General Disclaimer

One or more of the Following Statements may affect this Document

- This document has been reproduced from the best copy furnished by the organizational source. It is being released in the interest of making available as much information as possible.
- This document may contain data, which exceeds the sheet parameters. It was furnished in this condition by the organizational source and is the best copy available.
- This document may contain tone-on-tone or color graphs, charts and/or pictures, which have been reproduced in black and white.
- This document is paginated as submitted by the original source.
- Portions of this document are not fully legible due to the historical nature of some
 of the material. However, it is the best reproduction available from the original
 submission.

Produced by the NASA Center for Aerospace Information (CASI)

THE STRUCTURES AND THE ROLE OF AN INTERNATIONAL AGENCY FOR THE CONTROL OF SATELLITES

JURIDICAL ASPECTS

R. J. Dupuy

(NASA-TM-76765) THE STRUCTURES AND THE ROLE N85-12806
OF AN INTERNATIONAL AGENCY FOR THE CONTROL
OF SATELLITES (National Aeronautics and
Space Administration) 13 p HC A02/MF A01 Unclas
CSCL 05D G3/84 11502

Translation of "Les structures et le role d'une agence internationale de satellites de control", Annals of Air and Space Law. Vol. 6, Montreal, McGill University; Toronto, Carswell Co., Ltd.; Paris, Editions A. Pedone, 1981, pp 333-341.



ORIGINAL PAGE IS

STANDARD TITLE PAGE

			THE PARTY OF	
1. R. port No. NASA TM-76.765	2. Government Accession No.	2.	Recipient's Cataly 3 No.	
The Structures and the Role of an International Agency for the Control of Satellites - Juridical Aspects			5. Report Date June 1984	
			Performing Organization Code	
7. Author(s) R. J. Dupuy		a.	Parlarming Organization Report No.	
		10.	Work Unit No.	
9. Performing Organization Name and Address Leo Kanner Associates Redwood City, California 94063			11. Contract or Grant No. NASW-3541	
			13. Type of Report and Pariod Covered	
			Translation	
12. Sponsoring Agency Name and Address				
National Aeronautics tration, Washington,		14.	Spensering Agency Code	

15. Supplementary Notes

Translation of "Les structures et le role d'une agence internationale de satellites de control," Annals of Air and Space Law, Vol. 6, Montreal, McGill University; Toronto, Carswell Co., Ltd.; Paris, Editions A. Pedone, 1981, pp. 333-341. (A82-37636)

16. Abstract

Legal questions involved in the liability of a proposed agency which would control internationally owned satellites for monitoring worldwide compliance with arms control agreements are discussed. Difficulties are noted in aquiring the signed consent of all the relevant nations, as well as guaranteeing satisfactory compliance with the terms of such an agreement. Additional problems to be solved comprise the construction of the ground-based facilities and the satellites, the funding for the venture, and the reconciliation of the functions of the proposed Agency with the sovereignty of individual states. The Agency would gather, treat, and format data for signatories of arms control agreements, as well as provide technical assistance in crisis conditions. It is concluded that the existence and functioning of the Agency would reduce the amount of classified information and would consequently reduce the level of international tensions.

17. Key Words (Sciected by Author(1))		18. Distribution Statement			
		Unclassified - Unlimited			
19. Security Cloself. (of this report) Unclassified	20. Secondy Cloself. (of this page) Unclassified		21. No. of Peges 13	22.	

THE STRUCTURES AND THE ROLE OF AN INTERNATIONAL AGENCY FOR THE CONTROL OF SATELLITES

JURIDICAL ASPECTS

R. J. Dupuy

In his speech of May 25, 1978 before the General Assembly of the United Nations meeting in special session to study problems of disarmament, the President of France declared: "If disarmament is to become the business of all, it must be carried out with the agreement of all, under the control of all and for the benefit of all".(1) And Valery Giscard d'Estaing proposed various measures for attaining these goals. The proposal to create an international agency for the control of satellites was intended to ensure the control of all, the control of disarmament or arms limitation agreements by using observation satellites.

The proposal pointed out that only two powers were presently in a position to undertake such control by reconnaissance satellite, the United States and the USSR. But the development of space capacities by certain other powers allows us to believe that in a few years they too would be ready to gather useful data which would be available to the international community to help establish a lasting peace through arms control. The multiplicity of international means, by changing international relations, could be a factor in the reduction of tensions through the diffusion of information on the power and military movements of the various member states.

Nevertheless, many juridical problems appear upon careful study of this plan. Certain ones arise in regard to the creation of the Agency, questioning its viability, its ability to bring together the

(1) Le Monde, May 27, 1978, p. 6.

/333*

^{*} Numbers in the margin indicate pagination in the foreign text.

conditions indispensable to its formation and its development; other /334 problems are connected with the operation of the Agency, its powers, its functioning, its methods of acting on the collected data, and its credibility.

The Viability of the Agency

The birth of the Agency presupposes:

- adherence of the member states and their widest possible participation;
- the bringing together of technological means data, receiver and treatment stations, satellites - which would constitute the contribution in kind of certain participants in this undertaking;
- regular financing;
- . status within the United Nations system.

Adherence of the Member States

In the name of the absolute sovereignty of the member states, it is necessary to deal with to opposite types of behavior:

- the two great space powers possessing the means to observe the entire surface of the earth do not yet see it as being in their interest to participate in this plan since they have access to all of the collectable data without being required to communicate it. It must be pointed out that no member state has yet declared to them that this permanent observation violates their sovereignty inasmuch, perhaps, as the data gathered are not disseminated.
- the other countries for the most part will certainly be ready to join such an Agency in the hope of being a position to obtain information on their neighbors which may be useful to their security, while possibly opposing, in the name of sovereignty and security, the diffusion of data concerning their own territories.

In this regard it is necessary to refer to the current discussion

in the Committee for Peaceful Uses of Outer Space a propos the teleobservation of the earth; many member states are opposed to the free dissemination of data in the name of sovereignty over natural resources. This difficult question will be dealt with in the second part of this study.

The Technical Means that would be Available to the Agency

Taking into account the high cost of space technology, the plan foresees a progressive development of the technical means of the Agency. Three stages are envisaged (2):

/335

1. The Agency has only one center for the treatment and interpretation of data supplied by the satellites of the countries that have a surveillance system, i.e., the United States and the USSR, during the first stage, perhaps France or Europe afterwards.

Although the plan intends to avoid what is known as "the level of ultimate employment of national means" as well as "technical information considered to be sensitive", one does not see reasons that will convince the present space pwers to communicate to the international community information that confers on them an undeniable primacy - at least inasmuch as it may be a question of sounding out allies on a matter that concerns them, and in order then perhaps to disseminate information on the territory of other member nations, which may have acquired the right to object precisely because of membership in the Agency.

- 2. A second stage provides for the possibility of direct access to national satellites. Various options are possible: a well-deployed closed network suitable for gathering data from many types of satellites, or recourse to national stations of the Landsat type (intended
- (2) Cf Documert SMA/WP/3 of June 11, 1979, submitted by the French expert to the group of government experts installed according to Resolution 33/71 J of December 14, 1978 of the General Assembly of the United Nations, p. 26 ff.

for teleobservation of terrestrial resources) in order to obtain data adjusted to the level of performance which the member nations have agreed to make available to the Agency, or data received from a single space system (the futre French SPOT system for example) with coverage by Landsat or by well-deployed special stations.

This second stage already presupposes an investment of a variable but not negligible amount, as well as the agreement of the member states that progressively acquire space capacity.

3. The third stage consists of providing the Agency with observation satellites in order to carry out its data-gathering program without interference and to avoid the risks involved in handling the data, so as to better adapt the means to the intended missions.

All of this presupposes a large amount of funding in order to create the installations and maintain them.

Funding the Agency

The promoters of the project have attempted cost estimates. The latter can only be indicative, as they point out, due to the many possible hypotheses on the reactions of the member nations to the Agency plan. There is a wide margin with many scenarios between that of total collaboration of all memberstates with space capacity when and as required by the development of the Agency (a relatively low-cost but utopian hypothesis) and that of refusal of collaboration by all of the member states who are in possession of satellites and stations (which can be ruled out). The French estimates (3) have been criticized already (4).

⁽³⁾ Op. cit, p. 32 ff.

⁽⁴⁾ Document SMA/WP/4 of September 10, 1979, p. 8 ff. Remarks received from Mr. Santhanam, expert from India.

There are three possible types of funding:

- voluntary payments, "contributions in kind", that is to say, the technological means placed at the disposal of the Agency by certain countries: satellites and stations;
- contributions according to the budgetary regulations of the organs of the United Nations system;
- remuneration for services rendered by the Agency; payments made by member states who have applied to the Agency to ensure the control of disarmament agreements between them, according to conditions remaining to be specified in the Agency's charter.

These means of funding presuppose the adherence of space powers, or lacking that, a very large financial contribution by the less powerful countries. And it is necessary to point out that consideration must be given to a system of weighting the votes in relation to financial participation; otherwise the decisions might be made by those who do not contribute funding and therefore not be able to be applied.

The Status of the Agency

The French proposal suggests that the Agency be included in the United Nations system in the form of a specialized institution. Although other possibilities are conceivable: a technical organ directly attached to the General Assembly or to the Security Council, or dependent upon the United Nations Disarmament Commission, or put into action by the Secretary General on the request of a party to a disarmament agreement - the form of specialized institution has many advantages and seems adapted to the task at hand. The principal aspects of its status are described thus (5):

- <u>/337</u>
- "the Agency acts according to the purposes and principles of the United Nations Charter, in accordance with the policy of the United Nations regarding disarmament...";
- "the Agency is entrusted with gathering, treating and supplyan interpretive report on the data coming from earth observation
- (5) Document SMA/WP/3, p. 39 ff.

satellites". This point will be specified and discussed in the second part of this study, when we examine the Agency's powers;

- the Agency must respect the sovereign rights of the member nations;
- any member of the United Nations or of a spcialized institution may belong;
- the instances of decision and deliberation must include a full body, the General Assembly of the members, and a limited body, the space powers and the countries concerned with disarmament, with balanced regional representation;
- the status of the personnel of the Agency and the control of its activities must be specially studied so as to take into account the "sensitive" nature of the data in order to ensure in concrete terms respect for the limits set to the control by the Agency's charter and the secrecy of the information gathered within the framework of its mandate. Here too, there is the problem of dissemination of data.

The framework of a specialized institution seems perfectly acceptable, especially inasmuch as it guarantees the Agency's autonomy.

The Credibility of the Agency

In order for the Agency to function normally so that it may be in a conditions to play its role to the benefit of the international community as a whole "for the benefit of all", it must have credibility, its regulations must be precise and realistic; its ambitions must perhaps be limited but its capacities must be accepted without reserve by the majority of the countries.

Several problems arise:

- the scope of the Agency's powers;
- the Agency's modes of intervention;
- the dissemination of the collected data;

/338

the value of the data and the means of evaluating, using, and confirming it.

The Agency's Powers

The Agency is expected to participate in the control of the implementation of disarmament and security agreements on the one hand and to participate in inquiries into specific crisis situations on the other hand. It "provides a collection of technological means and abilities" (6). It gives advice first of all on the effectiveness of observation by satellite for a planned mission for which if positive it proceeds to gather data, treat it, and finally supply an interpretive report that is limited to stating the facts that might be deduced from the observation.

It must not go beyond this stage; in particular, it must not evaluate these facts in a political context, not to mention make sanctions. As a specialized institution it must be limited to a technical role; the evaluation of a violation of an agreement and the making of sanctions must be left to other organs of the United Nations.

The Agency's Modes of Intervention

To avoid conferring on the Agency a task of total and permanent observation that would tend to establish a sort of global surveillance organ (6), it is necessary to provide very precisely for the mechanisms for putting the Agency's controls into play.

It would intervene in two cases:

- upon the request of the member states who are parties to disarmament and security agreement. For existing accords that provide for control the Agency then offers new technological means
- (6) Op. cit. p. 35.

comparable to the national means, the procedure for implementation being specified in common by the Agency and the parties to the accord. For future accords recourse to the Agency can be expressly provided for, which will have available standard agreements that it could propose to the interested member states.

- upon the request of an interested member state or possibly the Security Council, in application of Article 34 of the United Nations Charter, which confers on it the right to inquire into any difference or situation liable to result in a discord, in order to investigate a particular situation and calm a crisis situation.

/339

The plan provides for the Agency to have, for its effectiveness, a bank of data on the areas possibly to be controled, before the crisis or upon the request for control, for comparison. This bank of data would be acquired by observation of the territories of all of the member nations participating, from the time they join, their consent to the observation being given when they join. This bank would consist of data whose use would not put into play the vital interest of the membernations. It nevertheless poses the problem

The Dissemination of Data

of dissemination of the data.

The data gathered are raw data: it is forbidden to disseminate it as such, most of the member states not being in a position to interpret it due to lack of the technical knowledge, which would place them in an unequal situation. The Agency must therefore plan to "supply a factual report consisting of a translation in clear language of the data coming from the satellites...as the case may be: volume and development of military movements, the nature of the equipment involved, maintenance of the demilitarization of a zone, etc..." (7).

The most serious problem is: Who is going to benefit from the

(7) Op. cit. p. 38.

Agency's reports? There are two possibilities:

- dissemination limited solely to the interested parties (member states party to the accord or difference, Security Council for cases of developing crises);
- . dissemination to all of the member states belonging to the Agency.

This problem is a very exact reflection of the problem posed to the Committee for Peaceful Uses of Outer Space of the United Nations, in regard to the teleobservation of the earth and of the information on the economic resources of the countries on which information can be gathered and disseminated. The former stake is military; the latter is economic. A reconciliation has been made, especially by the representatives of India (8) and of Belgium (9) to this Committee elsewhere. Two opinions clash: the eastern block countries (10) and a certain number of Third World countries are of the opinion that it is necessary to limit dissemination in order to respect sovereignty over natural resources in particular; certain western countries such as the United States, the Low Countries, Great Britain, Italy and Sweden are of the opinion that it is necessary to disseminate the gathered information as widely as possible and that its dissemination has never harmed anyone and that, on the contrary, this is the way to "prevent a growing inequality among the member nations not having the same economic and technical development...any limitation in the dissemination of such data would only have the effect of accentuating the growing predominance of the member state who are possessors" (11).

Can one extrapolate from the economic to the military? Probably not. It is necessary, however, not to lose sight of the fact that the two space powers make overflights of the entire earth and accumulate data for their own use alone, doing this for a number of years

- (8) United Nations Document A/AC. 105/PV 192, p. 8.
- (9) United Nations Document A/AC. 105/PV 196, p. 22.

/340

without anyone having raised the question of violation of sovereignty. Would sovereignty be more violated if the same data were stored in the archives of a specialized institution and disseminated on demand to any party who could prove legitimate interest in it for the purposes of security and peace? Even without the agreement of the observed country?

The problem of the secrecy of the accumulated files also involves the question of the status of the personnel of the Agency and of the control of their discretion.

The Value and Use of the Data

The authors of the plan point out the value that must accorded to the data collected by satellite: "Often, rather than proof, observation satellites, that cannot see everywhere and at all times, are capable only of supplying evidence, permitting, as the case may be, the start of a more complete investigation" (12). The data are therefore far from constituting proofs; they can be considered as presumptions only, and that in a double sense.

/341

First of all, the raw data, after pre-treatment (elimination of parasites, re-constitution of photographs...) are treated or interpreted in order to arrive at facts: volume and development of military equipment...Now. the technicians recognize that there can be several possible interpretations of the same data, even very highly developed satellites still having limits.

Then, when an interpretaion has been accepted, it only states facts that need to be corroborated by what the specialists call

(12) Doc. SMA/WP/3, preface. - 12 -

⁽¹⁰⁾ A convention on the teleobservation of the earth was signed in Moscow on May 19, 1978 by the USSR, Bulgaria, Cuba, Hungary, Mongolia, Poland, East Germany, Romania, Czechslovakia, which provides for (Art. IV and V) the "explicit consent of the contracting party to whom the observed territory and natural resources belong" for the dissemination of the basic data and information obtained by decoding. United Nations Document A/33/162 of June 29, 1978.

⁽¹¹⁾ United Nations Document A/AC. 105/PV 193, p. 24. Intervention of the representative of Sweden.

"terrain verity": control at the site or by other means that confirm or disprove the facts, and explain them.

It seems that this stage must be entrusted to another organ, of a political and not a technical nature, having the power to make decisions on an investigation and make possible sanctions: The Security Council seems, at first glance, to be qualified for this task.

In conclusion, if the security of all is an ideal to be sought after, the agreement of all does not seem to have been acquired for the creation of an agency that would ensure control of armaments for all to the benefit of all.

Now, it is the adherence of the most powerful that has some chance of making the undertaking viable, by providing it with the real means for its functioning. And this adherence will perhaps depend on the level of dissemination available to the least powerful for the information that they will be able to gather for themselves. If the quantity of "classified" information diminishe, the tension that attempts to pierce secrecy entail would diminish. If the quantity of "classified" information increases because a greater number of large countries can accumulate it while at the same time limiting its dissemination, the risk of tension increases.