wouter Basson*, South African High Court, Transvaal Division, 12 May 2000.

<i>Biological agents</i>		
Anthrax	1 envelope, the gum of which was contaminated with anthrax spores, 5 cigarettes contaminated, 5 coffee chocolates contaminated. (An unknown number flasks in 10ml and 25ml volumes containing freeze-dried anthrax spores were prepared and stored at RRL.)	No information available.
Botulinum	4 bottles of beer contaminated with botulinum toxin and five coffee chocolates were contaminated.	No information available.
Salmonella typhimurium	200g of sugar contaminated with salmonella. Two bottles of deodorant contaminated with Salmonella typhimurium.	Dr Mike Odendaal testified that he was responsible for the contamination of the sugar with salmonella. He had been told that the sugar had been used at an ANC meeting in Soweto and that people attending the meeting had subsequently become ill. ¹⁵⁹ It was not proved that this was in fact the case. No information is available regarding the use of the deodorant.
Vibrio cholera	32 bottles.	According to the evidence of CCB operator, Pieter Botes, a bottle of Vibrio cholera was given to him. He instructed one of the officers under his command to contaminate the water supply of a SWAPO camp in 1989. The water was chlorinated and the cholera

		had no effect on the residents of the camp. ¹⁶⁰ No information is available regarding the use of the remaining 31 bottles.
B. melitensis	Two doses.	No information available.

Scaling-up and closing down

Four years after starting work, in 1987, the senior management at RRL commissioned engineering firm Foster Wheeler (FW)¹⁶¹ to draw plans for an up-graded facility which would include freeze-drying and storage facilities and a P4 laboratory for dealing with highly virulent strains. Several laboratories were planned to deal with, *inter alia*, toxins, industrial chemicals and nerve agents. Odendaal, who was involved in the planning process, said the intention was to produce aflatoxins, T2 toxin, anthrax, *Brucella*, *Salmonella*, botulinum and tetanus toxins.¹⁶² He was convinced that the purpose of the new facility was to allow RRL to move into large-scale BW production, “[A]t the end of the programme we were planning a multi-million rand containment facility, the plans had been drawn up and it was going to be built. This was going to be a state-of-the-art, large-scale production facility - we were going to make big quantities... that was why we wanted large volumes.”¹⁶³ What is not clear is how or where these biological agents would have been used. As far as

¹⁵⁹ Testimony of Dr Mike Odendaal in The State vs Wouter Basson, South African High Court, Transvaal Division, 24 May 2000.

¹⁶⁰ Testimony of Pieter Botes in The State vs Wouter Basson, South African High Court, Transvaal Division, 15 May 2000.

¹⁶¹ “Conceptual Design of New Virulent Strain Centre and Fermentation/Mycology Research Laboratories”, (for RRL prepared by Foster Wheeler South Africa, Pty Ltd, July 1988. Contract No 1-1600-25112). Document held by the author.

¹⁶² C.Gould and P. Folb, Project Coast: Apartheid’s Chemical and Biological Warfare Programme, United Nations Institute for Disarmament Research, 2002, p99

¹⁶³ Chandré Gould interview with Dr Mike Odendaal, Onderstepoort, 6 October 1999.

can be established from the documentation available, no military doctrine or strategy was developed to encompass the use of biological weapons. In addition, contracting international consultants to draw up the plans for the high containment facilities, the intention of which must have been clear to the consultants since reference is made in the plans to “Group 3 pathogenic organisms” and “nerve agents,”¹⁶⁴ would surely have raised concern about exposure of the programme. According to the plans developed by Foster Wheeler the total cost of the up-grade would have been some R6.1million.¹⁶⁵ The fact that the consultants were not required to alert the British government to plans for such a facility in South Africa represents a failure of international oversight and detection systems.

However, two years after the decision to develop plans for the new facility Swanepoel changed his mind and decided¹⁶⁶ that the planned upgrade would not go ahead since there were insufficient funds available. Why a need had been seen for this new facility at this late stage of the programme, when the military products developed by RRL up to that point had been almost exclusively chemicals and biological agents which could be used for individual assassinations, remains unclear and is more puzzling in the light of the high cost of the new facilities. Basson was never called to testify about the plans, neither was Knobel, and Basson refused to grant me an opportunity to interview him. As a result it will remain uncertain whether the upgrade was authorised by military leaders, or was an expression of the unbridled ambitions of the senior scientists at the facility.

All the evidence indicates that the scientific management of RRL under Wynand Swanepoel was weak. The organisation began to experience problems related to bad inter-personal relations and the scientists lacked direction. Swanepoel a former member of the Special Operations Unit and a dentist by profession, told the TRC that he had no knowledge of the scientific work conducted at the front company and

¹⁶⁴ “Conceptual Design of New Virulent Strain Centre”, plan for room 1.2: Experimental chemical/biological laboratory.

¹⁶⁵ Ibid., Section 14 of the plans.

¹⁶⁶ Odendaal did not know who else was party to the decision.

concerned himself only with administrative tasks.¹⁶⁷ Scientists who worked there were under the impression that Swanepoel was more concerned about the interior decoration of his office than he was about the work done. Scientists at RRL agreed during interviews that from the time Swanepoel became managing director, they ceased to be given any clear guidelines on what they were expected to do. In the absence of a scientific compass, they simply began working on projects that interested them personally, but did not necessarily have any military value. The microbiologists motivated their research to management by appending the phrase “has military application” to their proposals to ensure they would be approved. This was how Botha, under Odendaal’s supervision perfected the genetic modification of the Ecoli bacteria. Adriaan Botha’s objective was to develop a vaccine that would protect sheep against one of the lethal toxins expressed by the Clostridium Perfringens bacteria. Ecoli can produce far larger quantities of the toxin, so the idea was to modify Ecoli to express the Clostridium toxin. While Botha was clear about his intention to develop a harmless vaccine, he was fully conscious that his work could also lead to development of a dangerous and frightening biological warfare agent. Management of RRL was so lax at that stage that that Botha and Odendaal - who directed his work – believed they were in full control of the research they were doing. Whether or not this was naïve was never put to the test, and Botha was never asked to apply his process to development of a bio-weapon.¹⁶⁸

In 1991 Roodeplaat Research Laboratories was privatized through an arrangement that saw RRL’s top management receiving generous payouts. Swanepoel admitted to the TRC that for an investment of R50 000 in RRL shares around 1989, he had received a payment of R4 million for his shares when the company was privatised.¹⁶⁹ The total cost of RRL to Project Coast, as audited, amounted to R98 432 657. This figure includes the cost of building the facility, total running costs and the payment made by the SADF when it was privatised. The only annual figures available show

¹⁶⁷ Testimony of Wynand Swanepoel at the TRC hearing into chemical and biological warfare, Cape Town, 11 June 1998.

¹⁶⁸ C. Gould and M. Burger, Secrets and Lies: Wouter Basson and South Africa’s Chemical and Biological Warfare Programme, Zebra press, 2003, p40.

¹⁶⁹ Testimony of Swanepoel at the TRC hearing, 11 June 1998.

the running costs of the company for the financial years 1987/8 and 1988/9. In the financial year 1987/8 about R3 million was spent. The following year the costs had more than tripled to R11 million.¹⁷⁰

Table 4. Chronology of the front companies of Project Coast

1982	Ministerial approval granted for the establishment of Delta G Scientific. The company starts with a staff of 25 at the Special Forces Headquarters. Delta G staff approach Daan Goosen at the HA Grové Institute for advise about animal experimentation.
1983	Jan Lourens joins 7 Medical Battalion. Daan Goosen and Wouter Basson develop a relationship and prepare papers about BW agents. Daan Goosen gives Basson, at his request, a black mamba and a quantity of its poison. Goosen is recruited to start RRL.
1985	The new research, design and production facility for Delta G Scientific in Midrand is completed. The RRL facility is fully operational.
1986	Basson establishes a group of companies in the Cayman Islands called WPW Investments. Lourens starts Systems Research and Design (80% share is owned by WPW Investments) Rudolf Louw establishes Project Academic Willie Basson is replaced by Philip Mijburgh as head of Delta G Scientific Daan Goosen is replaced by Wynand Swanepoel as head of Roodeplaat Research Laboratories.
1987	QB Laboratories (a division of SRD) begins the production of assassination weapons. Koortzen takes over QB Labs (but not the development of assassination weapons). Protechnik is established by Jan Lourens. A major upgrade is planned for RRL and consultants are contracted to develop plans for new laboratories.
1988	Lourens delivers an assassination weapon to a military operator in London. The relationship between Basson and Lourens sours.
1989	Medchem Consolidated Investments gains a 75% share in Delta G Scientific. Medchem is directed by Philip Mijburgh. RRL scientist, André Immelman provides military and police operators with

¹⁷⁰ Bruwer, "Project Coast. Forensiese Onderzoek. Aanvullende Verslag van HJ Bruwer", 10 August 2000.

chemical and biological agents and toxins.

Swanepoel decides not to go ahead with the planned upgrade of RRL citing insufficient funds. Swanepoel makes a personal investment of R50 000 in RRL shares.

- 1990 Delta G Scientific staff are given shares in the company during privatisation.
- 1991 RRL is privatized. Swanepoel is paid out R4 million for his shares.
- 1993 In March the military contracts with Delta G Scientific are completed.
Protechnik is sold to Charles Van Remoortre.
- 1994 Protechnik is sold to Armscor by Van Remoortre.
Lifestyle Management is established.

The nature and effect of secrecy at RRL and Delta G Scientific

The need to maintain the secrecy of Project Coast had implications for the way in which science was conducted, the construction of the facilities, the relationships between scientists in the facilities and between themselves and their colleagues in the national and international community. Certainly the moral opprobrium which chemical and biological weapons carry provided cause for the scientists themselves to seek to hide their own role in their production and, as became clear at the TRC hearing in 1998, many of them had never spoken to their closest family members about the nature of the work they undertook. However, the closed community in which the scientists operated also allowed for the development of a moral economy in which it was conceivable for them to weigh the production of assassination weapons against the development and production of animal vaccines and come to the conclusion that the harm caused by providing weapons for use against enemies of the state was morally countered by the 'good' of protecting animals against disease.¹⁷¹ Their consciences, therefore, remained clear. Basson too played a role in ensuring that the scientists who experienced moral dilemmas about the production of chemical and biological weapons resolved these by transferring responsibility to the

¹⁷¹ C. Gould and P. Folb, "The Role of Professionals in the South African Chemical and Biological Warfare Programme", *Minerva*, Netherlands, Kluwer Academic publishers, Special Issue: "Ethics and Reason in Chemical and Biological Weapons Research", Vol XL, Number 1, 2002, pp77 – 91.

users of the weapons, as will be demonstrated through the interactions described below.

The planning of both the RRL and Delta G facilities included consideration of the need to ensure that the true nature of the companies remained secret. It was for this reason that RRL was located close to other commercial agricultural facilities and Delta G was located in the heart of the industrial chemical area in Midrand, to add credibility to their claim of being private companies. However, in both cases care had to be taken to ensure that the waste products were carefully disposed of so as not to arouse suspicion. In the case of Delta G this referred to chemical wastes, whereas the clandestine disposal of animal carcasses was the chief concern for RRL. An incinerator was built close to the RRL animal experimentation laboratories so that any observers (including satellite) would not be able to detect the large number of animal carcasses which were disposed of after testing, certainly a higher number than would have been disposed of by a conventional commercial facility. At Delta G one of the plants was originally designed as a waste treatment facility, but according to Jordaan, this plant was seldom used¹⁷² as ultimately the waste generated by Delta G was relatively innocuous. All wastes were dealt with by a commercial waste disposal company: Waste-Tec. The waste treatment plant was later turned into a production plant for Bromoxynil, a herbicide used in sugar cane cultivation, and one of the commercial projects taken on in order to maintain the company's cover.

As mentioned previously, most of the scientists working within the front companies of the chemical and biological warfare programme retained their associations with their colleagues, mainly at the University of Pretoria, Rand Afrikaans University, the University of the Orange Free State and particularly at the Onderstepoort Veterinary Faculty of the University of Pretoria and its institutes. Scientists at Roodeplaat Research Laboratories also retained contact with colleagues at the National Institute of Virology (NIV). Although the NIV was the only facility in South Africa which had laboratories with the necessary bio-safety levels, and sufficiently trained staff to work with viruses, there is no evidence to suggest that the NIV was involved in doing work for the biological warfare programme. Within the Pretoria-based scientific community

¹⁷² Gould interview with Jordaan, 18 January 2001.

Delta G was referred to jokingly as “the secretive organisation” (die geheimsinnige organisasie)¹⁷³ indicating that within this community there was at least a suspicion that the company was not what it appeared to be, however, given the level of fear and secrecy that prevailed at all levels of society during the apartheid years, this did not result in uncomfortable questions being asked about the nature of work at the company.

Not all those recruited were aware of the role of the front companies in developing a chemical and biological warfare capability. All scientists were required to sign documents swearing them to secrecy and were subject to extensive security clearance procedures which would at least have alerted them to the connection with the military. Most senior Delta G Scientific staff were aware that they were working for a military front company and that their responsibilities included research and the development of crowd control agents and chemical warfare defence, though junior staff remained often unaware of this. Delta G scientists concurred in interviews that open forums for discussion of technical aspects and the general business of the company did not exist. Secrecy and “security” were much in evidence. Filing cabinets were kept under lock and key. Offices were required to be elaborately locked even if the occupant was going for a walk down the hallway, though gossip and tearoom discussions ensured that most staff knew what was being researched most of the time. Once on the payroll, scientists were subject to stringent security in the workplace, barred from discussing their work with colleagues who were not part of their specific research teams. Some scientists believe that their homes might even have been secretly monitored. Returning home one evening after a frustrating day in the laboratories, one of the Delta G scientists complained to his wife of tensions at work, only to find himself answering to his boss for his indiscretion the following day. Warnings like this kept the scientists in line, made them afraid to challenge the system and powerless to change the course of the programme they found themselves involved with.¹⁷⁴

¹⁷³ Gould interview with Candy, 24 May 2000.

¹⁷⁴ Gould and Burger, Secrets and Lies, p30.

Production was also secretive at Delta G. Raw materials delivered to the plant were immediately stripped of all identifying marks and given code-names. Final products were also coded. The production manager, Corrie Botha, was never told what substances the plant was producing.¹⁷⁵ He was merely given instructions as to the process to follow, provided with the raw materials and told to deposit the final product in the appropriate warehouse. Nevertheless, he was often able to work out what the substances were. Industrial safety precautions did not appear to be a major concern of management.

According to Immelman, some time after the mid-80s, he began to question the legitimacy of the work being done by RRL. He voiced his doubts to Basson, and was assured that all projects had the approval of the State Security Council (SSC). Even though Immelman had no idea who or what the SSC was, he accepted Basson's word.¹⁷⁶ When Wynand Swanepoel became managing director of RRL, he frequently reminded Immelman of the importance of maintaining good relations with Basson; clearly this contained an implicit threat against antagonising Basson. Immelman also recalled that Basson frequently told the scientists that it is not the arms dealer who will be held accountable for the "irresponsible" use of a firearm, but the person who uses it.¹⁷⁷ Immelman began to realise that the toxins he supplied were probably being used to kill people, and said he became resigned to the fact.¹⁷⁸

¹⁷⁵ Chandré Gould telephonic discussion with Corrie Botha, 28 June 2000.

¹⁷⁶ Immelman in The State vs Wouter Basson, 29 May 2000. The State Security Council was a permanent sub-committee of the Cabinet and the only committee whose membership and functions were enacted in law. The SSC was chaired by the President (from 1979 – 1989 this was PW Botha) and served by a permanent secretariat. James Selfe, "South Africa's National Security Management System", in Nathan and Cock (eds), War and Society, p151. Other members of the SSC included the Ministers of Defence, Law and Order, Justice and Foreign Affairs, the civil service heads of these departments and the NIS. According to Selfe the SSC met approximately once every two weeks to consider suggestions "as to how the 'revolutionary onslaught' can most effectively be counteracted by coordinated state activity. The recommendations of the SSC are then submitted for approval to the full Cabinet, which usually meets the next day", p151.

¹⁷⁷ Signed affidavit of Dr André Immelman made available to the TRC for its public hearing in June 1998.

¹⁷⁸ Testimony of Immelman in The State vs Wouter Basson, 29 May 2000.

All the scientists who testified at the TRC hearing referred to the secrecy surrounding their work and the need-to-know basis on which business was conducted. Some scientists in RRL had no knowledge of what a scientist in the next room was doing. Although most of the scientists talked to each other and had, at least, a general understanding of what others were doing. One of the scientists admitted to being afraid to leave the company for fear of his life, saying that he had been told by Basson that speaking out against the company or leaving could have life threatening implications.¹⁷⁹

The secrecy which governed scientific work at both Delta G and RRL had a profound influence on the ethics of the work done. Testifying at the TRC hearing, Schalk van Rensburg, who was also chair of the Animal Ethics Committee at RRL, stated that although he was required to review research proposals submitted by his colleagues before any animal experiments were conducted, he was denied access to the laboratory where these experiments took place. Koblentz described the effects of secrecy:

The high degree of compartmentalisation of the programme allowed Basson to circumvent the usual organisational and procedural checks and balances of secret military programmes. As a result, Basson was able to control the entire programme and manipulate his overseers as desired. Basson was in charge of personnel decisions, the programmes research agenda, budgetary matters, as well as overt and black market procurement. Basson would eventually exploit the secrecy and autonomy of his programme to abuse all of these responsibilities. The investigation of the TRC as well as Basson's two and a half-year trial revealed how excessive secrecy, compartmentalisation, and lax oversight resulted in a programme that was both mediocre and murderous as well as highly corrupt and at great risk of proliferating biological weapons materials and know-how to states and terrorists."¹⁸⁰

The private companies

The replacement of Willie Basson and Daan Goosen with Philip Mijburgh and Wynand Swanepoel at Delta G Scientific and RRL, was the first of a series of changes made by Basson in the mid-1980s to the structure of Project Coast. This

¹⁷⁹ Van Rensburg at the TRC hearing, 10 June 1998.

¹⁸⁰ Koblentz, "Pathogens as Weapons", pp116 – 117.

significant change, in which his close associates took over management of the front companies, was followed almost immediately by the establishment of a number of companies run by former Special Operation Unit members to provide services to the chemical and biological warfare programme. None of the companies established in this way were official front companies of the military, however, they relied almost solely on military contracts for their income. While the advantage to the military was that these companies did not require military management, this argument was apparently never put forward as Basson failed to consult with Knobel, Liebenberg or any other senior military officer about the broad restructuring. Had he done so some consideration may have been given to the potential proliferation risk posed by private companies which had both the capacity and technical knowledge to undertake the development of chemical weapons and which would be prepared to sell chemical weapons to individuals or countries seeking to proliferate. A number of the key companies associated with Project Coast are discussed below.

Systems Research and Development

In 1986 Jan Lourens left the Special Operations Unit to start a private company called Systems Research and Development. The company started in Lourens' garage and only later moved to its own site. SRD had four components:¹⁸¹

- Phoenix Service Station, a garage near the Special Forces Headquarters that could service the Nissan Skylines which Lourens had modified when he was a member of Special Operations. They had been modified to make them faster and to include specialised radio equipment.¹⁸²
- SRD Electronics, was a laboratory that took on chemical defence projects and which provided Basson with an electronic surveillance and counter-surveillance capacity, at his request.¹⁸³

¹⁸¹ Gould and Chaskalson interview with Lourens, 22 – 23 January 1998

¹⁸² Ibid.

¹⁸³ Ibid.

- QB Labs, which undertook mechanical work. The company's main product was the packing of new generation teargas into hand-held spray devices for the South African Police. Bart Hettema, formerly of the Netherlands, was in charge of the aerosol programme and liaised closely with Lothar Neethling in this regard.¹⁸⁴
- SRD, which undertook quality control and assurance of materials used in the manufacture of protective clothing and which did research into the development of detection technologies.¹⁸⁵

A year after its establishment, in 1987, QB Labs began producing covert assassination weapons with the assistance of former Rhodesian and ex-EMLC machinist, Philip Morgan. Morgan manufactured the assassination weapons designed by Lourens.¹⁸⁶ The weapons included.

- Signet rings topped with a coin, covering a small chamber which could contain a powder.¹⁸⁷
- Spoon-like blades that would contain a chemical in a cavity. One was a cigarette box from which a sharpened spoon would spring. The spoon contained poison which would enter the victim's body. These spoon weapons were intended for use in prisons where spoon stabbings are commonplace. About seven were manufactured at QB Labs. The intention was that a fight would be provoked, a prisoner would be stabbed, and it would appear as if the fatal injury was the result of a prison brawl.¹⁸⁸

¹⁸⁴ Ibid and testimony of Jan Lourens in The State vs Wouter Basson, South African High Court Transvaal Division, 19 May 2000.

¹⁸⁵ C.M. Erasmus, Protechnik 1987 – 1997: The First Ten Years, Pretoria, Protechnik in-house publication, 15 September 1997, p17.

¹⁸⁶ Gould and Chaskalson, interview of Lourens, 22 – 23 January 1998.

¹⁸⁷ Ibid

¹⁸⁸ Ibid.

- Screwdrivers with a syringe-like mechanism in the handle. A stab with the screwdriver would cause a liquid poison to be ejected. Between 30 and 40 of these were made.¹⁸⁹
- Needled units operating on the same principle as the screwdrivers. Needles would emerge from the front of a tube. This mechanism was apparently not successful because it was too slow.¹⁹⁰
- Needled unit in bicycle pump¹⁹¹
- Umbrellas and walking sticks. These devices shot out a 3mm diameter polycarbonate ball. Holes in the ball were intended to be filled with a poison. When the ball was shot into the victim's leg, it would cause a stinging sensation like a bee sting. The autopsy would not reveal the cause of death since polycarbonate is not revealed on X-rays. These were intended for assassinations in Europe or the UK. Lourens purchased the walking sticks and the umbrellas during one of his trips abroad. He speculated that the balls could have been packed with chemicals at Delta G or at RRL.¹⁹²

Lourens told me that in 1988 or 1989, as a favour to Basson he undertook a trip to England to hand over an umbrella weapon and poison to CCB agent Trevor Floyd. Lourens was given two glass ampoules of colourless, watery liquid by Philip Mijburgh which he wrapped in tissue paper and sealed plastic bags.¹⁹³ He testified in the Basson trial that he met Floyd as arranged, at a railway station in Ascot, and they proceeded to a cottage in Warfield, owned by Basson and his associates. While demonstrating the operation of the screwdriver to Floyd, Lourens got a minute amount of the poison on his hand and without thinking, wiped his lips. When he tasted a bitter taste, he realised what had happened. He could not remember much

¹⁸⁹ Ibid.

¹⁹⁰ Ibid.

¹⁹¹ Ibid.

¹⁹² Ibid.

¹⁹³ Lourens in The State vs Wouter Basson, 19 May 2000.

about what happened next, but said he suffered vision impairment, began shivering and briefly lost consciousness. He drank some milk and Dettol which he found in the bathroom, and went to lie down. After about two hours he recovered. The prosecutors in the Basson trial believed that the poison may have been phenyl silitrane.

Floyd's targets were high ranking ANC members in exile, Ronnie Kasrils and Pallo Jordan.¹⁹⁴ Lourens said that he and Basson discussed the special apparatuses made by SRD more than once; the last time while they were travelling in a British train together. Lourens was wrestling with his own conscience about the morality of the work he was engaged in. He told Basson of his concerns, who responded "sort it out with your God - I have".¹⁹⁵ In 1988 the relationship between Basson and Lourens broke down.¹⁹⁶ Evidence presented in the Basson trial showed that Lourens's wife Antoinette, who worked for Inffadel, travelled frequently with Basson and was named as director of some companies in which Basson is said to have had an interest. Lourens suspected that his wife was romantically involved with Basson. Lourens and his wife divorced and she later married Deon Erasmus, an ex- member of the Special Operations Unit.

In 1987 Johnny Koortzen, a psychologist working with Basson at 7 Medical Battalion, took over the running of QB Labs, SRD Electronics, and Phoenix Service Station.¹⁹⁷ Lourens maintained his relationship with Morgan and continued to oversee the production and design of assassination weapons, but expanded the defensive research and development component of SRD turning it into a new company called Protechnik which took on military contracts to test and develop defensive equipment. Before Koortzen took over the management of SRD, Lourens had owned 20% of the shares. The other 80% was owned by a company called WPW Investments. Lourens had been told by Basson that WPW were foreign investors whose local

¹⁹⁴ Ibid., and testimony of Trevor Floyd in The State vs Wouter Basson, 9 - 12 May 2000.

¹⁹⁵ Testimony of Lourens in The State vs Wouter Basson, 19 May 2000.

¹⁹⁶ Ibid.

¹⁹⁷ Gould and Chaskalson interview with Lourens, 22 – 23 January 1998.

representative was Wynand Swanepoel. Basson allegedly also told Lourens that WPW was owned by a German businessman, Hubert Blücher. Evidence gathered by forensic auditor, Hennie Bruwer, and supported by the testimony of US attorney, David Webster, during Basson's trial, show that in fact Basson was the sole owner of this group of companies, established in the Cayman Islands in 1986.¹⁹⁸ Basson contested this, stating in court that WPW was owned by his foreign principals. He named Blücher as one of these principals.¹⁹⁹ The state's case rested on the court accepting the evidence that Basson was the beneficial owner of the WPW group of companies. Many of the fraud charges against Basson were, however, dropped when the judge found the testimony of Webster to be unreliable and found that the WPW Group of companies had operated to the benefit of the Defence Force.²⁰⁰ However, what remains undisputed is that Basson did restructure the companies associated with the CBW project, placing his inner circle of friends and trusted associates in positions where they could benefit from lucrative military contracts.

Protechnik

A number of the scientists that had started working at Delta G Scientific later joined Jan Lourens at Protechnik to continue work on the development and testing of defensive equipment and materials for the SADF. The company expanded rapidly and by 1998 moved to a new, well equipped facility outside of Pretoria.²⁰¹ Initially research at Protechnik was financed by the South African Medical Services and later by Armscor.²⁰² Ironically, while Protechnik was focused almost entirely on developing defences against the use of chemical weapons, it was this company that presented the most serious proliferation danger. In order to test defensive equipment purchased by the military, scientists at Protechnik manufactured small amounts of conventional warfare chemicals. This meant that when, during the mid-1980s, Lourens was

¹⁹⁸ Bruwer, "Projek Coast Forensiese Ondersoek".

¹⁹⁹ Testimony of Basson in The State vs Wouter Basson, , 23 July 2001.

²⁰⁰ Judgement in The State vs Wouter Basson, 11 April 2002, paragraphs 2045 and 2131points 33 – 39.

²⁰¹ Erasmus, Protechnik, p37.

²⁰² Ibid.

approached by a foreigner seeking assistance in the development of chemical munitions the company had the technical knowledge and facilities to oblige. The absence of any military control over the activities at the company meant there was nothing stopping Lourens from agreeing despite the clear proliferation dangers such activities posed. Lourens explained his interaction with the Israeli arms dealer and others as follows:

I interfaced on three occasions with weapons systems or potential weapons systems for foreign entities, individuals. The first case it was my partner at the time in Protechnik, Charles Van Remoortere, had a potential customer. I knew him as Mr Mombar and he wanted a binary weapon developed. A binary weapon is a weapon with two chemicals that would be separated ... once you fire this, the two chemicals would mix by whatever mechanism ... and as the shell explodes it delivers the toxic substance. So we worked on this concept in actually developing the shell and the two chemicals, it's a substance called VX, a nerve agent. It's a binary nerve agent. The unit was given to Charles, I left, and as far as I know the programme never went anywhere.²⁰³

It is likely that the person Lourens dealt with was convicted chemical arms dealer Nahum Manbar. In 1999 Manbar was found guilty by a Tel Aviv district court of "aiding an enemy state with intent to harm Israel's security, by having sold chemical weapons-related materials to Iran". The 80-page judgement says: "He played a double game, supplying the Iranians with components for weapons of mass destruction, while deliberately misleading the Shin Bet regarding his business deals".²⁰⁴ Manbar appealed against his 16-year jail sentence but details of the appeal were not available at the time of writing.²⁰⁵ Lourens said that the weapon was never delivered, although the dealer was shown the prototype. He also said he had never reported the discussion to any military structures because this was a "difficult and confusing" time for him.²⁰⁶

²⁰³ Lourens at the TRC hearing, 8 June 1998.

²⁰⁴ "Manbar convicted of selling poison gas to Iran", Jerusalem Post, 18 June 1998, p 1. U. Mahnaimi and Y. Ridley, "Netanyahu wants Israeli to pay for arms sale", London, Sunday Times, 19 July 1998, p 18.

²⁰⁵ "Manbar to appeal 16-year sentence for Iran dealings and judge's decision not to disqualify himself", Mideast Mirror, 16 July 1998.

²⁰⁶ Lourens at the TRC hearing, 8 June 1998.

Like SRD, Protechnik shareholders also included foreigners. Lourens owned between 20 and 25% of the shares in Protechnik whilst Charburn (a Luxembourg based company), owned the balance. Charburn sold some of its shares to Medchem – a company owned by Philip Mijburgh. Two Belgian citizens, Charles Van Remoortrere, who resided in South Africa, and Bernard Zimmer, who resided in Luxembourg, owned Charburn. These two men and their companies, ABC Import, YCVM cc; Technotech, Charburn and Hazmat,²⁰⁷ played an important role in the development of protective clothing for the SADF. They also made foreign bank accounts available to Basson for the covert transfer of funds.²⁰⁸

In March 1993 Lourens left Protechnik and Van Remoortrere was informed that Medchem, the holding company of Protechnik, intended selling the company. Van Remoortrere owned two companies involved in the trade and testing of protective clothing, both of which were dependent on Protechnik for contracts. In order to protect his financial interests he either had to purchase Protechnik himself or stand to lose a great deal of money. However, he was aware that the credibility of the testing process could be called into question if the same person owned the company which provided the protective clothing and the company which tested it. He also believed it was inappropriate for a foreigner to control the manufacture of defensive items for the South African military, a fact which appeared not to have concerned Basson or Knobel. Van Remoortrere approached both Knobel and Armscor, requesting that the military purchase the company. When no immediate answer was forthcoming, he went ahead with the purchase. He then began lobbying the Surgeon General again. In September 1994, a year later, the facility was purchased by Armscor.²⁰⁹

Between 1988 and 1993 Protechnik's SADF contracts, paid from Project Coast funds, amounted to just over R10 million.²¹⁰ Protechnik is still classified as the only

²⁰⁷ Lourens was MD of Hazmat for the last few months of his involvement in the programme in 1993.

²⁰⁸ Testimony of Bernard Zimmer in The State vs Wouter Basson, South African High court, Transvaal Division, 21 and 25 August 2000.

²⁰⁹ Erasmus, Protechnik 1987 – 1997.

²¹⁰ Testimony of Hennie Bruwer in The State vs Wouter Basson, South African High Court, Transvaal Division, 29 August 2000.

South African single small scale facility under the Chemical Weapons Convention, and is therefore subject to regular international inspections by the Organisation for the Prohibition of Chemical Weapons (OPCW).²¹¹

Lifestyle Management

In 1986 medical doctor, Dr Brian Davey was conscripted to the Defence Force. He joined 7 Medical Battalion under Basson's command. Soon afterwards he was instructed by Basson to develop chemical defence procedures to be followed in the event of a chemical attack. He was also instructed to design training courses for medical staff and soldiers. Before Davey set these up in 1988 (the research and development process having taken two years), the Defence Force had no detailed procedures or doctrines for CBW defence.²¹²

During the process of investigating these defensive strategies, Davey realised the protective suits designed for use in the cooler northern hemisphere were inappropriate for use in African conditions. Until 1988 he had conducted his research work on the ergonomic problems of protective clothing at the CSIR. At 7 Medical Battalion he realised that he needed more extensive facilities, where multidisciplinary physiological testing could be conducted. He discussed the matter with Basson who agreed that upgraded facilities were necessary. He told Davey that he doubted if the SADF would establish such a facility itself, but would be prepared to contract to a financially independent company. He put Davey in touch with his finance company, WPW, represented by accountant Tjaard Viljoen.

Davey, Koortzen and Deon Erasmus (also from 7 Medical Battalion) drew up a business plan and received SADF contracts. This was how Lifestyle Management came into being and began testing the suitability of NBC protective clothing in Southern African conditions. In the non-military field, the company was active in the area of occupational health and fitness promotion.

²¹¹ Erasmus, Protechnik 1987 – 1997.

²¹² Chandré Gould interview with Brian Davey, Wilderness, 13 September 2000.

Forensic auditor Hennie Bruwer said his investigations revealed that in 1990 Medchem Consolidated Investments was a 50% shareholder in Lifestyle Management and wholly owned the property where the company operated. The percentage of Medchem's interest in the company changed over time. Through Medchem, WPW also had an interest in the company. The auditor's report also shows that Lifestyle Management's SADF contracts, paid from Project Coast funds, amounted to some R8 million between 1989 and 1993.²¹³

By the early 1990s, South African involvement in the war in Angola had diminished, and so the amount of work being contracted in the protective clothing field significantly decreased. As Lifestyle Management had identified organisational health as its strategic business direction, Davey resigned from the company in 1992 to pursue his personal interests in chemical defence and disarmament, as an independent consultant to the Surgeon General, government ministries, and companies involved in that field.²¹⁴

Technotech, Hazmat and other companies associated with Coast

Charles Van Remoortreere came to South Africa in 1983 to set up a factory for the Belgian company Syntex, near Port Elizabeth. The company was to produce a plastic-coated fabric. Van Remoortreere and his Belgian associate, Jean Pierre Seynaeve, agreed that he should try to sell other Syntex products to the South African military, including NBC protective clothing.²¹⁵ To this end Van Remoortreere met with Lothar Neethling of the police and visited the Department of Special Requirements at Armscor.²¹⁶ Initially he met with little success in trying to sell his products until Basson arrived at the factory and expressed an interest. Basson explained to Van Remoortreere that "the Russians were using Angola as a live testing ground." Van Remoortreere, concerned about associating himself with what he

²¹³ H. J. Bruwer, "Projek Coast Forensiese Ondersoek".

²¹⁴ Gould interview with Davey, 13 September, 2000.

²¹⁵ Testimony of Charles Van Remoortreere in The State vs Wouter Basson, South African High Court, Transvaal Division, 11 September 2000.

²¹⁶ Ibid.

expected may have been an offensive programme, consulted his associate in Belgium and his father who had been a colonel in the Belgian army. He also spoke to the Surgeon General who assured him that the project he would be supplying was only defensive in nature.²¹⁷ To convince Van Remoortrere that the threat against South African troops was real, Basson and Neethling took him and Seynaeve to Jamba in Angola where they were shown UNITA patients in a hospital and were told that these were the victims of chemical attacks. Van Remoortrere and Seynaeve established a good relationship with both Basson and Neethling. Neethling shared Seynaeve's interest in weapons and they went on hunting trips to South West Africa together.²¹⁸

The relationship between Basson and Van Remoortrere was to prove profitable to both men. Van Remoortrere expanded his business interests into other companies which provided services to the military. He established Technotech in November 1988 the main function of which was to provide the SADF with protective clothing for the CBW programme which it manufactured from material purchased from Syntex.²¹⁹ Between 1990 and 1993 Technotech received just over R49 million for NBC suits from Project Coast funds. According to Bruwer's report, Technotech was equally owned by Zimmer, Van Remoortrere and WPW Investments.²²⁰ As mentioned previously, he also had shares in Protechnik and owned that company for a year. For Basson, their relationship led to others which provided him with the means to move funds internationally. Van Remoortrere introduced Basson to his Luxembourg-based friend, Bernard Zimmer, a management and financial consultant soon after their relationship developed into a friendship. Van Remoortrere already had a personal bank account in Luxembourg (opened May 1979) which was managed by Zimmer. In 1986, soon after their first meeting, Basson asked if he could use Van Remoortrere's account claiming he needed the ability to pay for goods and services outside of South Africa and Zimmer was granted signing powers on it from December of that

²¹⁷ Chandré Gould interview with Charles Van Remoortrere, Pretoria, 18 March 1998.

²¹⁸ Ibid.

²¹⁹ Ibid.

²²⁰ Bruwer, "Projek Coast. Forensiese Ondersoek", p21, Diagram 2.

year.²²¹ This account, known as the “Barcelona account”, became increasingly active after this date, with all transactions through it being initiated by Basson. Van Remoortere played no further role in the running of the account and all instructions regarding it were issued to Zimmer by Basson. Zimmer ran the account exclusively on Basson’s behalf and made no payments from it without his prior instructions. At the same time, Basson instructed Zimmer to set up another holding company, Luft, registered in Luxembourg. Subsidiary companies followed - Biskara, registered in England as a “trading” company (according to Zimmer, it did very little business); General Golf Investments, which was to invest in golf resorts; and Genavco, set up in December 1993 with the sole purpose of buying and running the Jetstar aircraft Basson was to purchase.²²²

Another private company established to provide services to Project Coast was Intramex. This company was wholly owned by WPW Investments Inc based in the Cayman Islands.²²³ This was one of the companies which drew the attention of the Office for Serious Economic Offences (OSEO) in 1992. Seeking answers about the relationship between this and other companies and Project Coast the OSEO asked Knobel to explain the purpose of the companies. It was clear from his response that he had failed to exercise any managerial authority over Basson’s activities and indeed did not know the answers to many of the questions. He turned to Basson who provided a convoluted answer which revealed how the secrecy surrounding Project Coast had provided the opportunity to establish these private companies:

With the escalation of the war in Angola in 1987 and the accompanying threat there was a need in the SA Army for certain offensive and defensive equipment. At this stage the technology and products were only available from companies that had been or were fronts (e.g. Delta G Scientific) or private companies that developed specific technology for Project Coast. With regard to companies in both these categories there was a clear order from the CMC that these sources of technology could not be made known. It was therefore decided that the above mentioned products (in the case of Delta G – new generation teargas) would be bought by the Army through Armscor which would receive money for this purpose from the Army. Project Coast finances were not used for

²²¹ Van Remoortere in The State vs Wouter Basson, 11 September 2000.

²²² Zimmer in The State vs Wouter Basson, 25 August 2000.

²²³ Ibid.

this production. Seeing that Armscor was not meant to have known about the source of the new generation teargas, a front company was established which would purchase this substance from Delta G and sell it to Armscor. Only costs relating to the running of the front and the physical handling of the substance delivered were added to the price at which Delta G delivered it.²²⁴

Basson went on to explain that the CMC had authorised Tjaard Viljoen to manage the company.²²⁵ Viljoen's wife and Patricia Leeson (Lothar Neethling's niece) had worked for the company. Basson himself took over directorship of the company in early 1990 after Viljoen became ill and was hospitalized.²²⁶ His explanations implied that it was not possible for the one arm of the military to supply another arm of the same military with necessary substances, clearly an implausible argument.

The cost of Project Coast

Bruwer found that from 1 April 1983 to 28 February 1992 (the operational period of the CBW project) R418.2-million of military funds were allocated to Project Coast. From 1 March 1987 to 28 February 1993, the period during which it was alleged that Basson had perpetrated enormous fraud, the project had access to R340.9-m, of which, Bruwer believed some R37-m had been misappropriated.²²⁷

The bulk of Coast funding was spent on the establishment and privatisation of Delta G Scientific (R127.4-m) and Roodeplaat Research Laboratories (R98.4-m) while R66-m was spent on NBC suits, money which came from the Special Defence Account. Other expenditure was: R10.6-m to Protechnik (March 1988-February 1993), R8-m to Lifestyle Management (March 1989-February 1993), R1.4-m to Data Image (March 1991-February 1993) and R634 383 to Organochem (March 1992-February 1993). In the 1992/93 financial year, R1.9-m was paid to Aeromed for

²²⁴ D.P. Knobel, Correspondence with J. Swanepoel of OSEO, "Ondersoek Kragtens Artikel 5 van die wet op die ondersoek van Erenstige Ekonomiese Misdrywe, 117 van 1991: Krygkor, met spesifieke verwysing na Brigadier W. Basson", 11 January 1993: p8

²²⁵ ibid.

²²⁶ ibid.

²²⁷ Bruwer in The State vs Wouter Basson, 29 August 2000.

charter flights.²²⁸ WPW or Medchem Consolidated Investments, companies in which Basson was listed as a director, had interests in all the service companies.

The budgets of Project Coast present an interesting picture of a project concerned with offensive development late into the 1990s. The approved annual budget for the period April 1991 to March 1992 is for an amount of R65 815 550. This included an amount of R14 000 000 for chemical research, R10 538 440 for biological research and R4 750 092 for defensive and material research. A total of R27 115 500 was budgeted for defensive equipment (gas masks and protective clothing) and R1 000 000 for “own CBW operations”.²²⁹ The budget for the period April 1992 to March 1993 is some R20 million less. In this budget a total of R7.75 million is made available for research, most of which is dedicated to defensive and material research and physiological research. R2.05 million is made available for “own CBW operations” which remain undefined.²³⁰

The relationship between the CBW programme and the police and operational units of the military

Since Project Coast was, at least in part, established to address the PW Botha government's need to suppress internal political opposition it was essential for the Project Officer, or more generally, project management to have a channel of communication with the police who were responsible for suppressing civilian resistance. Basson's personal relationship with the SAP forensic chief, General Lothar Neethling, was one such channel. Daan Goosen claimed to have introduced the two men. Goosen was, at that stage, married to Neethling's niece. Basson and Neethling immediately got on well and became personal friends.²³¹ Their relationship went well beyond their professional contact. Testifying in the Basson trial, Niel

²²⁸ Ibid.

²²⁹ D.P. Knobel, P. Murray and M. Bekker, “Projek Coast: Gekonsolideerde Begroting: April 1991 - Maart 1992”, Exhibit J in The State vs Wouter Basson, South African High Court, Transvaal Division.

²³⁰ Ibid.

²³¹ Chandré Gould interview with Daan Goosen, Pretoria, 18 January 2001.

Kirstein, the property developer in some of Basson's enterprises, said that Basson and Neethling owned adjacent properties in Pretoria and that they intended purchasing the adjoining properties with the view to development.²³² Kirstein also told the court about a Sunday flight to Walvis Bay with Basson and Neethling, who had "an appointment" in the enclave. According to Basson's defence advocate, Jaap Cilliers, Basson and Neethling were on official duty all day, meeting representatives of UNITA, Germany and Portugal. No explanation was given as to what this meeting was about or who the foreign representatives were. Basson testified that he and Neethling had been responsible for jointly developing the "recipe" for the CR fill for "projectiles", of which he said thousands were made.²³³

During Basson's trial and the earlier TRC hearings, it emerged that during the early years of Project Coast Neethling visited Roodeplaas Research Laboratories²³⁴ as well as the laboratories at the Special Forces headquarters²³⁵ which were used by Basson. Knobel expressed surprise at the extent of the contact between the two men when he was questioned during the trial. He claimed to have been unaware of their relationship, and particularly of Neethling's involvement in Project Coast,²³⁶ although, as manager of Project Coast he should have been aware of the formal co-operation between the police and the Project Officer. His ignorance reinforces the contention that Knobel failed to execute his managerial responsibilities and that the managerial oversight of Basson, and the project more broadly, was weak.

²³² Testimony of Niel Kirstein in The State vs Wouter Basson, High Court of South Africa, Transvaal Division, 9 and 10 November 1999.

²³³ Testimony of Wouter Basson in The State vs Wouter Basson, High Court of South Africa, Transvaal Division, 23 July 2001.

²³⁴ Testimony of Lothar Neethling at the TRC hearing into chemical and biological warfare, Cape Town, 10 June 1998.

²³⁵ Testimony of Jan Van Jaarsveld in the State vs Wouter Basson, South African High Court, Transvaal Division, 5 June 2000. Statement made by Adv. Jaap Cilliers in the State vs Wouter Basson, during the cross examination of Knobel, 29 November 1999.

²³⁶ Knobel in The State vs Wouter Basson, 29 November 1999.

Van Remoortrere also testified about the relationship between the two men.²³⁷ Neethling was the first person he approached when trying to market CW protective clothing to the South African security forces during the early 1980s. Van Remoortrere said Neethling proved to be well-informed on the subject of chemical protection, and asked many questions regarding not only the suits, but the accessories - gloves, boots, masks and air filters.²³⁸ In 1984 or 1985, Neethling introduced Van Remoortrere and Basson to one another. In 1986 the three men travelled together to Belgium to meet with Jean-Pierre Seynaeve, managing director of Seyntex, near Ghent. According to Van Remoortrere, Neethling's role on the European trip was that of technical adviser to Basson, as Neethling allegedly had a "vast" knowledge of CBW.²³⁹ In 1984, Basson and Neethling had attended a conference hosted by Aubin Heyndrickx in Belgium, Basson masquerading as a policeman. There they met German industrialist Hubert Blücher, who, Basson testified, knew or was soon made aware that Basson was engaged in sanctions-busting for the South African security forces.

In a document authored by Lieutenant General J.P. Van der Westhuizen,²⁴⁰ former head of Military Counter-intelligence, Neethling is mentioned as having been a sounding board for Basson on Project Coast matters. When the document was shown to Neethling during the TRC hearings he denied the allegation. However, despite his denials it is clear that the relationship between Basson and Neethling was close and Neethling had first-hand knowledge of a number of key issues pertaining to the chemical and biological warfare programme. It was to Neethling that Johan Koekemoer, an organic chemist at Delta G Scientific, turned when he had concerns about the production of the rave drug MDMA for crowd control purposes in the early 1990s. He told Neethling that he had been instructed by Basson to produce a ton of

²³⁷ Van Remoortrere in The State vs Wouter Basson, 11 September 2000.

²³⁸ Ibid.

²³⁹ Ibid.

²⁴⁰ C.P. Van der Westhuizen, "Projek Jota", SADF document TI/202/1/10/1, 25 March 1993.

the drug. Neethling showed no surprise, as if he already knew of the plan, and he debated the various methods of production with Koekemoer.²⁴¹

Neethling also knew about the production of CR for crowd control. According to his evidence before the TRC, CR was used on at least two occasions by the police to control crowds. Anti-apartheid activists in Gauteng believe that it may have been used in Phola Park, a township outside Johannesburg, in 1992.²⁴² Badenhorst said that it was standard practice for Defence Force soldiers doing township patrols to be issued with CR between 1986 and 1987. At that stage Badenhorst controlled the CR stores.²⁴³ There are no publicly available records to show when or how often CR was used internally, although there is a perception amongst anti-apartheid activists that there was a point during the 1980s when the teargas the police were using became more potent. It is likely that that this perception was based on CR replacing the more commonly used CS.

The link between the police and the chemical and biological warfare programme may have extended beyond the use of teargas to the more sinister aspects of the programme. The state's case against Basson with regard to the charges involving alleged human rights abuses, rested on the court accepting that pathogens and poisons produced at Roodeplaat Research Laboratories were given to members of the police and operators of the military's Special Forces to be used to harm individuals who posed a threat to state security. The state called witnesses from the front company, operators and policemen in order to establish a chain of evidence which they believed implicated Basson in authorizing the use of chemical and biological agents in covert weapons. Whilst the judge accepted that the operators did indeed kill, or attempt to kill their chosen 'targets' in the ways they described, he rejected their testimony implicating Basson in the conspiracy. He said that the operators had testified under duress and had implicated Basson in the deeds in order

²⁴¹ Testimony of Koekemoer at the TRC, 9 June 1998.

²⁴² Correspondence between C. Gould and L. Pollecott, anti-apartheid activist, June 2000.

²⁴³ Gould interview with Badenhorst, 16 January 2001.

to save themselves from prosecution.²⁴⁴ The judgement, while finding that it was possible that poisons were used by operators and policemen, did not find the testimony linking the chemical and biological warfare programme to the specific incidents for which Basson was charged convincing.

It remains unknown, for example, whether the three police officers who were the alleged recipients of organophosphates possibly responsible for the poisoning of well known anti-apartheid leader Reverend Frank Chikane in 1989 had in fact received the organophosphate, paraoxon from RRL researcher Dr André Immelman and whether they used it to contaminate Chikane's underwear, as argued by the state.²⁴⁵ The court accepted Basson's testimony that he had introduced the three police officers to Immelman on the order of Liebenberg (Head of Special Forces) and that he believed Immelman would supply the three men with drugs which could quickly incapacitate people who they wished to arrest, or for unspecified use in cross border raids.²⁴⁶ The court also accepted Basson's denial that he was aware that Immelman had made poisons available to the police officers, such as organophosphates.

Basson's position as head of the CBW programme, under the management of the Surgeon General would not, under normal military chains of command and control, have resulted in him having a relationship with operators. Basson's position was however unique. While he was Project Officer for Project Coast, Basson was based at Special Forces Headquarters and received operational commands from the Commanding Officer of Special Forces.²⁴⁷ In addition, as head of a Special Operations Unit known from 1985 as Seven Medical Battalion which provided medical support to operational units of the security forces, Basson was responsible for ensuring that doctors accompanied operators on operations where it was possible

²⁴⁴ Judgement in the case of The State vs Wouter Basson, South African High Court, Transvaal Division, paragraph 2130, 11 April 2002.

²⁴⁵ Die Akte van Beskuldiging, Vol II in The State vs Wouter Basson, 1999, p240. Immelman in The State vs Wouter Basson, 29 May 2000.

²⁴⁶ Judgement in the State vs Wouter Basson, paragraph 2007.

²⁴⁷ Until 1982 this was General Fritz Loots whereafter General A.J. Liebenberg assumed this position.

they would need medical support . Members of the Special Operations Unit were mostly medical doctors many of whom received Special Forces training.

The state argued in the Basson trial that the close relationship between Special Forces and Special Operations extended to a relationship between the CBW programme and the covert units of Special Forces, in particular the 'hit-squad' unit, the Civil Co-operation Bureau (CCB). The state also argued that Basson, and other doctors from his unit had provided drugs for use in assassinations to the earlier incarnation of the Civil Co-operation Bureau, known as Barnacle. This SADF unit was established in 1979 as a covert operational division of Special Forces. Initially code-named D40, it soon changed its name to Barnacle. The primary objective of the unit was to "eliminate" (murder) enemies of the state, particularly leaders and key people identified as targets, including members of the SADF who threatened to expose secret information or otherwise posed a security threat.²⁴⁸

The secrecy of Barnacle was of such paramount importance that any operator who posed a security threat was identified as a target for elimination. Whilst operators of the unit, including the units' first commander, identified only as Mr K in the trial,²⁴⁹ alleged that Basson was the main conduit of toxicants from the laboratories at Special Forces headquarters to the operators of Barnacle and the CCB, Basson denied the allegation and the court found that the allegations were not believable. Judge Hartzenberg found the operators to have given reliable testimony about their own involvement in murders, but he said that their allegations about Basson's involvement were made in an attempt to save themselves from prosecution.²⁵⁰ Mr K told the Pretoria High Court in May 2000 that he had served in the Rhodesian army until 1978. In February 1979 he joined the SADF's Special Forces, based first at the Bluff in Durban as group commander of One Reconnaissance Regiment. Shortly afterwards, he was called to Pretoria by Major General Fritz Loots, commander of Special Forces, and together they went to see the Minister of Defence, Magnus Malan. Mr K was instructed to establish a front company to carry out clandestine

²⁴⁸ General Fritz Loots, "Verdere Implementering van Barnacle", 9 January 1981. Exhibit 31B in The State vs Wouter Basson.

²⁴⁹ According to an order of the court Mr K cannot be named.

²⁵⁰ Judgement in the State vs Wouter Basson, paragraph 1978.

operations, and to teach South African forces methods used in Rhodesia.²⁵¹ Documents handed into the court provide details about the structure and objectives of the unit. A document dated 12 December 1980 states that the purpose of Barnacle was:

- (a) Eliminations.
- (b) Ambushes against strategic personnel.
- (c) The collection of information in support of relevant operations.
- (d) The collection of information where other sources in Special Forces cannot be used.
- (e) Conducting chemical operations.
- (f) Conducting certain special security tasks for Special Forces for example assessment of sources/agents and security spot checks of Special Forces personnel.²⁵²

The aims of the unit are reiterated in a document signed by Loots, in January 1981. The only difference was that in the later document “conducting chemical operations” is replaced by “conducting super sensitive operations as instructed.”²⁵³

According to the testimony of Mr K, orders and authorisation for eliminations were always verbal, from Loots to Mr K. The documents relating to Barnacle specifically state that the Director had no authority to make decisions on the elimination of targets, which was the sole province of the Commanding Officer of Special Forces. Elimination decisions were never questioned by the operators and the need-to-know principle was strictly enforced.²⁵⁴ When a task had been identified and a team appointed, the rest of the unit personnel knew nothing about it.

²⁵¹ This largely entailed deep penetration reconnaissance - dropping a two-man team 600km behind enemy lines and leaving them there for up to seven weeks with no logistical support or contact with their own forces. Their task would be to identify terrorist infiltration routes and training camps and ultimately direct air strikes on such camps.

²⁵² S. Serfontein, “Organisasie-Ondersoek na Projek Barnacle”; 12 December 1980. Exhibit 31(C) in The State vs Wouter Basson.

²⁵³ Loots, “Verdere Implimentering van Barnacle”; 9 January 1981.

²⁵⁴ Testimony of Mr K in The State vs Wouter Basson, 2 May 2000.

The unit was self-sufficient in respect of technical and logistical support, but funded by the SADF. In order to establish a cover for Barnacle, Mr K and a colleague, Johan Möller, established an estate agency, NKJM, as a front company. But they were unable to conduct any “legitimate” property deals because they did not know how. The name of the company was then changed to NKTF Security Consultants. The purchase of a smallholding near Broederstroom, from which Barnacle operated, was authorised by Defence Minister Magnus Malan and paid for with SADF funds.²⁵⁵

During 1979 and early 1980, Mr K recruited “experienced” soldiers from both the Rhodesian and South African forces. These included Trevor Floyd, a Regimental Sergeant Major of One Reconnaissance at the time. Another Rhodesian, Gray Branfield (Special Branch), joined in mid-1979 and Danie Steyn, former Selous Scouts quartermaster, in 1980. Johan Theron was recruited as the security officer of the unit. Danie Phaal and armourer Phil Morgan also joined the unit. Colonel Ben Raubenheimer was appointed as the Chief Executive Officer of the front company to handle finances and administration. In time, the unit had between 30 and 40 operators, of whom two-thirds were black. Their names remain unknown.²⁵⁶

Mr K testified that during the first few months of 1980, he and Trevor Floyd spent three weeks in trucks driving from Broederstroom to Rhodesia to bring back “everything” that had been supplied to the Rhodesian forces by Special Forces, including “special equipment.” What exactly was brought to South Africa from Rhodesia is unknown²⁵⁷ but may have included the poisoned clothing used by the Rhodesian security forces and later seen at the EMLC facility.

Initially operations were confined to deep penetration reconnaissance. In time, the identification of external targets who had to be eliminated was added to the unit’s tasks. Mr K told the Pretoria High Court that when Reconnaissance commanders and SAP members involved in pseudo operations in Namibia began to experience

²⁵⁵ ibid.

²⁵⁶ ibid.

²⁵⁷ ibid.

“problems” with certain “turned terrorists”,²⁵⁸ it was decided they should be quietly disposed of. At that point Barnacle, and particularly Johan Theron, Mr K and pilot Martin van der Linde, became involved in disposing of the bodies of SWAPO prisoners of war and own forces identified for ‘elimination’.²⁵⁹

According to Mr K’s logbook, the first time he was involved in dumping what he assumed were SWAPO members into the sea from an aircraft was July 7, 1979. He took part in at least seven operations, piloting the aircraft to remote and desolate airfields in the bush or the Namibian desert. Corpses in body bags or semi-comatose individuals would be transported and handed over.²⁶⁰ According to Burgess and Purkitt the SADF may have learned this modus operandi from the Portuguese in Angola:

The Portuguese military were the first to use chemical and biological warfare for counter-insurgency warfare in Africa. Portuguese troops poisoned wells and threw prisoners out of aircraft. South African military officers were dispatched to Portuguese Army units in Angola to gain experience in counter-insurgency warfare. In general, South African military personnel were not impressed with the overall effectiveness of Portuguese counter-insurgency programs. However, officers who worked in Angola did learn first-hand how the Portuguese military used defoliants and napalm, mined trails, and poisoned water holes as tactics to counter their guerrilla enemies without having to engage in direct combat.²⁶¹

Theron testified that Fort Rev in Ondangwa, Namibia, was the forward operational base for the Reconnaissance Unit and the base from which pseudo operations were conducted. SWAPO prisoners were detained in large detention barracks with interrogation rooms attached. According to Theron, the detention barracks were overcrowded and a decision was made to kill detainees identified by the Commanding Officer of the base and the South African Police commander in

²⁵⁸ “Turned” in this context means to work for their captors against their fellow guerrillas.

²⁵⁹ Theron in The State vs Wouter Basson, 3 - 8 May 2000. Testimony of Martin van der Linde in The State vs Wouter Basson, 12 May 2000. Testimony of Mr K in The State vs Wouter Basson, 2 May 2000.

²⁶⁰ Mr K in The State vs Wouter Basson, 2 May 2000.

²⁶¹ S. Burgess and H. Purkitt, The Rollback of South Africa’s Biological Warfare Programme, Colorado, United States Airforce Institute for National Security Studies, Occasional Paper 37, February 2001, p7. www.usafa.af.mil/inss/ocp/ocp37.pdf

Namibia.²⁶² He also said that some SWAPO members captured during pseudo operations were “turned”. Others provided information and then were no longer “of any use”. Theron said “once they had served their purpose they were a problem.” The prisoners of war could not be detained because they could compromise the pseudo operations if they identified the operators after their release. Loots and Theron agreed that killing them and dumping the bodies in the sea would be the most effective way of dealing with “the problem”.²⁶³ Loots was not called as a witness and his version of these discussions was therefore not heard.

Theron and Mr K both expressed moral reservations about throwing their victims from the aircraft without first making sure that they were dead, but they did not want to shoot the victims in case the bodies made their way to the shore. For the first trip, on July 11, 1979 involving a single SWAPO detainee, Theron obtained a tranquilizer dart, of the type used on wild animals, from EMLC. He was told by his EMLC contact, Jan Coetzee, that the dosage in the dart would kill a man.²⁶⁴ With Mr K at the controls, Theron picked up the victim from two SAP officers, a captain and a lieutenant, at a rendezvous in the Etosha Game Reserve. Once airborne, he plunged the dart into the man’s buttock but it had no effect. The man put up a struggle as Theron tried to subdue him, with Mr K shouting from the front of the aircraft “Just don’t shoot him”. He tried first, unsuccessfully, to strangle the man with his bare hands, then used a length of the “strong” self-tying plastic (for binding victim’s hands) around the man’s neck. Theron used a pair of pliers to tighten the plastic noose but even so, the man “would not die”. It took about 15 minutes before the victim stopped kicking, thrashing about and wetting himself. Theron could find no pulse. The rest of the flight was “uneventful” reported Theron, except that when they landed to strip the body, the plastic was “deeply embedded” in the neck and he had “quite a problem” removing it before the body was dumped.²⁶⁵

²⁶² Theron in The State vs Wouter Basson, 3 May 2000.

²⁶³ Ibid.

²⁶⁴ Ibid.

²⁶⁵ Ibid.

Theron was upset by the incident and turned to Loots for a solution. Theron claimed in his testimony that Loots consulted Basson in seeking a solution to the problem. According to Theron's evidence, Basson gave him supplies of the muscle relaxants Tubarine and Scoline with which to inject the victims before disposing of the corpses.²⁶⁶ According to Theron in many cases the victims were first sedated with Vesperax (a sleeping tablet no longer on the market) or were injected with the anaesthetic Ketalar. The effect of the drugs was to paralyse the victim, including the respiratory muscles. Unless first injected with an anaesthetic, the victims silently suffocated to death whilst their minds remained alert. Basson denied these allegations, saying that he did not give the drugs to Theron, nor did he meet with Loots. The court found that while Theron was "certainly a strange man" whose idea it was to eliminate people who posed a security risk, his testimony implicating Basson could not be believed. The court also found that the meeting involving Loots, Theron and Basson had not taken place as claimed by Theron.²⁶⁷ It, therefore, remained unproved that there was a relationship between the chemical and biological warfare programme and the murder of SWAPO victims, it was not however in dispute that the operators had used the drugs in question to murder their victims.

Barnacle was succeeded by the Civil Co-operation Bureau (CCB), also known as 'the Organisation' in military circles. The functions of the CCB differed only slightly from those of Barnacle and included an emphasis on the collection of information about people, facilities and organisations regarded as enemies of the state. Target organisations of the CCB included the United Democratic Front and the South African Council of Churches.²⁶⁸ Unlike Barnacle, the huge CCB structure also included police officers.

Secrecy shrouded the CCB. Any links to the state had to be well hidden. It operated on a cell structure and on a strict need-to-know basis. Members operated with pseudonyms and each member was financed to establish his own business as a cover for his activities. Some of the CCB members were military officers, others were

²⁶⁶ Ibid.

²⁶⁷ Judgement in The State vs Wouter Basson, paragraph 1982 and 1983.

²⁶⁸ Die Akte van Beskuldiging, Vol II in The State vs Wouter Basson, p 208.

recruited from the police.²⁶⁹ The CCB was made up of an inner circle and an outer circle.²⁷⁰ The outer circle was made up of individuals who did not know they were working for the state. The organisation was divided into regions of operation, each with a co-ordinator and manager. Members of one region would not know who the members of any of the other regions were. The regional managers reported to the Managing Director, Joe Verster, who in turn reported to the Chairman, the Commanding Officer of Special Forces (from 1985 to 1989 General A.J.M. Joubert and from 1989 General E. Webb), and the Chief of the Defence Force. There was a direct operational line of command from the Commanding Officer of Special Forces to the Project Officer of the CBW programme, which would suggest that there was a direct line of command from the CCB to Wouter Basson.²⁷¹ The state argued that the CCB made use of substances provided by Basson, or on his authority, to murder Gibson Mondlane in Mozambique, Enoch Dhlamini in Swaziland, and to attempt to murder ANC leaders Pallo Jordan and Ronnie Kasrils in London, and Dullah Omar in Cape Town.²⁷²

Although Basson was not tried for the murders of Gibson Mondlane and Enoch Dhlamini, following a ruling by Hartzenberg that murders which took place outside the borders of South Africa were not within the court's jurisdiction and he could not make a finding on these charges, testimony relating to the incidents was allowed. In both the case of Gibson Mondlane and Enoch Dhlamini, the state attempted to prove that poisoned beer, obtained from RRL had been used to murder the ANC members. Operators testified that they had obtained poisoned beer,²⁷³ and RRL scientists testified that cans had been injected with poisons and the holes soldered shut at the front company. While the state was unable to prove Basson's role in facilitating or

²⁶⁹ Ibid., p207 – 210.

²⁷⁰ Ibid., p 208

²⁷¹ Correspondence between Knobel and Swanepoel, "Ondersoek kragtens Artikel 5 van die Wet op die Ondersoek van Erenstige Ekonomiese Misdrywe", 11 January 1992.

²⁷² Die Akte van Beskuldiging, Vol II, p 201 (Charge 63).

²⁷³ Testimony of Jan Anton Nieuwoudt in The State vs Wouter Basson, 16 May 2000.

ordering the interactions there was no doubt that the toxicants produced by RRL were used by members of the police and defence force.

The murder of individuals who posed an apparent threat to the security of the apartheid government was one of the primary goals of the CCB and Barnacle. This was not restricted to opponents of apartheid but extended to SADF members who were seen as a threat to the secrecy of SADF operations. Indeed the judge accepted the testimony of CCB witnesses and found that “their aim was to identify the enemies of the state and to ensure maximum disruption of the enemies of the state. In the process murder could have been committed, even through the use of poison. Their activities came to an end in September 1989.”²⁷⁴

²⁷⁴ Judgement in The State vs Wouter Basson, 2002, para 2131 point 19.

CHAPTER 5

International links

The extent to which the development and maintenance of the CBW programme required and received international assistance is essential to consider and analyse if the intention is to draw lessons from this experience for disarmament. This chapter discusses Basson's international travel and the relationships he developed with individuals and government officials and considers whether the South African programme received assistance from other countries; whether the programme was detected by foreign intelligence agencies and, what the response was from countries which may have been aware of the existence of the programme. I will argue that there is evidence to indicate that the intelligence agencies of at least the United States, the United Kingdom and Switzerland were aware of the SADF's interest in chemical and biological warfare and were aware of Basson's role in the programme from the early 1980s. Despite being states parties to the Biological and Toxins Weapons Convention (BTWC) these states chose not to confront the apartheid government with their suspicions about treaty violation until shortly before the 1994 elections because they were neither threatened by the programme nor had much to gain politically from calling Pretoria to account. Indeed, it can be argued that the most significant contribution of other states to Project Coast was their silence.

No evidence was presented during the TRC hearings or the Basson trial to indicate that there was any official foreign government support for the South African CBW programme. Returning to the assimilation analysis described in Chapter 1, the fact that (i) the products sought by the military from Project Cast were modest in scientific terms, (ii) there was a pool of skilled technicians who required no tutelage to find ways of meeting the needs of the military, (iii) the equipment and raw materials were either commercially available in South Africa or could be fairly easily purchased elsewhere (despite the economic sanctions against the country); there was little need for close international co-operation - a factor which certainly lowered the threshold to making the decision to initiate the programme. Project Coast and the military did, however, need access to information about other programmes, scientific

developments and advances in the defence against CBW. In addition, the evidence would suggest that at least once an attempt was made by Basson to procure chemical substances from a foreign country.

During his trial it was his role as intelligence agent that Basson played-up to present a picture of an international dealmaker who manipulated foreign intelligence agents to further the ends of Project Coast. What is equally as likely is that from the mid-1980s Basson's international financial dealings were aimed at self-enrichment rather than at serving the needs of the military. Basson certainly travelled extensively, interacted with foreign intelligence agents and even attracted their attention, at least in the early 1990s. Extensive reference to his alleged contact with foreign intelligence agents was made by his legal representatives during his trial who sought to prove that Basson had established an international network of intelligence agents who served his interests and those of the apartheid government. These included reference to his close relationship with Yusaf Murgham, who the defence lawyers claimed was an important Libyan intelligence agent. Unfortunately, the most detailed descriptions of Basson's international network of contacts is contained in the transcript of a bail hearing on the charges of fraud brought against Basson, and public access to this transcript is prohibited by an *in camera* ruling.

Basson certainly convinced his military managers of his success in gaining intelligence about the CBW programmes of other states. Knobel believed that Basson had 'penetrated' the chemical and biological weapons programmes of at least Russia and Iraq.¹ Basson's role as intelligence agent is, however, another indication of the tremendous freedom which he was accorded by senior military officers since intelligence gathering was usually the exclusive domain of the specialist intelligence officers of Military Intelligence. During the TRC hearing in 1998 Knobel proudly told the commission that at the outset of the programme Basson "went on a world tour, he penetrated many different countries' programmes and came back with that information." He added that when the Minister of Defence

¹ Knobel at the TRC hearing into chemical and biological warfare, Cape Town, 12 June 1998.

authorised initiation of the programme he gave a strict guideline that “no official co-operation was to take place with any other country or organisation.”²

For his part Basson told the Commission that he had no problem obtaining information from scientists abroad. He said that all his intelligence gathering was done openly using his own name. Basson claimed that:

The assistance I obtained was direct and indirect. Some of the scientists were really worried about what the Eastern Bloc countries were doing. Some of the scientists were more worried about what was happening in their own countries. Much of the information I gathered came from Physicians for Human Rights...they watched their governments so carefully to make sure that nothing would happen and they used the democratic systems in their own countries to obtain information and to force information from the government, and then they don't sell it, but they tell it to everybody else.³

Basson also said that some western countries were interested in sharing the information which he came by, especially with regard to the capabilities of the Eastern bloc countries. This was the reason he gave for having “good access to senior government officials”.⁴ The claim that Western intelligence agencies were interested in South African intelligence was supported by a Swiss parliamentary delegation report which investigated the relationship between the Swiss Intelligence Unit and South Africa. The report states:

With regard to the significance of contacts with South Africa, General Regli [Chief of the Swiss Intelligence Unit] pointed out ... that an intelligence service needs information from different sources (including, therefore, from counterparts in other services) in order to be able to provide its own military and political authorities with reliable and corroborated analyses. During the cold war, the Soviet Union and the Warsaw Pact countries represented the main threat for Switzerland. Any information on these countries was of great importance. At this time, South Africa was engaged in a war in Angola against communist forces equipped with Soviet *matériel*. Any information gleaned from this war was of vital importance for the Swiss intelligence service. None of Switzerland's neighbours in Europe had a comparable experience from which it could benefit. Furthermore, the communist secret services were also very active in the African continent. For this reason too the Swiss intelligence service was very interested in maintaining contacts with the South African secret

² Ibid.

³ Testimony of Dr Wouter Basson at the TRC hearing into chemical and biological warfare, Cape Town, 31 July 1998.

⁴ Ibid.

services. It should be stressed, however, that it was the Swiss intelligence service which benefited from South Africa, rather than vice versa.⁵

The battleground intelligence gathered by the South African military as a result of their involvement in the war in Angola was a strong currency during the Cold War and one of the reasons why Western nations may have been reluctant to alienate the apartheid government. However, the trade in intelligence is a specialized field and Basson had no training in this regard. Former Deputy Chief of Staff Intelligence, General Chris Thirion said he had been disturbed by the fact that Basson was given top security access to Military Intelligence headquarters and apparent free range to conduct intelligence gathering operations.⁶ Basson did not report back to Military Intelligence about his intelligence operations or contacts, nor did he consult with Military Intelligence prior to travelling. His independent dealings with foreign intelligence agents could have put sensitive Military Intelligence contacts at risk. Thirion could not explain why Basson was given this level of freedom, but thought that it had to do both with the significance of the task which Basson had to perform and Basson's ability to manipulate people.

I had an uneasy feeling about Wouter Basson in that he had a serious task to perform and of course that meant good access to the top hierarchy, even to the Minister. I think that he manipulated himself into that situation and manipulated the situation once he was there. He was no longer reporting to an official chain of command and he by-passed General Knobel who was in the formal chain of command. Basson would arrive at Waterkloof airbase when the Minister was there, flying somewhere, and would come to talk personally to the Minister. I didn't like it. He was no threat to me, no bad blood, but I was under the impression that he was manipulating the situation in that he was allowed the scope to talk to the Minister.⁷

Basson, while head of Project Coast and a Brigadier, was nonetheless a middle-level manager in the military. This kind of access to the Minister of Defence was unusual. The products of Project Coast were not of such a nature that they could have made a significant difference to South Africa's military position externally, nor could the use of CR as opposed to CS gas, or even the use of BW assassination weapons, have changed the course of the internal battle against opponents of apartheid. The facts,

⁵ "Le Rôle Des Services Reassignments Suites Dan le Cadre Des Relations Entree la Suis et l'Afrique du Sud", Swiss parliamentary delegation report, 12 November 1999.

⁶ Chandré Gould interview with General Chris Thirion, Pretoria, 4 September 2001.

⁷ Ibid.

therefore, indicate that there was some other benefit of Basson's activities accrued by decision-makers at senior government level.

Initial information gathering

The first recorded international trip by Basson took place in 1981, shortly after the CBW programme had received authorization to proceed from the Minister of Defence. During this trip Basson attended a conference in San Antonio, Texas followed by a visit to the Chinese Army Chemical School in Taiwan. His notes from the San Antonio conference claim that he was well received by US military officers who, he said, shared information with him about chemical and biological warfare. One of the people he met was Dr William Augerson, who presented a paper at the conference. At the time Augerson was the deputy assistant Secretary of Defence for health resources and programmes.⁸ Basson's notes include reference to Augerson's statements indicating that the USA "does in fact do offensive research/have and offensive research capacity" and that "he [Augerson] states that any country with a chemical industry should be able to produce offensive chemicals." Basson also credits Augerson with the opinion that, "chemical attack is an ideal tactical weapon against terrorist organisations".⁹ He wrote that Augerson was "very concerned" about the "possibilities of biological warfare in the African theatre."

In a newspaper article that appeared in the Los Angeles Times following the TRC hearing in 1998, Augerson disputed Basson's claims saying that

In 1981 at the meeting of the Aerospace Medical Association I gave an open talk on chemical protection. Some remarks attributed to me appear to be lifted from that talk After the panel meeting a South African physician who said he worked for South African Airlines (probably Dr Basson) asked if we could talk privately, which we did. He indicated that during his reserve medical service he encountered indications of chemical and biological warfare capability in Soviet allied forces in Angola. He told me some stories, I asked questions. I gave no

⁸ D.E. Murphy, "Dr Wouter Basson's Connections to US Intelligence", Los Angeles Times, 1 August 1998. <http://www.newsmakingnews.com/bassonusa3,13,00.htm>

⁹ W. Basson, "Verslag: Week Eindigende 09/05/81". This document was found in trunks after Basson's arrest in 1997 and was made available to the public during the TRC hearing in 1998. It is a hand written document.

advice or suggestions. I did not speculate about Soviet BW activities in Viet Nam (sic). People like me do not speculate on such matters with foreign strangers- weather, sports, music, yes, BW no. The South African indicated he would be back in the US later and that he had more information. I indicated interest but never saw or heard from him again. I reported our conversation to the appropriate organization but was never contacted about it. I, and others responsible for the defence of US forces were obligated to learn all we could about the capabilities and threats from our major adversaries of that period. None of us would however have considered 'paying' for such information by assisting South Africa in developing chemical or biological weapons. One can only speculate on what Dr Basson was doing with his trip notes - impressing his superiors with his access to senior officials? Putting his ideas in the mouth of others to enhance his credibility? They were not in any case a fair representation of my views or our conversation.¹⁰

Augerson told me that he filed a report with the US Military Medical Intelligence and Information Agency (USMMIIA) at Fort Detrick, and perhaps also the Defence Intelligence Agency about his discussion with Basson. He tried contacting Basson after the meeting, indicating an interest in talking further, but never heard from him again. Augerson said it did occur to him that one reason for his inability to contact Basson might have been that an intelligence organisation had established contact to manage an interesting source. Augerson also said that although US Health Affairs had intelligence interests it was not set-up to manage any complex intelligence activity. Augerson wrote, "Basson probably looked like a messenger from South Africa who was offering information in exchange for what? You can assume that others would have been interested in information about Soviet threats, and there might even have been some willingness to assist in defensive efforts, but I cannot imagine anyone at the time knowingly contributing to an offensive programme."¹¹

Aside from calling into question Basson's claims of assistance from US military officers, Augerson's response shows that US intelligence agencies were alerted to Basson's interest in chemical and biological warfare at the time that South Africa was initiating its programme. Thirion confirmed that the US Intelligence services were aware of Basson's activities. He told me that, "in about 1985/6 a man from the CIA asked me if he could ask me a question but said that I did not have to give an answer. He asked me if Wouter Basson had taken over from Lothar Neethling – is he now the main brain in CBW? I answered that Wouter Basson was involved in CBW

¹⁰ Electronic communication between Chandré Gould and Dr W.S. Augerson, 15 February 2001.

¹¹ Ibid., 16 February 2001.

counter measures and was therefore bound to rub shoulders with Lothar Neethling.”¹²

Augerson confirmed that Basson had offered him information about Soviet biological warfare training, information Basson claimed to have obtained from Cuban soldiers in Angola. However, it is extremely unlikely that Cuban soldiers in Angola would have had access to sensitive information about Soviet BW capabilities, especially since they only received defensive CBW training.¹³ Whether Basson had information of value to share or not, it is of significance that in the very early stages of Project Coast, US intelligence was aware of South African interest in chemical and biological warfare.

Directly after the meeting in San Antonio Basson travelled to Taiwan to visit the Chinese Army Chemical School. Documents from this trip show that Basson was given a briefing by senior officers at the school who informed him both about the nature of NBC defensive training at the School and the structure of the chemical defence unit.¹⁴ Basson was never called to testify about this trip since it was not the subject of any of the charges against him, nor was there any indication that information about chemical weapons development was shared by the Chinese and thus it remained outside the interests of the Truth Commission. What is significant is that the Chinese allowed the visit by Basson who was clearly identified as a South African military officer, despite the fact that they were providing support to the African National Congress (ANC). One can only speculate as to why this may have been the case. Perhaps, as was the case with the Americans, the Chinese hoped to gain intelligence about the activities of South Africa and its Western Allies during the Cold War.

Basson was not the only person associated with Project Coast who travelled and developed contacts internationally. During the early 1980s RRL Director, Daan Goosen also visited the US several times. Goosen claimed he had visited

¹² Gould interview with Thirion, 4 September 2001.

¹³ Professor Milton Leitenberg, CBW expert and fellow at the Centre for International and Strategic Affairs, University of Maryland, written communication to Chandré Gould, 12 August 2001.

¹⁴ “Briefing: the general situation of Chinese Army Chemical School”, 26 May 1981.

laboratories where primates were exposed to nerve gas and that he had been frank about his intentions to gain knowledge about biological weapons. He said he had not hidden his relationship with the South African CBW program during discussions.¹⁵ Goosen said he even gave the Federal Drug Administration (FDA) plans of RRL in 1984/5 and discussed the possibility of RRL doing research into antidotes for nerve agents.¹⁶ This appears to support the contention that US intelligence agencies knew about South Africa's interest in chemical warfare and possibly biological warfare and had good reason to make more detailed enquiries. Other events in the mid-1990s appear to confirm that they were monitoring the activities of Basson.

The mid-1980s: building the international web of deceit

As described in Chapter 4, Basson fostered a close relationship with Belgians, Charles Van Remoortere and Bernard Zimmer, who benefited from military contracts awarded to their companies, and assisted him in developing financial mechanisms to facilitate international deals. The US lawyer David Webster and Swiss pharmacologist David Chu¹⁷ also formed part of the complex web of contacts Basson developed during the mid-1980s. Webster was responsible for setting up three holding companies in the Cayman Islands on behalf of Basson.¹⁸ All of these people visited the CBW facilities, yet all, except Van Remoortere, claim to have believed that Basson was merely a businessman who may have had contacts with the military. All say they never provided Basson with assistance in procuring any equipment or substances for the programme, claims the judge found to be unbelievable, saying in judgement that they were aware of the fact that they had assisted Basson in sanctions busting to the benefit of Project Coast. Whichever version is true, these peoples' interest in Basson and Project Coast are more likely to have been motivated

¹⁵ Chandré Gould and Peta Thornycroft interview with Dr Daan Goosen, Adriaan Botha and Dr Mike Odendaal, Onderstepoort, 1 December 1999

¹⁶ ibid.

¹⁷ Zimmer in The State vs Wouter Basson, 21 - 25 August , and 13 December, 2000. Testimony of David Webster in The State vs Wouter Basson, 10 – 13 October, 16 October and 23 October 2000. Testimony of Charles Van Remoortere in The State vs Wouter Basson, 11 – 13 September 2000 and 27 – 28 September 2000. Testimony of David Chu in The State vs Wouter Basson on 29 January and 1 February 2001.

¹⁸ Gould and Burger, Secrets and Lies, p91.

by the possibility of self-enrichment than a desire to play a role in the development of chemical or biological weapons.

Many of the fraud charges against Basson rested on the court accepting that the funds spent in the name of Project Coast by Basson, were not used to purchase the substances and equipment which Basson said they were. These included the alleged purchase of a sophisticated peptide synthesizer, which was later exchanged for methaqualone; large quantities of the growth hormone thymus, a computer system for predicting the spread of chemical agents, as well as cocaine and BZ. The court found that Basson had purchased all these items, yet scientists at RRL told the authors that Basson did not bring them a single culture,¹⁹ and the Delta G procurement officer said the company never had any problems procuring substances or equipment through the normal commercial channels. It appears unlikely that sensitive procurement was necessary for the two official front companies. Unless the state is successful in its appeal against the judgement and a new trial is held, it is unlikely that the question of whether Basson was acting in the interests of the military or seeking self-enrichment will be resolved.

Larry Ford

The relationship between Project Coast and rightwing American gynaecologist, Dr Larry Ford, was complex and has raised more questions than it has answered. On 2 March 2000 Ford shot himself at his home in Irvine, California.²⁰ In the months that followed, the suicide and the subsequent investigation led to Ford being linked with Project Coast. The connection was confirmed by Knobel, who told American journalists that he had introduced Ford to Basson during the mid-1980s. Knobel said that Ford had been a consultant to Project Coast.²¹ He considered Ford a friend, and

¹⁹ Gould and Thornycroft interview with Goosen, Odendaal and Botha, 1 December 1999.

²⁰ Jack Leonard, "Disease-Causing Bacteria Found in Biofem Probe", Los Angeles Times, 30 April 2000. <http://www.latimes.com/editions/orange/20000430/t000040778.html>.

²¹ Jack Leonard, "No Sign That Doctor Used Deadly Germs on Patients", Los Angeles Times, 2 May 2000. <http://www.latimes.com/editions/orange/20000502/t000041336.html>.

said they had a mutual interest in Africa's AIDS pandemic.²² Allegations that Ford was linked to the CIA were made after his death when his wife claimed he had connections with the Agency while he was a student,²³ but the CIA denied that he was employed by them. Between 1987 and his death in 2000, Ford made at least three trips to South Africa.²⁴ Scientists testifying at the Basson trial said that they attended a day-long seminar by Ford near Pretoria when he showed them how to isolate and identify various toxic substances applied to everyday items such as the pages of magazines. He left various toxin-impregnated articles behind for research purposes.²⁵ The South African scientists became sceptical of Ford after tests showed that his samples contained no lethal toxins, only common fungi. Delta G staff were also aware of the "Ford Hair" project - a search for a product that could cure male baldness, launched at Ford's initiative.²⁶ It was established during the Basson trial that the hair restorer formula was closely related to a lethal toxin, phenylsilitrane, produced by Delta G and which the prosecutors believed was the substance intended for use in the assassination device Lourens took to Floyd in England.

Knobel said he met Ford in the late 1980s at the Los Angeles home of former South African trade attaché, Gideon Bouwer. Bouwer, who died in 1990, is known to have been a friend of businessman Dino D'Saachs, charged with conspiracy to murder Ford's business partner, Patrick Riley, and who was serving a sentence of 26 years to life, at the time of writing. Two other regular guests at Bouwer's home, Peter Fitzpatrick and Tom Byron, told FBI investigators that Bouwer often boasted of being involved in the acquisition of biological weapons for South Africa with the help of Ford and others.²⁷ Fitzpatrick and Byron claim they acted as FBI informers from 1985 and regularly reported on the activities of Bouwer and Ford during the UN arms embargo

²² Scott Martelle and Jack Leonard, "'Explosives Found in Exec's Yard'", Los Angeles Times, 11 March 2000. <http://www.latimes.com/cgi-bin>.

²³ Chelsea J Carter. "Suicide leads to cache of weapons", Contra Costa Times, 3 November 2000.

²⁴ Jeff Collins. "Ford Advised S.Africa on Warfare Devices", Orange County Register, March 15, 2000. <http://www.ocregister.com>.

²⁵ Immelman in The State vs Wouter Basson, South African High Court, Transvaal Division, 29 May 2000.

²⁶ Scott Martelle, Jeff Gottlieb and Jack Leonard, "A Doctor, A Deal Maker and A Mystery", Los Angeles Times, 20 March, 2000. <http://www.latimes.com>.

²⁷ Jack Leonard & Jeff Gottlieb, "Biofem Case: Focus Now on 80s Attache", Los Angeles Times, 17 July, 2000. <http://www.latimes.com>

against South Africa. However, there is no evidence that Ford supplied biological warfare cultures to Project Coast.²⁸ It is also unclear why Knobel would have made use of Ford, who despite his alleged links to the CIA, was not a recognised expert on biological weapons and would not have had access to such weapons.

Ford had joined with Riley to found a bio-technical research company, Biofem Inc. This company was working on a female microcide known as Inner Confidence from which Biofem hoped to make millions. Ford claimed it would revolutionise the fight against AIDS. Riley maintained that he was never aware of Ford's links with Project Coast, but he is known to have visited South Africa himself more than once. He was also known to Knobel.²⁹ In February 2000, three days before Ford committed suicide, an attempt was made on Riley's life in which Ford is believed to have played a role. Detectives investigating this failed attempt on Riley's life believe that early testing on the female suppository took place on prostitutes in South Africa, and possibly also on US prostitutes.³⁰ Knobel acknowledged helping Ford set up clinical trials for Biofem in South Africa, but claimed he has no further knowledge of the matter.³¹

Six sealed canisters buried in Ford's backyard and dozens of bottles of unidentified liquid recovered from storage facilities suggest other motives for both the attempted murder of Riley, and Ford's suicide. After being tipped off by a family member, authorities evacuated more than 200 people living in Ford's neighbourhood, moving them out of their homes for three days as they searched for hazardous substances, arms, and ammunition. Investigators found 17 illegal weapons, including machine-guns, thousands of rounds of ammunition, explosives which investigators said could only have come from a military facility, a large quantity of potassium cyanide in a sealed container, jars of suspected toxins in a refrigerator in Ford's garage, and over 40 hunting rifles and shotguns concealed in secret compartments and under floorboards in his home. They also found biological agents – *Vibrio cholera*, a

²⁸ Ibid.

²⁹ Martelle, Gottlieb and Leonard, "A Doctor, A Deal Maker and A Mystery".

³⁰ Julian Rademeyer. "Illegal Tests on SA Prostitutes?", Pretoria News, 22 July, 2000.
www.geocities.com/project_coast/ptabio.htm.

³¹ Ibid.

clostridium, and Salmonella typhi, all apparently still viable.³² A search of the home of Dino D'Saachs, charged with driving the getaway vehicle in which Riley's unidentified assailant escaped, turned up more guns and ammunition. A handbook titled "How to be a hit man" and a map of the Biofem parking lot, with Riley's parking space marked with an X. D'Saachs, a tax consultant and auto shop owner, had been a friend of Ford's for more than 15 years.³³

The local police investigation into Ford expanded, to include the CIA, FBI and the Alcohol, Tobacco and Firearms unit. Details emerged showing Ford to have conducted unauthorised medical experiments on patients, espoused extreme right-wing beliefs, and fraudulently claimed scientific achievements. Ford had told neighbours that he once parachuted into Southern Africa to take blood samples from dead guerrillas so that American authorities could identify the biological agents they were being vaccinated against.³⁴ According to Knobel, Ford was instrumental in formulating the SADF's AIDS policy, and served as an adviser to the SA military during the 1991 Gulf War. Knobel said that Ford supplied South African military personnel stationed in Israel during the Gulf War with various anti-toxins. It is not known how Ford came by such substances, or in what capacity he supplied them to South African authorities,³⁵ or indeed whether Knobel's assertions are correct.

Further information on Ford's links to Project Coast was provided during the Basson trial. Dr Graeme Gibson, a medical doctor who had done AIDS research while serving in the military in the late 1980s, was instructed by Basson to launch a six-month project funded by the SADF. Gibson's research aimed to establish the effect of a peptide, Thym-uvocal, in the treatment of HIV-positive patients. The research proposal, drawn up by Basson, specified that South African doctors involved in the project were to liaise with Ford on their findings. They were also to acquire "any

³² Professor Milton Leitenberg, personal electronic communication with Chandré Gould on 7 September, 2000.

³³ Tony Saavedra, Bill Rams and Heather Lourie, "Biofem intrigue heightens", Orange County Register, 5 May 2000.

³⁴ Arthur Allen, "Mad Scientist", Salon magazine, June 26, 2000. <http://salon.com>.

³⁵ Scott Martelle and Jack Leonard, "Weapons, Explosives Found in Doctor's Yard", Los Angeles Times, 11 March 2000. <http://www.latimes.com/cgi-bin>.

relevant CBW literature” from Ford.³⁶ Gibson testified that in his opinion the proposal was scientifically deficient. He had submitted a revised test protocol which he believed was more acceptable. He never heard further from Basson about the research and as far as he knew, it was never launched.³⁷

Much still remains unknown about the relationship between Ford and Project Coast. It is still not known whether there was an exchange of biological agents between the programme and Ford or whether Knobel or Basson had joint financial interests with Ford. What is clear is that this relationship should have been noted by US intelligence agencies.

The Croatian Deal: Outrunning the CWC

The only large procurement deal which involved the assistance of Basson’s international contacts was a complex and convoluted deal which took place in the early 1990s and involved Basson, Swiss arms dealer Jürg Jacomet, Croatian government officials, the head of the Swiss intelligence service, a Danish spy, forged Vatican bearer bonds and a loss of over R2million to the SADF. As with all Basson’s deals this one was difficult to unravel and the facts remain in dispute.

According to both Basson and Knobel the deal came about following research done by Delta G scientists on methaqualone (mandrax) confiscated by the police. This research resulted in the development, to prototype stage, of mortar bombs filled with methaqualone. They claimed these were tested on humans and animals in 1986 and 1987. Basson said the animals were given the drug orally and exposed to methaqualone smoke, and police volunteers were exposed to the smoke while engaged in a simulated battle organised by Neethling.³⁸ The results were not what had been expected. Rather than having a calming effect on the test subjects, they showed elevated levels of tension, and according to Knobel, this led to the halting of

³⁶ Testimony of Graeme Gibson in The State vs Wouter Basson, South African High Court, Transvaal Division, 6 June 2000.

³⁷ Ibid.

³⁸ Gould and Burger, Secrets and Lies, p82.

methaqualone production in 1988.³⁹ However, a production report from Delta G Scientific shows that the company produced a ton of methaqualone during that year.⁴⁰ Despite the fact that tests showed methaqualone to be unsuitable for crowd control purposes, the CMC authorised Basson to continue the search for a suitable variant, and allegedly urged him to act quickly as negotiations for the introduction of the Chemical Weapons Convention were underway and, once signed, it would be more difficult for South Africa to clandestinely procure chemical substances.⁴¹

In line with the CMC's instructions, Basson began negotiations at the end of 1991 to acquire a large quantity of methaqualone through the Croatian Minister of Energy Affairs, M Kajifeg. The deal was brokered by Swiss arms dealer Jürg Jacomet, and according to Basson, formed part of a much bigger transaction, involving the purchase of enriched uranium by Swiss Intelligence head, Peter Regli. By 1992 when it was finally agreed that the Croats would supply Basson with 500kg of methaqualone, four Croatian officials (Kajifeg, a border guard, a member of the Croatian Special Forces and a representative of the Croatian Army) had been drawn into the deal. None of them trusted the other, and all were wary of Basson and demanded guarantees of payment before delivery. Basson constructed a deal, approved at least in part by the CMC, which amounted to a double transfer of funds. One amount would be used to make cash payments from Jacomet's bank account in Zagreb to the suppliers of the methaqualone, while the second would be placed in a Swiss bank as a performance guarantee. As soon as all four suppliers had been paid, Jacomet would accompany Basson to the bank, the guarantee would be cancelled and the money repatriated to Project Coast. But the deal went awry, and after only two of the suppliers had been paid, the Croatian authorities allegedly froze all the funds remaining in Jacomet's account as part of an investigation into an unrelated arms deal. Despite this, Basson claimed that he brought the 500kg of methaqualone back to South Africa on 23 December 1992.⁴²

³⁹ Knobel at the TRC hearing, 7 July 1998.

⁴⁰ "Delta G Production: Mosrefcat", 31 August 1988..

⁴¹ D.P. Knobel, "Kronologiese verloop van gebeure tov Kroatiese Transaksies", SADF document GG/UG/302/6/J1282, undated. It is believed that this document was drawn up in 1993.

⁴² Basson in The State vs Wouter Basson, 27 July 2001.

The following morning Basson was informed by Knobel that he had been fired in a military purge by President FW de Klerk. Basson was placed on early retirement on 31 March 1993, but immediately employed on a 12-month contract to 'tie up loose ends' and shut down Project Coast. Among the threads to be gathered was the recovery of more than \$1-million from Jacomet. Basson had lost contact with the two suppliers who had not yet been paid and could no longer reach Jacomet. On returning to Croatia in January 1993 he was unable to trace the military officers involved in the deal, or Jacomet. It was not until March, Basson said, that he found Jacomet and "forced him" to set out in writing how the SADF's funds had been lost.⁴³

By May, Project Coast's books could still not be balanced, and Basson went back to Croatia again, where he met Hendrik Thomsen, a Danish intelligence agent based in the Ukraine, who told Basson he had intercepted Vatican bearer bonds worth \$100-m which were intended to fund the Croatian war effort.⁴⁴ Basson saw an opportunity to use the bonds to his advantage. He would inform the Croats that he would return them as soon as Jacomet's bank account was unfrozen. Basson claimed that Thomsen, however, suggested a simpler way of recouping the loss, and offered him bonds drawn on the Banco Di Napoli with a face value of \$5-million that he could cash in order to make up the SADF's loss. What followed seems to indicate that this may have been a trap. When Basson presented the bonds the bank asked for proof of ownership, which he was unable to provide. At some point during the next few months, Basson learned that the bonds were, in fact, forgeries. Jacomet had disappeared again and despite assurances from Regli that "the problem" was being attended to, the Swiss authorities had issued a warrant for Basson's arrest.⁴⁵

After two months on the run in Europe, Basson was arrested on arrival at Basel airport in December 1993 and detained for questioning for three weeks, until the SADF sent advocate Chris Marlow, who was closely linked to Project Coast, to pay Basson's bail of 100 000 Swiss francs. A year later, Basson was recalled to Switzerland for further questioning, his bail was refunded and he returned to South Africa.

⁴³ Ibid.

⁴⁴ Ibid.

⁴⁵ Ibid.

While the prosecution contended that this story had been invented by Basson to hide the fact that the missing funds were used for the benefit of the WPW Group, by the time Basson himself testified, the tale had become even more complex. Not only had he acquired half a ton of methaqualone through his Swiss contacts, he said, they had also been instrumental in helping him procure four tons of the chemical warfare agent, BZ.⁴⁶ Why the SADF would have wanted such a large quantity of an agent at that stage, which could not be utilised for riot control, was never explained. Basson claimed that the BZ was bought in 1992 from a front company in Hong Kong.⁴⁷ He claimed that 1,5 tons of the BZ was used in the search for the correct formula for weaponisation and that the balance was sent to Delta G for development of a variant. However, Delta G scientists were unanimous in denying that any work was done on such large quantities of BZ. In addition, neither Project Coast auditor Petro Theron nor Knobel knew anything about the alleged BZ deal, and no documentation was ever provided to support Basson's claims. This, he said, was because all the relevant documents had been seized by Swiss authorities investigating Regli's role in the Croatian deal.

Basson claimed that in his secret laboratory at Speskop, the BZ was mixed with cocaine in a ratio of 10:1, some 80kg of cocaine having been bought in Peru through a "high-placed government official" at the "bargain price" of \$250 000 to \$300 000. The cocaine was shipped through El Paso and Austin in Texas to South Africa hidden in a consignment of bananas, allegedly sold to defray some of the costs incurred. The cocaine deal, dubbed Operation Banana, was an "official" sub-project of Coast, Basson claimed, and had been fully audited as such. Ultimately, Basson said, the BZ was weaponised in hand grenades, 81mm mortars and 155mm projectiles.

Through his explanation of the deal during the trial, it was revealed that the relationship between Basson, Regli and Jacomet had started in the mid-1980s when Jacomet facilitated a deal with Swiss company Huber & Suhner to supply the SADF with gasmasks. Jacomet had also arranged, through Regli, that an official helicopter was available to ferry Basson and Neethling

⁴⁶ Ibid.

⁴⁷ Ibid.

around on one of their visits to Switzerland, and for Basson to enter Switzerland without clearing customs at the airport. Basson's relationship with Regli and Jacomet was the subject of questions to Knobel during the TRC hearing. It came under the spotlight again in early 1999 when Swiss journalist Jean-Philippe Ceppi was arrested by South African police for having in his possession a document handed to the TRC by Knobel.⁴⁸ The document was the minutes of a 1994 meeting of the CMC. Ceppi was released and charges dropped when TRC investigators made it clear that Ceppi had been handed the document legally. This incident and press reports about the nature of the relationship between Regli, Jacomet and Basson led to an investigation in 1999 by the Swiss parliamentary Federal Chambers Control Committee. The report of the committee concluded that,

the accusation made by the media that the intelligence service and, in particular, its chief, General Peter Regli, took part in the development of South Africa's secret chemical and biological weapons project is unfounded. Allegations that General Regli was an accessory to this project or, even worse, might have promoted it are utterly groundless. It is also not true that the chief of the intelligence unit 'cultivated contacts' with the head of the South African secret project.⁴⁹

The report stated that the committee was "unhappy with the fact that the intelligence service was able to operate at a time of considerable danger and in a sensitive area in intelligence terms without receiving any instructions and without being subject to any control by the politically responsible authorities."⁵⁰ Jacomet's role was described in the reports as having been "problematic".⁵¹

[F]or a number of years, Jacomet was clearly able to pass unhindered as a member of the intelligence service. In this context, criticism must be levelled against the chief of the intelligence unit for having ascribed insufficient importance to the selection, instruction and supervision of an

⁴⁸ The document in question was "Notule van die Beheer Komitee van Projek Jota wat gehou is op 29 Maart 1994 by die Kantoor van HSAW", SADF document GG/UG/302/6/J1282. The document was handed to the TRC by Knobel and distributed to the press and public during the hearing.

⁴⁹ "Le Rile Des Services Reassignments Suites Dan le Cadre Des Relations entrée la Suis et l'Afrique du Sud", Swiss parliamentary delegation report, 12 November 1999.

⁵⁰ Ibid.

⁵¹ Ibid.

informal collaborator, for having trusted him too easily and for failing to see through his double game.⁵²

Jacomet was an arms dealer whose company, Intermagnum AG, had supplied some 10 000 shotguns to South Africa. Before becoming involved in arms deals, Jacomet served as an intelligence officer in the Swiss airborne troops and air defence. After having left the Swiss military he continued to pass himself off as an agent of the Swiss intelligence service.⁵³ The report shows that contradictory statements were made by Basson and Jacomet regarding their first meeting. Jacomet claimed that the two men met in 1987 in Pretoria whereafter they met again on a number of occasions. Basson said that he met Jacomet in 1982 or 1983 during a visit to Switzerland by Lothar Neethling.⁵⁴ He said that Jacomet had introduced himself as an arms dealer who “officially-unofficially” represented the Swiss government. Basson assumed this meant he worked for the Swiss intelligence service.⁵⁵ Jacomet is alleged to have collaborated with Basson on the “transfer of technology between Switzerland and South Africa in chemical protection measures.”⁵⁶ Jacomet died in 1998.

The story of the Croatian Deal was not over. Basson’s testimony in the trial resulted in the Swiss Ministry of Military Affairs ordering a second, more thorough investigation into the matter. Notice of the re-opening of the investigation was given on 17 August 2001 and General-Secretary, Juan Gut, was appointed to lead the investigation. A report from this second inquiry was not publicly available at the time of writing. The information which is available does, however, indicate that the Swiss intelligence agency, like the US agencies, had sufficient intelligence about Basson’s activities to raise questions about South Africa’s interests in chemical warfare. However, the possibility that their relationship with Basson would lead to access to information about Soviet military capabilities was more important than questioning the South African government about their CBW warfare programme which did not present a direct threat to Switzerland.

⁵² Ibid.

⁵³ Ibid.

⁵⁴ Ibid.

⁵⁵ Ibid.

⁵⁶ Ibid.

Germany and Israel

The only record of an official foreign trip by an SADF officer with regard to chemical and biological warfare, apart from those conducted by Basson, is a document which the TRC made available to the public during its 1998 hearing. The document's author, Commandant Rudolf Louw, was appointed to the Army's Directorate Projects, where his task was to provide vehicle engineering support to various project officers. In 1986, Louw was instructed to carry out a project study on nuclear, chemical and biological warfare for the army. Based on his findings, the SADF decided he should not pursue the nuclear component, that the biological component would be the responsibility of SAMS and that the army would assume responsibility for the chemical component. Louw was then appointed project officer for Academic, the army's defensive chemical warfare programme.⁵⁷

Louw reports on a trip undertaken to Israel and West Germany in 1986 by SADF and Armscor personnel, accompanied by Uwe Paschke, son-in-law of PW Botha, and representative of the company Patech. It can be assumed that this trip was undertaken within Louw's brief to procure defensive CBW equipment for the various branches of the military. The report states that Louw was sent to visit West Germany and Israel by Basson. The purpose of the visit to Germany was to have exposure to selected industries related to CBW, and to visit the German military chemical and biological school. One of the places visited was the company Odenwald-Werke Rittersbach. Louw went alone and remarked that he was received unusually warmly, with the company showing an excellent understanding of South Africa and specifically the SADF. He also noted that this company did not want to do any business with Israel. In contrast the report notes that the visit to the CBW school was unsatisfactory and no information could be gathered. Louw reported that the trip to Israel was successful and proposed that the SADF consider a CBW training package that Israel could offer.

In a summary of the visit the report states:

⁵⁷ Testimony of Roelf Louw in The State vs Wouter Basson, South African High Court, Transvaal Division, 23 February 2001.

1. It provided for personal contact with experts in the field of CBW and the establishment of relationships which can be followed up.
2. Access was gained to industries which were formerly inaccessible.
3. A basis was laid for possible co-operation with Israel's Ministry of Defence in the field of CBW.
4. A wider insight with regard to philosophy and key problem areas.
5. Confirmed that although SA is still in the early stages, the programme is fundamentally sound and up to date with the latest developments.
6. Confidence was built and the SADF was acknowledged as a partner in the field of defensive CBW, although this will not be announced, especially in Germany.⁵⁸

Libya and the international “CBW Mafia”

Basson's defence against the fraud charges brought by the state in his criminal trial relied on the court accepting that he had established links with a group of international underground dealers in chemical and biological weapons related items. Included in this group, Basson claimed, was a senior Libyan intelligence agent.⁵⁹ He alleged that his relationship with this group whom he referred to as an 'international CBW mafia' had been authorised by former head of the SADF, General Kat Liebenberg and Surgeon-General Nicol Nieuwoudt. Since both men are dead, they could neither corroborate nor refute his testimony that Libyans, East Germans and Russians facilitated the procurement of materials for Project Coast.⁶⁰

Basson made the claims in order to explain his involvement in a group of companies (see Chapter 6) whose assets included a cottage near Windsor Castle, a condominium in Orlando, Florida, the Five Nations Golf Club in Belgium's Ardennes Forest, two apartments in an upmarket Brussels suburb, a luxury lodge at the exclusive Fancourt golf resort near George, the Tygerberg Zoo near Stellenbosch, two farms in Mpumalanga, an executive jet and Merton House, a luxurious Pretoria property which now serves as the Zimbabwean embassy. Basson told the court that

⁵⁸ Rudolf Louw, "Verslag: Buitelandse Besoek Kmdt R. Louw", SADF document H Leer/D PROJ/UG/302/6/A576, 5 August 1988, p1.

⁵⁹ Gould and Burger, Secrets and Lies, pp 109- 121.

⁶⁰ Ibid.

all these assets, and the flow of millions of dollars through more than 100 companies on three continents, were part of a front organisation he set up on behalf of Libyan, East German and Russian 'financial principals', and which was 'hijacked' by the SADF to its own advantage. Part of the arrangement, Basson claimed, was the exchange of classified military information, for which the only guideline offered to him by the SADF was: just make sure you get more than you give.⁶¹

Basson claimed he was introduced to the group by German industrialist Hubert Blücher in 1984 and that Blücher introduced him the members of an international group that met monthly to share information and assist one another in the procurement of chemical and biological agents. Basson claimed it was in this context that he formed a relationship with Abdur Razzaq, a senior Libyan intelligence agent, an East German spy named Dieter Dreier and a Russian by the name of Vorobyov. Basson alleged that when the 'principals' sought his assistance to launder massive sums of money, the foundation was laid for a nine-year relationship, in which the Libyans quickly became the dominant force, with access to 'unlimited' funds. Basson claimed to have been a regular visitor to Libya from 1988, but investigators, including the National Intelligence Agency (NIA), found evidence only of much later travel in connection with purely commercial ventures after he had been dismissed from the SADF in November 1992.

Basson's legal defence team did not offer the court a single document or witness to confirm Basson's claims and rejected a request by the prosecution to call witnesses, including Dreier, who disputed the allegations against them. Ultimately the court accepted Basson's version. While there is reason to doubt the veracity of Basson's story, it is indeed likely that during their international travel Basson and his colleagues from Project Coast developed an international network of contacts who dealt in illicit materials.

⁶¹ Ibid.

Breaking the silence: US and UK concerns come to the fore

Between 1993 and 1995 Basson began trips to Libya where he consulted on the management of a planned railway line in Tripoli for three years from March 1993. He was also employed as a consultant on the construction of hospitals in Libya.⁶² Christopher Marlow spent 18 months in Libya between 1994 and 1995 in connection with the business of a company, Libgro, set up by himself, Basson and Mijburgh. According to Marlow, Libgro was set up in 1993/94 specifically to handle “the Libyan arm of business”. Testifying in court Marlow was adamant that in all his dealings with Libya he had absolutely nothing to do with intelligence matters, and that his involvement at all times was “purely business”.⁶³ Basson’s interests in Libya were also not military related according to businessman and ANC supporter, Sol Pienaar, who told the court that he accompanied Basson on his first trip to Libya in 1993. He said that he had not known that Basson was linked to the military until it was revealed by media in the mid-90s.⁶⁴

Basson made more than one trip to Libya with Pienaar who introduced him to his contacts, including intelligence agent Yusaf Murgham. These trips did not go unnoticed by the South African intelligence service who were keeping watch on Pienaar because of his relationship with Murgham.⁶⁵ Nor did they go unnoticed by the US and UK intelligence services. In fact concern about these trips led the US and UK to urge the South African government to re-employ Basson in 1995 so that he could be brought under military control.⁶⁶ There were fears that Basson had been transferring CBW knowledge to Libya.⁶⁷

⁶² Testimony of Christopher Marlow in The State vs Wouter Basson, South African High Court, Transvaal Division, 2 – 6 February 2001. Testimony of Sol Pienaar in The State vs Wouter Basson, 14 February 2001.

⁶³ Marlow in The State vs Wouter Basson, 2 February 2001.

⁶⁴ Pienaar in The State vs Wouter Basson, 14 February 2001.

⁶⁵ Testimony of Cobus Engelbrecht in The State vs Wouter Basson, South African High Court, Transvaal Division, 13 February 2001.

⁶⁶ Chandré Gould telephonic interview with former US Ambassador, Princeton Lyman, 14 June 2001.

⁶⁷ Ibid.

According to US Ambassador Princeton Lyman, who was at these meetings, the US and UK were concerned that South African CBW information was “in danger of being acquired by other states, in particular Libya”⁶⁸ and that South African scientists could be recruited by these states. Another reason for the meeting was to persuade the South African government to be frank about the offensive aspects of Project Coast in international forums. Lyman said, “South African officials were adamantly opposed to making such an admission, arguing that any such offensive uses were done without proper authorisation and against official policy.”⁶⁹ Confirmation of the ambassador’s concerns is to be found in a briefing document for the newly elected President, Nelson Mandela, in August 1994, prepared by Knobel. Under a sub-heading “Enquiry by Ambassadors of the USA and UK”⁷⁰ it states:

On 11 April 94 the SP [State President] and the Minister of Defence were advised by the Ambassadors of the USA and the UK of their government’s position with regard to the above [chemical and biological warfare] programme as well as the CBM [Confidence Building Measure] declaration submitted by the RSA in 1993. They stated that they were fully aware of the contents and extent of the SADF CBW programme and that they had certain reservations about the RSA’s CBM declaration as well as the implications for non-proliferation.⁷¹

A second meeting took place on 22 April 1994 between the US and UK ambassadors and De Klerk. At this meeting, held a week before South Africa’s first democratic elections, De Klerk argued that a defensive program had been justified and that the data resulting from the program was a national asset which would not be destroyed.⁷² The continuing trips undertaken by Basson to Libya were still a matter of concern to the US and UK.⁷³ In January 1995 a third démarche was brought by the governments of the US and UK. Lyman records that the most difficult issue was Basson’s travels to Libya and elsewhere.⁷⁴

⁶⁸ Ibid.

⁶⁹ Ibid.

⁷⁰ D.P. Knobel. “Briefing to President Mandela on the Defensive Chemical and Biological Warfare Programme of the SADF and the RSA’s position wrt to the CWC and BWC”, SADF document GG/UG/302/6/J1282/5, 18 August 1994.

⁷¹ Ibid.

⁷² Gould interview with Lyman, 14 June 2001.

⁷³ Ibid.

⁷⁴ Ibid.

Explaining the silence

The US and UK clearly knew enough about the South African CBW program to judge that the CBM submitted by South Africa was inaccurate (why else would they have been concerned about Basson's contact with Libya?). Why, then, did the US and UK choose to do and say nothing to prevent the South African CBW program from continuing during the 1980s and early 1990s? The answer to this question probably lies in US policy towards South Africa during the Cold War.

US policy towards South Africa during the 1970s and 1980s was openly condemnatory but privately supportive. US government statements condemned apartheid, but the successive administrations were acutely aware both of South Africa's strategic importance and its significance as one of the two most important producers of platinum-group metals — together with Russia it accounts for some 90% of the world's supplies. In 1985 the CIA, in a research paper, noted the risk of a diminished supply should the US be included in a trade embargo against South Africa.⁷⁵ This was just one factor influencing US policy. Larry Bowman identified a number of arguments which were put forward in favour of South Africa's strategic importance to the US. Although Bowman's intention was to show that many of the premises upon which arguments in support of South Africa's strategic importance were based were spurious and, therefore, to show that the US could and should distance itself from the apartheid regime, he also demonstrated that successive US administrations had accepted that South Africa was strategically significant.⁷⁶

Bowman identifies four arguments in support of South Africa's strategic importance: (i) the Cape Route argument which held that from the 1960s an ever increasing percentage of goods imported to the US and Western Europe were shipped around the southern tip of Africa. Key among these imports was oil. South Africa's

⁷⁵“Western Platinum Dependence: A Risk Assessment”, January 1985, quoted in Kenneth Mokoena (ed), South African and the United States: The Declassified History, A National Security Archive Documents Reader, New York, The New Press, 1993, p34. Note: Most of the documents quoted in Mokoena (1993) appear in the US National Security Archive's microfiche collection.

⁷⁶ Larry Bowman. “The Strategic Importance of South Africa to the United States: An Appraisal and Policy Analysis”, in Olajide Aluko and Timothy Shaw (eds), Southern Africa in the 1980s, London, George Allen and Unwin, 1985. pp120 – 161.

importance, simply stated, came from its position on the southern tip of Africa and the potential for disruption to oil imports if a government hostile to the US was to replace the apartheid regime;⁷⁷ (ii) the collapse of colonial regimes in countries neighbouring South Africa during the 1970s and the increase in Soviet support for liberation movements in southern Africa raised concern about the potential for increased Soviet hold over the region;⁷⁸ (iii) South Africa is a dominant military power in Africa (and was suspected of having a nuclear capability). As such its bases and facilities would be useful to the US and its allies were a war to break out in the Middle East or Indian Ocean;⁷⁹ and (iv) South Africa possesses key mineral resources critical to the economies of the US and other industrial democracies.⁸⁰ These arguments, Bowman demonstrates, were used frequently by US administrations to justify continued, albeit tacit, support for the South African government.

During the 1970s US policy towards South Africa to end apartheid vacillated according to the particular US administration. But it was not just the US which vetoed an arms embargo and sanctions against South Africa called for by other African nations; the UK and France did too. In 1975 South Africa announced that it had a pilot plant for uranium enrichment at Pelindaba.⁸¹ Ninety-seven pounds of enriched uranium, enough to make seven atomic bombs, was shipped to the plant by the US Nuclear Corporation of Oak Ridge, Tennessee to assist it.⁸² Meanwhile the Organization of African Unity denounced the vetoes by the US, UK and France of a UN Security Council Resolution calling for a mandatory arms embargo against South Africa.⁸³ By mid-July 1975 South Africa was arming two opposition groups (FNLA and UNITA) in Angola to fight against Soviet-backed MPLA government forces. The

⁷⁷ Ibid., p122.

⁷⁸ Ibid., p1234.

⁷⁹ Ibid., p127.

⁸⁰ Ibid., p129.

⁸¹ "Sale of Uranium Made in US to South Africa", 16 April 1975; "South African Uranium Enrichment Plant", 17 April 1975. Quoted in Mokoena, South Africa and the United States, p19.

⁸² "Supply of Highly Enriched Uranium to South Africa", 15 April 1975. Quoted in Mokoena, South Africa and the United States, p19.

⁸³ "OAU Denounces Western UNSC Veto on Namibia", 11 June 1975. Quoted in Mokoena, South Africa and the United States, p19.

US provided both groups with sizeable donations.⁸⁴ In October 1975 Cuban troops arrived in Angola; Soviet shipments to the MPLA increased; and South Africa sent troops to support UNITA and the FNLA.⁸⁵ In December the US began a diplomatic campaign against countries allowing Soviet use of their airspace and facilities for airlifts to Angola.⁸⁶ In January 1976 the US State Department identified the Soviet incursion into Angola as a primary reason for US covert military intervention.⁸⁷ In January 1976 the situation changed when Tanzanian President Julius Nyerere intervened saying he could convince the MPLA government to repatriate Soviet and Cuban troops. Satisfied, South Africa began to withdraw troops but it was not until 1988 that they left Angola. The last Cuban troops left in May 1991.

On 16 June 1976 riots broke out in the South African township of Soweto when police opened fire on a group of students protesting South Africa's education system for black pupils. Within days protests spread to other townships and many were killed. The killings prompted the UN Security Council to adopt Resolution 392 condemning the South African government's violent actions and calling for an end to apartheid and racial discrimination.⁸⁸ At the same time, in June 1976 US President Gerald Ford signed a law (the Clark Amendment) prohibiting US support for military operations in Angola, unless such action was in the US's national security interests and approved by Congress.⁸⁹ Meanwhile US arms manufacturers were sending arms to South Africa through front companies.⁹⁰ For the latter half of 1976 US attention was focused on promoting change in Namibia and Rhodesia through talks between

⁸⁴ State Department, Memorandum for the Senate Foreign Relations Committee, "US Policy Toward Angola, 16 December 1975". Quoted in Mokoena, South Africa and the United States, p19.

⁸⁵ Department of State Bulletin, February 1989, p17. Quoted in Mokoena, South Africa and the United States, p19.

⁸⁶ "US position on Angola", 24 December 1975. Quoted in Mokoena, South Africa and the United States, p20.

⁸⁷ "Possible Contingency Action Regarding Africa", 10 January 1976. Quoted in Mokoena, South Africa and the United States, p20.

⁸⁸ Harold Nelson, "South Africa: A Country Study", Washington D.C. Government Printing Office, 1981. Quoted in Mokoena, South Africa and the United States, p21.

⁸⁹ "Angola and the Clark Amendment", 20 November 1982. Quoted in Mokoena, South Africa and the United States, p21.

⁹⁰ Klare, 1981. Quoted in Mokoena, South Africa and the United States, p22.

US State Department Secretary, Henry Kissinger, and South African prime minister, John Vorster.⁹¹

From 1977 US policy to South Africa hardened. Because of its exploitation of Namibian uranium, South Africa was removed from its permanent position in the International Atomic Energy Agency (IAEA). Shortly thereafter, Soviet satellite pictures showing South Africa preparing to detonate a nuclear explosive in the Kalahari desert brought a warning from US president Jimmy Carter not to do so.⁹² Indeed, Peter Vale has argued that Carter's approach to South Africa, particularly his focus on human rights issues, was a source of much frustration for the South African government, something which changed significantly when Reagan came to power in 1981.⁹³

On 12 September 1977, black consciousness leader Steven Biko died in police detention. Repression of dissent in South Africa increased. So did international pressure. In October the US voluntary ban on arms sales to South Africa became a formal embargo to be followed by UN Security Council Resolution 418 (1977), instituting a mandatory arms embargo against SA. This compromise resolution followed a veto by the US, UK and France of an earlier draft calling for sanctions as well.⁹⁴

US-South Africa relations worsened between 1978 and 1980 and were not helped by US satellite evidence recording a light signal over South Africa which some in the US government believed indicated a nuclear detonation.⁹⁵ With the inauguration of Ronald Reagan as US President in January 1981 (the year the CBW program was approved) US attitudes veered back to increased support for the apartheid

⁹¹ Klare, 1981. Quoted in Mokoena, South Africa and the United States, p22.

⁹² Washington Post, 23 August 1977. Quoted in Mokoena, South Africa and the United States, p23.

⁹³ Peter Vale, "The Botha Doctrine: Apartheid Southern Africa and the West", in Stephen Chan (ed), Exporting Apartheid: Foreign Policies in Southern Africa 1978 – 1988, London, Macmillan Publishers Ltd, 1990, p174.

⁹⁴ "West Vetoes African Resolutions on South Africa in Security Council October", 1 November 1977. Quoted in Mokoena, South Africa and the United States, p24.

⁹⁵ "Press Panel Review of South Atlantic Event", 7 February 1980. Quoted in Mokoena, South Africa and the United States, p27.

government. In March 1981 Reagan asked Congress to repeal the Clark Amendment “in order to remove an ‘unnecessary restriction’ on his foreign policy authority.”⁹⁶ The amendment was repealed. Bowman argues that by 1980 (just before the decision to initiate Project Coast was taken) Soviet intervention in Afghanistan and Ethiopia led to unease over Soviet and Cuban advances in the Third World. The US felt that it had to demonstrate its support for its allies wherever they were threatened by this advance. He notes that, “[A]ttitudes towards South Africa are thus altered somewhat depending on the global situation. When the USA wants to show resolve, it tends to be more attracted towards, and less critical of those who are like-minded. Thus, US policy tended to be somewhat more favourably disposed towards South Africa during the first Nixon administration and the last years of the Carter presidency.”⁹⁷

In April 1981 US Secretary of State, Alexander Haig, invited South African Foreign Minister, Pik Botha, to the US,⁹⁸ and the French, British and US vetoed four UN resolutions calling for sanctions against South Africa. For the next four years South Africa could count on a more tolerant US attitude.

Further examples of the US adopting a Nelsonian eye to apartheid in South Africa abound. In April 1982 the US Commerce Department approved the sale to South Africa of twenty-five hundred 3500-volt shock batons designed for crowd control, in violation of Section 502(b) of the Foreign Assistance Act prohibiting exports to the police or military in countries with consistent human rights violations.⁹⁹ In September 1982, Armscor announced that its G-5 tow and the G-6 SP Gun/Tow could fire nuclear rounds if necessary, but that South Africa did not intend to use such weapons.¹⁰⁰ In January 1983, the Reagan administration modified US limitations on exports to the South African and Namibian military and police forces. New guidelines

⁹⁶ Department of State Bulletin, February 1989, p18. Quoted in Mokoena, South Africa and the United States, p28.

⁹⁷ Bowman. “The Strategic Importance of South Africa”, p144.

⁹⁸ Foreign Broadcast Information Service. Daily Report, Middle East and Africa. Department of Commerce, National Technical Information Service. Springfield, Va, United States. Quoted in Mokoena, South Africa and the United States, p29.

⁹⁹ New York Times, 20 September 1982. Quoted in Mokoena, South Africa and the United States, p31

¹⁰⁰ “G-6 HMSP Gun/Howitzer” 13 September 1982. Quoted in Mokoena, South Africa and the United States, p31.

permitted the export of certain non-strategic industrial, chemical, petroleum, and transportation equipment without a license. This was the third relaxation of export restrictions in less than a year.¹⁰¹ These are but a few of the announcements and actions which both preceded and paralleled the start of South Africa's CBW program. Although US Congressional attitudes to South Africa hardened with the eventual passing by the Senate of the Comprehensive Anti-Apartheid Act in August 1986¹⁰² the Reagan Administration continued to oppose sanctions. The fact that the US and other Western nations adopted a lenient attitude towards the apartheid government on matters of strategic importance during the 1970s and 1980s, provided a context which limited the constraints on South African decision-makers to authorize the CBW program. International opinion hardened against South Africa and the government, particularly following the election of De Klerk in 1989, who was forced to begin dismantling its racially discriminatory measures¹⁰³ and the CBW programme.

Coming clean? South Africa's response to its BTWC obligations

The South African submission of December 1993, to the BTWC, in terms of Confidence Building Measure F: Declaration of Past Activities, states that there was no offensive biological research and development programme to declare. It refers to two past defensive biological research and development programmes: Programme 1 in 1990 and Programme 2 in 1992. With regard to the 1990 programme it is said that "a selected number of organisms were produced to study the detection methods as well as other protection methods, for example clothing and masks." With regard to the 1992 programme it is said that "area research was conducted in the production of micro-organisms that produce parathion-hydrolases".¹⁰⁴ The 1995 submission to the BTWC repeats the claim that there was no past offensive biological research and development programme to declare; however, it goes further than the 1993 submission, stating that a past defensive biological research and development

¹⁰¹ Brenda Branaman, Congressional Research Service, "South Africa: Issues for US Policy", July 1, 1980, p25. Quoted in Mokoena, South Africa and the United States, p32.

¹⁰² New York Times 19 November 1986. Quoted in Mokoena, South Africa and the United States, p37.

¹⁰³ New York Times, 21 September 1989. Quoted in Mokoena, South Africa and the United States, p44.

¹⁰⁴ "Confidence Building Measure F: Declaration of past activities", South African submission to the BTWC, 15 December 1993.

programme took place between 1987 and 1992. This submission states that *Clostridium perfringens* types D and C were worked on with the view to countering “the potential hazard created by genetic engineering and the effect it may have had on own protection and treatment.”¹⁰⁵

The CBM states that organisms and toxins as well as modified bacteria were studied with the view to developing detection techniques. The list of organisms allegedly studied for this purpose is given as including “*B.anthraxis*, *Yersinia pestis*, *Vibrio cholera*, *Francisella tularensis*, Yellow fever, Venezuelan equine encephalitis, T 2 mycotoxin.”¹⁰⁶ These statements cannot be reconciled with the evidence of the scientists during the Basson trial, nor with documentation before the TRC. No work was ever done at RRL on viruses, despite media claims to the contrary and the CBM raises the question as to whether another facility was involved in defensive BW research. RRL had neither the facilities nor the expertise to work with viruses. Claims have been made that the US Centre for Disease Control (CDC) shipped dangerous viruses to Basson.¹⁰⁷ CDC did send viruses to South Africa but they went to the National Virology Institute. The Director of the Institute, Dr Robert Swanepoel, is a world expert on Rift Valley fever and his work had no connection with biological warfare¹⁰⁸ and was conducted openly.

Since the démarches which sought to encourage honest CBM submissions about the past offensive programme, the matter has rested. The South African government has held fast to the position that the offensive aspects of the biological warfare programme were the result of unauthorised activities of the scientists at RRL. Since South African disarmament diplomats have taken a leading role in pushing for the strengthening of the BTWC there has been little pressure brought to bear as there is a reluctance from Western nations to undermine the credibility of the South African delegation in the Geneva negotiations.

¹⁰⁵ “Confidence Building Measure F: Declaration of past activities”, South African submission to the BTWC, 1995.

¹⁰⁶ *Ibid.*

¹⁰⁷ Mangold and Goldberg, *Plague Wars*, p 244.

¹⁰⁸ Chandré Gould telephonic discussion with Dr. R. Swanepoel, Director of the National Virology Institute, 25 January 2001.

Table 5. Recorded international travel by Basson

Date	Place	Purpose
May 1981	San Antonio, USA	Attendance of a professional congress. ¹⁰⁹
May 1981	Taiwan	Visit to the Taiwanese Army Chemical School. ¹¹⁰
May 1982	Windhoek	Unknown. ¹¹¹
August 1986	Ghent, Belgium	To attend the Second World Congress on Chemical and Biological Warfare. ¹¹²
May – June 1989	USA	Basson told Webster that "my intention regarding the flying session, French lessons, fitness programme and R & R remains the same", implying that the intention of the trip was recreational. ¹¹³
13 June 1989	London	Accompanied by Webster. Met with Buffham. ¹¹⁴
14 June 1989	Luxembourg	To meet with David Chu. ¹¹⁵
16 June 1989	Switzerland	Meeting with Jürg Jacomet at Haber & Sohn with regard to CBW protective clothing. ¹¹⁶
August 1989	London, Miami, Orlando	Month long vacation at Jane Webster's house. ¹¹⁷

¹⁰⁹ Wouter Basson, "Verslag: Week Eindigende 09/05/81".

¹¹⁰ "Itinerary for the visit of LTC Basson, the Republic of South Africa May 26 1981".

¹¹¹ Testimony of Martin Van Der Linde in The State vs Basson, South African High Court, Transvaal Division, 12 May 2000.

¹¹² "SA experts went abroad – UK publication 'Defence against nerve gas sought'", The Star, Johannesburg, 10 February, 1988.

¹¹³ Webster in The State vs Wouter Basson, 12 October 2000.

¹¹⁴ Ibid., 13 October 2000.

¹¹⁵ Ibid.

¹¹⁶ Ibid.

¹¹⁷ Ibid.

24 June 1990	London – Washington – Orlando – New York	Visit to David and Jane Webster. ¹¹⁸
30 June 1990	New York – Luxembourg – Basel – Farnborough – Malaga (Spain) – Abijan – Johannesburg	Meetings with Zimmer in Luxembourg, meeting with Chu in Basel; Basson's birthday in Malaga (6 July). ¹¹⁹
August 1990	England – Switzerland	Unknown. ¹²⁰
November 1990	England	To attend a rugby test match. ¹²¹
November 1990	England	To meet Jane Webster to resolve a dispute. ¹²²
February 1991	Moscow	Met with people who were knowledgeable about CBW issues, including a group from Croatia. ¹²³
April 1991	Switzerland	To meet Tjaard Viljoen. Basson was accompanied by his wife and children. ¹²⁴
October 1991	British Columbia, Canada	Hunting trip with Webster and Mijburgh. ¹²⁵
24 October 1991	Zurich – Basel – Spain – SA	Unknown. ¹²⁶
29 November – December 1991	Basel – Luxembourg – Switzerland – England – Germany – Belgium – Spain – Morocco – Tangiers	Meeting with Medchem Forschungs in Basel; meeting with Zimmer in Luxembourg, collection of documents in Tangiers. ¹²⁷

¹¹⁸ Testimony of Samuel Bosch in The State vs Wouter Basson, South African High Court, Transvaal Division, 14 – 29 March 2000.

¹¹⁹ Ibid.

¹²⁰ Viljoen in The State vs Wouter Basson, 3 – 14 March 2000.

¹²¹ Bosch in The State vs Wouter Basson, 14 – 29 March 2000.

¹²² Viljoen in The State vs Wouter Basson, 3 – 14 March 2000.

¹²³ Knobel, "Kronologiese verloop van gebeure tov Kroatiese Transaksies", 1993.

¹²⁴ Viljoen in The State vs Wouter Basson, 3 – 14 March 2000.

¹²⁵ Webster in The State vs Wouter Basson, 13 October 2000.

¹²⁶ Bosch in The State vs Wouter Basson, 14 – 29 March 2000.

¹²⁷ Testimony of Niel Kirstein in The State vs Wouter Basson, 9 – 10 November 1999. Viljoen in The State vs Wouter Basson, 14 March 2000.

December 1991	Chad	Transport of “samples and material.” ¹²⁸
September 1992	Croatia	Meeting with government officials. ¹²⁹
6 December 1992	London – Luxembourg	Travelled with his wife – purpose unknown. ¹³⁰
28 June 1993	Switzerland	Basson arrested in Switzerland. ¹³¹
1993 – 1996	Libya (several visits)	Consultation about the building of a railway. ¹³²
May-June 1995	Tripoli, Libya	Unknown. ¹³³
27 January 1997	Namibia	To meet with Libyan and former East German agents. ¹³⁴
Unknown	Two trips to Seychelles	Accompanied by family members. ¹³⁵
Between 1993 and 1997	Libya	

¹²⁸ W. Basson and D.P. Knobel, “Finale Verslag: VSA Dollar Voorskot”, 7 May 1994. SADF document justifying the advance payment of \$75 000 to Basson to pay landing fees, fuel and bribes.

¹²⁹ Ibid.

¹³⁰ Claim made by Adv. Cilliers in Basson’s defence. Knobel claimed during his testimony in the trial that Basson made this trip to sort out the problems with a deal in Croatia for the purchase of drugs. Knobel in The State vs Wouter Basson, 15 November 1999.

¹³¹ Ibid.

¹³² “Borgaansoek van Dr. Wouter Basson in die Streekhof vir die Streekafdeling van Noord-Transvaal gehou in Pretoria”; Vol 8. 03 November 1997, p360

¹³³ Marlow in The State vs Wouter Basson, 5 February 2001.

¹³⁴ Adv. Jaap Cilliers, during the cross examination of Samuel Bosch in The State vs Wouter Basson, 29 March 2000.

¹³⁵ Van Remoortere in The State vs Wouter Basson, 11-13 September 2000.

CHAPTER 6

The Final Years (1989 – 1993)

Project Coast and political change

By 1988 Delta G Scientific was well established in its Midrand facility and RRL was operational. The companies were under the management of Philip Mijburgh and Wynand Swanepoel respectively.¹ The internal war in South Africa was still raging with the police and military engaged in concerted campaigns, supported at the highest political levels, to undermine apartheid opposition. Police hit squad commander, Eugene De Kock, testified about this before the TRC and provided details in his autobiography. In August 1988 De Kock, was instructed by his commanding officer, on orders from PW Botha, to bomb Cosatu House, headquarters of the trade union federation.² Later that year he was instructed to destroy Khotso House, home of the South African Council of Churches. According to the testimony of the former Minister of Police before the Truth Commission, the instruction for this too came from PW Botha.³ In October, De Kock was ordered to set fire to Khanya House where the South African Bishops Conference had its offices.⁴

In February 1989 PW Botha suffered a mild stroke and resigned as leader of the National Party (NP). His successor as leader of the NP, FW De Klerk replaced him as president in September. Although from early in his presidency De Klerk made it

¹ Testimony of Wynand Swanepoel and Philip Mijburgh at the TRC hearing into chemical and biological warfare, Cape Town, 10 and 11 June 1998.

² De Kock and Gordin, A Long Night's Damage, p143.

³ Final Report of the Truth and Reconciliation Commission, Vol II, Chapter 3, 1998, <http://www.polity.org.za/govdocs/commissions/1998/trc/2chap3.htm>

⁴ De Kock and Gordin, A Long Night's Damage, p 145.

clear that he would follow a reformist path, the security police and covert military units continued to operate as before, even escalating their activities as De Klerk failed to gain their support for a transition to democracy. Between 1990 and 1994 levels of political violence in South Africa were higher than ever before. A war was being fought on the streets of Transvaal townships, in KwaZulu Natal, in Cape townships and in the rural areas of the Eastern Cape, and cross border raids were still being planned and executed. In his autobiography, De Klerk commented on the escalation in the levels of political violence from 1990 stating that the number of politically motivated deaths outside KwaZulu Natal (where conflict between the ANC and Inkatha Freedom Party resulted in an extremely high number of deaths) stood at 124 in 1989 and had increased to 1888 in 1990.⁵

For the biological warfare facility this was also a time of increased interaction with the operators of the police and military. In 1989 RRL scientist, Dr André Immelman, began keeping a list of the covert chemical and biological assassination weapons and vials of pathogens he gave to members of the police security branch and others introduced to him by Basson.⁶ One of the recipients of items listed on the so-called “Verkope” list⁷ was CCB operator, Pieter Botes. According to Botes, shortly before the elections in Namibia (November 1989) all CCB operators were instructed to suspend their activities elsewhere and focus all their attention on efforts to influence the outcome of the first democratic elections. One such effort included an attempt by Botes and his colleagues to contaminate the water supply of a SWAPO camp with cholera. Botes claimed that in August 1989, he was given four brown glass jars by CCB commander Joe Verster and told that two contained cholera bacteria,⁸ the others yellow fever.⁹ Botes traveled to Namibia to identify opportunities for anti-

⁵ F.W. De Klerk, The Last Trek – A New Beginning, London, Macmillan, 1998, p199.

⁶ Immelman in The State vs Wouter Basson, 29 May 2000.

⁷ Immelman, “Verkope”, 1989.

⁸ The Verkope list contains reference to 16 bottles of *Vibrio cholera* having been given to “Koos” on 4 August 1989.

⁹ No reference to yellow fever appears on the “Verkope” list and it is unlikely that Botes would have been given yellow fever since it is a virus and RRL did not work with viruses.

SWAPO operations. Once there, he received the order from Verster to contaminate the water supply at two refugee camps outside Windhoek with cholera and yellow fever. Botes said that he gave the bottles to two of his operators, Charlie Krause and José Daniels. He claimed that he was not convinced the plan to contaminate the water supply with cholera would work, since he had established that the water in the camp reservoir was from the municipal supply and thus chlorinated. Nevertheless the operation went ahead and Krause and Daniels reported they had polluted the water, and returned the empty containers to Botes, who destroyed them.¹⁰ As predicted by Botes, infection of the water fortunately did not cause an outbreak of either disease and despite the efforts of the CCB and other units of the Defence Force SWAPO won the election with 57% of the national vote.¹¹

In February 1990, De Klerk announced the unbanning of anti-apartheid organizations and the release of Nelson Mandela and other political prisoners. However, De Klerk made it clear that he was strongly opposed to black majority rule and warned that, “there could be no winner takes all system, but a power sharing one. Don’t expect me to negotiate myself out of power.”¹² On the part of the ANC, there was a realisation that the armed struggle was just one of several ways to bring about political change in South Africa. In the words of Nelson Mandela. “It was clear to me that military victory was a distant if not impossible dream. It simply did not make sense for both sides to lose thousands if not millions of lives in a conflict that was unnecessary.”¹³ It was increasingly evident to both the white government and the ANC that the only possible option was political settlement.

While the conditions for a negotiated political settlement were set, media revelations about hit squad activities in 1990 led De Klerk to appoint Justice Louis Harms to

¹⁰ Testimony of Pieter Botes in The State vs Wouter Basson, South African High Court, Transvaal Division, 15 May 2000.

¹¹ “Namibia: National List PR in Southern Africa”, http://www.aceproject.org/main/english/es/esy_na.

¹² Alastair Sparks, Tomorrow is Another Country, Arrow Books Limited, London 1995, p12.

¹³ Nelson Mandela, Long Walk to Freedom: The Autobiography of Nelson Mandela, London, Abacus, 1994, p62.

head a commission of inquiry into “certain alleged murders”. The Commission began hearing evidence on 5 March 1990. At the end of the hearings, Harms linked the CCB to crimes of violence, but the allegations did not lead to prosecutions. Harms had allowed CCB members to testify in disguise and using false names. He failed to find any wrongdoing on the part of the security police, a conclusion which Eugene De Kock, was to find laughable.¹⁴ The Harms Commission was severely criticised by the press and by anti-apartheid groups for failing to reveal anything approaching the extent of hit squad activity and was seen as little more than a cover-up. At the same time as unbanning the ANC and other liberation movement organisations, De Klerk set about “reclaiming civilian control of the state”,¹⁵ one of the factors which Burgess and Purkitt identified as having contributed to the decision to terminate the CBW programme.¹⁶ De Klerk replaced Magnus Malan with a civilian, Roelf Meyer, as Minister of Defence, and Adriaan Vlok was replaced by Kobie Coetzee as Minister of Law and Order, after ANC President Nelson Mandela had issued an ultimatum to De Klerk’s government to dismiss Vlok and Malan or put at risk the continuation of the negotiation process.¹⁷ But behind this façade of political change, the security forces continued operating much as they had under PW Botha. Politically motivated murders and disappearances continued, and even grew in number. In KwaZulu Natal, the Inkatha Freedom Party was armed by the security police to fight against the ANC. De Klerk claimed in his autobiography that his government had no role in the violence, however, he conceded that it was an indisputable fact that “some elements of the security forces were involved in secretly instigating and perpetrating violence” but, he said their actions were explicit violations of his instructions, indicating that elements of the security forces were beyond his control.¹⁸ On October 1991, in the face of struggling political negotiations, Justice Richard Goldstone was appointed to head the Goldstone Commission of Inquiry Regarding the Prevention of

¹⁴ De Kock and Gordin, A Long Night's Damage, p185.

¹⁵ Batchelor and Willett, Disarmament and Defence, p55.

¹⁶ Burgess and Purkitt, “The Rollback of South Africa’s Biological Warfare Programme”.

¹⁷ Graeme Simpson and Janine Rauch, “Political Violence: 1991”, in N. Boister and K. Ferguson-Brown (eds), Human Rights Yearbook 1992, Cape Town, Oxford University Press, 1993, pp 212-239.

¹⁸ De Klerk, The Last Trek, p202.

Public Violence and Intimidation. Goldstone uncovered details of the hit squad activities of the security police¹⁹ and revelations about the role of covert military units in the ongoing violence emerged after the Goldstone unit raided the offices of the Directorate of Covert Collection in November 1992. Subsequent investigations revealed ongoing security force operations against the ANC.²⁰

In January 1991, Mandela called for “an all-party congress” to start negotiating for a constituent assembly. On 20 December 1991 delegates from 19 political parties met at the Convention for a Democratic South Africa (CODESA) to begin negotiating the political future of South Africa.²¹ The negotiations were halted in 1992 when the ANC withdrew after a the brutal massacre of ANC supporters in the Johannesburg township of Boipatong. In November 1992, in the face of continued violence in which the security forces were implicated, General Pierre Steyn was appointed to head a commission²² “on alleged dangerous activities of SADF components”. A month later, he verbally delivered his report to De Klerk. Steyn’s report resulted in De Klerk ordering 23 military officers, including Wouter Basson, to take early retirement. Steyn’s investigation, supported by the NIS, had found that “to a great extent some members of the senior command structure [of the SADF] are trapped in the momentum of activities of the past,” and said that “it cannot be ruled out that other members might be furthering their own agendas.”²³

Analysts, including Batchelor and Willett, have argued that the De Klerk government cynically used the violence to undermine the ANC at the negotiating table. However, they also acknowledge that De Klerk “lacked any meaningful influence or operational

¹⁹ Louise Flanagan and Chandré Gould, “De Kock linked to more killings”, Mail & Guardian, 20 May 1994.

²⁰ Louise Flanagan and Chandré Gould, “What the Generals didn’t tell Modise”, Mail & Guardian, 24 June 1994.

²¹ Sparks, *Tomorrow is Another Country*, pp. 129-130.

²² Chandré Gould interview with General Pierre Steyn, Pretoria, 17 January 2001.

²³ “Staff Paper prepared for the Steyn Commission on alleged dangerous activities of SADF components”, December 1992.

control over the SADF, he was unwilling and unable to control or fully rein in the 'dissident elements' within the security forces who were accused of fomenting or perpetuating political violence through acts of commission or omission."²⁴ Others, such as Simpson and Rauch have argued that the violence was an inevitable consequence of the political transition during which the deregulation of "repressive forms of social control" took place at the same time as intensified political contest.²⁵ According to Simpson and Rauch's analysis, during this period the security forces were incapable of maintaining their authority in the face of political change. This would imply that the violence was not merely a tool cynically used by political leaders to influence the course of negotiations, but rather an inherent part of political transition; however, a factor which may have played to the advantage of one or other side of the political divide at different times.

Given the enmity between the military and De Klerk in the 1990s it's unlikely that De Klerk or other political leaders would have been informed about the details of the biological warfare programme or the development and use of covert chemical and biological weapons by the managers of the programme. De Klerk himself said that although by 1990 he had attempted to 'normalise' the role of the security forces, and had taken action to establish control over secret projects, he later discovered that there was a great deal kept from him.²⁶ If the formal written briefing of De Klerk in 1990 by Basson²⁷ on the chemical and biological warfare programme is indeed the only information which he received about the programme, it would indicate that the military held back information from De Klerk about projects which would not find his favour. De Klerk was told that the programme focussed on the development and production of incapacitants and irritants (particularly CR) which, Basson said, were not prohibited by the Geneva Protocol. On the biological warfare programme, De Klerk was told that a research and production facility had been established to keep

²⁴ Batchelor and Willett, Disarmament and Defence, p58.

²⁵ Simpson and Rauch, "Political Violence: 1991", p212.

²⁶ De Klerk, The Last Trek, p152.

²⁷ Wouter Basson, "Projek Coast: Voorligting aan Staatspresident", SADF document GG/UG/302/6/C123/BK, 26 March 1990.

up to date with the changing threat. Basson said, “we are constantly producing new organisms in order to develop a preventative capacity as well as treatment.”²⁸ No mention was made of the biological assassination weapons. In response to the briefing De Klerk ordered that no work be done on lethal chemical agents, but he authorised continued work on incapacitants and teargas.²⁹ Members of De Klerk’s government could have claimed to have been unaware of the offensive work being done at the front companies until 1993 when Jan Lourens broke his silence and approached Roelf Meyer through an intermediary to inform him of the development of the assassination weapons (see Chapter 3).

The biological programme at RRL was not curbed. By mid-1993, R200 000 had been spent on plans for the state-of-the-art biological production plant and bio-safety level 4 (high containment) laboratory in which a 300-litre fermentor would have been installed to produce much larger quantities of pathogens than had previously been produced. While the upgraded facility was never built³⁰ the intention to increase biological agent production was indicative of the mindset of both scientists and managers of the facility during that period.

The Goldstone Commission’s investigations appear to have concerned the military, and Knobel in particular, who feared that information about secret projects and operations would not withstand the scrutiny of the Commission. However, concern about the prospect of losing access to the crowd control agents and weapons meant that abandoning the programme was not considered a viable option,

...there are still a whole range of projects for which the technical information must be protected. Recent developments have indicated that, in public investigations such as, for example, the Goldstone Commission, the SADF and the SAP cannot withhold information any longer. So it

²⁸ Ibid.

²⁹ D.P. Knobel and B. Steyn, “Voorligting aan die Minister van Verdediging oor die verloop en huidige status van Projekte Coast en Jota te George op 7 Jan 1993”, SADF document GG/UG/302/6/J1282/5, 7 January 1993.

³⁰ Odendaal in The State vs Wouter Basson, South African High Court, Transvaal Division, 24 May 2000.

appears now as if the Goldstone Commission is at the point of subpoenaing Swartklip Products, a Denel affiliate, to make known the nature, content and effect of all products manufactured for the South African Police. A large number of the products which are manufactured for Jota [Project Coast had been re-named Jota by that time], must in the future be used during critical unrest situations. If knowledge of these weapons should leak out now, the instigators of this unrest will already begin to make propaganda against the use of these agents and to develop effective counter measures. That the SADF is the developer and client of these products must definitely remain undercover so that the tactical high ground can be maintained.³¹

It may be that the fear of losing their ability to contain crowds was prompted by De Klerk's announcement in 1989 to permit protest marches which had, until then, been forbidden under the State of Emergency. De Klerk states in his autobiography that some of his security advisers were "strongly opposed" to the decision and were "haunted by the spectre of the mass demonstrations that were taking place in Eastern Europe and had led to the overthrow of Communist governments in country after country."³² Not only was the internal situation changing dramatically and affecting secret projects such as Coast, developments at an international level also indicated that the days of the chemical and biological warfare programme were numbered. Negotiations that would lead to the introduction of the *Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and their Destruction* (known as the Chemical Weapons Convention - CWC) had been underway for many years and by 1991 it was clear that the Convention would soon be ready for signature. On 14 January 1993 South Africa signed the CWC which prohibits the development, production, acquisition or stockpiling of chemical weapons and requires that all states parties destroy any prohibited chemical weapons in an approved manner.³³ On 31 March 1993 a meeting of the CMC was attended by, amongst others, General AJ (Kat) Liebenberg (Chief of the SADF); Lieutenant General DP Knobel (Surgeon General); the Chief of Staff of the Army; the Chief of Staff of the Navy; Brigadier Wouter Basson, and Colonel BP

³¹ D.P. Knobel, "Fondsbehoefte en fondshantering: Projek Jota", 6 July 1992, p2. Exhibit K2 in The State vs Wouter Basson, South African High Court, Transvaal Division.

³² De Klerk, The Last Trek, p156.

³³ Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and their Destruction, Article 1.

Steyn. The CMC decided that South Africa should deny its possession of chemical weapons until the CR project had been completed. At that stage the Surgeon General was still in possession of 6 tons of CR and 10 tons of the intermediary. It was decided that the research into the delivery systems for waterborne CR and the foam form should continue until the end of the 1993/4 financial year. The management of the CR project would be the responsibility of Ben Steyn and was budgeted for at a cost of R2.3m (\$655 500 at 1992 exchange rates).³⁴ Work was being done on a water cannon which could disperse a water-based formulation of CR.

In briefing the Minister of Defence in 1993, Knobel told the Minister that were South Africa to declare its work on CR before the signing of the CWC 'the groups responsible for mass action' would have an opportunity to consult their international advisers and to find ways to counter the agent. This, claimed Knobel, would 'neutralize the army's most effective weapon in handling internal unrest'. Knobel was supported by the Minister of Defence, Eugene Louw, in his proposal to keep South Africa's CR stocks a secret.³⁵ This was not a violation of the CWC which only required disclosure of riot control agents after the entry into force of the Convention, in 1997. However, the CWC prohibited the use of CR in a conventional war outside the borders of the producing country. This meant that the 155mm shells containing CR had to be destroyed after South Africa signed the CWC. This condition did not escape the attention of the CMC. In a January 1993 meeting it was noted that if the holders were to be removed from the grenades and stored separately, they would no longer be in conflict with the CWC and this course of action was accepted.³⁶ If the testimony of Corrie Ferreira, an army colonel who had been the Defence Force's technical ammunition officer for over 22 years, is correct it would appear that the order was carried out. Ferreira told the court during the Basson trial that he was an

³⁴ "Notule van die vergadering van die Beheerkomitee van Projek Jota gehou op 31 Maart 1993 in die HF Verwoerdgebou, Kaapstad", SADF document GG/UG/302/6/J1282/5, 31 March 1993.

³⁵ Knobel and Steyn, "Voorligting aan die Minister van Verdediging", 7 January 1993. Signed acceptance and authorisation from the Minister of Defence.

³⁶ "Notule van die vergadering van die Beheerkomitee van Projek Jota wat gehou is op 9 Januarie 1995 by die Kantoor van HNW", SADF document GG/UG/302/6/J1282, 9 January 1995.

expert on the shells used for CR and on pyrotechnics. He had unrestricted access to all Defence Force ammunition depots serving the army, navy and airforce.³⁷ According to Ferreira, not a single 155mm projectile loaded with CR was ever issued to any SADF unit, and all 1 373 were “destroyed” by being emptied of CR and re-loaded with smoke (he did not put a date to this destruction). An amount of R65 000 was budgeted for the 1986/87 and 1987/88 financial years to empty 120mm shells for this purpose, with R16 000 per year budgeted for the years 1988/89, 1989/90 and 1990/91.

However, Ferreira’s testimony on the use of CR-filled mortars was contradicted by that of Rudolf Louw. Louw claimed that during Operation Packer, the mopping-up and withdrawal phase of the Angolan conflict, he was reliably informed by some of his former SADF colleagues that CR mortars had been used. This was in direct contravention of his own instructions, which were that no weaponised CR was to be used operationally. Louw was told this by middle-ranking officers, who said that huge quantities of the CR mortars had been used by the SADF. This came as a shock to him because he did not even know that the Army had been issued with the CR mortars. The entire weaponization project was supposed to be top secret.³⁸ The available information remains contradictory and its unlikely that without detailed investigations it will be resolved whether CR was used in Angola or not.

This period (1990 – 1993) was an uncertain time for the military. Resentment ran high within the SADF about the appointment of a civilian Minister of Defence and the dismissal of the 23 officers following the Steyn report. It was clear that the favoured position occupied by the SADF during PW Botha’s presidency was a thing of the past. In this uncertainty the managers of the CBW programme began making anomalous decisions that suggest that self-enrichment was taking place. Despite the initial failure of methaqualone to yield positive results as a crowd control agent, and the alleged production of superior analogues, in late 1992 the CMC approved the purchase of 500kg of methaqualone from Croatia, a mere three months before all

³⁷ Testimony of Corrie Ferreira in The State vs Wouter Basson, South African High Court, Transvaal Division, 16 August 2000.

³⁸ Testimony of Roelf Louw in The State vs Wouter Basson, 23 February 2001.

incapacitants were to be destroyed.³⁹ According to Knobel, on 13 November 1992 the Co-ordinating Management Committee of Project Coast decided that, given the upcoming signing of the CWC and the resultant difficulty in procuring chemicals, all procurement actions necessary to round off the project should be completed by the end of 1992.⁴⁰ It is unclear why the CMC thought this procurement to be necessary, although Knobel argued that it intended to avoid restrictions that may have been placed on procurement of chemical agents by the CWC. It is also unclear why the SADF would have purchased the methaqualone in September 1992 when the destruction of all chemical agents allegedly took place in January 1993, a mere four months later. The prosecutors in the Basson trial argued, on the basis of the forensic audit of Project Coast's accounts, that the alleged purchase of methaqualone did not take place. Instead, they argue, the money was used in the perpetration of fraud. The judge did not agree. He stated in his judgement that "[E]verything went smoothly until about 1989 when a new president arrived on the scene. It was decided that the process of weaponising the incapacitants had to be accelerated. The problem was that the methaqualone manufactured at Delta G Scientific was not acceptable and BZ and methaqualone had to be procured. Provision was made for Delta G to make Ecstasy in time".⁴¹

In July 1992, Mijburgh (Managing Director of Delta G Scientific), wrote a letter to Basson in which he quoted costs for the production of MDMA (also known as Ecstasy). The total cost for 1000kg was quoted at R840 000 (\$294 700 calculated at 1992 rates). The letter states that delivery could take place some 6 to 8 weeks after production.⁴² About a week later, the Surgeon General confirmed the order in writing and provided Mijburgh with provisional immunity against prosecution for the

³⁹ D.P. Knobel, "Kronologiese verloop van gebeure tov Kroatiese Transaksies", undated SADF document GG/UG/302/6/J1282.

⁴⁰ Ibid.

⁴¹ Judgement in The State vs Wouter Basson, para 2063.

⁴² Letter from Philip Mijburgh to Wouter Basson dated 30 July 1992 and headed: "Order for the manufacture of 'Baxil'", 30 August 1992.

production of the drug.⁴³ In January 1993 Knobel advised the Minister to authorize the destruction of the MDMA, BZ and methaqualone.⁴⁴ He explained that 1000kg of a locally produced BZ variant had been manufactured which had been intended for weaponization during the course of 1993. It is the BZ that perhaps raises the greatest number of questions about the CBW programme at this time. Questions I shall return to later in this chapter.

There are a number of facts which, taken together, point towards the conclusion that the MDMA, and methaqualone, were produced with the purpose of enriching Basson and his associates. The one indicator is the timing. The production of the MDMA was authorized in July 1992 when it must have been clear to at least Basson and Mijburgh that testing and weaponisation would have taken far more than 6 months. Four months later, in November Basson wrote a letter to Knobel declaring which chemicals were in stock⁴⁵ (presumably so that a decision about their use or destruction could be taken) and in early January the Minister was advised by Knobel to authorize the destruction of the drug (along with quantities of BZ and methaqualone).⁴⁶ The total financial loss to the SADF of the destruction of the MDMA, methaqualone, BZ and cocaine was estimated by Basson to have been R21.7million.⁴⁷ The second indication was the claim by CCB operator Danie Phaal, that Basson had offered him methaqualone tablets for sale. The third indication was the evidence that the MDMA was encapsulated by pharmacist Steven Beukes, and was therefore clearly not intended for operational use as an incapacitant.

⁴³ Letter from the Surgeon General, DP Knobel to Philip Mijburgh dated 7 August 1992 headed: "Produksie van d-N,a-DIMETHYLPHENETHYLAMINE (BAXIL)".

⁴⁴ Knobel and Steyn, "Voorligting aan die Minister van Verdediging", 7 January 1993.

⁴⁵ D.P. Knobel, "Bevestiging van Ontvangs van Produkte Gelewer: Projek Coast/Jota" SADF document HSF/UG/302/6/C119, 9 November 1992. "Tans is daar in voorraad by die SAGD die volgende spesialis chemikalie wat in die 1993/1994 FJ verwerk sal word vir die bepaalde produkte: (a) 1000kg produk B; (b) 500kg produk M; (c) 30 kg produk C."

⁴⁶ Knobel and Steyn, "Voorligting aan die Minister van Verdediging", 7 January 1993.

⁴⁷ Wouter Basson, "Afskryfwaardes" unnumbered SADF document, 1 February 1994.

While the desire for self-enrichment may explain the production of both the MDMA and methaqualone, it does not hold for the BZ. According to Knobel, in October 1990 the Defence Command Council authorized the development of BZ (along with the CR, methaqualone and MDMA).⁴⁸ The minutes of this meeting refer to chemical agents and chemical weapons but do not specify which agents, aside from CR, were authorized for development, although it is possible that the specifics were not minuted. Nevertheless, while 2 years later the MDMA production went ahead, there are no documents in the public domain which show that a similar authorisation was given for the production of BZ. During Basson's trial, his defence counsel claimed that large quantities of BZ (between 3 and 4 tons) were purchased 'as a precursor to the Croatian methaqualone deal' in 1992.⁴⁹ Basson testified that BZ was used to fill hand grenades, 81mm mortars and 155mm projectiles, though in the case of the latter, the process went only as far as filling the canisters. He said that pyrotechnical testing and weaponisation of the BZ took place in what was known as the Pilot Plant at Speskop, which had been demolished and rebuilt in 1986. He said that three tons of the BZ were used – 1,5 of them just to find the formula and that Neethling was fully aware of the BZ development.⁵⁰ Certainly by November 1992 Basson claimed that there was one ton of the agent in the SADF stocks. Where it came from is unclear, however its existence is important because in January 1992 an unusual incident took place in Mozambique, close to the South African border, which suggested the use of a chemical agent. According to the Steyn report:

Allegedly the chemical attack on Frelimo soldiers in Mozambique was a practical training session. A small unmanned reconnaissance bomber (sic) was located shortly before the attack on Komatipoort. The toxic substance used in the attack was manufactured and stored by Petrotechnics (sic). (Confirmed and the individuals involved are known).⁵¹

⁴⁸ Knobel, "Kronologiese verloop van gebeure tov Kroatiese Transaksies".

⁴⁹ Statement made by Adv Jaap Cilliers during the cross-examination of Knobel, in The State vs Wouter Basson, 29 November 1999.

⁵⁰ Basson in The State vs Wouter Basson, 7 September 2001.

⁵¹ "Staff Paper prepared for the Steyn Commission on alleged dangerous activities of SADF components", December 1992.

The story of this incident begins on 14 January 1992. The Third Battalion of Commandos of the Mozambican government forces, reinforced by one company of provincial troops, left on that day to attack a Renamo base close to the South African border. Altogether there were 300 to 400 soldiers in the Mozambican forces.⁵² They travelled initially by vehicle and continued the next day on foot. Seeing evidence of the presence of Renamo forces in the area, the troops grouped into a box formation,⁵³ one company forming each side of the box. They moved to a position south of the Renamo base near Estompene. As it was late, they set up camp and decided to attack the following morning. During the night, sounds of domestic animals were heard. At daybreak on 16 January, the troops moved towards the Renamo base. A white jeep-type vehicle and a light aircraft were allegedly spotted by the troops - accounts of where the vehicle was travelling and whether it crossed the South African border are varied. After the incident, when a South African verification mission was despatched to investigate, the Mozambican delegation that accompanied them said the vehicle had come from the Renamo base. The troops entered the Renamo base and found it deserted. They left the camp without destroying it. Several kilometres from the base, still in box formation, they came under limited small arms fire of no more than 15 shots and took cover. At that moment there was an explosion overhead that produced a dark smoke. When the smoke had dissipated they continued moving. After about 15 minutes there were problems in keeping the soldiers moving forward, and control was lost. Later it was reported that soon after the explosion some of the troops began to feel hot, developed sore throats and dry mouths. Others were disoriented and confused and their vision affected.⁵⁴ Between 18 and 27 January, 28 troops from the unit were admitted to Maputo hospital, four were reported dead, two were wounded during “uncontrollable shooting” and 38 soldiers were missing.

⁵² S. Persson, H. Staub and J.P. Thompson, “Report of the Mission dispatched by the Secretary-General to investigate an alleged use of chemical weapons in Mozambique”; United Nations document, 12 June 1992.

⁵³ J.P. Thompson, “Chemical & Biological Defence Establishment: Report on an investigation into the alleged use of chemical weapons in Mozambique, January 1992”, 17 February 1992.

⁵⁴ Ibid., p3.

Shortly after the incident the SADF dispatched a verification mission divided into two teams. The first group, led by Dr Brian Davey, was composed of medical and intelligence personnel who travelled to Maputo to interview and examine casualties. The second team were dispatched to the Kruger National Park, which bordered on the affected area, for field sampling and detection. Jan Lourens, the director of Protechnik (the company which, according to the Steyn report was responsible for manufacturing the BZ), assembled the second team, which included Philip Coleman, Robert Temperman and members of Seven Medical Battalion.⁵⁵ This latter team met in the Kruger National Park in a camp near the Mozambican border. Davey and Mozambican officers, said to have been members of the battalion that had suffered the attack, flew in by helicopter to join the team some time later. The group, including the Mozambican representatives, drove along the border on the South African side, but were unable to identify the site of the incident. This is not surprising since the terrain is very consistent and it would have been almost impossible for them to have located the site accurately this way. No use was made of methods more likely to have located the site like the use of helicopters. Davey told the authors that helicopters were ruled out by the Air Force for reasons he did not know. In Maputo, Davey's team interviewed six casualties and concluded that although an 'unusual incident of sorts did occur' there was insufficient evidence to suggest a chemical attack took place. However, in what appears to be a contradictory statement, Davey claimed that the "symptoms do not fit the picture of any known chemical agent. At the time of examination, no patients or corpses showed signs attributable to known chemical agent exposure."⁵⁶ Davey suggested that he had seen "nothing to exclude the possibility that Frelimo troops might have fired it [a chemical munition] themselves in error."⁵⁷

A British medical doctor and toxicologist, Dr JP Thompson, was sent to Mozambique by his government to conduct an investigation into the incident. He was accompanied by the British defence attaché in Maputo. Thompson's investigation followed shortly

⁵⁵ Gould and Chaskalson interview with Lourens, Cape Town, 23 January 1998,

⁵⁶ B. Davey, "Chemical Incident Verification Mission Mozambique 22 – 24 January 1992", 29 January 1992, p1.

⁵⁷ Ibid., p2

after the South African investigation. He conducted interviews with troops of all four companies involved in the incident and information obtained in the interviews (transcripts were attached to his report) was consistent and non-contradictory on the salient points. The evidence he gathered led Thompson to the conclusion that an agent such as BZ may have been used.

It is possible that the findings of the two teams differed because they had interviewed different subjects or because they had approached the interviews with different perceptions. Should it have been found that a chemical weapon had been used in the incident, suspicion would naturally have fallen on the South African security forces. The recommendations in Davey's report reflect this concern: "However valid our scientifically based negative conclusions may be, those who would want to score political points against Renamo and South Africa will carry on, and will probably find a receptive audience in the media due to the invariably sensationalistic nature of chemical warfare. It will be important to distribute the results of our investigation as widely as possible in the international community, so that the uncertain nature of the allegations is known."⁵⁸ Davey was keenly aware of the political implications for South Africa, had any of the international investigations to have concluded that a chemical weapon had been used during the incident. His report includes the observation that,

[T]here could be a need to be able to convincingly prove that we are not involved in this matter. A balance is needed between taking the actions required to maintain our own international interests, and possible overreaction – which could be perceived as guilty attempts to 'cover-up'. It is relevant to note that the allegations made by Mozambique at the time of the incident included the allegation that 'an aircraft and a vehicle had crossed from South Africa into Mozambican airspace and territory during this incident, thus constituting a violation of the Nkomati Accord and negatively affecting the spirit of cooperation between the two countries.'⁵⁹

Following both the South African and British missions was a two-person team of Drs Gustav Andersson and Sven-Ake Persson from the Swedish National Defence Research Establishment. They managed to conduct interviews with only six alleged

⁵⁸ Ibid., p2.

⁵⁹ Ibid., p1.

victims and concluded that the explosion was caused by a military smoke munition. They argued that the symptoms were consistent with poisoning with yellow phosphorus. They did, however, state in their report that: “the feeling of intense heat, dryness of skin and mucous membranes, the mental disturbances, even the long duration of the symptoms could be signs and symptoms of intoxication induced by an atropine-like agent.”⁶⁰ The Swedish scientists believed that whilst the use of an atropine-like substance was not impossible, they thought it unlikely, “these types of agents have been studied experimentally, but the step to use these substances in full-scale in the field is a rather large one. We also think even if a munition with atropine-like agents would exist they should not be easily available.”⁶¹ Had the Swedish team been aware of the SADF’s interest in BZ perhaps their findings would have been different. Neither of the two men responded to questions about their investigation when I contacted them.

A third investigation was done by the United Nations. In March 1992 the Secretary General of the United Nations appointed Dr Sven-Ake Persson, Mr Heiner Staub and Dr JP Thompson to look into the alleged attack. Staub, of the NC-Laboratory Defence Technology and Procurement Agency in Switzerland, was a new member of the team while Persson and Thompson had been to Mozambique for the Swedish and British investigations. The team received a briefing by Davey and a copy of the South African report on the incident. Davey reported on this briefing⁶² stating that the South African opinion of Thompson’s report was that: “it had selectively presented and distorted much of the available evidence, and its conclusions were unfounded.”⁶³ The South African delegation which met with the UN team in March 1992 comprised

⁶⁰ A. Andersson and S. Persson, “The final report given by the experts appointed by ASDI to assist the government of Mozambique in order to investigate the alleged use of chemical warfare agent(s) in the Ngungue Incident”, 3 March 1992, p8.

⁶¹ Ibid.

⁶² B. Davey, “Report on a meeting in Maputo with the United Nations team investigating the alleged use of chemical weapons by Renamo in January 1992”, 27 March 1992. This was a document prepared for internal circulation within the SADF and was made available to the public during the TRC hearing in 1998.

⁶³ Ibid., p1

those members of the SADF who had been part of the South African investigating team: Dr Brian Davey, Colonel Ben Steyn and Commandant Putter. Significantly Thompson was not present during the briefing of the UN team by the South Africans. Davey's briefing to the UN team included a note of caution in relation to the "special pitfalls to be aware of when interviewing Third World patients."⁶⁴ Davey informed the group that "inappropriate publicity of poorly verified incidents often had negative effects for those seeking advantage thereby. Widespread fear of CW in own troops results, with consequent panic at even the hint of battlefield smokes." In his internal report on the meeting to the SADF, Davey stated that the members of the UN team present agreed with South African criticisms of the UK report.

It is worth noting that in the absence of reliable biological or field samples all the teams involved in the investigations relied solely upon information gathered in interviews with troops involved.

With regard to the munition involved, the report of the Swedish verification mission concluded that the explosion was likely to have been caused by a military smoke munition. The UN report deals with the munitions aspect in some detail, stating that the explosion could have been caused by an exploding artillery or mortar shell.⁶⁵ The likelihood of the explosion being caused by a self-destructing rocket is ruled out since such a rocket "would not be expected to carry a chemical agent."⁶⁶ The use of a single artillery round or mortar shell is unusual in both conventional or chemical attack. However, if as has been postulated in the intelligence gathered for the Steyn Report,⁶⁷ the attack was conducted by the South African military as an experiment, it is not impossible that only one mortar shell, or a single artillery round may have been used, although this is significantly less than the amount prescribed for use in chemical warfare. According to an interview conducted by the UN delegation with Eduardo Malata, head of the military engineers of the Maputo Commando, the

⁶⁴ Ibid., p2.

⁶⁵ Ibid., p10.

⁶⁶ Ibid., p10.

⁶⁷ "Staff Paper prepared for the Steyn Commission", 1 December, 1992.

explosion which caused the dark cloud of smoke could not have been caused by a mortar. A mortar explodes on the ground whereas the explosion that caused the smoke emission was in the air, suggesting the use of a proximity fuse. The UN report goes on to state that whilst it is improbable that a chemical attack would be planned using a single round, "it cannot be excluded that the limited quantity of agent that could be delivered would have had an effect which could have been exacerbated by local climatic conditions and limited water supply."⁶⁸

All reports about the incident and interviews with patients agree that the troops experienced a rise in body temperature after the alleged attack, accompanied by irrational behaviour and desperate attempts to cool down leading the troops to remove their clothes. Thompson summarised the common symptoms as: "a feeling of tremendous heat on the skin, severe thirst, sore throat, loss of self control, emotional lability, muscular weakness, visual disturbance and difficulty breathing."⁶⁹ Biological samples taken by both Davey and Thompson failed to yield significant results. Davey tested the samples taken for cholinesterase levels and also found the results to be inconclusive, however, given the length of time between the incident and the tests this is not surprising.

The UN report presented two interpretations of the symptoms, reflecting the opinions of Heiner Staub on the one hand and JP Thompson on the other. Staub believed that the symptoms experienced by the troops were the result of dehydration and resultant heat stress. Thompson contended that the symptoms were consistent with exposure to a centrally acting atropine-like agent. It is relevant to note that Joachim Jonasse, a Mozambican lieutenant with 12 years experience in the military, said that the troops had no water supply problems.⁷⁰ One soldier⁷¹ stated that the soldiers found 25 drums of water when they entered the Renamo base. Three of the drums were taken by the first company of troops.

⁶⁸ Perrson, Staub and Thompson, 12 June 1992, p11.

⁶⁹ Thompson, "Report on an investigation into the alleged use of chemical weapons in Mozambique".

⁷⁰ B. Davey, "Chemical Incident Verification Mission Mozambique 22 – 24 January 1992", 29 January 1992.

⁷¹ Casualty 13 interviewed by Thompson on 30 January 1992.

The outcomes of these investigations reveal some of the problems experienced by verification missions whose terms and political agendas are determined by the governments that appointed them. A lack of trust between the teams and suspicions of cover-ups by the South African team hampered a free and honest discussion between the missions. The missions were also hampered by other circumstances - it was not possible to locate the site of the incident and, therefore, to take reliable environmental samples; the bodies of the deceased soldiers were in a state of advanced decomposition by the time the verification teams had access to them; and the bodies had been piled into a mortuary that lacked refrigeration facilities. These factors made it almost impossible for the verification missions to reach a conclusion as to the nature of the incident. All those consulted have however agreed that something strange happened and it raises the spectre that the SADF may, as claimed by the Steyn report, have seen an opportunity to test BZ on human subjects. Given the amount of time which has passed since the incident it is unlikely ever to be resolved satisfactorily.

Closing Down

The privatisation of Roodeplaat Research Laboratories and Delta G Scientific took place in 1990 and 1991; however, it was not until 1995 that the programme was finally and formally shut-down.

The fate of the chemical agents produced or procured by Project Coast remains almost as much of a mystery as the chemical incident in Mozambique. In January 1993, when Defence Minister Eugene Louw was briefed by Knobel about the CBW programme, he ordered that, in the light of the imminent signing of the CWC, all work on incapacitants should cease and the stocks be destroyed. It was decided at the same meeting that South Africa would not reveal the work done on CR in its declarations.⁷² A week later, South Africa signed the CWC which clearly states that “[E]ach State Party shall determine how it shall destroy chemical weapons, except that the following processes may not be used: dumping in any body of water It

⁷² Knobel and Steyn, “Voorligting aan die Minister van Verdediging”, 7 January 1993.

shall destroy chemical weapons only at specifically designated and appropriately designed and equipped facilities.”⁷³ Although the convention only entered into force in 1997, (following ratification in 1995), it would have been prudent for the SADF to have destroyed the chemicals in a way which was in keeping with the Convention. However, the chemicals were allegedly dumped into the sea.

On 29 January 1993, Basson reported to a meeting of the CMC⁷⁴ that the chemicals had been destroyed, though not quite as ordered. The Commissioner of Police who was supposed to assign a police officer to supervise the destruction failed to do so. According to Basson, the police did not want to be involved, so an officer from Military Intelligence’s counter-intelligence division, Commandant De Bruyn, was assigned to fulfill that function. The Minister of Defence had ordered that samples of the substances be taken and preserved by the Chief of the Defence Force until verification tests had been conducted by the SAP Forensics Laboratory, after which the samples were to have been destroyed.⁷⁵ Three months passed after the alleged destruction, before a document certifying the destruction of the chemical agents was drawn up.⁷⁶ Only in May, five months after the alleged destruction, did the police forensic laboratories receive for analysis samples, claimed to have been taken from the drums. Basson told the CMC that the chemicals had been packed in drums on a pallet, loaded into a South African Air Force aircraft and dumped in the sea off Cape Agulhas. According to Basson, American satellites had confirmed that the flight was made. How Basson knew if American satellites had spotted the drop is also unclear since this information is highly classified in the US.⁷⁷ Even if there was satellite

⁷³ Convention on the Prohibition of the Development, Production, Stockpiling and use of Chemical Weapons and on their Destruction, Part IV, Section C: Destruction, South African Government Gazette No 72, 2 May 1997.

⁷⁴ “Notule van die vergadering van die beheerkomitee van Projek Jota gehou op 29 Jan 1993 in die HF Verwoerd gebou, Kaapstad”, SADF document GG/UG/302/6/J1282/5, 29 January 1993.

⁷⁵ Steyn, “Bevestiging Notas” 7 January 1993.

⁷⁶ J.G. De Bruyn, “Sertifisering tov die vernietiging van Chemiese produkte op 27 Januarie 1993,” SADF document AI/UG/302/6/C123-2, 30 March 1993.

⁷⁷ Chandré Gould interview with Professor Milton Leitenberg, Pretoria, 30 October 2000.

confirmation of the flight, and confirmation that something had been dropped in the sea, the satellite would clearly not have been able to confirm the contents of the items dropped. While Basson reported to the CMC that samples had been taken at random from the drums by De Bruyn,⁷⁸ the certificate states that Military Intelligence felt it was better not to take samples, as this might draw attention to the operation.⁷⁹ This meant that the SADF (and later the High Court) had only Basson's word that the samples that were tested had in fact been taken from the drums which were dropped in the sea. Despite this the court found that there was no reason not to accept the fact that the substances had been destroyed, as stated by Basson.⁸⁰

On March 30 1993, De Bruyn was given another three samples of BX (Ecstasy) and "C" (cocaine) by Basson, and told they had also been taken on dumping day. De Bruyn said there were 18 blue plastic drums in all, which Basson said contained Product M. On June 9, 1993, all De Bruyn's samples were tested by Brigadier Hein Strauss at the South African Police laboratory.⁸¹ The amounts of substances destroyed represented in the various documents are not consistent, in addition to which since MDMA in capsule form was found amongst Basson's possessions in 1997, it is, therefore, unlikely that the MDMA was destroyed as reported. Indeed it was more than three months after the alleged destruction that pharmacist Steven Beukes was requested to manufacture 1 million capsules of what was found to be MDMA.⁸² Two batches of MDMA were manufactured at Delta G Scientific. The first batch was made using Sassafras oil.⁸³ The production of this first batch resulted in

⁷⁸ "Notule van die vergadering van die beheerkomitee van Projek Jota gehou op 29 Jan 1993", 29 January 1993.

⁷⁹ De Bruyn, "Sertifiseering tov die vernietiging van Chemiese produkte op 27 Januarie 1993", 30 March 1993.

⁸⁰ Judgement in The State vs Wouter Basson, paragraph 2131 points 33 – 39.

⁸¹ Affidavit of Heinrich Frederick Strauss, a Brigadier South African Police at the Forensic Laboratory, 9 June 1993.

⁸² Testimonies of Steven Beukes and André Koch in The State vs Wouter Basson, 29 October 1999.

⁸³ Testimony of Dr. J Koekemoer in The State vs Wouter Basson, South African High Court, Transvaal Division, 26 February 2001.

MDMA with 99,5% purity, production was completed by January and February 1992,

and the result was between 50kg and 70kg of MDMA. Later in 1992 Koekemoer manufactured 912kg of MDMA by the glycidic ester route.⁸⁴

When Basson was arrested, he was charged with the possession of a total of 3158 capsules of MDMA in addition to 38.6g in powder form. He was also charged with dealing in 96.9g of methaqualone and the possession of 14g of cocaine. He was acquitted on the latter three charges in a ruling by Judge Willie Hartzenberg on 18 June 2001. The state had alleged that the drugs had been found in the trunks found at the time of Basson's arrest. Basson's defence lawyers argued that there was no evidence that Basson was aware of the contents of the trunks, nor that he had packed the trunks himself, and their defence was accepted by the court.

If the substances were not destroyed as reported, the question of the whereabouts of the substances, including the BZ which Knobel reported the SADF had in stock, remains unanswered. The table below shows the chronology of events relating to the destruction of the chemical warfare agents and drugs.

Table 6. Chronological account of the alleged destruction of substances

30 July 1992

Letter from Philip Mijburgh of Medchem Technologies to Basson with a quote for the production of 1000kg of MDMA. Total cost of production quoted at R840 000. States time of delivery to be 6 – 10 weeks after payment.⁸⁵

7 August 1992

Knobel confirms the order for 1000kg of MDMA. Provides assurance of provisional immunity from prosecution.⁸⁶

⁸⁴ Ibid.

⁸⁵ Correspondence from Philip Mijburgh to Wouter Basson, "Offer for the manufacture of Baxil", 30 July 1992.

⁸⁶ D.P. Knobel, "Produksie van d-N,a-DIMETHYLPHENETHYLAMINE (BAXIL)", 7 August 1992.

September 1992

Basson allegedly deals with Croatian suppliers for the acquisition of 500kg of methaqualone.⁸⁷

6 November 1992

Payment of \$2 300 000 into Jacomet's account in Switzerland to pay Croatian suppliers for 500kg of product M (date is given for its delivery in SA). It is unlikely that this is the 500kg of product M said to be in the SADF stores in the letter dated 9 November 1992.⁸⁸

9 November 1992

Letter from Basson, signed by Knobel, about what substances are in SADF stores: "The following specialist chemicals are in stock at the South African Medical Services which will be worked up in the 1993/1994 financial year: (a) 1000kg product B, (b) 500kg product M, (c) 30kg Product C".⁸⁹ [These were BZ, methaqualone and cocaine, respectively]

31 November 1992

CMC of Project Coast decides that, given the upcoming signing of the CWC and the resulting difficulty in procuring chemicals, all procurement actions necessary to complete the offensive programme and which are dependent on external involvement should be expedited and completed by the end of 1992, if possible. R6.6 million was moved to the current financial year budget so that destruction can be carried out on 27 January 1993.⁹⁰

14 January 1993

South Africa signs the CWC.

29 January 1993

Destruction of agents reported to the CMC.⁹¹

30 March 1993

Certification of the destruction of chemical products on 27 January 1993. It is stated that the following products were in the load that was destroyed:

18 plastic drums (weighing 50kg, containing 100 litres, Product M) = 900kg (mandrax/methaqualone)

73 metal drums (weighing 12.5kg, 20 litres, product BX) = 912.5kg (MDMA)

2 metal drums (12.5kg, 20 litres product C) = 25kg (Cocaine)

2 containers (about 6kg, 12 litres product P) (it is not known what Product P was)

2 small metal drums (about 6kg, 12 litres, Product C) = 12kg

11 green metal drums (80kg, 200 litres, Product B) = 880kg (BZ)

4 paper drums (50kg, 200 litres, 2 with product M and 2 with product B) = 100kg each

⁸⁷ Knobel, "Kronologiese verloop van gebeure tov Kroatiese Transaksies".

⁸⁸ Ibid. D.P. Knobel, "Bevestiging van Ontvangs van Produkte Gelewer: Projek Coast/Jota", SADF document HSF/UG/302/6/C119, 9 November 1992.

⁸⁹ Knobel, "Bevestiging van Ontvangs van Produkte Gelewer", 9 November 1992. "Tans is daar in voorraad by die SAGD die volgende spesialis chemikalië wat in die 1993/1994 FJ verwerk sal word vir die bepaalde produkte: (a) 1000kg produk B; (b) 500kg produk M; (c) 30 kg produk C."

⁹⁰ Knobel, "Kronologiese verloop van gebeure tov Kroatiese Transaksies".

⁹¹ "Notule van die vergadering van die beheerkomitee van Projek Jota gehou op 29 Jan 1993", 29 January 1993.

2 cardboard boxes with 60mm and 81mm mortars.
Total Product M = 1000kg and Total Product C = 37kg.

Maj Gen Verbeek states it is not necessary to test the contents because it would draw too much attention.⁹²

End of March 1993

CMC decides that Basson must travel to Croatia to recover money lost during the procurement transaction.⁹³

After March 1993 (date unknown)

Mijburgh approaches Beukes to encapsulate a substance on Basson's orders for a state contract. He makes 1 million capsules from which Koekemoer takes samples. The police find the samples to contain MDMA.⁹⁴

7 April 1993 – 7 May 1993

Basson in Croatia.⁹⁵

May 1993

Brigadier Strauss of SAP Forensic Labs receives 4 samples from Colonel Ben Steyn marked B, BX, C and the fourth with no identification. He finds them to be:

B = 1-methyl-3-piperidyl benzilate

BX = 3,4-methylenedioxyamphetamine hydrochloride (MDMA)

C = cocaine hydrochloride

The fourth sample is found to be methaqualone.⁹⁶

11 May 1993 – 14 May 1993

Basson intercepts the Vatican bearer bonds intended for weapons purchase for the Croatian government.

28 June 1993

Basson arrested in Switzerland.

30 June 1993

Basson released.

⁹² De Bruyn, "Sertifiseering tov die vernietiging van Chemiese produkte op 27 Januarie 1993", 30 March 1993.

⁹³ Knobel, "Kronologiese verloop van gebeure tov Kroatiese Transaksies".

⁹⁴ Affidavit of Stephen Beukes at the TRC Hearing into chemical and biological warfare, Cape Town, 1998.

⁹⁵ Knobel. "Kronologiese verloop van gebeure tov Kroatiese Transaksies".

⁹⁶ Affidavit of H.F. Strauss, South African Police Forensic Laboratory, 9 June 1993.

2 July 1993

Basson back in South Africa.

24 Jan 1994

CMC instructs Basson to draw up the write-off values for the drugs allegedly destroyed.⁹⁷

1 Feb 1994

Write-off values as supplied by Basson.⁹⁸

Substance M: first 500kg = R 6 900 000

Second 500kg = R 7 440 000

Total = R14 340 000

Substance BX 912.5kg = R3 650 000

Substance C 37kg = R2 590 000

Substance P 1 kg @ R40 000/kg = R 40 000

Substance B 980kg = R1 176 000

TOTAL VALUE = R21 796 000

18 Feb 1994

Letter of demand for payment from Organochem's Jerry Brandt who supplied the formula for the production of MDMA and 4 PMK deliveries. PMK was one of the starting substances for a particular process of manufacturing MDMA, a process that was ultimately not used.⁹⁹

9 January 1995

Minutes of CMC indicate Knobel has not yet contacted the Attorney General regarding destruction of chemicals. The minutes state that Knobel wanted to first get a written report from Colonel Venter of the SAP and that the Attorney General wanted a valuation of the substances destroyed.¹⁰⁰

29 March 1995

Surgeon General is instructed to find out from the Attorney General what his investigation found.¹⁰¹

13 September 1995

South African ratification of the Chemical Weapons Convention

⁹⁷ "Notule van die vergadering van die Beheerkomitee van Projek Jota gehou op 24 Januarie 1994 in die kantoor van HSAW", SADF document GG/UG/302/6/J282, 24 January 1994

⁹⁸ Wouter Basson, "Afskryfwaardes" (Write-off values), 1 February 1994.

⁹⁹ Correspondence from Viljoen French & Coter on behalf of J. Brandt to John Truter, Sefmed Information Systems, 18 February 1994.

¹⁰⁰ B. Steyn, "Voordrag aan die Beheerkomitee van Projek Jota oor die toekomstige bestuur van Chemies-Biologiese en Stralings Beskerming en Verdediging in die SANW", SADF document GG/V/306/3, 9 January 1995.

¹⁰¹ "Notule van die Beheerkomitee van Projek Jota wat gehou is op 29 Maart 1994 by die Kantoor van HSAW" SADF document GG/UG/302/6/J1282, 29 March 1994.

29 January 1997

Basson arrested on charges of drug trafficking by the South African Narcotics Bureau during a deal in which he was alleged to have sold a large quantity of Ecstasy capsules to Grant Wentzel.¹⁰² Basson contested this allegation saying that he was unaware that a refuse bag containing the Ecstasy was contained in a box of wine which Wentzel had allegedly given him. Basson said that transaction with Wentzel involved the sale of small arms. His version was later accepted by the court.

12 May 1997

Letter from the Attorney General to the Head of the South African Air Force, Hechter, requesting details of the flight during which the drugs allegedly were destroyed.¹⁰³

27 May 1997

Letter from the Head of the South African Air Force stating that there was no list of passengers for the flight and that the 4 or 5 people aboard were not known to the Air Force; that there were no flight plans and that there were allegedly 20 blue drums on board.¹⁰⁴

By the end of 1993 all South African chemical warfare agents had allegedly been destroyed and SADF contracts with the two companies cancelled. No records are available to confirm that the biological agents were destroyed. Indeed there is great uncertainty about what happened to RRL's culture collection.¹⁰⁵ Microbiologist Mike Odendaal said he gave it to André Immelman when he left RRL,¹⁰⁶ and he believed that Immelman was going to destroy it. Some of the scientists believed that the cultures could have been taken by their colleagues for their own research purposes. Daan Goosen claimed in 2002 that he had access to the culture collection and indeed set a process in motion to sell items from the collection to the CIA (see the section in this chapter headed: Proliferation Threats for details).

¹⁰² Charges 25 – 28 in The State vs Wouter Basson, South African High Court, Transvaal Division, 1999.

¹⁰³ J.P. Pretorius, "Verlangde inligting en verklaring: Chemiese Biologiese Oorlogvoeringondersoek: Dr. D'Oliveira Spesiale Ondersoekspan: Navraag Nommer 276/96", 12 May 1997.

¹⁰⁴ Lieutenant General Hechter, "Verlangde Inligting en Verklarings: Chemiese Biologiese Oorlogvoeringondersoek: Dr D'Oliviera Spesiale Ondersoekspan: Navraag Nommer 276/9", 27 May 1999.

¹⁰⁵ Gould interview with Daan Goosen, 18 January 2001.

¹⁰⁶ Gould interview with Dr Mike Odendaal, 1 December 2000.

Another set of unanswered questions about the closure of the programme relates to the whereabouts of the technical information. Towards the end of the programme, in 1993, the CMC decided that all technical data generated by the programme should be saved on optical disk and the documentation destroyed. Prior to this, at the end of 1989, Basson and Knobel had written to the Deputy Auditor requesting authorisation to destroy documents relating to the project. The letter notes that all technical, scientific and operational documentation had been kept at a central office, known as Project Chancellor, since 1987.¹⁰⁷ Knobel and Basson presented three reasons to motivate their request to destroy the documentation: (i) the large amount of space needed to store the documents and the difficulty in ensuring security; (ii) some of the documents were deemed to be no longer relevant since there had been a change in the philosophy behind the project; and (iii) future directions in the development of the project render some of the documentation irrelevant.¹⁰⁸ Their letter argued that destroying the documentation would afford more security to the project, and that since most of the technical documentation was lodged with the “sub-projects” nothing would be lost¹⁰⁹ (I presume that the sub-projects referred to are the front companies). It was also said that the sub-projects had already been ordered to destroy any documentation that could link them to the SADF. Information relating to project management would only be kept for two years, for purposes of auditing. The requests were approved by the Deputy Auditor in 1990.

A year later, in 1991, Philip Mijburgh changed the name of his company Medchem Technologies to Data Images Information Systems.¹¹⁰ This company was contracted to place all technical information of Project Coast on optical disk. The company Data Images still existed in 1998 when Mijburgh testified at the TRC hearing. When questioned at the TRC hearing, Mijburgh said he did not know what happened to the

¹⁰⁷ W. Basson and D.P. Knobel, “Toestemming vir vernietiging van Projekdokumentasie: Projek Coast”, SADF document GG/UG/302/6/COAST/5/1, 21 November 1989.

¹⁰⁸ Ibid.

¹⁰⁹ Ibid.

¹¹⁰ Mijburgh at the TRC hearing, 7 July 1998.

disks or whether the technical documentation had been destroyed as ordered.¹¹¹ Klaus Psotta and a woman whose surname he could not remember, worked on capturing the information on disk. (Knobel testified that Dr Kobus Bothma was also involved with this process).¹¹² Mijburgh testified that Basson was not involved in the data capturing process at all, save for giving the initial instruction in 1992 or 1993 for the work to be done. Mijburgh stated that all research reports and related documents from Delta G were captured on the disks. He was not able to confirm whether similar information from RRL was captured.¹¹³ It is not clear how Mijburgh was granted the contract to capture the information. He did testify that when the company Sefmed closed down, Data Images bought all its computer equipment and general office equipment.¹¹⁴

Knobel testified at the TRC hearing that 13 optical disks were obtained from Data Images and given to him by Colonel Ben Steyn. This was confirmed by Steyn at the Basson trial.¹¹⁵ The disks were then apparently placed in a safe attached to Knobel's office. After the US and UK ambassadors' approach in 1994, and particularly after those countries expressed concern about the safety of the information on the disks, Knobel consulted President FW de Klerk. It was decided that to ensure the security of the information, the president, Knobel and Steyn would all have to be present in order for the disks to be accessed. Accordingly, a small safe containing the disks was placed inside a large safe which required two keys and a combination to open it. The president had one of the keys to the large safe as well as the combination, Knobel kept the other key to the large safe and Steyn had the combination of the large safe and the key of the smaller safe. With the change in government in April 1994, the

¹¹¹ Ibid.

¹¹² Knobel at the TRC hearing, 18 June 1998.

¹¹³ Mijburgh at the TRC hearing, 7 July 1998.

¹¹⁴ Ibid.

¹¹⁵ Testimony of Ben Steyn in The State vs Wouter Basson, South African High Court, Transvaal Division, 6 September 2000.

situation remained the same. After the 1995 démarche, the key and combination in his control was passed over to Deputy President Thabo Mbeki.¹¹⁶

Despite these elaborate precautions there is evidence that the technical information from Project Coast was not destroyed as Basson had stated to a CMC meeting in January 1995.¹¹⁷ Knobel was mandated at this meeting to determine whether the process of capturing the information had been completed correctly and all the documents destroyed. Knobel's action in this regard consisted of interviewing Basson who assured him that the process had been successfully completed. Accepting Basson's explanation at face value, as he did, Knobel was at best casual with information of profound public health importance. RRL scientists interviewed said they had not handed over all their project reports as requested by RRL management and that they retained their reports. Technical project documents from both Delta G and RRL were found in trunks at the time of Basson's arrest in 1997. A number of questions pertaining to the documentation of Project Coast remain unanswered: What is on the disks? How many copies of the disks exist? Are they all secure? Indeed, do such disks exist at all? Are all the technical documents found in Basson's trunks captured on the disks? How many of the scientists retained information on the projects they carried out?

As previously mentioned, Basson had been dismissed from the Defence Force on 31 March 1993, in the wake of General Pierre Steyn's report to FW De Klerk. But, he was immediately re-employed for twelve months to tie up the loose ends of Project Coast, including retrieving the money that was lost during the alleged deal to purchase methaqualone from Croatia. From March 1994 – October 1995 Basson was not employed by the military, but was reinstated by a cabinet decision in 1995. After his dismissal, despite having been re-employed, Basson pursued a number of business deals, including the development of links with Libya. These included consulting on the management of a planned railway line in Tripoli for three years from March 1993. He was also employed as a consultant on the construction of hospitals

¹¹⁶ Knobel at the TRC hearing, Cape Town, 8 July 1998.

¹¹⁷ "Notule van die vergadering van die Beheerkomitee van Projek Jota wat gehou is op 9 Januarie 1995 by die Kantoor van HNW".

in Libya.¹¹⁸ His close associate, Christopher Marlow, spent 18 months in Libya between 1994 and 1995 in connection with the business of a company, Libgro, set up by himself, Basson and Mijburgh. According to Marlow, Libgro was set up in 1993/94 specifically to handle “the Libyan arm of business”.

Testifying in court Marlow was adamant that in all his dealings with Libya he had absolutely nothing to do with intelligence matters, and that his involvement at all times was “purely business”.¹¹⁹ As discussed in Chapter 5, there were a matter of concern for the NIA, who were keeping watch on Pienaar because of his relationship with Murgham,¹²⁰ and US and UK intelligence services. Concern about these trips led the US and UK to urge the South African government to re-employ Basson in 1995 so that he could be brought under military control.¹²¹ There were fears that Basson had been transferring CBW knowledge to Libya.¹²²

On 11 April 1994 the ambassadors of the US and UK met with President De Klerk. According to Ambassador Princeton Lyman of the United States, who was present during these meetings, the US and UK were concerned that the South African CBW information was “in danger of being acquired by other states, in particular Libya,”¹²³ and that South African scientists could be recruited by these states. Reference to this meeting is made by Knobel in the document which formed the basis for his briefing of Mandela in August 1994. Under the heading “Enquiry by Ambassadors of The USA

¹¹⁸ Marlow in The State vs Wouter Basson, 2 – 6 February 2001. Pienaar in The State vs Wouter Basson, 14 February 2001.

¹¹⁹ Marlow in The State vs Wouter Basson, 2 February 2001.

¹²⁰ Engelbrecht in The State vs Wouter Basson, 13 February 2001.

¹²¹ Gould telephonic interview with Lyman, 14 June 2001. See also Burgess and Purkitt, “The Rollback of South Africa’s Biological Warfare Programme”.

¹²² Ibid.

¹²³ Ibid.

and UK¹²⁴” Knobel confirmed the intention of the meeting as explained by Lyman and added that the US and UK had requested further that:

- Their experts be fully briefed on the details of the SADF programme.
- Confirmation be given that the programme has been terminated and that no biological weapon systems are in existence.
- A public declaration to this effect be made.
- All cases of alleged abuse of the programme and its products be fully investigated and the results of this investigation be made available to them.
- That Mr Mandela should be fully informed about the programme.¹²⁵

The response from the De Klerk was terse. According to Knobel’s document he told the representatives that it was his intention to inform Mandela about the programme after the election, that South Africa would not submit a CBM declaration until the Government of National Unity was in place, and that the information on the disks was regarded as a national asset and would not be destroyed before discussions with the new government.¹²⁶ Mandela was also told that an overview of Project Coast had been given to a group of US and UK experts by Basson over a period of three days during which they had visited RRL.

A document used by the TRC in its 1998 hearing may have been the document on which Basson briefed the US and UK experts. The document is not dated and is merely headed “The South African CBW programme”. It states that South Africa had to develop a self-sufficient, defensive capability through the production of defensive equipment and through the establishment of defensive equipment research and development laboratories. At the same time it states that “the SADF would have to develop a plausible retaliatory ability in the case of chemical attack on its forces. This

¹²⁴ D.P. Knobel, “Briefing to President Mandela on the Defensive Chemical and Biological Warfare Programme of the SADF and the RSA’s position with respect to the CWC and BWC”, SADF document GG/UG/302/6/J1282/5, 18 August 1994.

¹²⁵ Ibid.

¹²⁶ Ibid.

ability would not necessarily have to be lethal, but would, against the backdrop of the possibility of highly lethal agents being deployed, have to be realistic enough to force an opposing force to deploy defensive measures to protect their own forces.”¹²⁷ It goes on to say that “no biological weapons or delivery systems would be developed.” This last claim is misleading since biological weapons and delivery systems were developed at RRL, but not for large scale delivery. The emphasis on the defensive nature of the programme was even more misleading since attention to the defensive aspects of the programme began only in 1988, seven years after the initiation of the programme. The document states that, for lethal agents, binary systems were considered “too inefficient” to develop, whereas for agent CR, a binary system was developed. This too is a misleading statement, because what would make a binary nerve-gas inefficient would also make a CR binary inefficient, probably a great deal more so. The US Congressional opposition to large-scale procurement of binary chemical weapons by US armed forces laid particular emphasis on the greater efficiency of the non-binary nerve gases that were already massively stockpiled.¹²⁸

On 22 April 1994, a week before South Africa’s first democratic elections, a second meeting took place between the US and UK ambassadors and President De Klerk. In this meeting De Klerk reaffirmed his commitment to briefing Mandela about the programme and agreed that the meetings between the technical experts from the three countries should continue. Contrary to the statement De Klerk made in his earlier meeting, however, he argued that a defensive programme had been justified and that the data resulting from the programme was a national asset which would not be destroyed.¹²⁹ Lyman recalls that after the 1994 election the US and UK waited for De Klerk to brief President Mandela. They believed that this briefing had to take place before Mandela’s inauguration. Five days before the inauguration, when the briefing had not taken place, the US “alerted Thabo Mbeki that there was a proliferation matter of great concern that we [the US and UK] would need to address

¹²⁷ “The South African CBW Programme”, undated document found in the trunks belonging to Basson at the time of his arrest in 1997.

¹²⁸ Electronic communication between Chandré Gould and Professor Julian Perry Robinson, Science Policy Unit, University of Sussex, 12 February 2001.

¹²⁹ Gould telephonic interview with Lyman, 14 June 2001.

with Mandela very soon in the new government.”¹³⁰ Mandela was urged to seek a briefing from De Klerk as soon as possible. A short briefing was given to Mandela a few days later and he received a fuller briefing some months later.

The continued trips undertaken by Basson to Libya were still a matter of concern to the US and UK.¹³¹ In January 1995 a third démarche was brought by the governments of the US and UK. Dr Graham Pearson, former Director-General of the UK Defence Ministry’s Chemical and Biological Defence Establishment at Porton Down,¹³² who was present during the meetings that followed, told me that the intention of the démarche was to request the South African government to provide a credible CBM statement to the BTWC.¹³³ He said that no comment was made about the nature of the programme and no questions were asked about it. Lyman records that the most difficult issue of the meeting was Basson’s travels to Libya and elsewhere. This discussion took place with Minister of Foreign Affairs, Alfred Nzo and Deputy Defence Minister, Ronnie Kasrils, after Mandela had left the meeting. It was agreed that the best way, at that stage, to deal with this matter was for Basson to be re-hired by the Defence Force in his capacity as a cardiologist. It was clear that this would lead to questions being raised but it “was the only recourse that appeared practical at the time.”¹³⁴

The annual submission to the BTWC has many parts, one of which is Form F, a Declaration of Past Activities in Offensive and/or Defensive Research and Development Programmes. The South African Confidence Building Measure Form F

¹³⁰ Ibid.

¹³¹ Ibid.

¹³² On 1 April 1995, Graham Pearson’s position as Director-General of the UK Defence Ministry’s Chemical and Biological Defence Establishment was abolished as part of a reorganization which removed the autonomy of the CBDE, folding the CBDE into a new super-agency, DERA. Pearson thereupon spent the last few months of his pre-retirement career as an Assistant Chief Scientific Advisor to the Defence Secretary.

¹³³ Chandré Gould interview of Graham Pearson, Brighton, UK, 31 August 2000

¹³⁴ Gould telephonic interview with Lyman, 14 June 2001.

(CBM F) declaration to the BTWC which followed the démarche was incomplete, and misleading in so far as it deliberately concealed relevant information about the programme.¹³⁵ The declaration states that the past “defensive biological research and development programme” began in 1987 and ended in 1992, rather than the 1983 – 1994 period that its own documents revealed. It also states that a “specific biological warfare threat against South African forces in operations in Angola was perceived.” There is no evidence, documents or information that such a threat existed. No mention is made in the annual CBM F Form of the work done at RRL (established in 1983), or of any component of the programme designed to research, prepare and use biological agents to kill people. In its official CBM F statements of 1996, 1997, 1998, 1999 and 2000 South Africa has continued to maintain the same position, notwithstanding the revelations of the TRC and the convincing evidence to the contrary.

Allegations of fraud

In 1989 the first indications emerged that the financial management of Project Coast had been extremely weak. By the time Basson’s criminal trial started in 1999 investigations into the use of the CBW programme’s funds had been underway for more than seven years (see Chapter 3).¹³⁶ The appointment of Swanepoel and Mijburgh as directors of the front companies appear to have signalled the shift in Basson’s approach to the CBW programme. While initially ideological convictions and professional ambitions drove him to establish and develop the secret programme, after 1985 he focussed a great deal of attention on the establishment of an arcane international system of companies with the apparent purpose of siphoning off Project Coast funds. Forensic auditor, Hennie Bruwer, found that over a seven year period R86-million of funds intended for Coast were channelled through bank accounts to which Basson had access, but which were never disclosed to the

¹³⁵ Confidence Building Measure F, Declaration of past activities in offensive and/or defensive research and development programmes, South African submission to the BTWC, 1995.

¹³⁶ Gould and Burger, Secrets and Lies, p91.

Surgeon General or the CMC.¹³⁷ In order to place the apparent ideological shift in perspective it is instructive to consider the political conditions in South Africa during the mid-1980s.

In August 1985 PW Botha presented his infamous 'Rubicon' speech following a great deal of media hype that he was to announce major shifts in his government's positions on political change. However, the speech fell far short of what had been promised.¹³⁸ The failure of Botha to significantly address the need for change as well as a number of other factors contributed to increasing international pressure on South Africa. Legum argues that at this time the conflicts in Southern Africa finally moved to near the top of the international agenda, until then "Western nations had not felt their interests in the region to be seriously jeopardised, even if the public conscience was troubled by the injustices of apartheid."¹³⁹ When in September 1985 Botha announced a national State of Emergency and initiated a repressive crack-down by the security forces on public opposition to apartheid Western nations began to reshape their policies towards the country. Legum makes the case that the "decision to declare a national emergency reflected the Pretoria government's increasing loss of power in being able to contain the challenge coming from the Black (sic) opposition."¹⁴⁰ The State of Emergency, he argues was the result both of increasing support within South Africa for the ANC policy of making the townships ungovernable and the failure of the security forces to stop incursions by Mkhonto we Sizwe cadres into the country. Aside from these indicators that the NP government was losing control inside South Africa, Legum identifies three other factors which indicated a change in the balance of power during the mid-1980s: (i) the government was unable to force negotiations with the liberation movements on its terms, particularly not without first releasing key political prisoners, including Nelson

¹³⁷ Ibid., p93.

¹³⁸ P.W. Botha, "Manifesto for the Future", text of the speech made by PW Botha in Durban on 15 August 1985.

¹³⁹ Colin Legum, The Battlefronts of Southern Africa, New York, Africana Publishing Company, 1988, p374.

¹⁴⁰ Ibid., p375.

Mandela; (ii) the South African business community began to place pressure on the government to negotiate with the ANC and to release Mandela, going so far as to open talks with the ANC in Zambia; and (iii) Botha failed to respond to pressure from Western leader to release Mandela resulting in tougher policies to force Botha to accept change.¹⁴¹

In addition, the Afrikaner Broederbond began to see the inevitability of political change. In 1986 the head of the Broederbond, Pieter de Lange, met with the ANC at a Ford Foundation conference in New York. Here Thabo Mbeki and De Lange held informal talks with the dramatic result that De Lange committed himself to facilitating change as long as the survival of the identity of the Afrikaner could be ensured.¹⁴² As a powerful political force in South Africa and within the NP, the acceptance by the Broederbond of the necessity for change placed additional pressure on Botha to undertake meaningful reform. According to Sparks, De Lange claimed that by 1986 “a majority of the brotherhood’s twenty thousand members voted to accept the principle of full citizenship rights for blacks.”¹⁴³

If the winds of change were already blowing through the Broederbond by 1986, there is no question that Basson would have been aware that his days of access to large reserves of freely available funds were numbered. In addition, the inevitability of and moral imperative for change undermined the ideological justification for the programme. If Goosen’s word can be relied upon, Basson’s justification for his involvement in the CBW programme before 1985 was that he wanted to be able to tell his children that he had done everything in his power to prevent a black government from taking power.¹⁴⁴ By the 1990s his collaboration with ANC members in business deals indicated that opportunism had trumped ideology.

¹⁴¹ Ibid.

¹⁴² Sparks, Tomorrow is Another Country, p55.

¹⁴³ Ibid., p57.

¹⁴⁴ Gould and Burger, Secrets and Lies, p28.

In his opening address in the criminal case against Wouter Basson, state prosecutor Anton Ackerman, who led the state's case on the fraud charges, told the court that Basson saw himself as an international businessman with a personal empire in five areas: property; finance; trading; scientific/production/research; and investment.¹⁴⁵ All of these, the prosecution claimed, were bankrolled from Project Coast funds. Ackerman told the court that the prosecution believed state funds had been siphoned off in various ways. First, he said, Basson set up an extensive network of companies in South Africa and abroad. At all times, confidantes appointed as executive officers acted as Basson's nominees. Funds channelled to fixed deposit accounts abroad served as "performance bonds" or security for the purchase of commodities. The prosecutors maintained that loans acquired against such collateral had been used by Basson for personal gain. Bank accounts were opened in the name of existing SADF front companies (or alleged fronts known to suppliers) and funds due to the SADF were channelled, according to the prosecution, through second accounts for Basson's personal use.¹⁴⁶

The state claimed that towards the end of 1986, Basson established three companies in the Cayman Islands: WPW Investments Inc, PCM International Inc, and Medchem Inc. Basson's American friend and business associate, David Webster, was instrumental in establishing and dealing with the companies. In each case, Basson was vice-president of the companies.¹⁴⁷ The multitude of companies were restructured often, sometimes on an annual basis and their names were frequently changed. Broadly speaking, the companies operating outside South Africa fell under the holding company WPW Investments; those that operated internally came under the umbrella of the Wisdom group.¹⁴⁸

¹⁴⁵ Anton Ackerman. "Openingsbetoog – Dr Basson", in The State vs Wouter Basson, South African High Court, Transvaal Division, November 1999.

¹⁴⁶ Ibid., The sale of protective CBW clothing as outlined in Charge 65 took place this way.

¹⁴⁷ Ibid.

¹⁴⁸ Ibid.

The prosecutors argued that Basson had a close group of trusted associates who took care of the running of the business, most of whom were employed by fronts of Project Coast.¹⁴⁹ They included Antionette Lourens (former wife of Jan Lourens) who was employed at Infladel, accountant Tjaart Viljoen, Wynand Swanepoel, Philip Mijburgh, Samuel Bosch (a banker who had been drawn in by Basson to deal with some of his financial matters) and advocate Christopher Marlow who was ostensibly legal adviser to Delta G Scientific and Project Coast.

Basson argued against the state's claims, saying that because Project Coast relied on the import of substances and equipment, SADF funds for this purpose had to be laundered to avoid international detection. He said that his role in the procurement process was of such importance that he had no choice but to masquerade as an international businessman. His legal defence team claimed that the companies established abroad were used to launder funds in the interests of the SADF. The fact that the companies never made a profit and that the business deals usually resulted in a loss only proved, according to the defence, that they were never intended to be profitable and had only been established to hide the origin of Project Coast's funds. The state, on the other hand, argued that the intention was to make a profit, but that Basson and his colleagues were poor businessmen.

According to the report of forensic auditor Hennie Bruwer, the WPW Group of companies was established in October 1986, at the time when WPW Investments Incorporated was registered in the Cayman Islands. The latter was alleged by the state to have been the holding company of Basson's international financial interests. Bruwer said that Basson's interests in South Africa were initially held by a controlling company Wisdom Investments and Properties – the founding company for what became the Wisdom Group, referred to extensively in Bruwer's report.¹⁵⁰ At the time of setting up WPW Investments Inc. in the Cayman Islands, two other companies were established: PCM International Inc. and Medchem Inc. In tracing the financial records of the companies in the Wisdom Group, Bruwer found that the names of the

¹⁴⁹ Ibid.

¹⁵⁰ H.J. Bruwer, "Projek Coast Forensiese Ondersoek", 10 November 1999.

companies and the shareholders changed regularly.¹⁵¹ Basson explained the establishment of the three different groups of companies, saying that he had realised during his initial discussions with a group of financial principals, who were involved in international black market CBW procurement deals, that 'the principals' comprised three distinct groups and his perception of the groups motivated him to set up three different corporations – one for the Libyans (WPW), one for the East Germans (MCI) and one for the Russians (PCM).¹⁵²

Documents found in possession of David Webster showed that at one stage WPW Inc had a 50% interest in Medchem Consolidated Investments, which in turn had a 75% interest in Delta G Scientific. Using available documents, the auditor extrapolated that this arrangement must have been implemented between April 1990 and August 1991, before the final privatisation of the company. The register of companies confirmed that for three months in 1989 Medchem Consolidated Investments was owned by Christopher Marlow, and thereafter by Philip Mijburgh. Meaning that Basson had a financial stake in the company and would have benefited from the privatisation.

The Wisdom Group was mainly funded through loans from WPW Investments Inc, which were channelled by the South African holding company to Wisdom Investments and Properties, allegedly established as the property division of Basson's empire in 1988 by Tjaart Viljoen. Wisdom Investments and Properties had three affiliates: Wisdom Finance; Wisdom Erf 1219 and Aeromed Services.¹⁵³ Another group of companies, Medchem, fell under the umbrella of Medchem Consolidated Investments. Philip Mijburgh was the managing director of this company. Dr Johan Koekemoer testified at the TRC hearing that between February 1992 and January 1993 he delivered MDMA to Medchem Consolidated Investments.

¹⁵¹ Ibid.

¹⁵² Basson in The State vs Wouter Basson, 24 July 2001.

¹⁵³ Ibid.

The delivery notes for the MDMA were made out to Kowalski International.¹⁵⁴ Mijburgh testified that this had been done for tax purposes; he also said that both Delta G and Kowalski were subsidiaries of Medchem Consolidated Investments. The Medchem group included Medchem Technologies which, according to Mijburgh's testimony to the TRC, changed its name to Data Images, the company responsible for capturing all the technical data of the CBW programme on optical disk.¹⁵⁵ Mijburgh was also director of a number of other companies in the Medchem group, including Ecotox (formerly named Maison de Medchem), Trudid Investments, and Medchem Sports International (which purchased property at the Fancourt golf development). He was a shareholder in other companies, many of which held contracts with the SADF.¹⁵⁶ Mijburgh also had interests in Medchem Pharmaceuticals, Lifestyle Management and Protechnik.¹⁵⁷

The agreements involving the privatisation of Delta G Scientific and RRL were the subject of Charges 23 and 24 in the indictment of Basson. Basson and Mijburgh were accused of having benefited from the privatisation of the company. Basson and Wynand Swanepoel were accused of having benefited from the privatisation of RRL. The state alleged Mijburgh, Swanepoel and Basson had communal business interests which Basson did not declare when the privatisation scheme was presented for authorization.¹⁵⁸

¹⁵⁴ Philip Mijburgh, MD of Delta G Scientific, purchased 50% shares in an import export company known as Kowalski International which was initially owned solely by Dr. ZE Kowalski, a Polish citizen. Kowalski introduced Basson and Mijburgh to a Russian by the name of Evstignevev who acted as a translator during Basson and Mijburgh's trips to Russia.

¹⁵⁵ Mijburgh at the TRC hearing, Cape Town, 7 July 1998.

¹⁵⁶ Ibid.

¹⁵⁷ Ibid.

¹⁵⁸ Basson was found not guilty on these charges by the judge who stated that the privatisation of the companies was done openly on the basis that the calculations were done by the buyers and the scheme had been presented to the Inspector General and the state advocate. The judge said that the scheme was presented to different ministers for approval and they examined and approved it. Judgement in The State vs Wouter Basson, para 2131 point 55.

The privatisation of Delta G took place following a letter from the Chief of the Defence Force, General AJ Liebenberg to the Minister of Defence, General Magnus Malan. In the letter, Liebenberg gave reasons for the immediate privatisation of Delta G Scientific and proposed how this might be done.¹⁵⁹ Liebenberg explained that in 1989 the Defence Force needed to create a distance between itself and Delta G, and therefore Medchem Consolidated Investments had come into Delta G as a majority shareholder. He said that the long-term plan was to enable Delta G to commercialise through the gradual withdrawal of the SADF “when an acceptable level of technological development had been reached in terms of CW research and development.”¹⁶⁰ Liebenberg said that the government would have found it difficult to deal with questions which could arise concerning the front company. He suggested, therefore, that all official research programmes be concluded in 1991 and SADF links to the ownership of the company should be severed. Liebenberg stated that it would be best if the process of withdrawal from Delta G could be completed before Magnus Malan ended his term of office at the end of August that year and proposed that the withdrawal of the state should be secretly managed by Medchem Consolidated Investments.¹⁶¹ The family relationship between Malan and Mijburgh (Malan is Mijburgh’s uncle) inevitably gave rise to questions of nepotism, however, it has never been proved that Malan benefited from the arrangement.

Liebenberg said that the greatest problem with regard to the change of ownership of Delta G was that a new owner would be able to deduce that the facility had produced products for the military, and security would be breached if a buyer from the chemical industry were sought. This problem, he suggested, could be overcome if the existing shareholders were to purchase the company, the only trouble with that option being the fact that the existing shareholders could apparently not persuade a bank to finance the purchase. Liebenberg argued that the only option, therefore, would be to cancel all research contracts with Delta G and carry over ownership to the

¹⁵⁹ A.J. Liebenberg, “Voorstelle mbt die Beeindiging van Kontraktuele verbintenis met die Medchem Groep miv 1 September 1991 – Implikasies en opsies: Projek Coast”, SADF document HSF/UG/302/6/C123, 9 August 1991.

¹⁶⁰ Ibid.

¹⁶¹ Ibid.

shareholders.¹⁶² Delta G was valued at the time at R20m. On Basson's advice, Liebenberg argued that it should be sold at a 40% discount. He pointed out that the state had an interest in the company through a R12m secured loan and that breaking ties with the company would result in the severance of the loan. The Defence Force would have to pay Medchem Consolidated Investments for the contracts it would terminate.

It was then proposed that:

- All contracts with the SADF should be ended.
- The contracts to be paid out for a 5 year period would amount to R37m.
- A 33% discount should be offered on the outstanding loan amount owed by Medchem to D John Truter Financial Consultants, leaving R8m owing.
- The land and buildings should be sold for an amount of R14m.
- Medchem should be allowed to pay off the outstanding loan amount immediately with the cancellation payment.
- Delta G should be allowed to purchase the land and the property holding company at a discount.
- The control which the SADF had over the Philip Mijburgh Family Trust with regard to the appointment of trustees should be ended.¹⁶³

The result of this proposal, approved at a meeting in Magnus Malan's Cape Town office in April 1990, was that Philip Mijburgh was authorised to take over the facility with R15 million in hand in the form of a payment to the company of which he was

¹⁶² Ibid.

¹⁶³ A.J. Liebenberg and W. Basson, "Magtiging vir die afverkoop van bates: Projek Coast", HSF/UG/302/6/C123, 19 August 1991.

director, Medchem Consolidated Investments.¹⁶⁴ Present at this meeting were the Minister of Defence, Magnus Malan; the Minister of Finance, Barend du Plessis; then Auditor-General Peter Wronsley (since deceased); Chief of Staff : Finance, Admiral Bekker; Chief of the SADF, General Jannie Geldenhuys; auditor Pierre Theron; General Niel Knobel; Wouter Basson; and Wally van Heerden of the auditor-general's staff. In his testimony at the Basson trial, Barend Du Plessis said that he had only been in office for a short period of time before being confronted with the privatisation of the front companies and that he had relied on information given to him by the auditor general. He said he had not been informed that Philip Mijburgh was related to Malan, nor that Basson stood to gain from the deal through his interests in Medchem Consolidated Investments.¹⁶⁵

A similar proposal was made with regard to the sale of RRL, also in the form of a letter from Liebenberg to Malan.¹⁶⁶ This letter stated that RRL was fully functional by the end of 1988 and that until January 1989 the management of Project Coast had a direct role in the direction of the company through attendance at directors' meetings, but that this had been stopped for security reasons.¹⁶⁷ From the beginning of the 1989 financial year indirect control was exercised through monthly meetings and consultations with the managing director. The letter claimed that RRL attracted attention from the private sector and, although no links to the state could be proved, the situation created considerable stress for the management of the company. This was a strange claim in the light of the fact that RRL actively sought contracts from the private sector. The proposal states that until the end of the 1989 financial year all financing of the company had been undertaken by the SADF and there were no profits or losses registered. Very little income was earned from other sources such as

¹⁶⁴ "Alternatiewe tot die verandering van die SAW se belang by CO navorsing & ontwikkeling mbt die Medchem groep van maatskappye", 12 August 1988. Testimony of Knobel in The State vs Wouter Basson, 16 November 1999.

¹⁶⁵ Testimony of Barend du Plessis in The State vs Wouter Basson, South African High Court, Transvaal Division, 8 August 2000.

¹⁶⁶ Liebenberg and Basson, "Magtiging vir die afverkoop van bates: Projek Coast".

¹⁶⁷ Ibid.

private sector contracts. From the beginning of the 1989/90 financial year the system of financing was changed and formal contracts were entered into. The total loan amount made available to the company at that stage had been fixed at R22,469,000.¹⁶⁸

Liebenberg's letter further states that it was almost impossible to sell RRL or to bring in partners from the biological industry. He proposed that the company should be privatised, but with the precaution that it was essential that the new owners have a positive attitude towards the SADF which meant that key people within the company should remain involved. At the time, the three directors (Schalk van Rensburg, André Immelman, and Dawid Spamer) each had a 20% share in the company while the managing director (Wynand Swanepoel) had a 40% share. It was proposed that the company be taken over by van Zyl and Partners (Pty) Ltd and the RRL Employees Trust. In terms of this arrangement, Van Zyl and Partners would have 75% share and the employees a 25% share. Swanepoel was named as the owner of Van Zyl and Partners. Basson and Liebenberg agreed that the interests of the SADF would be protected by Swanepoel's holding of the controlling shares.¹⁶⁹

The state, which had an outstanding loan to RRL of R12, 25 million, allowed Swanepoel's company to take over the loan, to be paid back over a period of eight years, the first three years interest-free. It was agreed that the facility would be rented from the company which had been established to own the property. This proposal was accepted by the Minister of Defence, Magnus Malan, and the Minister of Finance, Barend Du Plessis.¹⁷⁰ In the end, R18 million was available, and paid out to shareholders as follows:¹⁷¹

Contrasida Holdings (WP Swanepoel)	R4 671 677
Wynand Swanepoel Trust	R4 488 474

¹⁶⁸ Ibid.

¹⁶⁹ Ibid.

¹⁷⁰ Ibid.

¹⁷¹ Bruwer, Projek Coast, 10 November 1999, p291.

A Immelman	R2 334 940
DW Spamer	R2 334 940
DS Van der Merwe	R1 257 275
P Delpont	R 718,443
JJ Nieuwenhuis	R 589 700
J Davies	R 589 700
S Wandrag	R 589 700
JJ Hendriks	R 359 221

Delta G was eventually sold to a subsidiary of the multinational DOW Chemicals and the facility has since been abandoned. RRL was purchased by the Department of Agriculture and currently houses the Plant Protection Research Institute of the Agricultural Research Council, so the state effectively paid for the facility three times.

Proliferation threats

At the time of the Truth Commission hearings the NIA expressed the concern that the names of scientists involved in the programme should not be made known, in case they became vulnerable to recruitment attempts by governments interested in acquiring a CBW capacity. This concern may have come too late. The first incident, about which information is available, involved an approach by a foreign government to former Project Coast scientists sometime after 1993 when Jan Lourens was approached by Ters Ehlers, PW Botha's last private secretary, who has since been linked to the supply of arms to Rwanda during the 1994 genocide.¹⁷² Ehlers introduced Lourens to a friend of his from Syria who Lourens remembers as Mr Saroojee.¹⁷³ Lourens recalls that Saroojee was "quite open in his request for technology in the form of documentation or skills."¹⁷⁴ Lourens had left Protechnik

¹⁷² S. Brummer, "How Ehlers sold arms to the Hutus", Mail and Guardian, 15 November 1996. Joost Hilterman, "Post-Mortem on the International Commission of Inquiry (Rwanda)", Human Rights Watch Arms Project, Bulletin of Concerned Africa Scholars, http://www.iansa.org/documents/research/res_archive/r19.htm.

¹⁷³ Electronic communication between Chandré Gould and Jan Lourens, 14 February 2001.

¹⁷⁴ Ibid.

already and told me “there was no way I was going to address the matter with Charles [Van Remoortere] and company.” Lourens told Mr Saroojee that he could not purchase documents, but after some discussion, the details of which Lourens could not remember, Saroojee asked about purchasing skills: “I cannot recall exactly how we arrived at André Immelman. I do recall however that we did not approach any other scientist, André may have had a specific skill required.” Lourens subsequently introduced Immelman to a small group of Syrians. Immelman recounted that he attended a meeting which took place at a house in Johannesburg. Two of the men introduced themselves as a general and a retired general from the Syrian Army.¹⁷⁵ There was a discussion about chemical and biological warfare. Immelman and Lourens asked the men whether they had laboratories for the analysis of chemical agents and for the culturing of bacteria. It was suggested by the South Africans that Lourens and Immelman could go to Syria to evaluate their facilities if necessary. During the discussions the Syrians showed a broad interest in chemical and biological warfare, which Immelman did not find surprising in the light of “the knowledge that Israel has a chemical and biological warfare capability.” Immelman asked what the source of the political tensions between Israel and Syria were. These were explained. The Syrians then said they had an important meeting to attend and left. No further contact was made with Immelman and he did not travel to Syria. He cannot recall the names of the people who attended the meeting.¹⁷⁶ A senior official formerly of the NIA’s Non-proliferation Unit told the authors that the NIA had not been aware of the Syrian contact.

In 2003 the Washington Post approached me to assist them to investigate a story involving an attempt by Dr Daan Goosen in 2002 to sell his services and biological cultures from Project Coast to the CIA. Goosen initially hoped to make \$5 million from the deal and to secure green cards and employment in the US for himself, his

¹⁷⁵ Telephonic discussion between Chandré Gould and André Immelman, 16 February 2001.

¹⁷⁶ Ibid.

family and a handful of scientists formerly employed by RRL.¹⁷⁷ The clandestine deal involved a former general in the South African Defence Force, Tai Minnaar, who acted as an intermediary between Goosen and former CIA agent, Don Mayes. The deal followed an attempt by Goosen to interest US vaccine production company, Bioport, in employing him and a group of South African scientists to produce recombinant vaccines. Bioport had indicated some interest but was concerned about the security implications of the deal. Mayes wrote in a letter to his colleague, Bob Zlockie, that “Dr Lallan Giri [Vice-President of the Scientific and Regulatory Affairs Group] said ... that the project is too sensitive for Bioport and that DOD would pursue the issue, Bioport would, however, love to have the products.”¹⁷⁸

Following the failure of his approach to Bioport, Goosen contacted Minnaar who wrote to Mayes (who he had known for a number of years) offering him an antidote for a virulent strain of an unidentified organism (presumed to be anthrax), all the “personal notes and data compiled over the years of research” [by scientists at RRL] and “stock in hand” [the culture collection] as well as the services of a research team composed of scientists who had formerly worked at RRL.¹⁷⁹ The correspondence between Mayes, Zlockie and Minnaar shows that from late March, when it was clear that Bioport could not be involved in the deal, Mayes began negotiations with the Federal Bureau of Investigation(FBI) to take the deal further.¹⁸⁰ The deal was to involve the sale of:

One hundred eighty nine strains Anthrax Strains (sic) were grown DNA finger-printed and logged. Thirty of the above strains are virulent. Twelve are very active and virulent. Three are deadly and ideally suited for Mass Destruction in a Warfare Programme. All cultures that were grown have been kept under strict Lab. Conditions under the control of the senior scientist [Goosen]. These cultures would need to be flown to

¹⁷⁷ Joby Warrick and John Mintz, “Lethal Legacy: Bioweapons for Sale”, Washington Post, 20 April 2002, pA01. See also Chandré Gould and Alastair Hay. “A Decade of Deceit”, in Mark Wheelis, Malcolm Dando, Lajos Rosza (eds), Deadly Cultures: Biological Weapons Since 1945, Cambridge, Harvard University Press, forthcoming November 2005.

¹⁷⁸ Facsimile from Don Mayes to Bob Zlockie, 13 March 2002.

¹⁷⁹ Facsimile from Tai Minnaar to Don Mayes, 4 March 2002.

¹⁸⁰ Electronic message from Zlockie to Mayes, 20 March 2002.

the US by a US army plane under strict safety measures and US control. Antidotes were developed for EACH of the abovementioned Strains... All notes on the research of all the scientists would come with the group.¹⁸¹

The initial asking price was an ambitious US\$200 million not including the relocation costs of 37 people.¹⁸² However, it would appear that Goosen was offering more than he had to sell as, according to Odendaal, RRL's culture collection only ever included 45 strains of anthrax, which had been collected in the Kruger Park,¹⁸³ only one of the strains in the collection was virulent, none were anti-biotic resistant and the antidotes were old and no longer viable.¹⁸⁴ This offer from Goosen came shortly after anthrax infected letters had been sent to key individuals in the US in October 2001 causing widespread panic and provoking fears that terrorists would use biological agents in a future attack on the United States. It is clear that Goosen and Minnaar were hoping to profit from the heightened threat perception in the US by appealing to their fears that if they rejected the deal Goosen and Minnaar would seek alternative buyers who might in turn use the biological agents against the US.

Before going ahead with the deal Mayes demanded proof of the products Minnaar was offering. Goosen, meanwhile, visited China to discuss control of foot and mouth disease with the Chinese authorities. When Minnaar informed Mayes and Zlockie about the trip it had the desired effect – the US authorities became extremely concerned that Goosen might intend selling the package deal to the highest bidder.¹⁸⁵ However, instead of increasing their willingness to pay the high price to secure the items it created tensions between Minnaar and his CIA contacts and the deal began to sour. These setbacks aside, Mayes wrote to FBI agent, Rea Bliss, on 9

¹⁸¹ Communication from Minnaar, "Brief Response to the Questions Asked", 22 March 2002.

¹⁸² Ibid.

¹⁸³ M.W. Odendaal, P.M. Peterson, V. De Vos et al, "The anti-biotic sensitivity patterns of Bacillus Anthracis isolated from the Kruger National Park", Onderstepoort Journal of Veterinary Research, 1991, p58.

¹⁸⁴ Chandré Gould and Alastair Hay interview with Mike Odendaal, Pretoria, 26 January 2004.

¹⁸⁵ Electronic communication between Minnaar and Zlockie, 1 and 2 April 2002.

April 2002, stating that the transfer of the “material” from its location in South Africa to the United States, could be successfully undertaken “with no exposure for the USG [United States government] except for funding.”¹⁸⁶

Goosen appears to have convinced Mayes that he held the rosetta stone to the South African biological weapons programme since Mayes’ proposal to the FBI for removing the pathogens from South Africa included a statement that

The present government of SA is aware of the Biological Research Program to a limited extent. They are unaware of the advanced development and present existence of the deadly strains or the developed antidotes. The anthrax, antidotes and laboratory R&D documentation are presently in the control of Dr Goosen and a few of his research associates.¹⁸⁷

Securing the pathogens would remove the threat that they could be used for sale at a later date, or be used by the South African government in a future programme. A possibility that did not seem unlikely to the Americans. Mayes proposed a plan that would not alert the South African government to the transaction. He warned of “serious consequences” if the South African government were to become aware which would “ultimately deny the Anthrax (sic), technical data and antidotes to the USG.”¹⁸⁸ Mayes suggested that the pathogens be shipped using private boats which would attract little attention.¹⁸⁹ A detailed shipping plan, including options for ensuring plausible deniability, was presented to the FBI.¹⁹⁰ In May 2002 Goosen provided proof of his bone fides in the form of a sample of “Escherichia coli 078:K80 (+K60 GM).”¹⁹¹ This bacteria which can cause severe intestinal upset had had an even more toxic gene inserted into its genetic code. The inserted gene which results in the

¹⁸⁶ Letter from Donald Mayes, on the letterhead of the ICT Aviations Programs Group, to Rea Bliss (Federal Bureau of Investigation, 301 Simonton Street, Key West, FL 33040), 9 April 2002.

¹⁸⁷ Ibid., attachment to the letter headed: “SA”, 08 April 2002.

¹⁸⁸ Ibid.

¹⁸⁹ Ibid., p7.

¹⁹⁰ Ibid., p7.

¹⁹¹ Warrick and Mintz, “Lethal Legacy: Bioweapons for Sale”.

production of the epsilon toxin (causing botulinal poisoning in animals) had been inserted at RRL by Adriaan Botha and it is presumed that Botha gave Goosen the material. The sample was sealed in a glass cylinder and inserted into an ordinary toothpaste tube surrounded by a cooling gel.¹⁹² Zlockie flew on a commercial airline from South Africa to the US where the tube and its contents were given to Bliss.¹⁹³

The Washington Post found that the sample was tested at the US BW Defense laboratory at Fort Detrick and found to be exactly as described by Goosen.¹⁹⁴ Yet, rather than being convinced to go ahead with the deal, the US authorities changed their mind about the deal deciding that there was “no compelling reason for paying Goosen or excluding the government of South Africa from an operation affecting the security of biological material.”¹⁹⁵ A few days later the FBI informed the SAPS about the plan. The police searched Goosen’s laboratory in South Africa. Goosen, however, claims that he had been warned in advance with the result that the police found nothing incriminating.¹⁹⁶ Minnaar, in the meantime, continued to seek potential buyers for the products Goosen claims to have had. This enabled the police to set up a sting operation with someone posing as a sheik from Qatar wanting to buy anthrax. Goosen said he cultured a strain of anthrax used in vaccine production (non-infective strain) and gave that to the sheik. If this is what was traded it might explain why the sting failed and why there were no arrests. In September 2002 Minnaar died in suspicious circumstances and the media speculated that his death was tied to his involvement in the deal.¹⁹⁷

¹⁹² Ibid.

¹⁹³ United States Department of Justice, Federal Bureau of Investigation, Receipt for Property received: “One toothpaste tube containing one ampoule of Ecoli genetically coded with epsilon toxin”, 9 May 2002.

¹⁹⁴ Warrick and Mintz, “Lethal Legacy: Bioweapons for Sale”.

¹⁹⁵ Ibid.

¹⁹⁶ Chandré Gould interview with Dr Daan Goosen, Johannesburg, 17 February 2003.

¹⁹⁷ “SA General Touted Anthrax Abroad”, Mail and Guardian, 24 January 2003.

After the failure of the deal and the SAPS investigation Goosen remained closely associated with the NIA.¹⁹⁸ Whether this was because he had managed to convince the NAI had he had something to offer them or whether the NIA was merely hoping that by keeping him close to them he would be prevented from pursuing deals like this in the future which would deeply embarrass the South African government is unclear. Goosen and those of his close associates who stood to benefit from the deal certainly pose a proliferation threat particularly since Goosen made no secret of the fact that he was motivated largely by a need for financial security, although he told Mail & Guardian journalists that concern about the safety of the items and a desire to “safeguard the skills and material developed by the South Africans against the threat of proliferation” contributed to his decision.

There is reason to doubt this latter claim by Goosen since, if he could make the case that he was indeed trying to put the biological agents out of harm’s way, it might have been difficult for the South African authorities to successfully prosecute him under the South African non-proliferation legislation. The Non-Proliferation of Weapons of Mass Destruction Act of 1993 (Act 87 of 93) includes Article I of the BWC.¹⁹⁹ The relevant section states that it would be an offence if an individual sought to transfer material in “types and in quantities that have no justification for prophylactic, protective or other peaceful purposes”.²⁰⁰ Since this legislation has not yet been tested in court it is unclear how it will be interpreted and Goosen would certainly argue that his intention was to secure the items. The act also regulates the export and transfer of a comprehensive list of pathogens and genetically modified organisms. If Goosen violated the South African legislation to control export of genetically modified organisms²⁰¹ through the transfer of the modified Ecoli to the US successful

¹⁹⁸ Sam Sole and Stefaans Brümmer, “Bid to hijack SA bio-stocks”, Mail & Guardian, 25 April 2003

¹⁹⁹ Notice Under Section 13 Of The Non-Proliferation Of Weapons Of Mass Destruction Act, Act No. 87 Of 1993: Declaration Of Certain Goods And Technologies To Be Controlled And Control Measures Applicable To Such Goods, Government Gazette No 23308, Notice No 428, 10 April 2002.

²⁰⁰ Ibid.

²⁰¹ The Genetically Modified Organisms Act, Act No 15 of 1997.

prosecution would require the cooperation of the US authorities to provide proof of shipment, co-operation which is unlikely to be forthcoming.

The closure of any CBW programme raises the problem for authorities of how to control the knowledge and skills developed by the scientists who worked within the programmes. In the case of the South African programme it would have been difficult for the government to have re-employed the scientists of Project Coast as a way of controlling the proliferation danger. The post-1994 ANC government was lampooned by the national press when it was discovered that Wouter Basson had been re-employed by the military. The fact that his re-employment was at the request of the US and UK governments who were concerned about his potential role in assisting proliferation in Libya was not taken into consideration in the court of public opinion. What South Africans saw was that the post-apartheid government was prepared to employ a man believed to have been responsible for gross human rights violations. The large-scale re-employment of scientists from the NBC programmes would have found little support from ANC supporters and would have been very difficult for the ruling party to justify to its electorate. In addition, those who were suspicious of the actions of the government would have raised concerns that the re-employment of the scientists was evidence of the continuation of a biological weapons programme. Given these factors it is not surprising that the ANC government chose to allow the scientists to reintegrate into their professions by returning to academia or finding jobs in the private sector. Yet it is likely that questions about the potential for the scientists to contribute to proliferation in future will continue to haunt South Africa for many years to come.

CHAPTER 7

TRC hearing and Basson's trial

By 1997 Basson's fortunes had changed dramatically. From living the life of a successful international businessman with all the trappings: overseas flights in the Jetstar, a private box at the Pretoria rugby grounds - Loftus Versveld - and an exclusive home at Fancourt, with unlimited SADF funds at his finger tips, he was reduced to much smaller-scale illicit deals on the black market. Indeed, by the end of 1996 three major investigations into Basson's dealings were underway – by the NIA, the OSEO and the Special Investigation Unit of the Transvaal Attorney General. However, it was the Narcotics Bureau of the SAPS that arrested him on 29 January 1997. Detectives from the Narcotics Bureau had watched as he handed a black plastic bag containing Ecstasy tablets to an associate, Grant Wentzel, who in turn laid R60 000 on the seat of the car. As soon as the deal was complete police descended on the pair. Basson fled through the park in Magnolia Dell, Pretoria where he had met Wentzel, stumbled and fell into the small stream that traverses the park and was arrested. Later Basson would deny any knowledge of the drug deal and claim that he had run believing that the police were Mossad agents who wished to kill him.¹

Basson's relationship with Wentzel dated back to 1992 when Basson started a procurement company called Global Management to seek foreign markets for South African-made products.² Five people were recruited to work for the company, Jerry Brandt (Managing Director of Organochem³), Marlène Brand, Solly Pienaar, Steve Martin and Grant Wentzel.⁴ Wentzel described himself as a commodities broker who had dealt

¹ Gould and Burger, Secrets and Lies, p5.

² Testimony of Grant Wentzel in The State vs Wouter Basson, South African High Court, Transvaal Division, 27 October 1999.

³ Organochem was the company responsible for procurement activities for Delta G Scientific. Brandt had previously been involved in procurement for Armscor. He was arrested in the United States for attempting to export an ion implanter to East Germany.

⁴ Wentzel in The State vs Wouter Basson, 27 and 28 October 1999.

in canned fruit, ostrich meat and leather, hi-tech machinery, pumps and unwrought gold (to Japan). In 1999 when Wentzel testified against Basson during his criminal trial he told the court that he had maintained regular contact with Basson over a number of years during which time Basson had advised him how to structure business deals.⁵

The events leading to Basson's arrest in January 1997 began when Wentzel was experiencing financial difficulties. He had been advised by Steve Martin, his colleague at Global Management, that the solution to his financial troubles may lie in marketing the popular rave drug, Ecstasy. Sometime before this, Brandt had told Wentzel he was sure Delta G Scientific had manufactured Ecstasy. Wentzel approached a former Delta G scientist, Gert Lourens, who warned him against the venture saying that it was 'too risky'. Wentzel claimed in his testimony during the Basson trial that shortly thereafter he was called by Basson who gave him 100 capsules of the drug.⁶ Wentzel sold these to Martin for R4000. However, what Wentzel did not know was that Martin was a police informer. This deal and a second deal in January 1994 involving 2000 Ecstasy tablets resulted in Wentzel's arrest. During his short period of incarceration Wentzel agreed to work with the police to create a trap for his supplier, Wouter Basson. The deal was choreographed by detective Giel Ehlers who chose the venue close to Basson's home and fitted Wentzel with a recording device. Ultimately these tapes would be of no value as the recording was so poor. However, the police did observe the exchange between the two men. In court Basson explained that the deal he and Wentzel discussed was for the sale of AK47s to Pakistan⁷ and that he had no idea what was in the black plastic bag, since he was merely returning the bag which he had found in a box of wine Wentzel had given him on an earlier date.

Ehlers testified that shortly after arresting Basson he received a number of calls from SADF generals (whom he did not name), indicating that Basson was still well connected. The arrest caused enormous confusion amongst the investigating authorities, none of which had been apprised of Ehlers' sting operation (Ehlers in turn only came to know that the NIA had Basson under surveillance during the search of Basson's home following the

⁵ ibid.

⁶ ibid.

⁷ Comments made by Advocate Jaap Cilliers during the cross-examination of Grant Wentzel in The State vs Wouter Basson, 27 and 28 October 1999.

arrest).⁸ Later that evening, NIA agents who had Basson's home under surveillance followed a woman from his home to a block of flats a few kilometres away. They watched as she removed a black plastic bag from her car and left it next to a second vehicle before driving away. Soon afterwards a man emerged from a flat, put the bag in his car and drove to a house in Wonderboom, a suburb of Pretoria. The following day detectives raided the house (owned by Samuel Bosch) and found two trunks of documents.⁹ These documents, along with two more trunk loads handed to investigators in May, would provide all three investigating authorities and the TRC with invaluable information about Project Coast. Shortly after the trunks were found, representatives from NIA, the SIU, the OSEO and TRC were called to examine the contents of the trunks. They watched as the documents were numbered and recorded and an agreement was reached that all four interested parties would have access to the documents.

At this stage the TRC, through its research department headed by Professor Charles Villa Vicencio, had attempted to interview Basson about his role in CCB related activities, but had met with little success. The TRC had no formal investigation planned into the activities of Basson and indeed, had little information about the chemical and biological warfare programme. The Netherlands Instituut voor Zuidelijk Afrika (NIZA) had been commissioned by the TRC's research department to report on the "involvement of the South African apartheid regime and its secret services in external operations like hit squads, chemical and biological warfare".¹⁰ The report was based on open source material and interviews and, despite later being found to be inaccurate on a number of points, it formed the basis of the TRC's understanding of the CBW programme in late 1997. Shortly after Basson's arrest, President Mandela instructed Knobel, Michael Kenney (Deputy Director of the NIA) and Colonel Ben Steyn (then Project Officer of Project Jota) to brief the TRC about the chemical and biological warfare programme. It was a secret briefing open only to a small group of senior TRC members who had top

⁸ Testimony of Giel Ehlers in the State vs Wouter Basson, South African High Court, Transvaal Division, 25 October 1999.

⁹ Gould and Burger, Secrets and Lies, p6.

¹⁰ "Questions about the involvement of the South African apartheid regime and its secret services in external operations like hit squads, chemical and biological warfare", Submission to the Research Department of the Truth and Reconciliation Commission by the Netherlands Institute for Southern Africa, November 1997. Available at http://www.contrast.org/truth/html/chemical_biological_weapons.html.

secret security clearance from the NIA, a fact which caused a great deal of controversy within the TRC as many saw such a top secret briefing as being in contradiction to the purpose of the TRC - to reveal information. Fortunately the application for amnesty from Jan Lourens, and later that of Schalk van Rensburg, provided the TRC with sufficient reason to conduct a full investigation into the activities of Project Coast. However, once an investigation and hearing had been approved by the commissioners, gaining access to the documents from the trunks proved to be a difficult task.

There was a great deal of opposition to the TRC investigation - from the SIU which saw the TRC investigation as a threat to its own investigation; from the NIA which was concerned about information being made public, and from some of the scientists involved in the programme. This opposition, particularly from the NIA, complicated and stalled the TRC investigation which had to be completed in three months since the deadline for the completion of human rights investigations was set for the end of July 1998. Time still had to be allowed to organize and subpoena witnesses to the public hearing. Pressed as the TRC was for time, the NIA's constant stalling in providing investigators with access to the documents almost prevented a successful investigation. When first approached by the TRC for access to the documents the NIA insisted that, before access could be granted, a meeting needed to take place between Deputy President Thabo Mbeki and the TRC. However, letters to Mbeki remained unanswered and his office said he was too busy to meet with the investigators. The meeting never took place. Meanwhile the NIA met with the deputy head of the TRC, Dr Alex Borrairie, and head of the investigative unit, Dumisa Ntsebeza, urging them to call the investigation off as, they claimed, it could jeopardize the SIU and OSEO investigations. When the TRC responded that the investigation would go ahead, the NIA refused investigators access to the documents on the basis that the investigators did not have top secret security clearance.¹¹ It was the OSEO which finally broke the deadlock. When investigators met with Dr Jan Swanepoel, head of the OSEO, he sympathized with the TRC's problem having had his own investigation blocked frequently since 1992. He offered the investigators free access to the documents which the OSEO had in their offices and allowed them to make copies of several hundred pages. When the NIA was confronted with the fact that the TRC already had many of the documents they relented and while imposing extremely stringent conditions on the use of the documents (they had to be consulted within the confines of the NIA offices in Cape

¹¹ Gould and Burger, Secrets and Lies, p8.

Town), access to the information allowed the TRC to effectively prepare for the public hearing.

Detailed interviews with Jan Lourens and Schalk van Rensburg provided the names of some of the scientists involved in the programme and details of the operation of the front companies. Van Rensburg's motivation for coming forward was the reaction to a betrayal. Goosen, when approached, was just as forthcoming as Lourens and van Rensburg. He too was aggrieved by his removal from the leadership of RRL, but for both van Rensburg and Goosen the main source of their grievances was the fact that neither had benefited financially from the privatisation deal which had seen Swanepoel, Immelman and others walk away rich men. Ultimately it was a handful of scientists who participated willingly in the TRC process, and others saw themselves as having no option but to co-operate. Most, however, were afraid of public exposure and declined to see the investigators or were impossible to find. Before the hearing in June 1998 more than 40 interviews were conducted.

Two weeks before the scheduled hearing date in June, TRC Commissioners and investigators were summoned to urgent meetings with the Ministry of Defence, the Ministry of Foreign Affairs, the Surgeon General, and the NIA. The TRC delegation found the government bodies united in their wish to prevent public exposure of the programme and was warned of the threat the hearing posed to foreign relations, not least because documents relating to the 1993 and 1994 démarches of the US and UK were found in the trunks. It was argued that if details of these démarches were to emerge, trust between the three countries (US, UK and South Africa) would be severely compromised. The government hoped for a cancellation of the hearing, or at the very least an agreement that the hearing would be conducted *in camera*. Neither of which were acceptable to the Commission. Finally, in a bid to reduce the potential damage the hearing could cause to foreign relations, the government insisted that a rigorous process be undertaken to identify and approve the documents which could be used in the hearing. A policy was agreed upon: not to make public any documents that could provide technical information to potential proliferators, and the documents pertaining to the démarches would not be made public. Three categories were devised in which to classify the documents: (1) those that could not be used because they were of a technical nature or related to the démarche; (2) those which the TRC could use and refer to in the hearing, but not make public; and (3) those documents which the TRC could use and make public. By far the largest number of documents fell into this latter category.

On Friday 5 June, three days before the hearing, Knobel handed to the investigators a new set of documents, which he tabled subsequently at the TRC hearing, thus placing them into the public domain. Documents he believed he would require in his personal defence. They included the minutes of CMC meetings, correspondence pertaining to the manufacture of and payment for the MDMA, briefings to the Minister of Defence and President, and minutes of meetings of the Defence Command Council.

Before the hearing began on Monday 8 June 1998, the government, represented by its legal adviser Fink Haysom, again presented an argument to the TRC that the hearing be held *in camera*. He was supported by legal representatives from the Department of Foreign Affairs and the head of the Council for the Non-proliferation of Weapons of Mass Destruction, Abdul Minty. Despite their urgent appeals, the TRC determined that the hearing should go ahead with full public disclosure. The only compromise made was that a legal representative from the Department of Foreign Affairs was to sit in on the hearing so that he could raise objection to testimony or documentation that posed the danger of proliferation. It emerged that one of the greatest concerns of government was that they did not know what the scientists were going to say. The NIA had not briefed government officials on their findings about the CBW programme and the briefings of Knobel and Steyn clearly fell short of conveying all the information about the programme.

Those who gave testimony in the hearing included: Jan Lourens, Charles Van Remoortere (one-time owner of Protechnik, Hazmat and Technotech, and associate of Basson), Dr Daan Goosen (first managing director of Roodeplaat Research Laboratories), Dr Schalk van Rensburg (former director at RRL and head of the Animal Ethics Committee), Dr Mike Odendaal (former head of Microbiology at RRL), Dr Johan Koekemoer (former head of research at Delta G Scientific, the person responsible for the manufacture of MDMA), General Lothar Neethling (former head of the Police Forensics Laboratory and close associate of Basson), Dr Wynand Swanepoel (former MD of RRL), Dr Philip Mijburgh (former MD of Delta G), Knobel (former Surgeon General and Project Manager) and Dr Wouter Basson (former Project Officer).

Whilst Lourens, Van Remoortere, Odendaal, Van Rensburg, Goosen, Koekemoer and Knobel agreed to give their testimony willingly, Mijburgh, Swanepoel and Basson were reluctant witnesses. They had denied TRC investigators interviews prior to the hearing, and their legal counsel argued that they should not be called upon to testify because there were indications that all three were to be indicted by the Attorney General. Basson maintained that his right to silence and his right not to incriminate himself were protected by the constitution. On the basis of this argument he challenged the TRC in the Cape

Town High Court. Basson lost his case, however; the legal challenge delayed the hearings, leaving one day in which to hear Basson's testimony. On the morning of 31 July, with less than 12 hours before the Human Rights Commission of the TRC would cease to be a legal entity, Basson began to testify. His legal representatives tried every trick in the book to delay and stall the hearing, arguing on minor technical points, challenging questions posed by the Commissioners and finally, half way through the day, Advocate Jaap Cilliers, who was representing Basson walked out of the hearing claiming he had to catch the last flight back to Johannesburg leaving Basson to face questions without formal legal representation.¹²

The hearing was closely monitored by the world media. It was the first time that the managers, scientists and architects of any country's CBW programme had been called to publicly account for their actions. Media coverage of the hearing was extensive, albeit sensationalist and often inaccurate. The TRC hearings also provided the scientists with an opportunity to talk about and question their involvement in the programme. Some spoke afterwards of a tremendous sense of relief at having spoken openly about their involvement in the programme. Until the TRC hearings, some had successfully kept the nature of their work at the warfare facilities a secret, even from their families. Ironically it was a scientist working at Pretoria University's Veterinary Faculty who was challenged about his role in the programme by the university, which questioned his suitability to remain in an academic position. He and others managed to retain their positions by proving their co-operation with and commitment to the TRC process to their employers. Others found that colleagues were reluctant to work with them or to include them in research teams, despite their professional abilities. Nor did their families escape persecution. The wife of one of the co-operating scientists, a cardiologist, was victimized by her colleagues who openly and vociferously supported Basson and saw the Commission as a witch hunt and her husband as a traitor.¹³

¹² A full list of the TRC findings on the CBW programme is contained in Appendix 1.

¹³ Based on interviews with all the scientists involved.

The criminal trial of Wouter Basson

The first leg of the Basson trial, the hearing for his application for bail, took place ten months after his arrest. Applications were received from the office of the Attorney General, the Ministry of Foreign Affairs, the South African National Defence Force, the NIA and the Council for the Non-Proliferation of Weapons of Mass Destruction, for the bail hearing to be held *in camera*. The state bodies argued for the need to maintain state secrets and claimed that the revelations of the bail hearing might lead to proliferation. The presiding judge ruled in their favour. It was only two years later, in 1999, after a lengthy legal battle fought by the Freedom of Expression Institute (FXI) and the press, that the bail application hearing on the drug charges was made public and an out-of-court settlement assured that the trial would be open to the public.¹⁴

The charges against Basson fell into three broad categories, charges relating to the possession of narcotics and top secret documents, those relating to human rights violations and charges of fraud and theft. Given the enormity of the case (the state brought 64 charges against Basson) two prosecutors were assigned to the case. Dr Torie Pretorius and Anton Ackerman, both of whom had been involved in the successful prosecution of Vlakplaas Commander, Eugene De Kock. Ackerman took responsibility for arguing the state's case on all charges relating to the fraud and theft, and Pretorius led the arguments on the charges of human rights violations and possession of drugs and documents. While this division of labour was essential in order to manage the huge number of witnesses and documentary evidence, it resulted in an unintentional contradiction between the case presented by Pretorius and that of Ackerman. Both were still investigating their cases and preparing arguments when the trial began and each took the opportunity of the other's presence in court to continue work. So when Pretorius was presenting his case, Ackerman was preparing his in the office. This meant that they did not hear each other's cases, and while they did consult each other, they did not work from the same offices so could not even consult in detail at the end of each day.

The case made by Pretorius, in arguing that Basson was guilty on the multiple charges of human rights violations, was that Basson would go to any length to make chemical and biological agents available to units of the security forces to carry out assassinations and to assist in interrogation. Ackerman's case rested on the court believing that Basson

¹⁴ The transcript of the subsequent bail application hearing which dealt with the fraud charges against Basson is still inaccessible to the public.

cynically used the CBW programme to enrich himself and that his claims to have obtained the raw materials, chemicals or biological agents abroad were merely covers for fraudulent activities. The implicit contradiction between these two positions did not help their cases which were already hampered by a judge who appeared hostile to the prosecution from the start.

Basson's trial started in the Pretoria High Court in October 1999 before Judge R. (Willie) Hartzenberg, with intense interest from international and national media. Media attention would soon wane when it was clear that the trial would be conducted in Afrikaans, making it impossible for foreign journalists to follow the proceedings. The only permanent media presence throughout the trial was senior court reporter Marlene Burger who had been commissioned by the Centre for Conflict Resolution to monitor each day of the trial and provide me with detailed daily reports. It was not clear why the Judge President of the Transvaal chose to appoint Hartzenberg to the case, since despite his experience in presiding over fraud cases he was also the brother of former Conservative Party leader, Ferdi Hartzenberg. Given the sensitivity of this trial, only the second in which an apartheid military officer had to account for his actions and which followed shortly after the state's failed attempt to convict Magnus Malan and other military officers for the murder of civilians in KwaMakhutha, it may have been important to have appointed a less controversial figure.

Soon after the trial began, legal argument by Basson's defence team, and a ruling by the judge, led to 6 of the original 64 charges against Basson being dropped. One of these related to use of biological agents in Namibia prior to independence in 1989. Others referred to murders in Mozambique and Swaziland. The judge ruled that Basson qualified for a general amnesty applicable to all South African security force members who had operated in Namibia prior to 1989. He also declared that incidents that had taken place outside the borders of South Africa could not be prosecuted in South Africa despite the fact that they may have been planned in the country and carried out by South African citizens.¹⁵ The amnesty the judge referred to was promulgated by the South African

¹⁵ Dropped charges included, Charge 55: conspiracy to murder Gibson Mondlane in Mozambique; Charge 58: conspiracy to murder Enoch Dlamini in Swaziland; Charge 46: conspiracy to murder an unknown man in Ovamboland, Namibia; Charge 61: conspiracy to murder SWAPO members in a transit camp by contaminating the water with cholera; Charge 31: conspiracy to murder SWAPO members and own forces that posed a security threat; Charge 54: conspiracy to murder Ronnie Kasrils and Pallo Jordan in London.

Administrator General in South West Africa on 7 June 1989, shortly before the first Namibian democratic elections. The proclamation read:

No criminal procedures may be instituted or continued following the date of this proclamation in any law court against any person included in sub-section (2) or (3) in respect of a crime committed by such person at any time prior to the date mentioned in the territory or elsewhere.¹⁶

Section (2) of the promulgation initially listed “a certain category of persons” but sub-section (3) of section 2 was later amended to specify

...persons who, while members of the South African Police, the South West African Police and the South African Defence Force, including the South West African Territorial Force, in the execution of their duties and activities in the territory committed an act or neglected to commit an act which represents a crime as covered by that sub-section.¹⁷

Basson’s legal team argued that in terms of Section 140 of the current Namibian constitution, all acts in place immediately prior to independence of Namibia in March 1990 remained in force. Pretorius argued that the amnesty was applicable only to criminal proceedings in Namibia, and that Namibian law does not extend to South Africa. He said that the amnesty could not be used in South African courts to “protect South African soldiers who conspired to murder prisoners of war and throw their bodies into the sea.” He also noted that Basson had not applied to the TRC for amnesty and had therefore not availed himself of the opportunity to receive amnesty. Pretorius also argued that poison murders could never be justified as having been part of Basson’s military duties.¹⁸ His arguments were rejected by the judge in the first of many rulings against the prosecution.

By February 2000, after merely two months in court (during December and January the court was in recess) the state was so convinced of Hartzenberg’s bias that the prosecutors sought his recusal after Hartzenberg had stated in court that it would take very little to convince him that the company WPW, of which Basson was a director, had acted in the interests of Project Coast. This statement was made in response to forensic auditor Hennie Bruwer’s report of the financial dealings of Basson and his associates. Hartzenberg’s comment, argued Ackerman, cut to the heart of the state’s case and if the

¹⁶ Extraordinary Official Gazette for South West Africa, No 5725.

¹⁷ The amended Act was passed in 1990 as the Administrator General Government Notice, No 16 of 1990.

¹⁸ Legal argument in The State vs Wouter Basson, South African High Court, Transvaal Division, 11 October 1999.

judge had already made up his mind that WPW had acted in the interests of the SADF there was little point in him presenting his case.¹⁹ The prosecutors argued that the judge was biased and had prejudged the case before all the facts had been presented to the court. The judge responded that his understanding of the companies established by Basson rested on the premise that the SADF had to act in a clandestine manner. He said that Basson had been given freedom by the CMC of Project Coast to create covers for people associated with the programme and to procure equipment and substances without explanation. He said that the testimony of Knobel, that the CMC did not want to know the details of Basson's activities, justified his perception and it would take little to convince him that Basson had acted in the interests of the Project. Hartzenberg declined to recuse himself from the case. In giving judgement on the recusal application, he gave his views on the fraud charges stating that:

- Basson had been ordered to develop both an offensive and defensive chemical and biological warfare capacity for South Africa.²⁰
- The project was top secret and managed by the SADF's CMC, made up of a small number of the most senior military officers.²¹
- The "need to know" principle had been strictly enforced and Knobel had testified that if it took theft, bribery or any other normally unacceptable means to acquire what was needed for the project, Basson was to "get the goods".²²
- The CMC did not want to know where or how Basson did what he had to do, nor the names of people or countries involved, nor when, how and to whom payments were made.²³

¹⁹ Gould and Burger, Secrets and Lies, p95.

²⁰ Ruling of Judge Hartzenberg as reported by Marlène Burger in the daily trial report prepared for the Centre for Conflict Resolution's chemical and biological warfare research project, 16 February 2000.

²¹ Ibid.

²² Ibid.

²³ Ibid.

- To this end, Basson had been issued with three false passports by the SADF to support his cover as a wealthy international businessman with chemical interests.²⁴
- Knobel testified that the SADF would have had no problem if Basson had been required to pay collaborators or spend money to help them create plausible cover stories in their own countries in exchange for their assistance. For example, share capital in a company might be purchased to support such a cover story. Knobel also testified that Basson carried out other tasks for the SADF, not connected to Project Coast, which he would not know about.

Forensic auditor Hennie Bruwer had testified from his 800-page report, the result of a seven-year investigation into the funds the state believed Basson had misappropriated from Project Coast for personal gain. Bruwer found that Project Coast funds had been “laundered” through an international network of companies of which Basson was at all times the beneficial owner and in which some of his colleagues, friends and family members had financial interests. Basson refuted these allegations, arguing that he had used the companies to launder SADF funds and, therefore, to distance the SADF from sensitive procurements and to substantiate his cover as an international businessman. The court heard that documents on the financial dealings of these companies were retrieved from American lawyer David Webster’s office after an American court ruled that Webster had to make the documents available to South African investigators, despite client-attorney privilege. Based on these and other documents from various foreign banks, Bruwer declared that both the WPW Group and the Wisdom Group (two holding companies established by Basson), and all subsidiaries controlled by them, were set up to serve Basson’s personal interests.

In October 2000 the court moved to Jacksonville, Florida for two weeks to hear the evidence of David Webster and his wife Jane Webster. David Webster testified that he was unaware of Basson’s military links and that he had considered all the deals he had brokered to have been for Basson’s personal business. However, in his findings, Hartzenberg rejected Webster’s claims that he had not known the nature of Basson’s relationship with the SADF²⁵ and found that the companies established by Basson,

²⁴ Ibid.

²⁵ Judgement in The State vs Wouter Basson, para 2092, 2131 point 30.

including the WPW and Wisdom Group had acted in the interests of the SADF and not to the personal benefit of Basson,²⁶ an opinion he had apparently held from February 2000.

Despite the difficulties faced throughout the trial by the prosecution, the trial provided a unique insight into the activities of Basson and the chemical and biological warfare programme. While the TRC called only 11 witnesses and used some 140 documents in the hearing, 153 witnesses took the stand to testify against Basson including his international business associates; the former Minister of Finance, Barend du Plessis; and members of the CCB who had never before been named in the press. The documentary evidence ran to thousands of pages and new insights were gained into the activities of the covert units of the SADF. Invaluable information about the operation of Project Coast included the revelation that the total budget for Project Coast for the financial years April 1987 to March 1993 was R270m, including establishment and privatisation costs of Delta G Scientific and Roodeplaat Research Laboratories (R60m to set up, R70m to privatise). Operating costs of the two facilities averaged R21m a year - R9m for Delta G Scientific and R12m for RRL - or about R105m for the six years of their operation. Bruwer told the court that from March 1990 to February 1991, the project had R48m available, of which R6m was allegedly defrauded (Charge 16). From March 1991 to February 1992, the budget was R60m (\$21 million at 1992 exchange rates).²⁷

In May 2000 for the first time in a South African court, details emerged about the clandestine operation, Barnacle, forerunner to the CCB. Established under the auspices of Special Forces, and adopting the *modus operandi* of the Rhodesian Selous Scouts, Barnacle was allegedly responsible for the 'elimination' of 'enemies of the state', and of 'own forces' who posed a security threat. As SADF soldiers gave evidence, a picture emerged of a unit which spent much of its time disposing of the bodies of SWAPO members who, after interrogation, were of no use to the defence force and whose release would pose a security threat. The state hoped to establish that Basson supplied the drugs scoline, tubarine and ketamine used by Barnacle operators to murder their victims. Basson repeatedly denied his involvement in these activities. Hartzenberg found the soldiers' accounts of their involvement in the murder of SWAPO members and those viewed as security threats by the SADF (which included both soldiers who spoke loosely

²⁶ *Ibid.*, para 2089 and 2090.

²⁷ Cross examination of Hennie Bruwer in The State vs Wouter Basson, South African High Court, Transvaal Division, 28 February 2000.

and opponents of apartheid) were true. He found, however, that they had falsely implicated Basson in the supply of drugs for this purpose, in order to avoid their own prosecution.²⁸

Scientists followed the soldiers. Jan Lourens told the court about the covert murder weapons he had designed. RRL scientists told the court of the production of biological toxins and the testing of covert weapons they believed were used to murder enemies of the state. André Immelman testified about the 'Verkope' list. He told the court it was a record he had kept of items he had provided to people introduced to him by Wouter Basson. He identified some of these people as members of the SAP.

Belgian citizens Bernard Zimmer and Charles van Remoortere told the court how they had made bank accounts in Luxembourg available to Basson for his use, but said that they were not aware of his using the accounts for acquisition on behalf of the chemical and biological warfare programme.²⁹ David and Jane Webster said that they had helped Basson establish trust accounts in Jersey and the Cayman Islands, and that they had managed many of his other business interests. They too maintained that they were not aware of his involvement in South Africa's chemical and biological warfare programme.³⁰ Swiss pharmacologist David Chu told the court that he had become a close friend of Basson and that Basson was his son's godfather. He had visited Roodeplaat Research Laboratories with a view to marketing the company abroad. He also claimed to be unaware of Basson's military activities.³¹ The judge rejected their claims that they were unaware that, through Basson, they were assisting the SADF in sanctions-busting activities.³²

Hartzenberg refused to allow the testimony of Roger Buffham, who Basson claimed was a former British intelligence agent with good connections at Porton Down. Buffham claimed in press interviews that he, too, was not aware of Basson's double role of

²⁸ Judgement in The State vs Wouter Basson, para 1978.

²⁹ Van Remoortere in The State vs Wouter Basson, 11 – 13 September and 28 – 28 September 2000. Zimmer in The State vs Wouter Basson, 21 – 25 August and 13 December 2000.

³⁰ David and Jane Webster in The State vs Wouter Basson, Jacksonville, 10 – 23 October 2000.

³¹ Chu in The State vs Wouter Basson, 29 January – 1 February 2001.

³² Judgement in The State vs Wouter Basson, para 2092.

businessman and head of the former CBW programme. Basson insisted that his international associates were all selected for their sanctions-busting experience. He said that David Webster was particularly valued because of his ability to create false documentation. He said that most of the documents used by the state as evidence were in fact fabricated.³³ He went further to claim that, with the full knowledge of his military superiors, he was allowed free range to establish a complex network of foreign intelligence agents.

Basson explained in testimony that the many luxury homes and apartments purchased in South Africa and abroad were purchased on behalf of his foreign 'principals'. He maintained that the Tygerberg Zoo in the Western Cape had been purchased with the view to providing these principals with access to animals for furthering their research into chemical substances such as heavy metals elements and pheromones. Basson said that the research of Project Coast in these fields was carried out in various South African universities. The pheromone research, he said, was part of the quest for effective crowd control measures, since certain pheromones raise stress levels, and the first principle of crowd control is to "break the cohesion".³⁴ No other evidence was heard to support this contention. Basson denied the state's claim that the trunks of documents pertaining to the secret CBW programme had belonged to him. He said that he did not know to whom the trunks belonged, nor was he responsible for packing them. This made it impossible for the state to prove a charge of illegal possession of top secret documents and Basson was found not guilty on this charge by the judge.

One of the most serious and far-reaching allegations to be made by Basson was that the chief of Swiss Intelligence, Peter Regli, had co-operated with him in a joint deal to procure BZ for South Africa and enriched uranium for Switzerland. The prosecutors had attempted to call Regli as a witness at an early stage of the case but found that Regli was unwilling to testify. Regli still held the position of head of the Swiss Intelligence services at that time, and the Swiss authorities were unwilling to allow him to testify. By the time the state closed its case, the Swiss authorities' investigation into Regli's relationship with Basson had been re-opened, and Regli was no longer in his position as head of intelligence. Regli repeatedly contacted the South African prosecutors requesting that he be allowed to testify. An application by the prosecutors for the court to call Regli, Dieter

³³ Testimony of Basson in The State vs Wouter Basson, 24 July 2001.

³⁴ Ibid., 26 July 2001.

Dreier and Libyan, Yusaf Murgham, failed. The judge argued that he did not believe that they would add materially to the case and that he had no reason to believe that the three men would tell the court the truth. The court therefore relied entirely on Basson's evidence regarding the nature of his relationship with them. Indeed, not a single witness was called by the defence – their case rested entirely upon Basson's testimony.

In June 2001, after the state had closed its case and the defence had argued for Basson's acquittal on many of the charges against him, Judge Hartzenberg acquitted Basson of the following charges:

Charge 2 – R220 789 paid to Professor Aubin Heyndrickx for a visit to Iran.

Charge 6 – R200 000 paid to Roger Buffham's company, Contemporary Systems Design, for electronic circuit blueprints for reverse engineering of Chemical Agent Monitors.

Charge 10 – R67 424 paid to Wilfred Mole's company, RF Telecommunications, for rental of offices for Project Coast.

Charge 28 – Possession of 38,6g of Ecstasy found in Basson's possession in blue steel trunks.

Charge 29 – Trafficking in Mandrax (96,9g) and cocaine (14g) found in trunks.

Charge 30 – Trafficking in Mandrax (100 000 tablets offered to Danie Phaal).

Charge 36 – Incitement to murder (five Renamo members who allegedly killed secretary-general Orlando Cristina).

Charge 37 – Assault with intent to do grievous bodily harm (chemical interrogation of five Renamo assassins).

Charge 38 – Conspiracy to murder ANC spy Roland Hunter with mamba venom.

Charges 39-41 – Attempted murder (of three unidentified victims at Dukuduku on whom jelly-like substance was smeared by Dr Kobus Bothma).

Charge 52 – Murder (of Special Forces operator Victor de Fonseca).

Charge 57 – Attempted murder (of the Rev Frank Chikane).

Charge 60 – Conspiracy to murder (of Dullah Omar).

At the time, the judge did not give his reasons for acquitting Basson of these charges.

The state's case was fraught with problems. Many witnesses were reluctant to testify, some refused to do so at all, and others were openly hostile to the prosecution. The prosecutors had to rely on testimony from operators who had carried out murders many years before and whose accounts of the incidents did not always tally. The greatest challenge for the state in proving the human rights violation charges was to link Basson directly to the manufacture and exchange of assassination weapons. While there was no dispute that Basson was head of the CBW programme, he denied that he had ever been involved in the development of assassination weapons, or that he had facilitated such weapons being given to operators by the scientists. While the scientists testified to the manufacture of assassination weapons and the operators testified to receiving and using (or intending to use) them, every suggestion of his involvement was denied by his advocate. Ultimately Basson's version of events was found to be the most believable by Judge Hartzenberg.

Basson had indeed put up a remarkable performance. As the sole witness in his defence and without a single document presented by his legal team to support his version, Basson needed to present himself to the judge in the same way as he had to his senior military officers, as a brilliant scientist, expert in his field who was deeply committed to duty. During the nine weeks he spent on the witness stand Basson's demeanour did not falter. His strategy, it appeared, was to present fact and fiction in almost equal portions in a way that intertwined reality with fabrication until it was impossible to distinguish one from the other. For example, he claimed that chemical weapons had been used against Iran by Iraq in a fictitious town called Velapjar.³⁵ When challenged by the prosecution that such a town does not exist on any map, nor are there any reports of chemical weapons having been used in such a place, Basson merely became vague about the dates and times of the incident. As he had during his tenure as head of Project Coast, Basson effortlessly made the transition from scientist to businessman, drug and arms dealer to spy in his testimony and beguiled the court. He claimed that the volumes of document put before the court by the prosecution were either false, compiled to support the cover stories for the 'real' business of Project Coast; or that he could not recall having seen them; or that they contained details for which there must have been a good reason at the time but

³⁵ Gould and Burger, Secrets and Lies, p152.

which he could no longer remember.³⁶ The fact that Basson's claims about the nature of his relationship with the foreign principals only emerged during his own testimony meant that the prosecutors, who had closed their case, could not call any of the men identified as having been members of the "international CBW mafia".

On 11 April 2002, after a trial lasting over two years and involving testimony from 153 witnesses, Judge Harzenberg found Basson not guilty on all charges. For the first time in South Africa Harzenberg allowed television cameras in court to record and make a live transmission of the judgement. However, by the time the judgement was passed it was clear to all involved that the judgement would be in Basson's favour. Indeed, such was Anton Ackerman's disillusionment with his chances of obtaining a conviction that he had withdrawn from the case at the start of the closing arguments leaving his junior, Werner Bouver, to present a summary of the state's case. The defence was no less convinced of their victory – five days prior to judgement day Basson had agreed to an international press briefing within an hour of the court rising, he had also planned a family celebration for 12 April.³⁷ In court on the day were five SADF Generals who broke into applause at the conclusion of the lengthy judgement: Magnus Malan, Constand Viljoen, Joep Joubert (former head of Special Forces), Dirk Marais (who had led the SADF campaign to prevent SADF officers from seeking amnesty from the TRC) and Niel Knobel. All had come to show their support for Basson who had, throughout the trial, protected the identities and role of senior military officers unless they had since died.³⁸

At the conclusion of the judgement the state announced its intention to appeal the verdict. A week later, again before Hartzenberg, the state was granted limited leave to appeal – the state could appeal his decision not to recuse himself from the trial, but not to appeal the judgement. That meant that should the state's appeal be successful the trial would have to be started from the beginning again. The state also sought to appeal Hartzenberg's decision on the dismissal of charges relating to offences that took place outside the borders of South Africa. After losing their case in the Appeal Court the state approached the Constitutional Court seeking judgement on Hartzenberg's refusal to recuse himself, his decision not to admit the bail hearing record as evidence in the trial

³⁶ Ibid., p173.

³⁷ Ibid., p188.

³⁸ Ibid., p189.

and the decision not to allow charges relating to murders in Namibia, Swaziland and Mozambique. During the Constitutional Court hearing Advocate Wim Trengrove, appearing on behalf of the state, said that should the judgment favour the state, a new trial could be started within three months of the judgment and the trial would be expected to have been completed within a year. The state also said that they would drop 10 of the initial 24 fraud charges against Basson which they believed were too weak or too complicated.³⁹ At the time of writing the Constitutional Court had not yet passed judgement.

³⁹ South African Press Association. "Basson could be retried within three months", Mail and Guardian Online, 25 February 2005. <http://www.mg.co.za>

CHAPTER 8

Lessons for Disarmament

This thesis has considered (i) the context in which the South African CBW programme was established, (ii) the nature and structure of the programme and its relationship with other branches of the security forces, (iii) the extent of international co-operation with the apartheid military, (iv) the role of individuals in the programme, and (v) how and why the programme was terminated. Here I consider the lessons for disarmament. In particular, what can be learnt about, (i) the factors which motivate states to develop chemical and biological weapons programmes; (ii) the factors which influence the nature, scale and duration of such programmes, (iii) the motivation of scientists to participate in CBW programmes, (iv) factors that influence the decision to terminate such a programme, and (v) factors motivating other states to react to knowledge of covert CBW programmes.

It has often been questioned whether the South Africa programme does indeed offer internationally applicable lessons when measured against the biological weapons and/or chemical programmes of Iraq, the United States, the Soviet Union and Japan which were several orders of magnitude larger and were aimed at the development of large-scale biological weapons for conventional use. I will demonstrate that there are sufficient similarities between the motivations for the initiation of the programme, the nature of the perception of threat to the state, the mechanisms used to prevent detection of the programme; and most importantly the response of states who had detected the programme, to provide some important lessons for the future detection of BW programmes and the response which is required both from states and civil society. Chief among these lessons is that the absence of a strong and sustained political will to challenge a state that violates the BTWC significantly weakens and threatens the norm against biological weapons.¹

¹ C. Gould, "Armes Chimiques et Biologiques: Leçons d'Afrique du Sud", Paris, *Politique Étrangère*, No 1 2005, pp 109 – 123.

It is true that South Africa never sought to produce large-scale biological or chemical weapons that would be used against the ground forces of an enemy or against civilians in a foreign country, however, like many of the other programmes, the production of covert assassination weapons was a key focus. In addition, as has been the case in all known programmes, the perception of threat to the existence of the state was a key factor in the decision to develop a programme, despite the absence of a symmetrical threat. In the case of both Iraq² and South Africa the programmes were a response to both an internal and external threat.

Also like Iraq, there was not a clear distinction between the chemical and biological components of the programme. As the South Africa programme demonstrated, even at a top military management level the distinction between chemical and biological weapons was not clearly comprehended and the two were frequently conflated. Analysts like to make a very clear distinction between the two, I doubt whether this is always the case in the minds of those developing programmes. It is true that at the time when the Iraqi and South African programmes were initiated (late 1970s and early 1980s) the ban on biological weapons was perhaps stronger than the ban on chemical weapons, that in itself provided a strong reason to hide a BW programme in a CW programme. Since the entry into force of the CWC, the likelihood is that a CW programme may be hidden within a biodefence programme, which is not subject to international scrutiny. As biotechnology advances, in any case the distinction becomes more and more difficult to make.

Factors motivating the initiation of CBW programmes

Analysts have frequently argued that biological weapons do not offer the same tactical utility as conventional weapons.³ This, it has been argued, is a strong factor weighing against the development of large-scale biological weapons by states. This begs the question: if biological weapons are of limited tactical or strategic value why have they been seen as the answer to a security threat in so many cases? Is it because other factors outweigh the disadvantages of biological weapons, or because the assumption

² J.B. Tucker, "Armes Biologiques: Quelques Leçons Irakiennes", Paris, *Politique Étrangère*, No 1 2005, pp 123 – 1370088.

³ G. Koblenz, "Pathogens as Weapons".

that tactical utility is a significant factor in the determination to develop biological weapons is incorrect?

As the South African programme demonstrates, the consideration of the potential tactical utility of large-scale biological weapons was not a factor influencing the decision to develop a BW programme. Nor was a direct BW threat. Before the mid-1970s biological weapons were not considered for development. However, by mid-1977, four years before the initiation of Project Coast it would appear that there was a change in the SADF's thinking about chemical and biological warfare. At this time the head of the Applied Chemistry Unit of the CSIR, Dr JP De Villiers authored a chapter in the SADF's "Manual for the SADF Command System, Vol I: National Security and Total War"⁴ in which he set out the various categories of chemical warfare agents and made a brief analysis of the Geneva Protocol of 1925. He concluded that whilst there was no threat of chemical warfare agents being used against South African troops, the use of both lethal and irritating agents may be to the SADF's advantage in certain circumstances when fighting its war against 'terrorists'. He pointed out that the Geneva Protocol did not forbid the use of such agents within a country and, therefore, South Africa would not be in violation of the Protocol if it used chemical agents in an internal war. On the other hand, De Villiers stated categorically that biological warfare was not a threat to South Africa and that no specific training in biological warfare was necessary.⁵

During the 1980s the threat assessment shifted as the Soviet Union increased its support for MPLA forces in Angola and the possibility that chemical weapons would be used during ground battles increased. Ultimately the chemical weapons programme was a response to the threat of chemical weapons use by Soviet-backed military forces in Angola and to address the need for crowd control agents to suppress internal opposition to the policies of apartheid. The biological weapons programme, on the other hand, was specifically aimed at developing covert biological weapons to be used to assassinate individuals.

⁴ J.P. Villiers, "Handleiding vir die SAW Bevelstelsel Vol I: Nasionale Veiligheid en Totale Oorlog. Hoofstuk 12: Aanwending van Chemiese en Biologiese Aspekte van Totale Oorlog", undated document.

⁵ De Villiers, McLouglin, Joynt, Van Der Westhuizen, "Chemical and Biological Warfare in a South African Context", 1971.

It can be concluded that if military leaders believe that a threat to the state can be significantly reduced through the elimination (assassination) of key individuals amongst the enemy (as the United States has viewed Osama Bin Laden and Saddam Hussein) – however flawed an analysis this may be – it points towards the utility of assassination weapons that cannot be detected post mortem. If it appears as though the target has died of natural causes s/he is less likely to achieve iconic status through martyrdom. Under these circumstances biological weapons become an attractive option.

Factors influencing the nature and scale of a programme?

The nature, structure and scale of a chemical and biological warfare programme will be determined by a number of factors and the interaction between them. In the South African case the nature of the perceived threat and South Africa's perception of the inability of the Geneva Protocol and the BTWC to prevent the development of programmes elsewhere were two factors which influenced the nature and scale of the programme. While it had been argued that the BTWC was not taken seriously by other states parties who were believed to be in non-compliance with the requirements of the treaty, the restrictions of the treaty did mean that there was a need to ensure that the programme would avoid detection. For this, and other reasons to be explored later, the CBW programme, unlike the nuclear programme established some eight years earlier, was run from within the military,⁶ under the supposed guidance of the Surgeon General and through the South African Medical Service (the medical wing of the military) and was hidden within front companies with no apparent link to the military.

In their consideration of the potential constraints to the development of the BW programme military leaders were informed by Basson that, in his assessment, other states parties to the BTWC had no intention of allowing it to impede their pursuit of biological weapons. He advised that concern about adherence to the treaty was, therefore, not of importance. Significantly, there was never an attempt to argue that the BTWC did not apply because the agents were being produced for small-scale, internal use. The perceived security threat was a more influential factor in the decision to develop a biological warfare programme than concern about the implications of being found to have violated the BTWC.

⁶ The management and authority for the nuclear programme was the responsibility of the parastatal arms procurement company, Armscor.

As was the case in the Iraqi programme, the South African military made use of facilities that could not be obviously linked to the military. The individuals who ran and managed the facilities, were initially scientists who had no obvious link to the military. This changed midway through the programme when those who started the facilities were replaced by close military associates of Basson, but they resigned from the military before assuming their positions as head of Roodeplaat Research Laboratories and Delta G Scientific. Much like in Iraq and the Soviet Union, the front companies undertook some commercial work so that it would appear as though they were commercially viable companies. This commercial work was also an incentive for the scientists who worked at the companies. It gave them a perception of sustainability and allowed them to pursue their specific research interests. Lessons were also learnt from the detection of other programmes. The head of the South African programme was aware of the need to ensure that an incinerator was placed in such a position, close to the research facilities, that the large numbers of corpses of experimental animals would not be detected by satellite and result in suspicions about the nature of the work undertaken at the company.

The lessons which must be learnt are that the failure of states parties to the BTWC to ensure that known violators of the treaty are challenged in the BTWC context results in the perception that the agreement is of little real use in preventing the development of biological weapons programmes. The fact that the BTWC still has no compliance monitoring and verification mechanism significantly undermines the role of the treaty in enhancing security. Despite its obvious flaws, concern about being seen to have violated the BTWC can have an influence on the way in which BW programmes are structured, ironically it is likely that the result will be that programmes are hidden more carefully and are more difficult to detect.

Factors influencing the duration and termination of the CBW programme

Both internal and external factors played a significant role in the determination of the duration of the South African programme. The programme was ultimately of very short duration, in comparison, for example, with the Soviet programme. It was approved by the Minister of Defence in 1981, the front companies began operating effectively in 1983 and underwent privatization in 1991, although the military only officially terminated the programme in 1993. That means a total duration of 12 years and an operational duration of seven years. This goes some way towards explaining the limited scientific advances

made.

During the 1980s opposition to apartheid from within the country increased dramatically, as did the brutal suppression of civilians by the state. In Angola several large conventional battles were fought by the SADF against Soviet-backed MPLA forces between 1980 and 1987 during which allegations were made, but never proved, that the MPLA forces had used chemical weapons. The war in Mozambique began shortly after the country won independence from Portugal in 1975. Frelimo, which had gained political control of the country, aligned itself with the Zimbabwean liberation struggle, providing Zimbabwean guerrillas with refuge. The white Rhodesian government responded by supporting the Mozambican National Resistance Movement, which later became known as Renamo, in its fight against the Frelimo government. When Zimbabwe gained independence in 1980, support for Renamo shifted from the Rhodesian to the South African military. Under the guidance of South African Military Intelligence, Renamo became a fighting force to be reckoned with, resulting in a conflict that, despite peace talks in 1984, continued until a cease-fire was signed between Mozambique and South Africa in October 1992.⁷ The independence of Zimbabwe in 1980 provided additional security concerns for the apartheid government as the country served as a safe location for South African liberation movement soldiers.

Thus Project Coast, whilst only a very small part of the state's military response to its security threats, was active during the period when the state was under greatest threat. By the mid-1980s, while the repression of internal opposition continued, for some military and intelligence analysts it was clear that the maintenance of apartheid in the long term was unsustainable. When in 1989 President PW Botha had a stroke and was replaced by a more moderate successor, political changes followed rapidly and the military was forced to consider the closure of the CBW programme. However, between 1989 and 1991 there was an increase in the activity of the programme, both in terms of the number of covert assassination weapons made available to the operational units of the police and military and, if Basson is to be believed, in the purchase of chemical agents through black market sources abroad.

⁷ Minter, *Apartheid's Contras*, p6.

Project Coast was officially closed at a meeting of the CCMC in January 1995.⁸

A combination of factors ultimately contributed towards the closure of the programme. The most important amongst these was the change in the internal and external threat perception after 1990, the change of political leadership and the inevitability of a negotiated settlement between the ruling National Party and liberation movements, and the negotiation of the CWC which opened for signature in 1991. It was the anticipation of the entry into force of the CWC that prompted the military leaders to decide to destroy the chemicals which were to be banned by the treaty. The documentation also indicates that the military knew that the introduction of the CWC would make it more difficult for them to procure chemical agents and their precursors outside of South Africa. In addition, concern that the programme could fall into the hands of the ANC after the political transition would also have played a role in the decision to end it. It can be concluded that the decision to terminate a CBW programme is likely to be motivated by a number of factors, including changing threat perceptions, ideological and political shifts and multilateral disarmament agreements which include compliance monitoring and verification regimes.

Motivations of scientists

On an international scale the South African CBW programme was trivial in its scope and incompetently managed. That does not reduce the gravity of the potential it had for doing harm, and there are sufficient indications that the programme was indeed harmful to individuals and quite possibly to communities. It is inconceivable that senior and experienced scientists employed in the programme were unaware of the cynical subversion of science and professional ethical norms that they were furthering. Yet few protested, or left voluntarily, and a number joined the programme in the full realization of its true purpose.⁹

Any country would be able to persuade some of its elite scientists to join the ranks of clandestine professional workers, to defend the interests of the state, particularly when

⁸ "Notule van die vergadering van die Beheerkomitee van Projek Jota wat gehou is op 9 Januarie 1995 by die Kantoor van HNW", SADF document G/UG/302/6/J1282, 9 January 1995.

⁹ C. Gould and P. Folb, "Perverted Science and Twisted Loyalty: the government's refusal to release secrets of South Africa's chemical warfare effort echoes an unhappy legacy of secrecy", Sunday Independent, 8 October 2000.

this can be justified in the interest of threatened national security. Recruitment of scientists to the South African programme was not by coercion; they were free to accept or not the attractive offers that were made to them at the time they joined. Conditions of service, salaries, intellectual curiosity, boredom or frustration with what they had previously been doing brought the key persons to the scientific teams at RRL and Delta G Scientific. Once in the system, the pressures on them were to conform and not to challenge it. They were pressures that were understood and generally accepted. Eminent and respected scientists dealt with the development and distribution of chemical and biological murder weapons. Veterinarians with years of experience in scientific research were willing to approve the ethical standards of experiments on animals which any sense of compassion or concern should have led them to refuse. Organic chemists directed the large-scale production of drugs of addiction for purposes of which they had no inkling. And so on. The list is long albeit incompletely known.

With few exceptions, the persons recruited were known to be sympathetic to the government ideology of the day, and they were persuaded that there were internal and external threats to national security that they might play a part in addressing. In retrospect, they saw themselves as idealists. Some testified at the TRC or conceded in interviews that they realize on reflection, and with hindsight, that such idealism may have been misguided. Undoubtedly, a number sought opportunities for the advancement of their careers or self-enrichment. And a few would have identified with the very worst of apartheid ideology and welcomed their own special opportunity to serve its implementation.

Whatever the original purpose of the programme, the environment of work was such that a true scientific contribution was virtually impossible. There was a climate of distrust, threat and most pervasively, secrecy. It was impossible in such circumstances for normal scientific exchange and discourse to have been conducted. Moreover, judging from the evidence, the programme made possible self-enrichment for those associated with it.

It must be concluded that the central preoccupation of the CBW programme was not with science, discovery and truth. There is scant indication that the leadership was concerned truly to create a scientific environment, although that was the emphatic claim of the protagonists. Eventually, it was corrupt. Judged by the normal criteria for scientific research – publications, presentation at scientific meetings, peer review and training of young scientists, the programme must be judged as having been virtually unproductive. Yet an entire cohort of accomplished scientists remained at their benches for years.

There remain a number of unanswered questions about the programme. What was the fate of the chemical and biological products. The accounts given to the TRC, and court, of their production and destruction were incomplete and scarcely credible. The extent to which the products of RRL aimed at the murder and assassination of individuals were indeed used for this purpose is not clear. Perhaps most troubling of all is the muted, almost non-existent, response of the South African professional community to the revelations of the TRC and to the corruption of science and professional ethics that the Commission revealed. This might be explained, but not justified, by the moral and ethical fatigue of so much that was exposed by the TRC. Where does one begin? However, the national response should be comprehensive including the formulation and implementation of scientific codes of conduct to be adopted by all scientists and in the introduction of ethics training in undergraduate programmes. In the end the conclusion is inescapable that the pursuit of science for purposes of causing harm is corrupt and corrupting, as was manifestly revealed in Project Coast.

Factors motivating other states to react to knowledge of covert CBW programmes

If we are to draw lessons from the South African experience it is as important to consider why the programme did not draw international condemnation. Why, if the programme was detected by foreign intelligence agencies, did this not result in pressure being placed on the South African government to terminate the programme until just before the elections in 1994? As discussed in Chapter 5, a great deal of documentary evidence points to the likelihood that branches of both US and UK intelligence had ample opportunity to detect the South African programme from the early 1980s when Basson undertook information collection trips to the US, UK and Taiwan. Even if, as a result of failures in the intelligence systems, Basson's activities did not result in reports to political leaders about the South African CBW programme, there were other indicators that a programme was in existence. During 1983 the Committee on South African War Resistance produced a publication in which they alleged, on the basis of insider information, that the SADF had a large chemical programme,¹⁰ and a number of press articles suggested that chemical weapons either had been used or were under development in South Africa. Perhaps these sources were not considered reliable enough, or perhaps, the absence of a credible civil society

¹⁰ "Chemical Warfare Threat", Resister, No23, London, December - January 1983.

organization which monitored and analysed information, and reported its findings meant that no-one was really watching and taking note. Yet, incidents in the mid-1990s appear to confirm that Western intelligence agencies were monitoring the activities of the programme head, Dr Wouter Basson. When in 1993 and 1994 Basson became increasingly involved in what he claimed were business ventures in Libya, British and American intelligence agencies became sufficiently concerned to initiate ambassadorial-level meetings with President FW De Klerk. The US and UK were concerned that the South African CBW information was “in danger of being acquired by other states, in particular Libya”¹¹ and that South African scientists could be recruited by these states. They also believed that South Africa had not been honest about the past programme in their submission to the BTWC. Had the US and UK not been informed about the nature and extent of the South African CBW programme they would not have been aware that the Confidence Building Measure submitted by the South Africans was inaccurate, nor would they have been as concerned about Basson’s contact with Libya.

Why had they not challenged the apartheid government about this breach in compliance of binding international agreements earlier? During the TRC Knobel inadvertently provided a partial answer to this question. He claimed that he had been told by one of the members of the delegation that there was concern that the programme would fall into the hands of the ANC after the political transition. While the apartheid government had, during the Cold War, shared the same enemy as the Western powers and, therefore, posed no direct threat to the US, UK and their allies, the allegiance of the ANC could not be relied upon. The support given to the ANC by the Soviet Union, China and other African countries sympathetic to the ideals of socialism meant that the allegiances of the apartheid government were unlikely to be shared by its successors. While not posing a direct threat to the US and UK there was concern about South Africa’s potential as a supporter of proliferation in ‘rogue’ states. Moral and principled objections to the development of chemical and biological weapons were not a factor in influencing the international response which was rather determined by self-interest.

The South African experience of biological weapons development, while extremely small scale, illustrates that states will pursue policy options that are in their best security

¹¹ D.P. Knobel, “Briefing to President Mandela on the Defensive Chemical and Biological Warfare Programme of the SADF and the RSA’s position with respect to the CWC and BWC”, SADF document GG/UG/302/6/J1282/5, 18 August 1994.

interests. In this example, it was not only South Africa which set aside its commitment to the BTWC in favour of developing a biological warfare programme to address its security needs, but also Western nations who put their security concerns ahead of the need to uphold the international treaty. One cannot fail to reach the conclusion that an international treaty which has no verification regime, no compliance regime that can be triggered quickly and easily and has not achieved universality is not a sufficient deterrent to the development of biological weapons.

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APPENDIX 1

TRC Findings on the CBW Programme

In the TRC's final report the following findings were made about the CBW programme, that:¹

- Scientists were recruited to the CBW programme from universities and research institutions in South Africa because of their 'patriotism' and loyalty to the government of the day. They were lured by generous conditions of service, facilities, working arrangements and pay packages.
- Work was conducted on a need-to-know basis, subverting the very purpose of science. The free discourse of information and ideas that characterises scientific endeavour were subverted. Moreover, those who were appointed were intimidated and threatened, even with their lives, if they stepped out of line.
- Overall understanding of the programme, and its co-ordination and direction, were vested in the hands of one person, Dr Wouter Basson, whose ability and (it was assumed) integrity were unquestioned both by those who served under him and by those to whom he had to report. It emerged in the hearings that the military command was dependent on Dr Basson for the conduct and command of the programme, even at a time when there were sufficient indications that Dr Basson might not be trustworthy and that there were serious aberrations taking place.
- The military command, and pre-eminently the Surgeon General, Dr DP Knobel, were grossly negligent in approving programmes

¹ Extract from Truth and Reconciliation Report of South Africa, Vol 2, Chapter 6: Special Investigation into Project Coast: South Africa's Chemical and Biological Warfare Programme, Cape Town, Juta & Co, 1998.

and allocating large sums of money for activities of which they had no understanding, and which they made no effort to understand.

- The CBW programme made the self-enrichment of individuals possible and opened the way for a cynical subversion of its ostensible aims in the production of murder weapons for use against individuals.
- An extremely complicated arrangement of front companies supported the programme, a part of whose intention was a plan for its own ultimate privatisation. This, it appears, was intended from the start.
- The development of the programme would not have been possible without some level of international co-operation and support.

The role of the management committee:

- The CBW programme, and in particular its gross aberrations, would not have succeeded without the support, active and tacit, of the Co-ordinating Management Committee over the period 1988 to 1995.
- The Committee knew of the large-scale production of mandrax and Ecstasy and their purported use, but did not seek to establish reasons for this. It approved of the idea and lent its support directly.... [T]here was no scientific basis for thinking that it would be an appropriate, safe or sensible form of crowd control.
- The Committee was aware of and authorised Basson's trips to Croatia, at great expense, to purchase 500kg of methaqualone as late as 1992, and assisted Basson when he was arrested in Switzerland in possession of fraudulent bearer bonds.

The Surgeon General in particular:

- Knew of the production of murder weapons but refused to address the concerns that were raised with him, on the grounds

that they did not fall under his authority. He was nevertheless fully aware that these activities happened in facilities under his direct control and were perpetrated by staff under his chain of command.

- Did not understand, by his own admission, the medical, chemical and technical aspects and implications of a programme that cost tens, if not hundreds of millions of rands.
- Made no effort to come to grips with these technical and medical issues, notwithstanding the fact that he was the highest-ranking medical professional in the military and that others in the military were wholly dependent on his judgement and discretion.
- Advised the Minister of Defence, on 7 January 1993, that South Africa should conceal from the Chemical Weapons Convention that the country possessed NGT (a new generation of teargas related closely to CR), recommending that South Africa should proceed with the research and development of NGT in a covert manner.
- Approved the budget for projects (in some cases alone, and in others in conjunction with his fellow officers on the management committee, with or without the full understanding of what he was doing) that had as their purpose the murder of individuals, and the undermining of the health, if not the elimination, of entire communities (for example, projects involving cholera, fertility drugs, botulinum, mandrax and Ecstasy).
- Agreed to the destruction of documents describing the activities and the financial aspects of these programmes. Instead, he should have ensured that the details of the programme were recorded and accessible, while limiting their accessibility to authorised persons. This would have safeguarded the massive investment, both financial and intellectual, while on the other hand guarding against use of the information for purposes of proliferation or criminal activities.