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TESTS WITH THREE-DIMENSIONAL ADJUSTMENTS IN THE RECTANGULAR  
WORKING SECTION OF THE FRENCH T2 WIND TUNNEL, WITH AN  
AS 07-TYPE SWEPT-BACK WING MODEL

A. Blanchard, M. J. Payry, J. F. Breil

Translation of "Essais 'd'adaptation tridimensionnelle' de la veine rectangulaire de la soufflerie T2, en presence d'une maquette d'aile en fleche du type AS 07," Rapport Technique OA 34/3075 (DERAT 12/5015 DN), O.N.E.R.A., Centre d'Etudes et de Recherches de Toulouse, November 1985, pp. 1-24 (plus figures).

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16. Abstract This report presents the results obtained on the AS 07 wing and the working section walls for three types of configurations. The first, called "non-adapted," corresponds to the divergent upper and lower rectilinear walls which compensate for limit layer thickening. It can serve as a basis for complete flow calculations. The second configuration corresponds to wall shapes determined from calculations which tend to minimize interference at the level of the fuselage. Finally, the third configuration, called "two-dimensional adaptation," uses the standard method for T2 profile tests. This case was tested to determine the influence of wall shape and error magnitude. These results are not sufficient to validate the three-dimensional adaptation; they must be coordinated with calculations or with unlimited atmosphere tests.			
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## NOTATION

$\left. \begin{matrix} x_p \\ y_p \\ z_p \end{matrix} \right\}$  Cartesian coordinates in the reference working section  
(porthole axis)

$\left. \begin{matrix} x \\ y \\ z \end{matrix} \right\}$  Cartesian coordinates in the wing reference (leading edge to socket)

C Profile chord of the wing section considered

$\alpha$  Angle of the model (fuselage axis)

$M_\infty$  Infinite Mach upstream of the flow

M Local Mach (wing or wall)

$$K_p = \frac{p - p_\infty}{\frac{1}{2} \rho_\infty V_\infty^2} \quad \text{Pressure coefficient}$$

$C_z$  Local or complete-wing lift coefficient

$$\left\{ \begin{array}{l} C_z \text{ local} = \int_{\text{profil}} K_p \cdot d\left(\frac{x}{C_{\text{local}}}\right) \\ C_z = \frac{F_z}{\frac{1}{2} \rho_\infty V_\infty^2 \cdot S_{\text{aile}}} \end{array} \right.$$

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1 - INTRODUCTION

/7\*

This test series follows a study done in the T2 wind tunnel with the goal of defining a shape for the adaptable walls which would minimize their influence on three-dimensional objects placed in the center of the section or fastened on the side.

The present configuration of the working section does not allow obtaining a shape identical to that of the layer of current existing around a three-dimensional model in unlimited atmosphere (two completely rectilinear and parallel lateral walls, two flexible and bendable upper and lower walls). The planned solution thus consists of using the two bendable walls to minimize the influence of the walls on the model.

The method implemented uses solutions developed by "E. Wedemeyer and L. Lamarche" [5]. A first series of tests was done in cooperation with the University of Berlin on various existing models [6]:

- a C5 revolving body 166 mm long, 0.3% blockage;
- a civil F4 airplane model with 120-mm wingspan and three-component balance;
- a duck-type military airplane model with the same balance.

Another series of tests was then done on a bigger model [7]:

- a C5 body 400 mm long, 1.8% blockage.

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\*Numbers in the margin indicate pagination in the foreign text.

The results and calculations were compared.

The calculation method was optimized for revolving bodies placed in the center of the section; an extrapolation was tried which placed a half-wing at the wall. In this case, calculation is done as if the section were twice its actual width, using the Mach distribution at the wall measured near the plane of symmetry.

The results obtained on the "16/1000-scale" AS 07 are discussed in this report. They can be divided into two groups: control tests and systematic tests.

Included in the first group is control of wing angling by rotating the walls. The path of the jacks would not permit the displacements required by calculation for angling the model to  $+2^\circ$ ; we thus used this artificial method after having verified its validity.

The three-dimensional adaptation method supplies the optimal shape of the walls from the first calculation, whatever the initial position of the walls; this was verified in /8 several test configurations. Finally, an adaptation called "two-dimensional" was tested; it uses the normal method for T2 profile tests. This case, without theoretical justification, was tried to see the influence of the shape of the walls and the size of errors which can be made.

The second part of this study corresponds to systematic tests: four configurations were chosen which gave different lift coefficients, without making highly supersonic zones appear on the profiles. For each configuration, three wall positions were tested:

- The first, called "unadapted," corresponds to the upper and lower divergent rectilinear walls compensating for

thickening of the limit layers; it served as our basis for beginning three-dimensional adaptation calculations. These particularly simple limit conditions can also be used for complete calculation of the flow in the working section.

- The second wall shape comes from the three-dimensional adaptation calculation; the flexible sheets are positioned before the gust.
- Finally, the last case corresponds to "two-dimensional adaptation"; the iterative process converges on a single gust.

For each type of test, three gusts are necessary to obtain readings from the six rows of pressure recorders spread along the AS 07 wing.

The experimental results gathered during this series are not sufficient to validate the three-dimensional adaptation method used. Additional calculations must be made to estimate residual corrections. In these tests, a negligible influence of the walls is observed for low lift values or low Mach numbers; inversely, for 2 degrees of incidence or for Mach 0.8, the gaps become significant and can in part be interpreted as variations in aerodynamic incidence.

## 2 - ADAPTATION PRINCIPLE

The purpose of the adaptable walls is to create an unlimited flow around a model in a working section with finite dimensions; this can be done by controlling the wall conditions, either by their shape in the case of solid walls or by flows of mass through porous walls. The first solution has been chosen at T2, where flexible sheets moved by jacks form the upper and lower plates of the working section [3].

In the case of a three-dimensional body, it is necessary to bend the walls located around the model to arrive at a shape near the layer of current existing around the model in unlimited atmosphere. This solution is not at present possible at T2, but on the other hand it is possible to use the two flexible /9 walls to minimize residual corrections due to the influence of the walls on the object.

### 2.1 Two-dimensional adaptation

The details of the process will be found in [2] and [4]; it uses a coupling between the real flow in the working section (internal field) and a calculated virtual flow outside the wind tunnel (external field). Coupling occurs on a control surface near the walls through speed vector components. Adaptation is achieved by an iterative process acting on the shape of the walls: the components of the speed on the control surface become available at each iteration; they are extrapolated from the pressure measurements at the wall. The velocities needed on the control surface to achieve an unlimited external flow are calculated by the Green function following an inverse method. A method of optimized relaxation between the internal and external flows for the vertical velocity component, followed by an integration along each flexible wall, supplies the new shape of the wall. The real shape needed is obtained by adding the thickness displacement of the four wall limit layers.

### 2.2 Three-dimensional adaptation

For three-dimensional adaptation, the process is different [5]: it uses schematization of the model through distribution of sources and vortices in a narrow horseshoe placed on the section axis. This schematization gives a good representation of axisymmetrical bodies mounted in the middle of the working section.

The originality of the method lies in then doing a linear transformation, which permits passing directly from distribution of velocities at the walls to the adapted form without needing to determine the intensity of singularities. The optimized shape of the walls is thus theoretically obtained from the first calculation; this shape, which is not exactly "adapted," minimizes residual corrections on the model caused by the influence of the walls.

Using this method for a half-wing at the wall is abusive, because the base schematization does not represent a wingspan; it has nonetheless been tried here by replacing the lateral door by a plane of symmetry leading to a fictional double section width, and taking the Mach distribution of the flexible walls near the plane of symmetry as reference.

### 3 - EXPERIMENTAL EQUIPMENT

The T2 transonic wind tunnel is pressurizable and can function at low temperatures; only minimum-pressure and ambient-temperature tests were done during this series.

#### 3.1 Working section equipment

/10

The working section has an almost square section of  $0.39 \times 0.37 \text{ mm}^2$  at the entrance. Flexible sheets of Invar make up the upper and lower walls, equipped with three rows of pressure recorders whose coordinates are given in figures 7 and 8. The sheet-positioning mechanism is described in [2], [3], and [4].

The left lateral door has three portholes with pressure recorders placed along horizontal and vertical lines whose coordinates are shown in figures 7 and 9.

The pressure recorders are linked to the Scanivalves, each of whose head can observe 48 positions in 5 seconds.

The position of the wing in the working section is given in figure 6.

The Mach number of the flow is set by a second neck controlled by the computer which controls the gust.

No other equipment or wind tunnel measurement method was used.

### 3.2 Mounting the wing

The AS 07 wing model with a scale of "16/1000" is shown by the photographs in figure 5. The method of mounting the wing on the wall is shown (figure 6), the plane of the wing and its specifications are given (figures 10 and 11), and the shape of the profiles which compose it and the positions of the pressure recorders are indicated (figures 12 and 13).

There are six rows, each with 16 recorders on the inner and outer sections and one on the leading edge; they are placed across the wingspan so as to form lines with constant chord percentages. These recorders communicate with tubes placed in grooves along the wingspan; each tube communicates with three recorders (either on the external wing or on the internal wing). When one of the three rows of recorders is used to measure pressure, the other two are covered with thin (0.05-mm) adhesive strips. It is thus possible to simultaneously measure pressure on two sections of the wing (one internal and one external); measurement of velocities over the entire wing thus requires three different gusts.

The wing is mounted on a half-fuselage linked to a porthole, whose rotation ensures the angling of the wing-

fuselage assembly; the angular reference is the rectilinear part on the back of the fuselage [1].

### 3.3 Acquisition and examination program

The T2 wind tunnel is linked to a team of two computers, one concerned with creating and regulating the gust and the other with obtaining data and storing measurements to disk at the end of the gust.

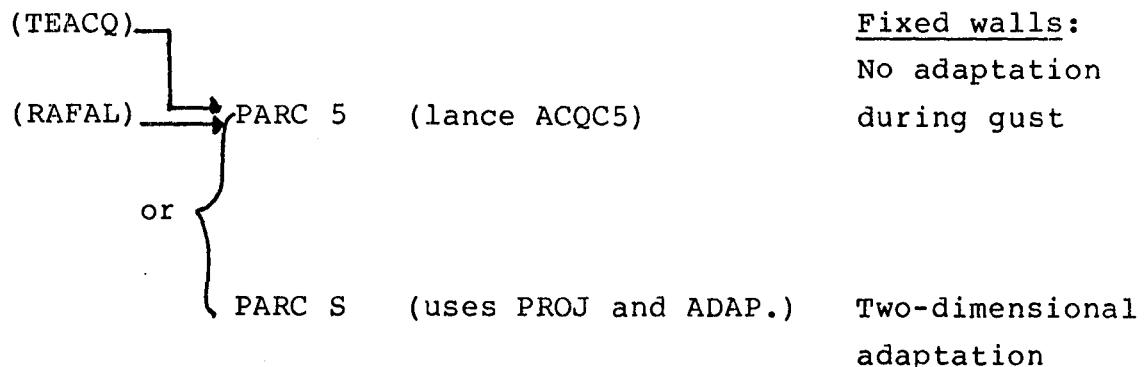
These tests are pursuant to the series done on the /11 C5 body and use its principal elements.

#### Disk cartridge

LU 26, Program

LU 34, Test files, calculation files

#### Acquisition program



Initialization of programs { with (TR,) RINC 5 (For PARC 5)  
or (TR,) RINC S (For PARC S)

#### Test file

AD --- test number from AD 100 to AD 173

## Wall positioning file

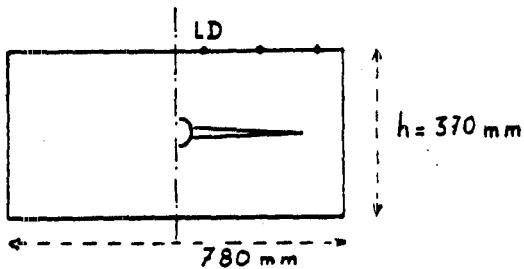
- any test file AD---
- or calculation file AD 9 ---
- or special file {
  - AD 4: Divergent rectilinear walls of symmetrical limit layers.
  - AD 444: AD 4 + 10' rotation upward
  - AD 445: AD 4 + 30' rotation upward

## Three-dimensional adaptation calculation

Calculation from a test file AD ---

VKJ 43 Calculation of wall shapes without rotation

VKI M Calculation of wall shapes with rotation



- section length 780 mm
- ratio  $c = h/b = 2.1081$
- reference recorders:  
right lateral RL
- weighting coefficients  
file VKJ - R (cartridge  
LU 43)

→ Filing to disk

## File for new calculated wall shapes

AD 9 --- beginning test number for the calculation

## Programs for examination of AD--- files

LTCS:

- graphs local profile Mach numbers
- graphs Kp
- lists AD file
- calculates Cz

LTC 51:

- graphs wall Mach numbers
- graphs wall shapes
- starts LTC 52 (does an RP, LTC 52)

LTC VK:

- graphs only wall shapes calculated by VKI 43 or VKIM (from AD 9---).

4 - SUMMARY OF TESTS PERFORMED

A previous study was done on the AS 07 wing [1]. We verified in one case that the same results would occur, although the working section was modified when the T2 wind tunnel was adapted for cryogenics.

The first control tests were done by measuring rows 2 and 5 of pressure recorders for the Mach numbers and incidences indicated below:

$M_\infty$	0,6	:	0,7	:	0,8
$\alpha$	:		:		)
(					)
( +2°	X	:	X	:	X
( 0	X	:	X	:	X
( -2°	X	:	X	:	)
					)

Four configurations were selected for systematic tests: /13

$\alpha$	$M_\infty$	0,6	:	0,7	:	0,8
		:		:		)
( +2°	X	:		:		)
( 0°	X	:		:	X	)
( -2°	X	:		:		)
		:		:		)

They correspond to a sampling of lift coefficients and to an infinite Mach effect upstream, while limiting the supersonic zones which appear on the profiles.

Figure 1 shows the list of tests in chronological order, and figures 2, 3, and 4 classify them by configuration.

We first showed that rotation of the upper and lower walls was equivalent to angling the model at the same angle. This artifice was made necessary because the path of the jacks did not permit the displacements required by calculation of three-dimensional adaptation for a model incidence of +2°.

#### - Divergent rectilinear walls

$\alpha$	$\alpha$	Wall	$M_\infty$
Gened.	( Display	Start	0,6 : 0,8 )
			:
+2°	( +2°	AD 4	AD 120 : )
	( +1,5°	AD 445	AD 122 : )
			:
0°	( 0°	AD 4	AD 107 - AD 109 : AD 108 - AD 132 )
	( -0,5°	AD 445	AD 137 : AD 139 )
			:

M <sub>0</sub>		
( $\alpha$ CALCUL	0,6	: 0,8 )
( $\alpha_{\text{aérod.}} = 0^\circ$	:	)
( 0° VKI 43	117	: AD 119 )
( -0,5° VKI M	138	: AD 141 )
(	:	)

The three-dimensional adaptation method theoretically supplies the optimal shape of the walls from the first calculation, whatever the initial position of the flexible sheets. Controls were done in this respect for the following configurations:

M <sub>0</sub>		
( $\alpha$	0,7	: 0,8 )
( display	:	)
(	:	)
( +1,5°	:	AD 127 (1) )
(	:	AD 128 (2) )
(	:	AD 129 (3) )
(	:	)
( 0°	AD 115 (1)	: AD 118 (1) )
(	AD 116 (2)	: AD 119 (2) )
(	:	)
( -0,5°	:	AD 140 (1) )
(	:	AD 141 (2) )
(	:	)

The figure in parentheses after the file number indicates the order of the iteration; the wall-positioning file thus results from calculation of the preceding test. (Iteration (0) is the test done with rectilinear walls.)

We also verified that the tests called "two-dimensional adaptation" converged rapidly, as is the case for the profile tests; it is sufficient for that to compare the wall position of

the 3rd and 4th iterations done during the same gust; the two positions are always close. In general, the beginning shape chosen is near the adapted shape, but we have tested this convergence in the two particular cases when the beginning shape was far from the adapted shape. The beginning file chosen was AD 4: rectilinear walls divergent from limit layers and symmetrical.

/15

Configuration:  $M_o = 0.7 \alpha = +1.5^\circ$  File AD 130 (1)  
Configuration:  $M_o = 0.8 \alpha = 0^\circ$  File AD 133 (1)  
followed by File AD 134 (2)

Comparisons were made between the various wall positions; they are noted:

- "Non," for divergent rectilinear walls
- "2D," for two-dimensional adaptation done with the PARCS program
- "3d," for positioning of the walls in the shape calculated by the VKI 43 or VKI M program

It was decided to do systematic tests for the three cases of "adaptation," the non-adapted case serving as a basis for three-dimensional calculation (any wall shape will work); this case can also serve as a basis for complete flow calculations, because here the limit conditions are particularly simple. The two-dimensional adaptation, a priori outside the subject of the study, was systematically tested to use as a comparison with the assumed optimal shape.

Finally, four configurations for three cases of adaptation, reproduced three times to have the velocity field on all of the wing, were tested; these 36 gusts make up the systematic tests listed in figure 26a.

## 5 - CONTROL TESTS

We will not present all the tests done, but only a selection of cases judged most interesting, since the goal of this series is not to evaluate the AS 07 wing.

### 5.1 Angling by wall rotation

Of the five configurations tested (paragraph 4), three are presented. The first corresponds to  $M_0 = 0.6$  and  $\alpha = +2^\circ$  for rectilinear walls (figure 14); this is the configuration which obliged us to use this artifice, as the three-dimensional case could not be tested.

Figure 15 shows the comparison of Mach numbers on the walls and on the wing, for an aerodynamic incidence equal to  $0^\circ$  and a Mach number equal to 0.8, in the case of rectilinear walls. Figure 16 presents the same configurations but for wall shapes coming respectively from calculations VKI 43 and VKI M.

The results of figures 14 and 15 show that the high Mach case is the most recordable, but the correspondence of the tests remains good. Figure 16 shows that the VKI M calculation makes perfect allowance for total rotation.

It is thus possible to display a model incidence /16 different from that desired and to compensate by rotating the walls.

### 5.2 Convergences of iterations

#### 5.2.1 Three-dimensional adaptation

Several calculations for optimization of wall shape were connected for one configuration. The last test is always recalculated, leading to a wall shape which by definition

will not be used, but which will in fact constitute an additional iteration.

Of the four tested cases, two are presented in figures 17 and 18; the first ( $Mo = 0.7$  and  $\alpha = 0^\circ$ ) shows that the adapted shape is practically obtained from the first iteration; in the second case--much more difficult ( $Mo = 0.8$  and  $\alpha = +2^\circ$ )--it is necessary to wait for the second calculation. This second case corresponds to a freely supersonic regime of the wing which will not be studied systematically herein.

### 5.2.2 Two-dimensional adaptation

In all tests done, the 3rd iteration is always identical to the 4th and last iteration of the gust, even when the upper and lower walls have been prepositioned in a shape very different from the "adapted" shape. This is the case shown in figure 19 corresponding to  $Mo = 0.8$  and  $\alpha = 0^\circ$ .

To confirm the validity of this statement, a second test was done, positioning the flexible sheets on the preceding shape; the values obtained can thus be considered to correspond to the 4th, 5th, 6th, and 7th iterations of the test; they are all identical (figure 20), which confirms that the convergence was well obtained.

### 5.3 Non/2-D/3-D comparison

Two cases are presented here, one of which is not part of the systematic tests:

- $Mo = 0.7 \quad \alpha = 0^\circ$
- $Mo = 0.8 \quad \alpha = 0^\circ$

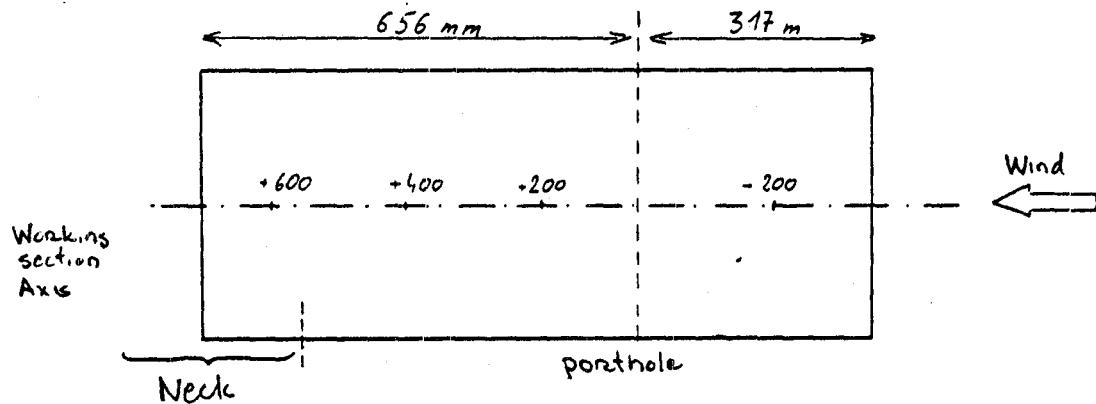
The gaps observed following the types of "adaptation" will become more significant as lift and Mach number upstream increase. The adaptation called "two-dimensional" gives results nearer to the non-adapted case; in fact, everything happens as if the aerodynamic incidence of the two-dimensional case were higher than that of the tests with a wall shape adapted in three dimensions. On the other hand, rectilinear walls lead to a higher effective Mach number upstream (blockage effect).

In the first case (figure 21), the gaps are moderate; they are more significant in the second case (figure 22). Observation of the direction of the walls leaving the convergent (figure 21) shows that effectively the direction of the flow upstream is no longer horizontal in the "2-D" case, unlike the "3-D" case; the angular reference was given by the "non-adapted" case. The effect produced is incontestable, because we previously demonstrated that rotation of the wall assembly modified the aerodynamic incidence of the model; however, this is not sufficient to prove that the 2-D case is erroneous, because the direction of the current lines in unlimited atmosphere is not known. We note also the very different shapes of the walls downstream; they go downward for the "3-D" cases, which is logical allowing for the chosen schematization (horseshoe vortex) and the calculation made (in the plane of symmetry). But once more, that does not prove that the shape obtained is optimum. /17

Finally, one can observe on the last figure (23) that the effect produced by modifying the shape of the walls is not constant across the wingspan. This was predictable due to the working section geometry itself, allowing for twist of the wing and for three-dimensional effects.

#### 5.4 Visualizations

For three configurations, oil visualizations were done on the left door of the working section, giving the direction of the current lines 55.4 mm from the end of the wing. Reference marks were made, making it possible to locate the positions relative to the current lines and to measure their deviations.



The end of the wing is located between the abscissas 91.06 mm and 135.86 mm from the porthole (figure 6) and very near to the section axis (function of the incidence).

The maximum deviations noticed are located on the section axis slightly behind the tip of the wing (figures 24, 25, and 26).

(	Mo :	$\alpha$	Walls :	$\delta_{\max}$	)
{	:		:	:	)
{	0,6	: +2°	"Non-adapted"	: (5°.....6°)	)
{			AD 4	:	)
{	0,6	: +2°	'Adapted 2-D'	: (5°.....6°)	)
{				:	)
{	0,6	: -2°	"Non-adapted"	: ~ 0,5°	)
{			AD 4	:	)

Figure 24

Figure 25

Figure 26

The photos taken from behind clearly show the deviations of the current lines. /18

## 6 - SYSTEMATIC TESTS

For the 36 gusts that made up the systematic tests (paragraph 4 and figure 26a), the following information is given: wall shape (figures 27 and 28), Mach numbers of the three rows of recorders on the adaptable walls (figures 29, 30, 31, and 32), Mach numbers of the left lateral door (figures 33, 34, 35, and 36) following the horizontal axis or the three verticals, and finally spread of  $K_p$  on the AS 07 wing (figures 37 to 44).

Numerical values for these curves are given in the attached test listings. File numbers corresponding in chronological order to the experiments were kept in the interests of clarity.

Here will be found a systematic comparison of the three cases of adaptation--"Non/2-D/3-D"--and their influence on the speed distributions whose principal characteristics were seen in paragraph 5.3.

Finally, integration of  $K_p$  for each section supplies local lift coefficient  $C_z$ . The values are tabulated in figure 45; they were traced along the wingspan of the various configurations tested (figures 46 and 47). It is observed that the internal wing changes less rapidly than the external wing with incidence (figure 46) or Mach number upstream (figure 47).

On the other hand, the gap between the "non-adapted" and "adapted 3-D" cases increases with the lift.

Local  $C_z$  were multiplied by the chord of the profile in the section considered; the product  $C_z \cdot C$  represents local contribution to wing lift. The values obtained were traced in this representation (figures 48 and 49); this weighting modifies the appearance of the curves ("elliptic" distribution plane), but the observed tendencies are the same. /19

Finally, integration of the curves in this last representation supplies the overall lift coefficient of the wing, which was reported as a function of incidence (figure 50). We have also reported the lift measured during the preceding series [1], done between rectilinear walls for a Mach number upstream of 0.47. The effect of compressibility is felt more as supersonic zones develop on the wing.

## 7 - CONCLUSION

This series of tests on the AS 07 wing is registered as a study on three-dimensional adaptation of the T2 wind tunnel. It uses the two flexible walls to minimize residual corrections in the presence of a three-dimensional model. It implements the "E. Wedemeyer and L. Lamarche" method where schematization of the model by a distribution of singularities adequately represents an axisymmetrical body. Extrapolation of these methods in the case of a half-wing at the wall has no ultimate goal; it serves merely as a preliminary phase, to observe the influence of wall shape in various sections of the wing, to study the convergence of the method, and to make adjustments (rotation of walls, incidence, etc.).

On the other hand, these experiments can serve as a basis for calculating potential three-dimensional flow around the model. Then, a three-dimensional object placed in the section

could be more elaborately schematicized; it would lead to development, as for axisymmetrical bodies, of a method of adaptation minimizing the influence of the walls on the model.

At present, it is difficult to know if the shape called "adapted 3-D" is nearer to the values of unlimited atmosphere than the shape "adapted 2-D," but it is definitely not the optimum shape.

The tests will next be completed by directional limit layer readings on the lateral wall at the level of the end of the wing. The direction of the current lines in this area will be an important element in the reality-calculation comparison.

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- 2-D  
- 3-D 29

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TEST TABLES

FIGURES 1 TO 4

Figure 1

List of "AS 07 wing" tests

File AD4 : Divergent rectilinear walls  
 AD445 : Idem + 30° rotation (upward)  
 AD--- : Test file No. ---  
 AD9---- : 3-D calculation of new wall position

A File	B	C	D	E
* A !INC. ! PANGEES ! FICHIER ! ROT. ! NB. *				
*FICHIER ! AFF. ! MARCHE ! DE PRISES ! DE DEPART ! PAROIS ! ADAPT. ! D'ITER. *				
* AD105 0 .7 2 - 5 AD4 0 NON 1 *				
* AD107 0 .6 " " 0 " 1 *				
* AD108 0 .8 " " 0 " 1 *				
* AD109 -2 .7 " " 0 " 1 *				
* AD110 0 .7 " " 0 " 1 *				
* AD111 0 .6 " " 0 " 1 *				
* AD112 0 .8 " " 0 " 1 *				
* AD113 0 .8 " " 0 " 1 *				
* AD114 0 .8 " " 0 " 1 *				
* AD115 0 .7 " " AD9105 0 3-D (1) 1 *				
* AD116 0 .7 " " AD9115 0 3-D (2) 1 *				
* AD117 0 .6 " " AD9107 0 3-D 1 *				
* AD118 0 .8 " " AD9108 0 3-D (1) 1 *				
* AD119 0 .8 " " AD9118 0 3-D (2) 1 *				
* AD120 +2 .6 " " RD4 0 NON 1 *				
* AD122 +1.5 .6 " " AD445 30' NON 1 *				
* AD123 +1.5 .6 " " AD9122 30' 3-D 1 *				
* AD124 +1.5 .7 " " AD445 30' NON 1 *				
* AD125 +1.5 .7 " " AD9124 30' 3-D 1 *				
* AD126 +1.5 .8 " " AD445 30' NON 1 *				
* AD127 +1.5 .8 " " AD9126 30' 3-D (1) 1 *				
* AD128 +1.5 .9 " " AD9127 30' 3-D (2) 1 *				
* AD129 +1.5 .9 " " AD9128 30' 3-D (3) 1 *				
* AD130 +1.5 .7 " " RD4 0 2-D 4 *				
* AD131 +1.5 .6 " " AD130 0 2-D 4 *				
* AD132 0 .6 " " RD4 0 2-D 4 *				
* AD133 0 .6 " " AD133 0 2-D 4 *				
* AD134 0 .8 " " AD134 0 2-D 4 *				
* AD135 0 .7 " " AD135 0 2-D 4 *				
* AD136 0 .6 " " AD445 30' NON 1 *				
* AD137 -0.5 .6 " " AD9137 30' 3-D 1 *				
* AD138 -0.5 .6 " " AD445 30' NON 1 *				
* AD139 -0.5 .8 " " AD445 30' NON 1 *				
* AD140 -0.5 .8 " " AD9139 30' 3-D (1) 1 *				
* AD141 -0.5 .8 " " AD9140 30' 3-D (2) 1 *				
* AD142 -2 .6 " " RD4 0 NON 1 *				
* AD143 -2 .6 " " AD9142 0 3-D 1 *				
* AD144 -2 .6 " " AD136 0 2-D 4 *				
* AD145 +2 .6 " " AD131 0 2-D 4 *				
* AD146 +2 .6 1 - 4 AD145 0 2-D 4 *				
* AD147 +1.5 .6 " " AD445 30' NON 1 *				
* AD148 +1.5 .6 " " AD9122 30' 3-D 1 *				
* AD149 0 .6 " " AD136 0 2-D 4 *				
* AD150 0 .6 " " RD4 0 NON 1 *				
* AD151 0 .6 " " AD9107 0 3-D 1 *				
* AD152 0 .8 " " AD134 0 2-D 4 *				
* AD153 0 .8 " " RD4 0 NON 1 *				
* AD154 0 .8 " " AD9118 0 3-D 1 *				
* AD155 -2 .6 " " AD144 0 2-D 4 *				
* AD156 -2 .6 " " RD4 0 NON 1 *				
* AD157 -2 .6 " " AD9142 0 3-D 1 *				
* AD158 -2 .6 3 - 6 AD144 0 2-D 4 *				
* AD159 -2 .6 " " RD4 0 NON 1 *				
* AD160 -2 .6 " " AD9142 0 3-D 1 *				
* AD161 0 .6 " " AD136 0 2-D 4 *				
* AD162 0 .6 " " RD4 0 NON 1 *				
* AD163 0 .6 " " AD9107 0 3-D 1 *				
* AD164 0 .8 " " AD134 0 2-D 4 *				
* AD165 0 .8 " " RD4 0 NON 1 *				
* AD166 0 .8 " " AD9118 0 3-D 1 *				
* AD167 +1.5 .6 " " AD445 30' NON 1 *				
* AD168 +1.5 .6 " " AD9122 30' 3-D 1 *				
* AD169 +2 .6 " " AD145 0 2-D 4 *				

Figure 2

Rows of recorders : 1-4

NON ADAPTE			
Incidence		Mach	
Affichee	Aerodynamique	0.6	0.7
+1.5	+2	147	
0	0	150	153
-2	-2	156	

ADAPTE 3-D			
Incidence		Mach	
Affichee	Aerodynamique	0.6	0.7
+1.5	+2	148	
0	0	151	154
-2	-2	157	

ADAPTE 2-D			
Incidence		Mach	
Affichee	Aerodynamique	0.6	0.7
+2	---	146	
0	---	149	152
-2	---	155	

Affichee = Displayed

Figure 3

Rows of recorders : 2-5

NON ADAPTE				
Incidence		Mach		
Affichee	Aerodynamique	0.6	0.7	0.8
+2	+2.17	121		
+2	+2	120		
+1.5	+2	122	124	126
0	0	107 109	105	108 132
-0.5	0	137		139
-2	-2	142	110	

ADAPTE 3-D				
Incidence		Mach		
Affichee	Aerodynamique	0.6	0.7	0.8
+1.5	+2	123	125	127(1) 128(2) 129(3)
0	0	117	115(1) 116(2)	118(1) 119(2)
-0.5	0	138		140(1) 141(2)
-2	-2	143		

ADAPTE 2-D				
Incidence		Mach		
Affichee	Aerodynamique	0.6	0.7	0.8
+2	---	145		
+1.5	---	131	130	
0	---	136	135	134
-2	---	144		

Figure 4

Rows of recorders : 3-6

NON ADAPTE			
Incidence		Mach	
Affichee   Aerodynamique		0.6	0.7
+1.5	+2	167	
0	0	162	165
-2	-2	159	

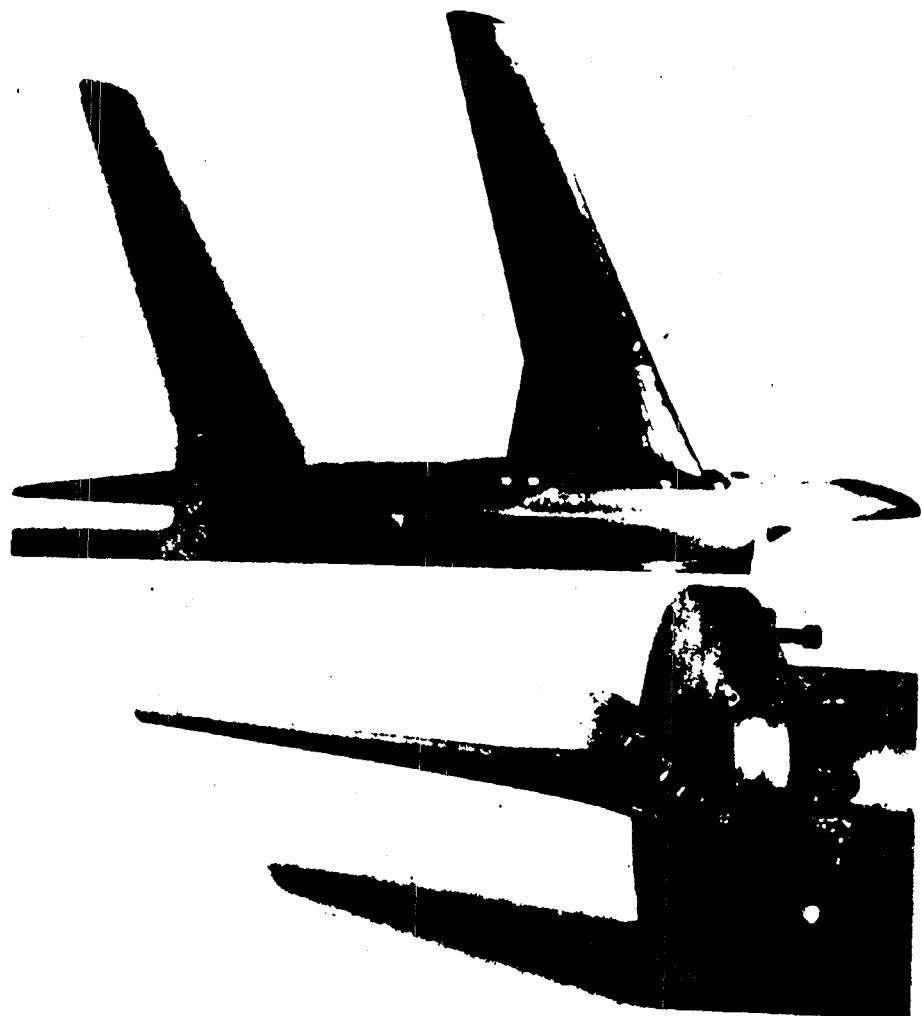
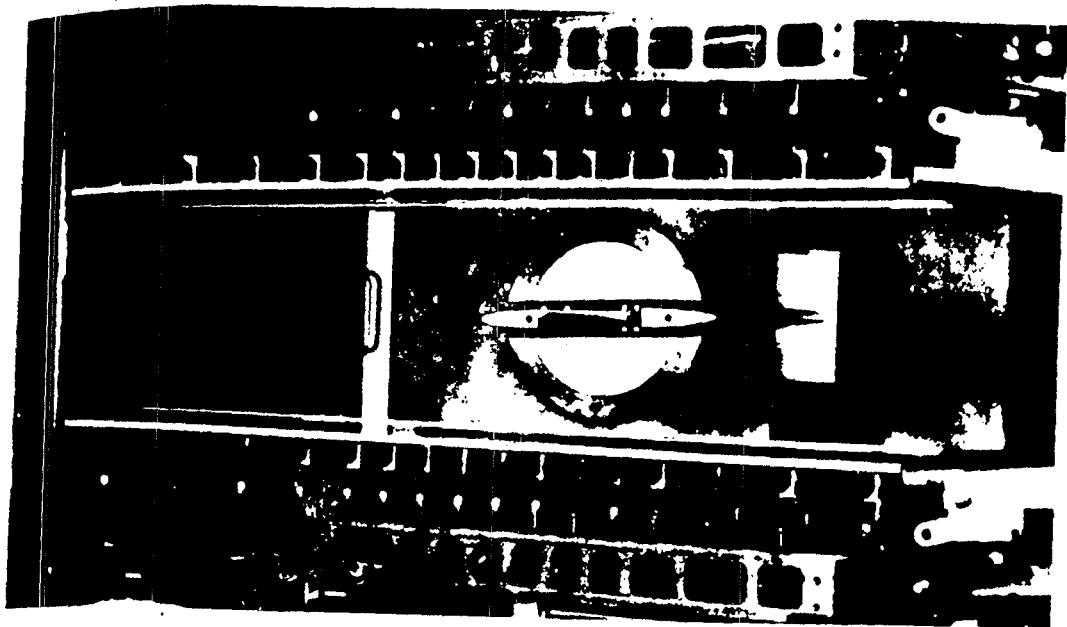
ADAPTE 3-D			
Incidence		Mach	
Affichee   Aerodynamique		0.6	0.7
+1.5	+2	168	
0	0	163	166
-2	-2	160	

ADAPTE 2-D			
Incidence		Mach	
Affichee   Aerodynamique		0.6	0.7
+2	---	169	
0	---	161	164
-2	---	158	

Affichee = Displayed

Figure 5

Presentation of mounting



WING MOUNTING

FIGURES 5 TO 13

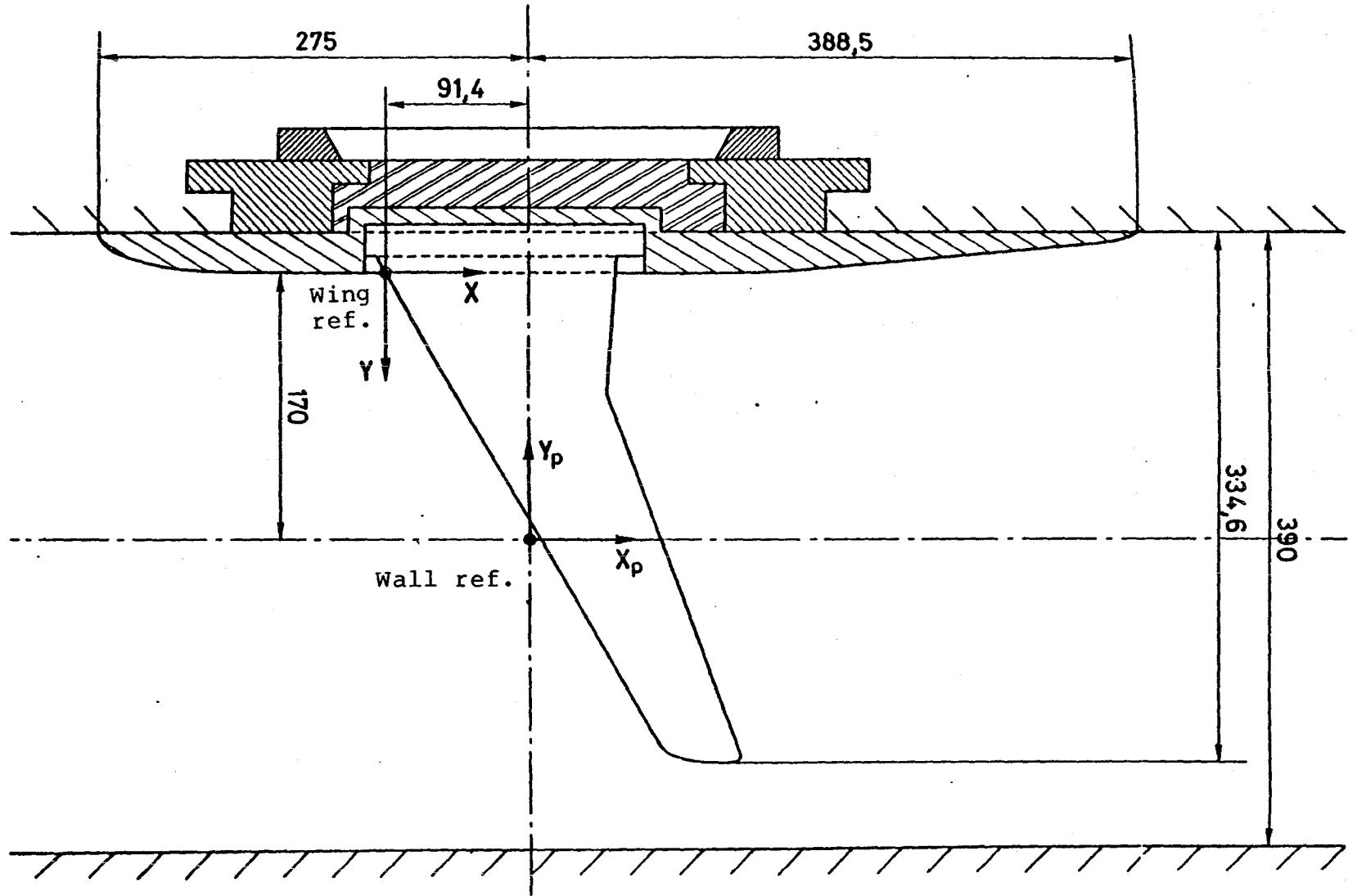


Diagram of wing mounting

Figure 7

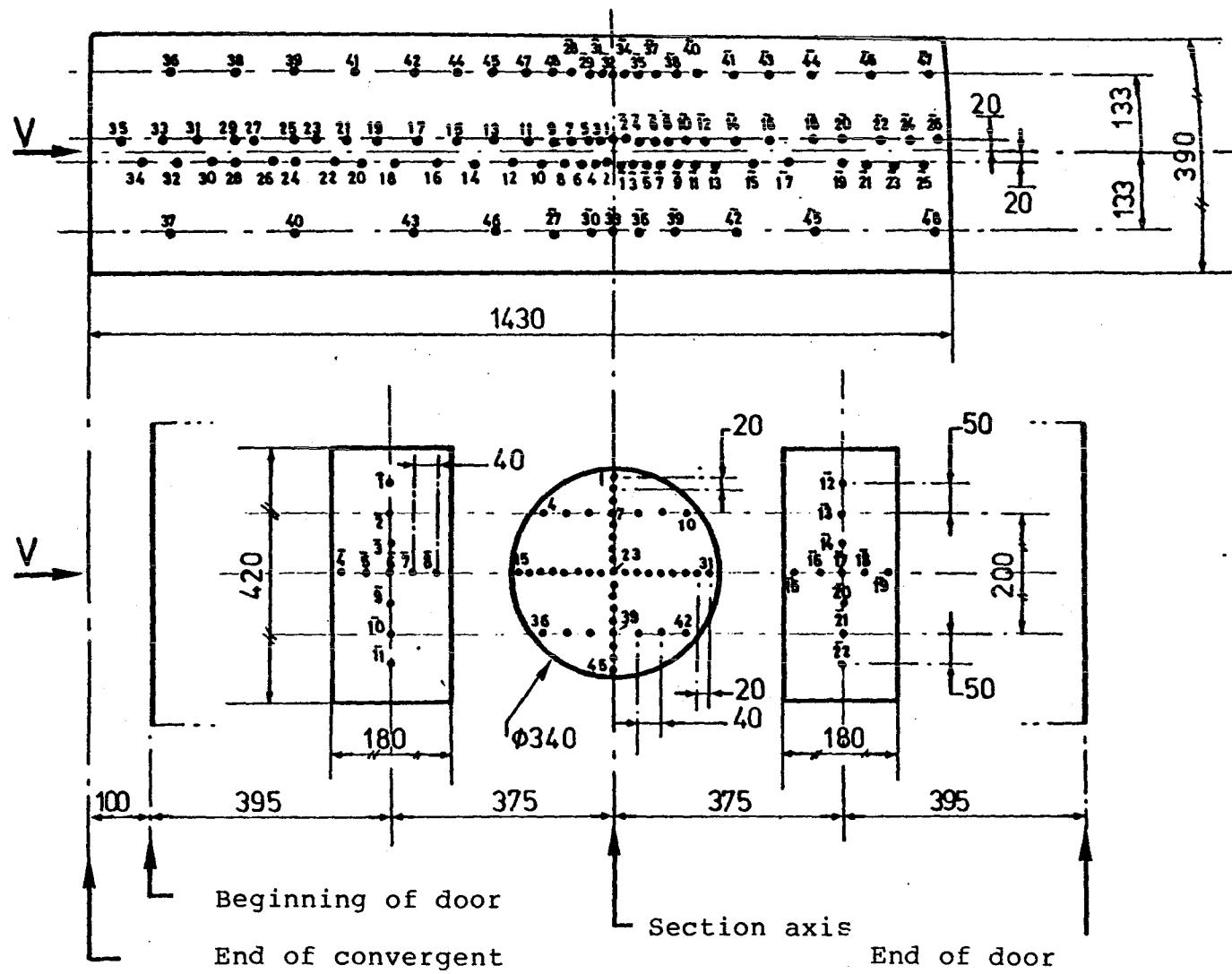


Diagram of wall pressure recorders

Figure 8

Equipment of adaptable cryogenic walls: specs of  
pressure recorders, jacks, and thermocouples

<u>Wall pressure recorders</u>						<u>Jacks</u>					
I	XPH	XPB	ZP	I	XPH	XPB	ZP	I	XV		
1	-812.5	-812.5	20.0	49	260.0	260.0	20.0	1	-705.0		
2	-787.5	-787.5	-20.0	50	290.0	290.0	-20.0	2	-575.0		
3	-747.5	-747.5	20.0	51	330.0	330.0	20.0	3	-460.0		
4	-722.5	-722.5	-20.0	52	380.0	380.0	-20.0	4	-355.0		
5	-692.5	-692.5	20.0	53	417.5	417.5	-20.0	5	-275.0		
6	-667.5	-667.5	-20.0	54	442.5	442.5	20.0	6	-215.0		
7	-630.0	-630.0	-20.0	55	467.5	467.5	-20.0	7	-155.0		
8	-592.5	-592.5	20.0	56	492.5	492.5	20.0	8	-95.0		
9	-567.5	-567.5	-20.0	57	517.5	517.5	-20.0	9	-35.0		
10	-530.0	-530.0	-20.0	58	542.5	542.5	20.0	10	25.0		
11	-492.5	-492.5	20.0	59	-630.0	-630.0	20.0	11	85.0		
12	-467.5	-467.5	-20.0	60	-530.0	-530.0	20.0	12	145.0		
13	-442.5	-442.5	20.0	61	380.0	380.0	20.0	13	205.0		
14	-417.5	-417.5	-20.0	62	-735.0	-735.0	-133.0	14	285.0		
15	-392.5	-392.5	20.0	63	-530.0	-530.0	-133.0	15	390.0		
16	-367.5	-367.5	-20.0	64	-330.0	-330.0	-133.0	16	505.0		
17	-330.0	-330.0	20.0	65	-200.0	-200.0	-133.0				
18	-290.0	-290.0	-20.0	66	-100.0	-100.0	-133.0				
19	-260.0	-260.0	20.0	67	-40.0	-40.0	-133.0				
20	-230.0	-230.0	-20.0	68	0.0	0.0	-133.0				
21	-200.0	-200.0	20.0	69	40.0	40.0	-133.0	THERM.			
22	-170.0	-170.0	-20.0	70	100.0	100.0	-133.0	*****			
23	-145.0	-145.0	20.0	71	200.0	200.0	-133.0				
24	-120.0	-120.0	-20.0	72	330.0	330.0	-133.0				
25	-100.0	-100.0	20.0	73	530.0	530.0	-133.0	I	XTH		
26	-85.0	-85.0	-20.0	74	-735.0	-735.0	133.0				
27	-70.0	-70.0	20.0	75	-630.0	-630.0	133.0	8	-737.0		
28	-55.0	-55.0	-20.0	76	-530.0	-530.0	133.0	7	0.0		
29	-40.0	-40.0	20.0	77	-430.0	-430.0	133.0	9	475.0		
30	-30.0	-30.0	-20.0	78	-330.0	-330.0	133.0				
31	-20.0	-20.0	20.0	79	-260.0	-260.0	133.0	I	XTB		
32	-10.0	-10.0	-20.0	80	-200.0	-200.0	133.0				
33	0.0	0.0	20.0	81	-145.0	-145.0	133.0	6	-737.0		
34	10.0	10.0	-20.0	82	-100.0	-100.0	133.0	4	-427.0		
35	20.0	20.0	20.0	83	-70.0	-70.0	133.0	2	-180.0		
36	30.0	30.0	-20.0	84	-40.0	-40.0	133.0	1	0.0		
37	40.0	40.0	20.0	85	-20.0	-20.0	133.0	3	173.0		
38	55.0	55.0	-20.0	86	0.0	0.0	133.0	5	473.0		
39	70.0	70.0	20.0	87	20.0	20.0	133.0				
40	78.8	78.8	-20.0	88	40.0	40.0	133.0				
41	91.3	91.3	20.0	89	70.0	70.0	133.0				
42	100.0	100.0	-20.0	90	100.0	100.0	133.0				
43	123.0	120.0	20.0	91	138.0	138.0	133.0				
44	138.8	138.8	-20.0	92	200.0	200.0	133.0				
45	151.3	151.3	20.0	93	250.0	250.0	133.0				
46	170.0	170.0	-20.0	94	330.0	330.0	133.0				
47	200.0	200.0	20.0	95	430.0	430.0	133.0				
48	230.0	230.0	-20.0	96	530.0	530.0	133.0				

XPH--XPB--XV--XTH--XTB IN MM/AXIS Porthole

Z in mm/section axis

Figure 9

Pressure recorder specifications - lateral walls (mm)

upstream hole			central hole			downstream hole		
N	X	Z	N	X	Z	N	X	Z
1		+150	1		+160	1		+150
2	-375	+100	2	0	+140	2	+375	+100
3		+ 50	3		+120	3		+ 50
4	-455		4	-120		4	+295	
5	-410		5	- 80		5	+335	
6	-375	0	6	- 40		6	+375	0
7	-335		7	0	+100	7	+415	
8	-295		8	+ 40		8	+455	
9		+ 80	9			9		- 50
10	-375	-100	10	+120		10	+375	-100
11		-150	11		+ 80	11		-150
			12	0	+ 60			
			13		+ 40			
			14		+ 20			
			15	-160				
			16	-140				
			17	-120				
			18	-100				
			19	- 80				
			20	- 60				
			21	- 40				
			22	- 20				
			23	0	0			
			24	+ 20				
			25	+ 40				
			26	+ 60				
			27	+ 80				
			28	+100				
			29	+120				
			30	+140				
			31	+160				
			32		- 20			
			33	0	- 40			
			34		- 60			
			35		- 80			
			36	-120				
			37	- 80				
			38	- 40				
			39	0	-100			
			40	+ 40				
			41	+ 80				
			42	+120				
			43		-120			
			44	0	-140			
			45		-160			

Figure 10

Diagram of the wing

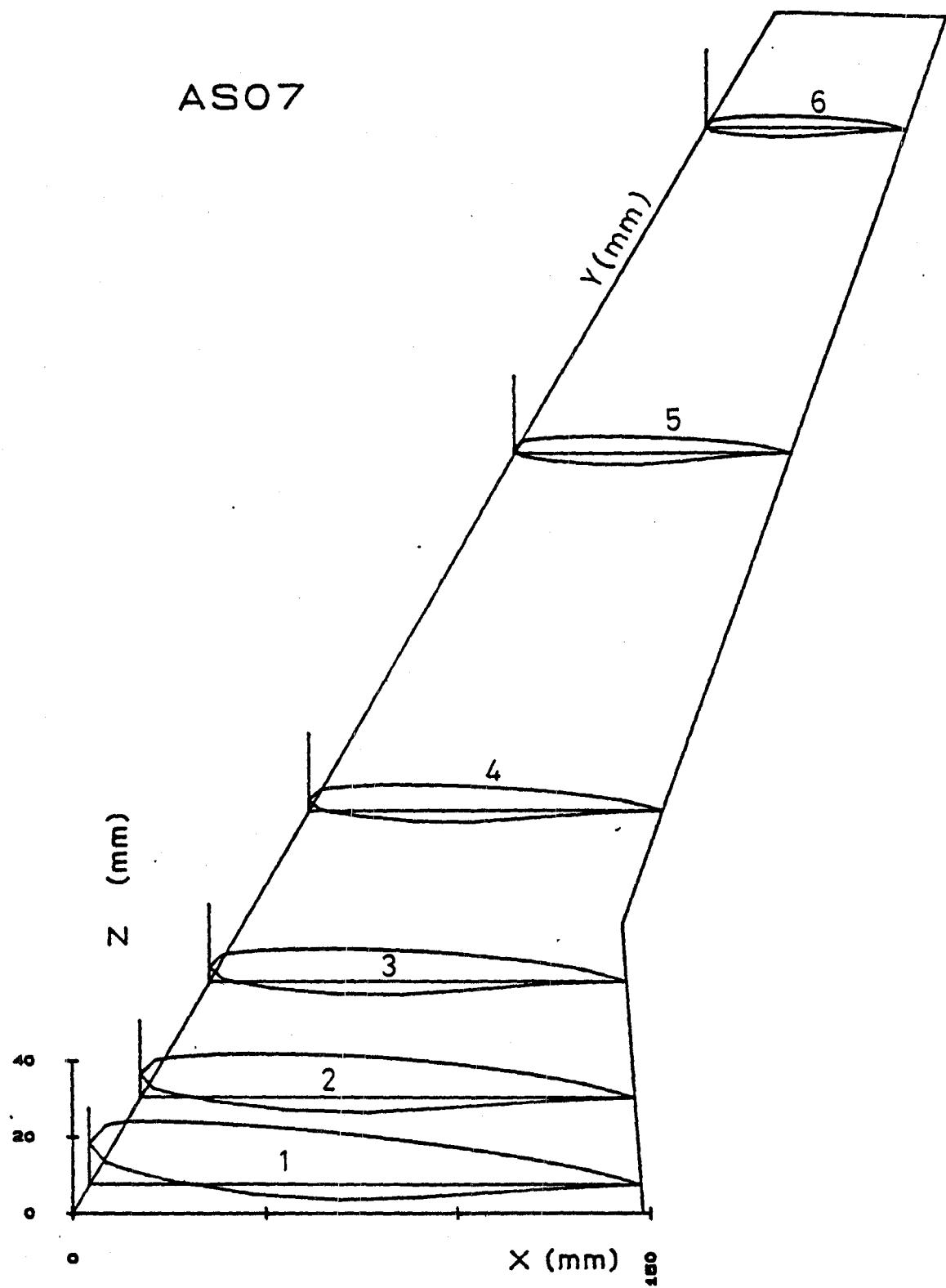


Figure 11

Specifications of the AS 07 wing

					A	
	Y	B.A.	B.E.	corde		(mm)
B	Emplanture	0	0	148,112	148,112	
C	rangee 1	7,56	4,46	147,62	143,16	
	rangee 2	30,34	17,88	146,12	128,24	
	rangee 3	60,40	35,6	144,15	108,55	
	rupture	75,227	44,335	143,18	98,845	
	rangee 4	104,301	61,47	153,61	92,14	
	rangee 5	196,41	115,75	186,66	70,91	
	rangee 6	279,87	164,94	216,60	51,66	
D	Saumon	309,60	182,464	227,264	44,80	

Key

- A - chord
- B - root
- C - row
- C - tip

Figure 12

Position of pressure recorders for each section

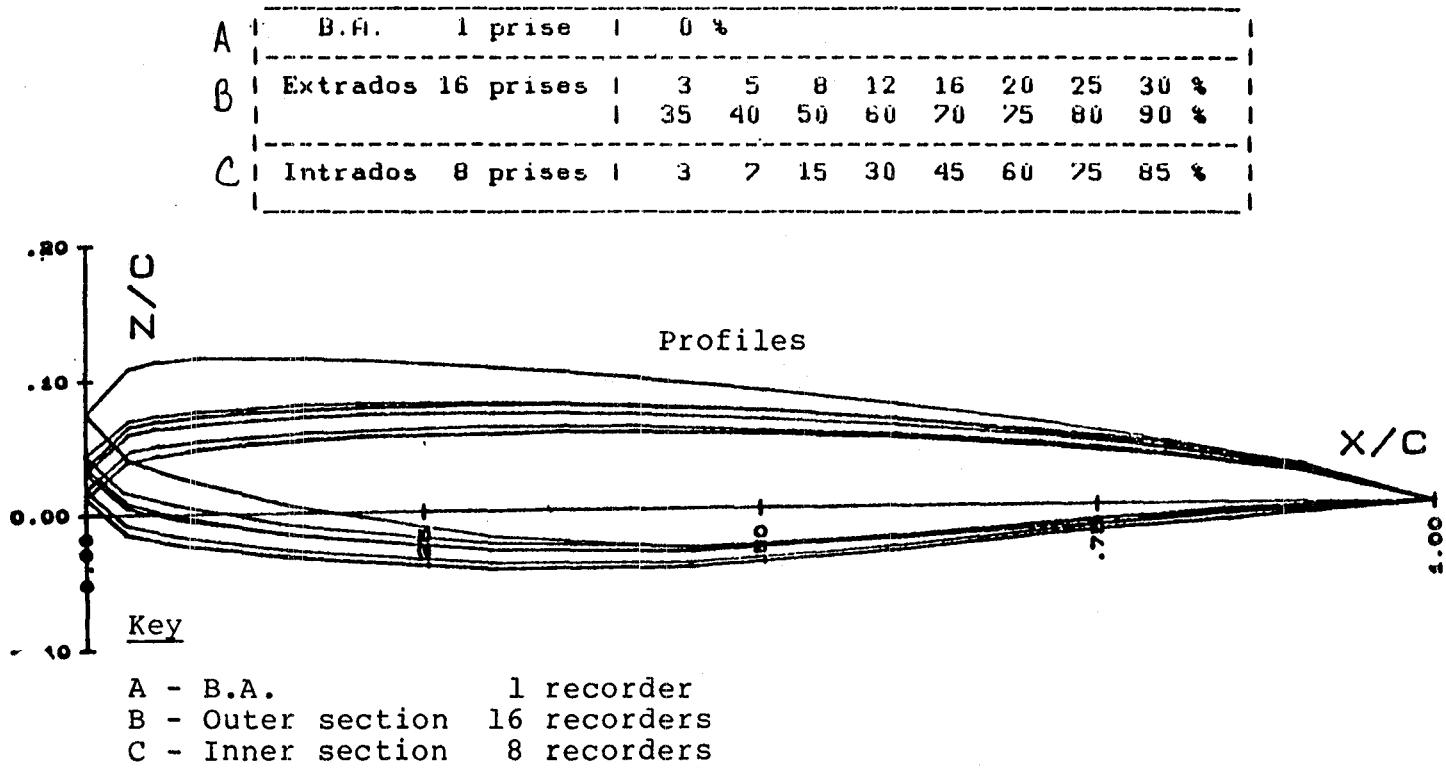


Figure 13

Specifications of pressure recorders on "Airbus" AS07 wing

Aile Interne		Aile Externe						
ranges 1	ranges 2	ranges 3	ranges 4	ranges 5	ranges 6			
C Y = 7.560mm	E Y = 30.340mm	F Y = 60.400mm	B.A. = 104.301mm	B.F. = 196.410mm	B.F. = 279.870mm			
D B.A. = 4.295mm	B.A. = 17.715mm	B.A. = 35.498mm	B.A. = 61.392mm	B.A. = 115.701mm	B.A. = 164.943mm			
E B.F. = 147.620mm	B.F. = 146.120mm	B.F. = 144.150mm	B.F. = 153.610mm	B.F. = 186.660mm	B.F. = 216.600mm			
F corde 143.160mm	corde 128.240mm	corde 108.550mm	corde 92.140mm	corde 70.910mm	corde 51.660mm			
X (mm)	Z (mm)	X (mm)	Z (mm)	X (mm)	Z (mm)	X (mm)	Z (mm)	X (mm)
1125.9791	-1.0601126.7531	-8121127.7441	-4271139.7961	-4271176.0141	-5291208.8021	-6111		
2111.6521	-2.0301113.9461	-1.6031116.8601	-1.1041130.5461	-1.0591168.8831	-1.0621203.6551	-9401		
31 90.2251	-3.3931 94.6431	-3.0431100.6861	-2.3491116.6081	-2.0471158.1821	-2.0851195.8771	-1.6861		
41 68.2031	-4.1001 75.4261	-4.0261 84.4441	-3.4161102.9101	-2.9411147.6761	-2.0361168.1101	-2.2441		
51 47.0661	-2.6701 56.0691	-3.4111 68.0841	-3.1551 89.0861	-2.6831137.0291	-2.7391160.3781	-2.2341		
61 25.7411	.8331 36.7851	-1.1561 51.7531	-1.6801 25.2791	-1.4041126.4441	-1.9331172.7751	-1.6851		
71 14.6241	3.7641 26.5601	.9241 43.0911	-.1891 67.8091	-3.441120.6611	-1.1601168.5321	-1.1581		
81 8.2511	5.7831 21.2491	2.3951 38.8731	.8691 64.1741	.4581117.7681	-.5311166.4871	-.7421		
91 4.2951	10.8001 17.7151	6.3271 35.4981	3.8231 61.3921	2.9091115.7011	1.3021164.9431	.6311		
101 8.2231	15.4931 21.7701	9.9861 38.9401	7.0781 64.2671	5.4671117.9731	3.3231166.5471	2.0251		
111 11.5851	16.1991 24.3581	10.4871 41.1051	7.4861 66.1081	5.8431119.4171	3.5981167.6341	2.2031		
121 15.8461	16.6471 28.1291	10.9231 44.2831	7.8491 68.8971	6.1101121.5011	3.8351169.0651	2.4421		
131 21.6181	16.6041 33.2521	11.2531 48.6401	8.1841 72.6441	6.4061124.4221	4.0571171.2781	2.6761		
141 27.2771	16.4691 38.4121	11.5291 52.9911	8.3151 76.3131	6.5981127.2901	4.2571123.3751	2.8081		
151 32.9111	16.2591 43.5671	11.6341 57.3931	8.4901 80.0391	6.7451129.9931	4.3201175.4301	2.9221		
161 40.3451	15.8321 50.1301	11.6211 62.7711	8.5391 84.7001	6.7841133.4231	4.4401177.9311	2.9541		
171 47.3781	15.3251 56.4151	11.5521 68.2031	8.5991 89.2201	6.7391137.1561	4.4981180.6421	2.9741		
181 54.6001	14.7791 62.3671	11.3731 73.6281	8.5591 93.2971	6.6741140.6191	4.4421183.0361	3.0241		
191 61.8171	14.1091 69.2751	11.1231 79.0511	8.3301 98.3531	6.5571144.2141	4.4381185.8511	2.9851		
201 76.0801	12.5931 81.9701	10.4721 89.9051	7.8861102.6211	6.1161151.2501	4.1161190.8361	2.8621		
211 90.3931	10.8711 94.8431	9.2681100.2071	7.1621116.8091	5.5641158.2431	3.8241196.0001	2.6481		
221 104.7291	8.9811107.7031	7.8231111.6691	6.0981126.1681	4.8141165.5011	3.3311201.1001	2.3121		
231 111.8391	7.8691114.0701	6.9611117.0011	5.5601130.6411	4.3111168.9271	3.00911203.8411	2.0561		
241 119.0201	6.7011120.4821	5.9801122.4671	4.8461135.2041	3.7471172.3671	2.6291206.3491	1.8501		
251 133.2691	3.9201133.3111	3.6261133.3041	3.071144.3551	2.4271179.5521	1.6841211.6141	1.1811		

Key

- A - Internal wing
- B - External wing
- C - Row
- D - B.A.
- E - B.F.
- F - Chord

#### CONTROL TESTS

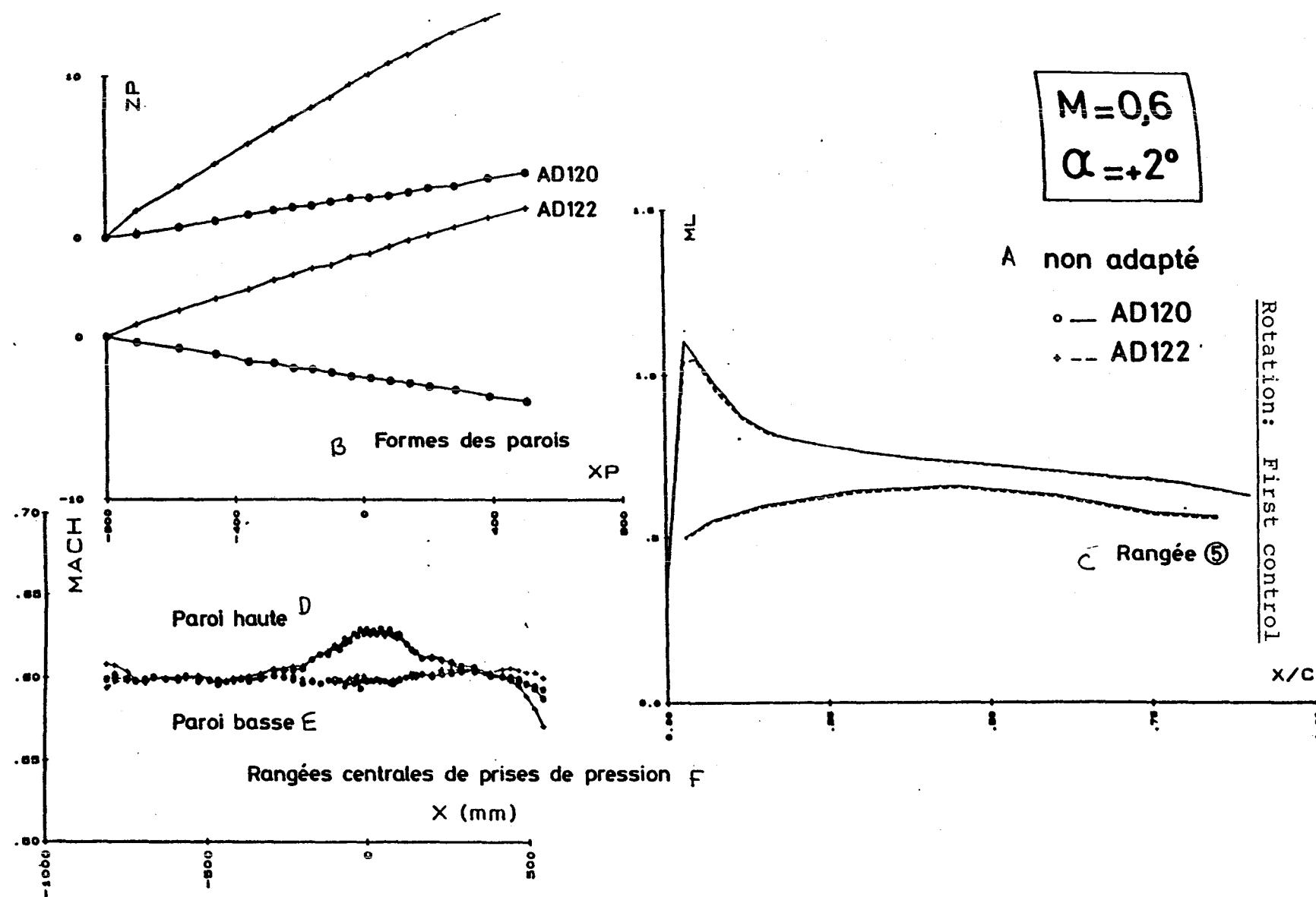
- Wall incidence and rotation: Figures 14 to 16  
Convergence of iterations: Figures 17 to 20  
Non/2-D/3-D comparison: Figures 21 to 23

Key to figures 14, 15, and 16

- A - Non-adapted
- B - Wall shapes
- C - Row
- D - Upper wall
- E - Lower wall
- F - Central rows of pressure recorders

Figure 14

Rotation: First control



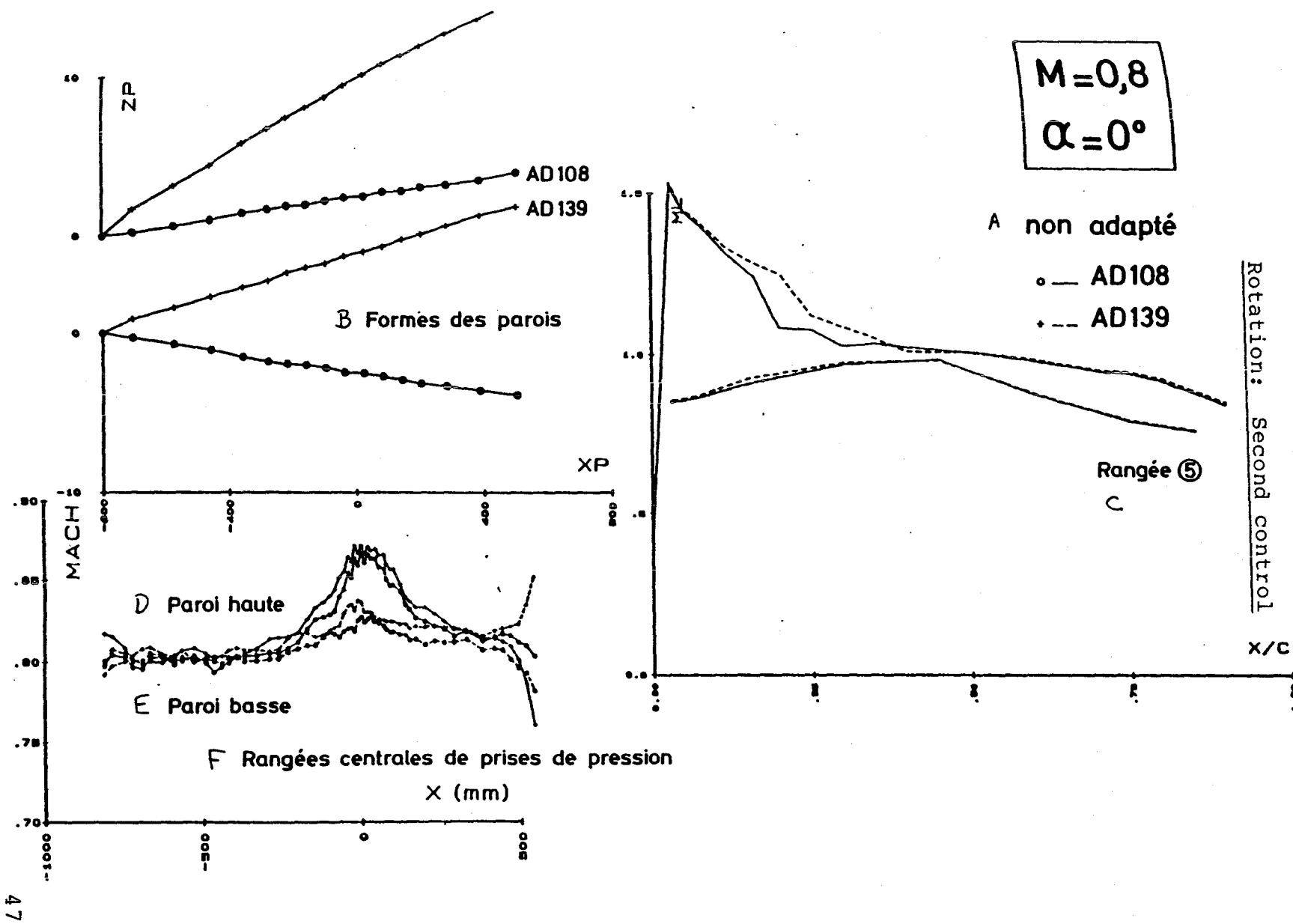


Figure 15

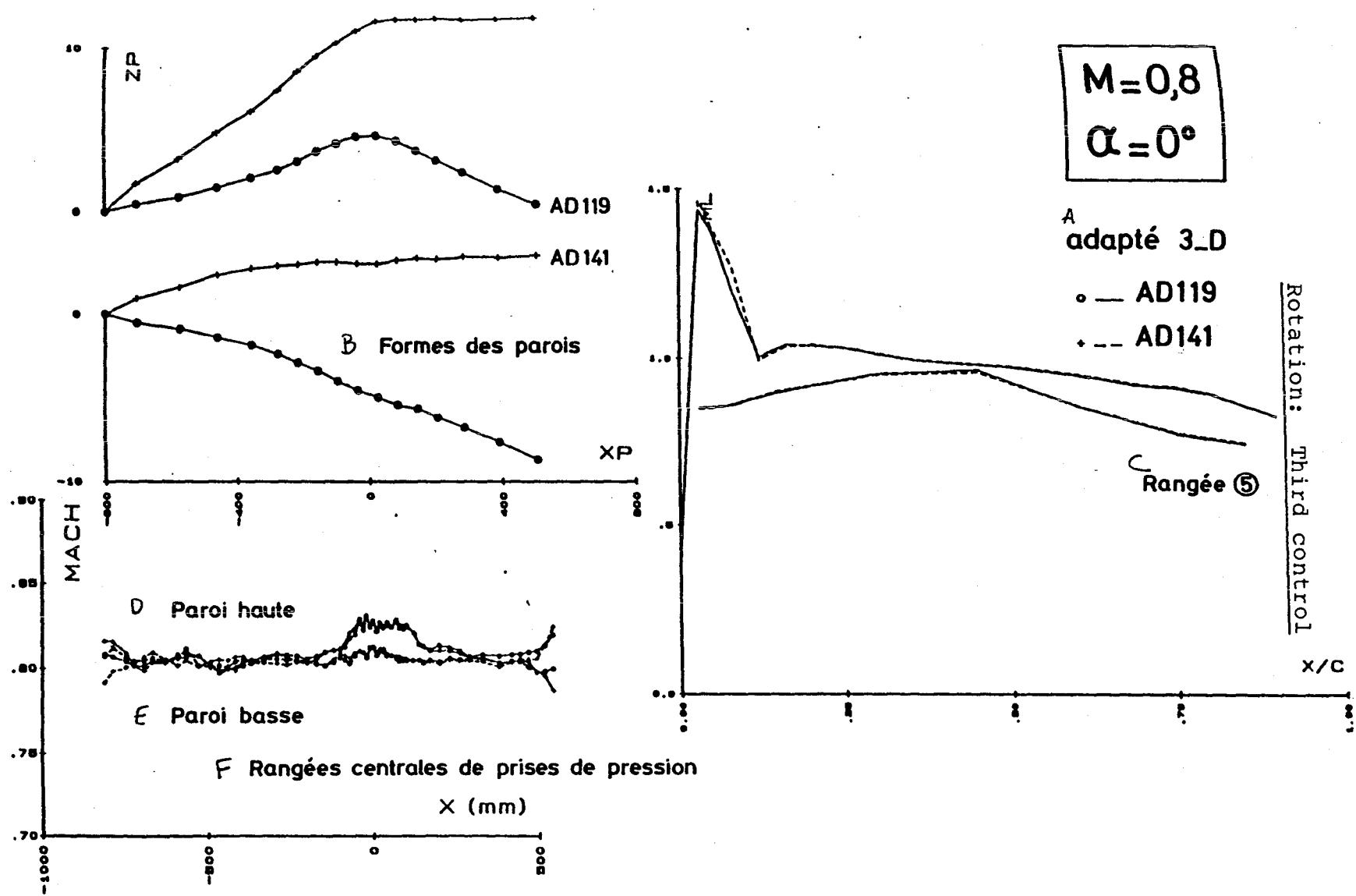
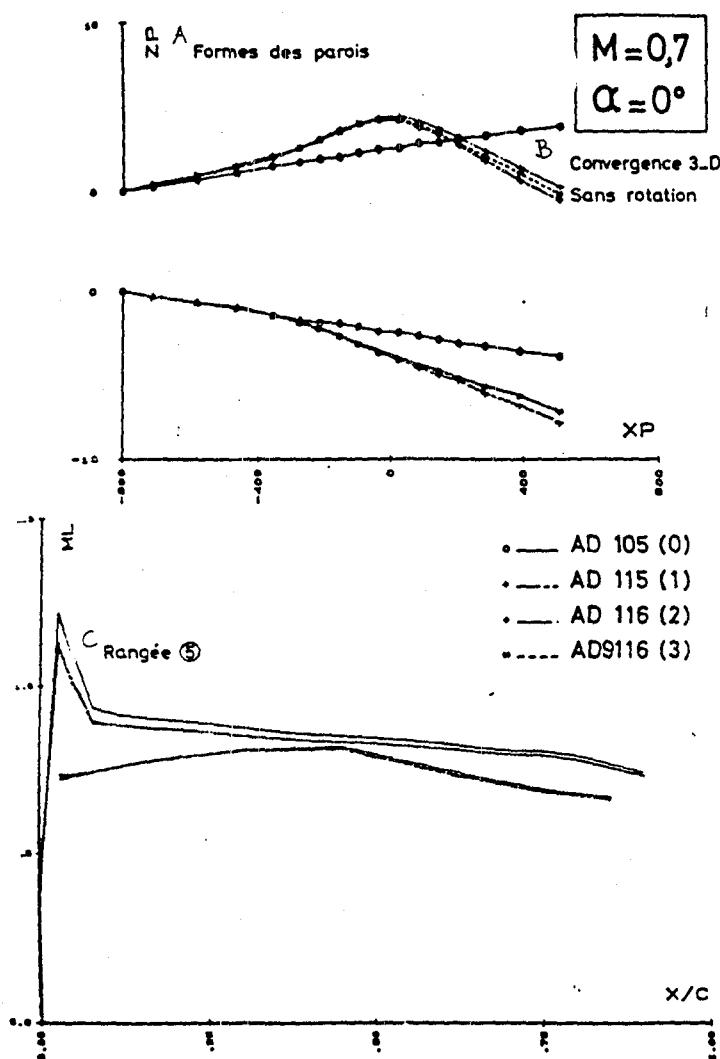


Figure 17

First case

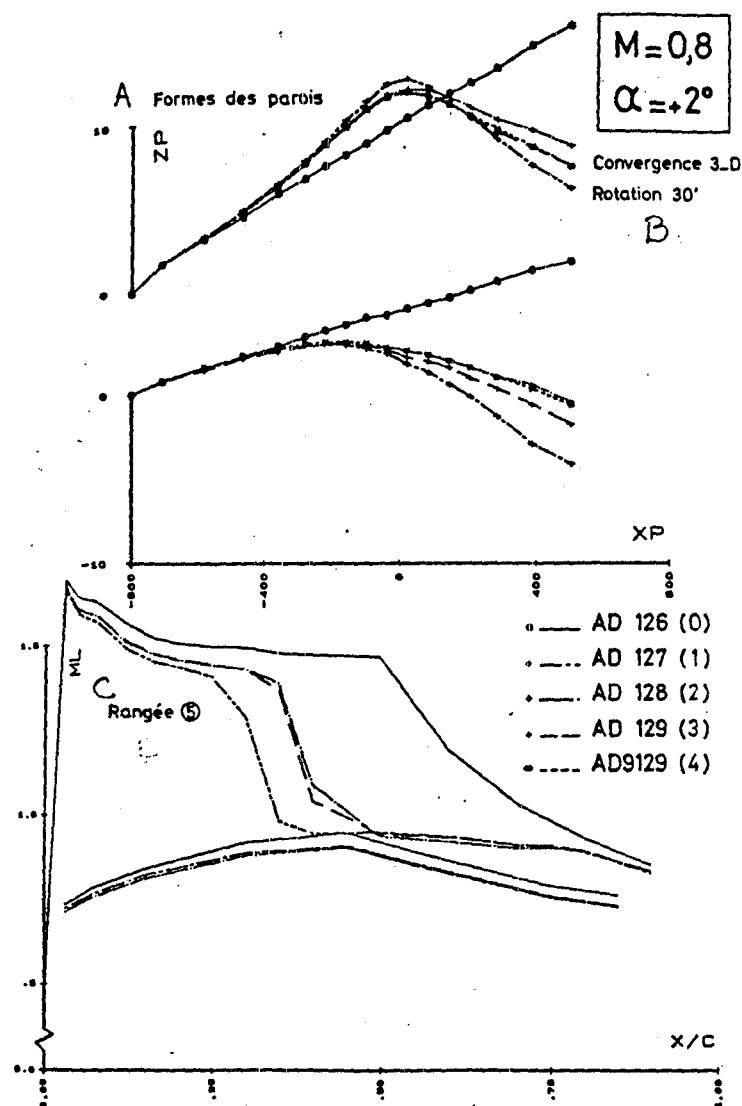


Key

- A - Wall shapes
- B - 3-D convergence, no rotation
- C - Row

Figure 18

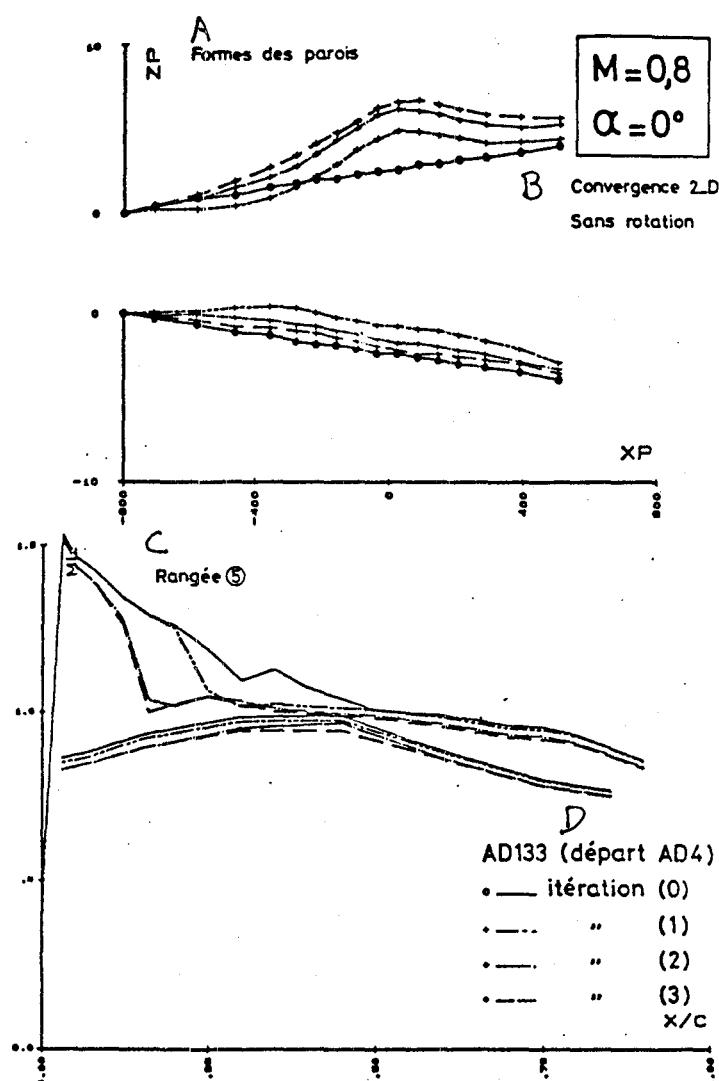
Second case



Key

A = Wall shapes  
B = Row

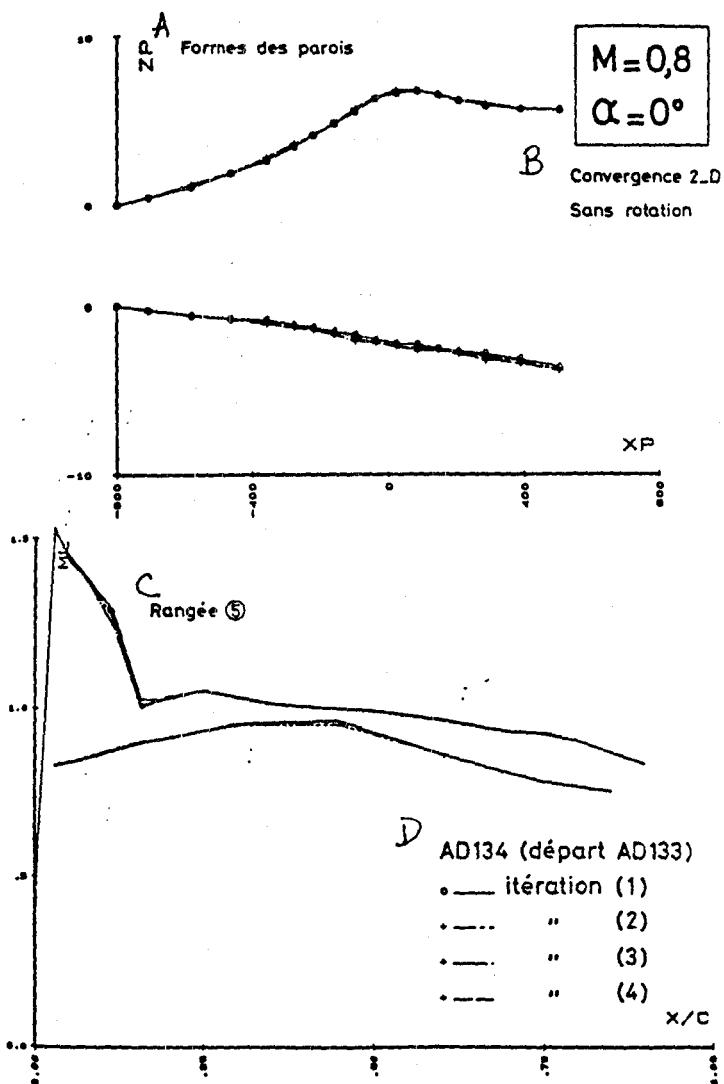
Figure 19



Key

- A - Wall shapes
- B - 2-D convergence, no rotation
- C - Row
- D - Beginning

Figure 20



Key

- A - Wall shapes
- B - 2-D convergence, no rotation
- C - Row
- D - Beginning

Key to figures 21 and 22

- A - Wall shapes
- B - Row
- C - Upper wall
- D - Lower wall
- E - Central rows of pressure recorders

Figure 21

Non/2-D/3-D comparison

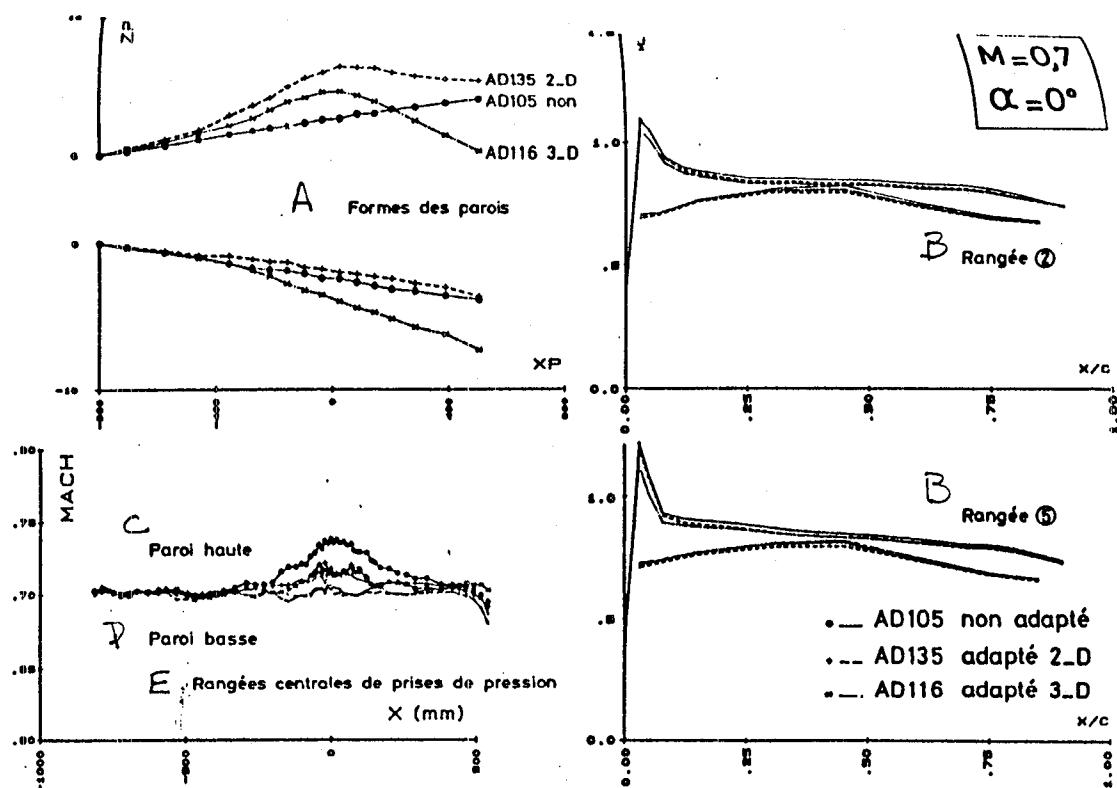


Figure 22

Non/2-D/3-D comparison

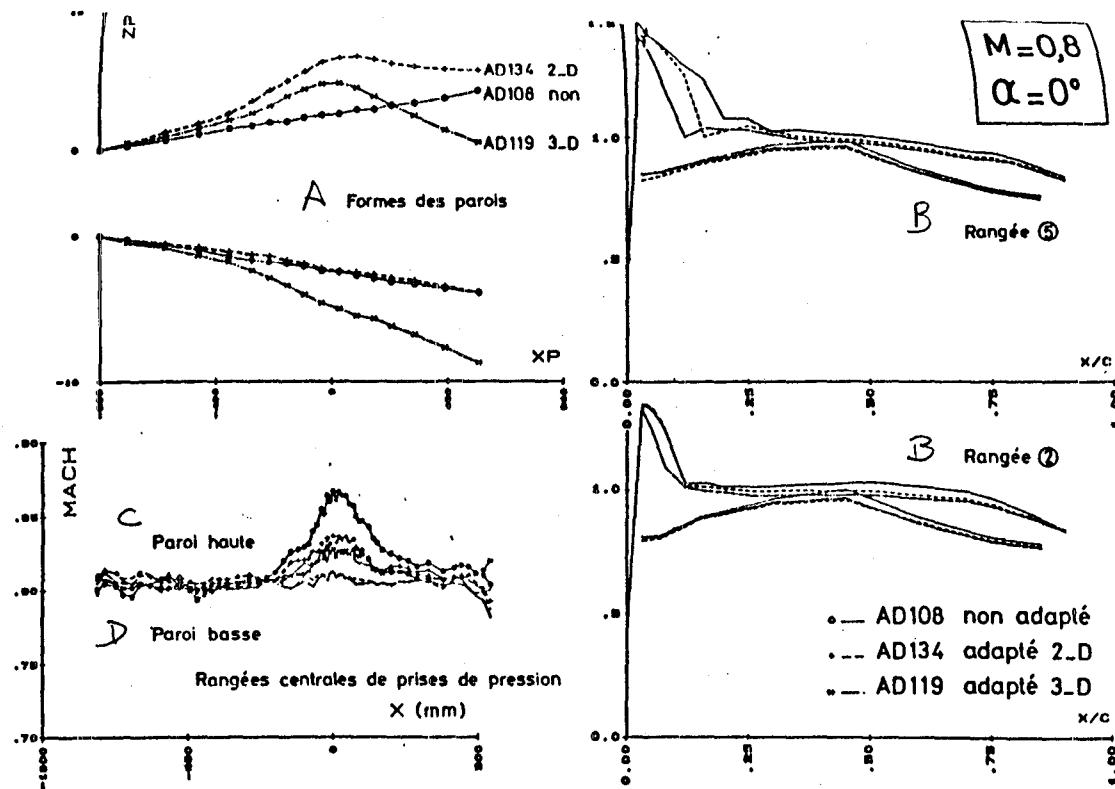
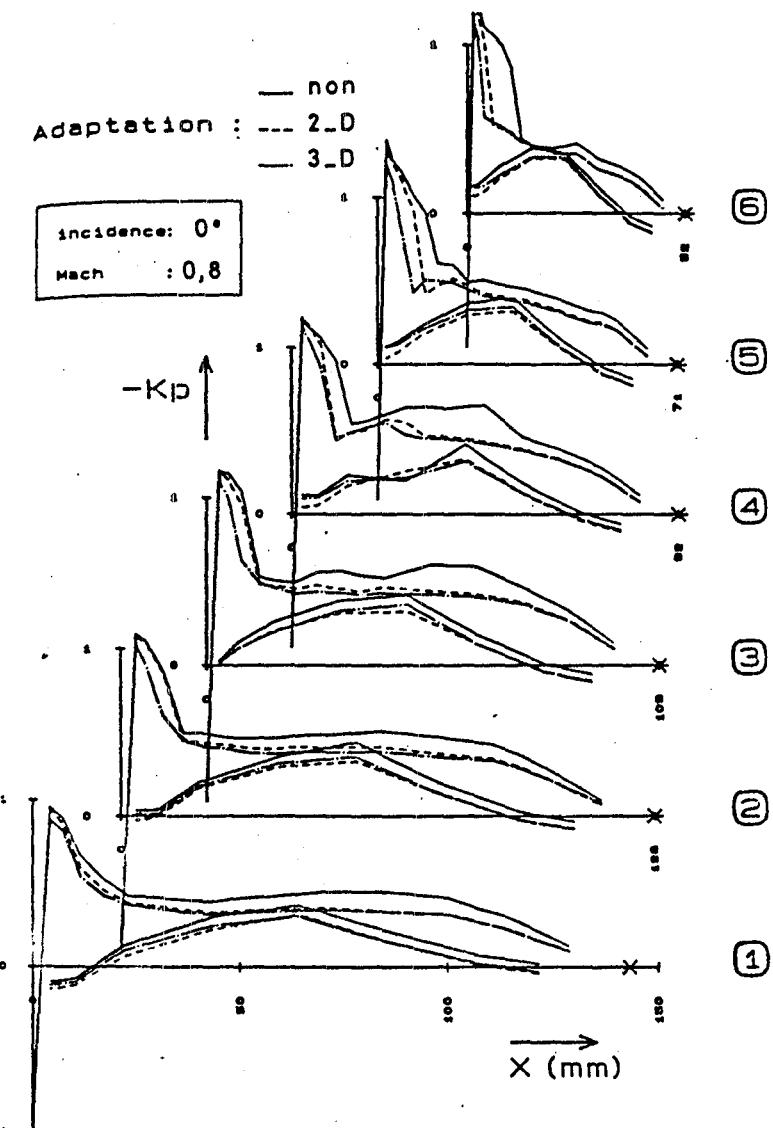


Figure 23

Non/2-D/3-D comparison



VISUALIZATION OF CURRENT LINES  
ON THE LEFT LATERAL WALL

$M_o = 0.6$	$\alpha = +2^\circ$	Non-adapted	Figure 24
$M_o = 0.6$	$\alpha = +2^\circ$	2-D	Figure 25
$M_o = 0.6$	$\alpha = -2^\circ$	Non-adapted	Figure 26

Figure 24

Left lateral door visualization  $\alpha = +2^\circ$  M = 0.6 non-adapted

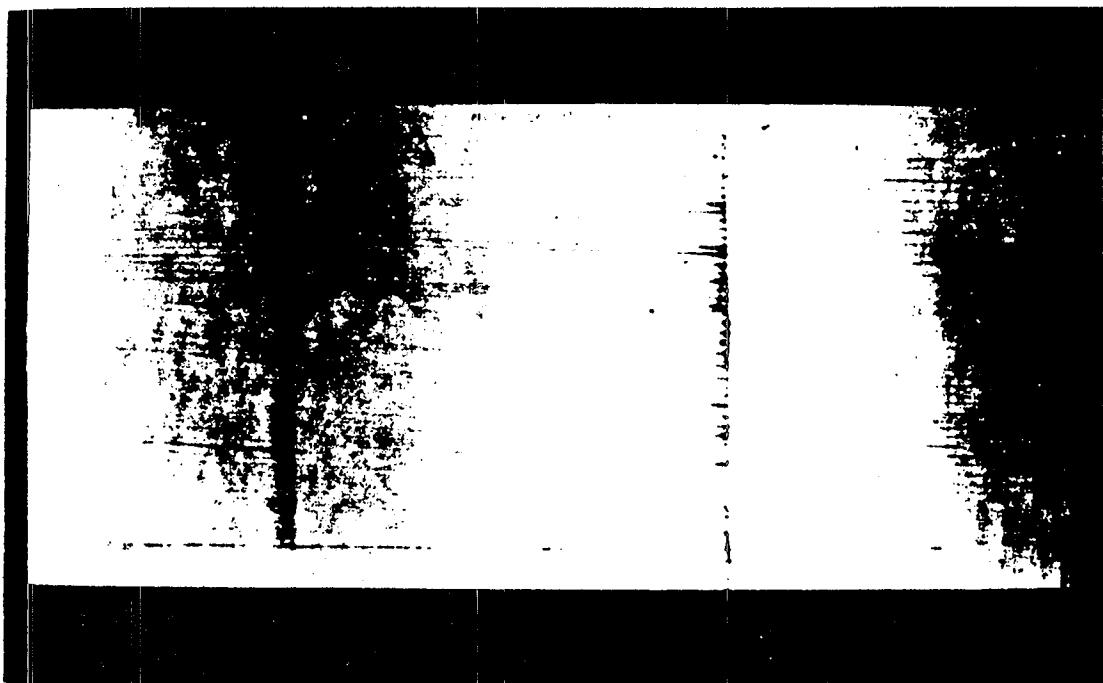
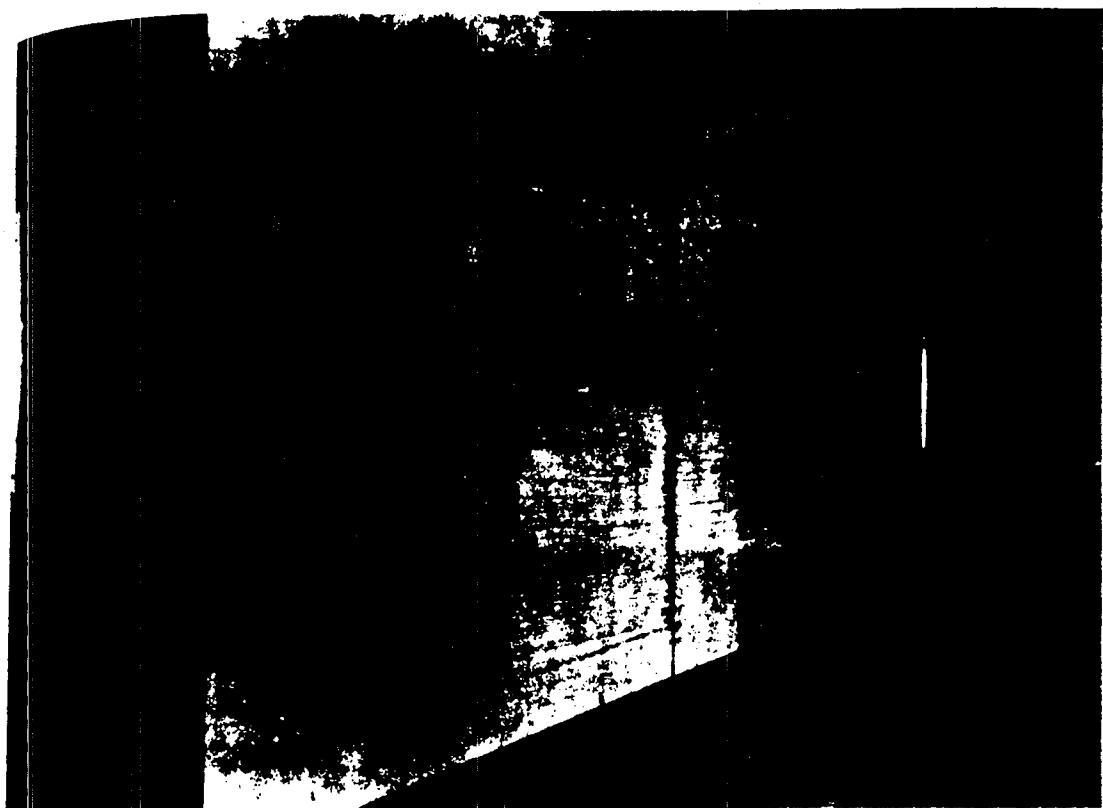


Figure 25

[illegible]

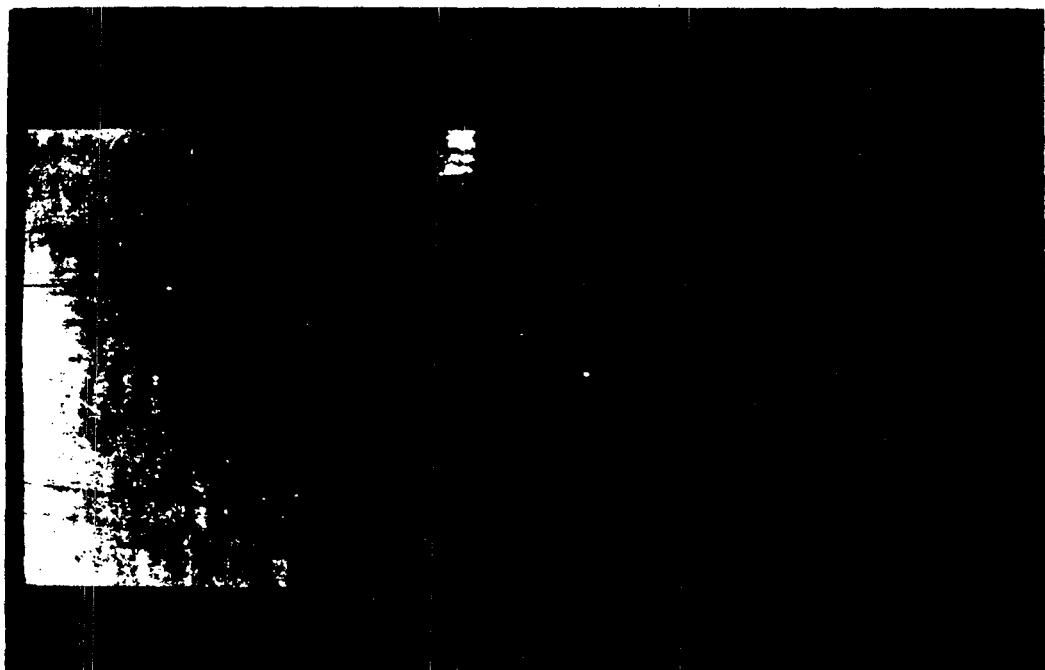
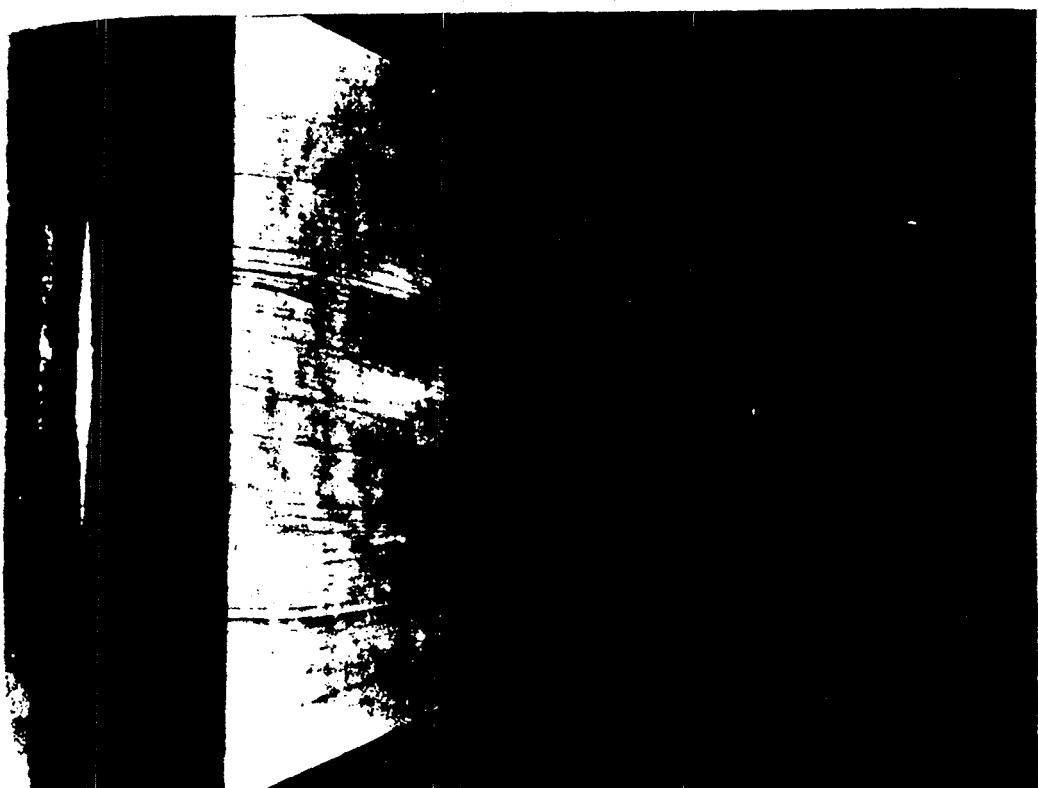


Figure 26

Left lateral door visualization  $\alpha = -2^\circ$  M = 0.6 non-adapted

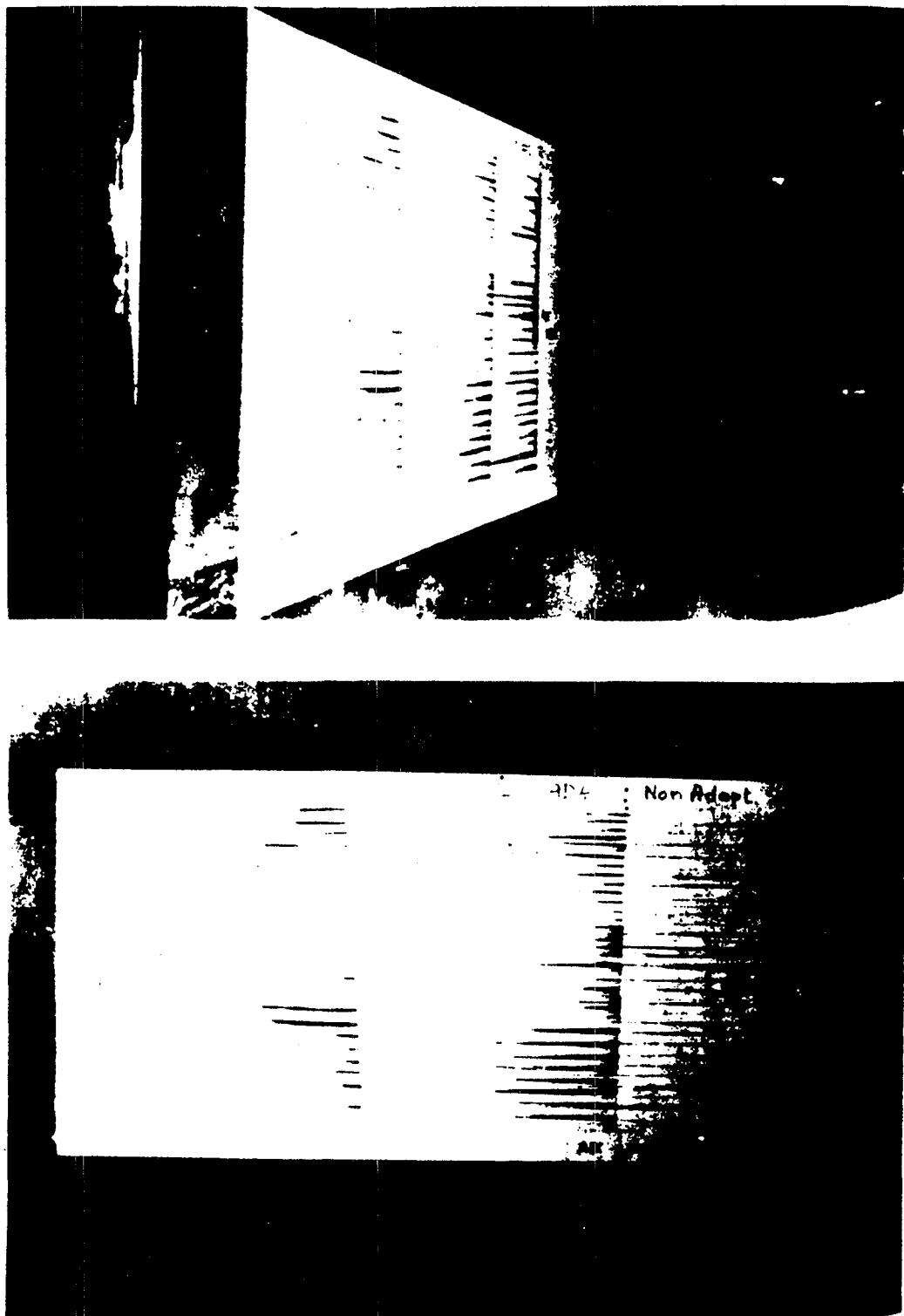


Figure 26a

Use of four base cases

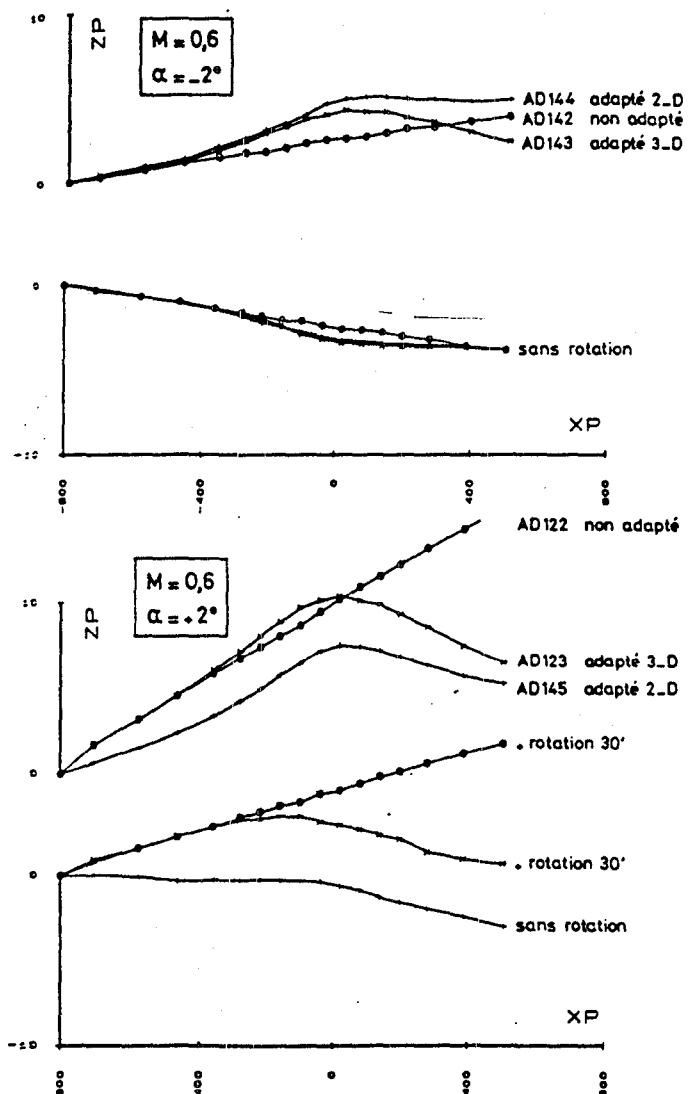
	M=0,6	0,9	NON ADAPTE
+2	147 (*) 122 (**) 167 (***)		(*) ranges 1-4 (**) ranges 2-5 (***) ranges 3-6
0	150 (*) 107 (**) 162 (***)	153 (*) 108 (**) 165 (***)	
-2	156 (*) 142 (**) 159 (***)		
	M=0,6	0,9	ADAPTE 2-D
+2	146 (*) 145 (**) 163 (***)		
0	149 (*) 136 (**) 161 (***)	152 (*) 134 (**) 164 (***)	
-2	155 (*) 144 (**) 158 (***)		
	M=0,6	0,9	ADAPTE 3-D
+2	148 (*) 123 (**) 168 (***)		
0	151 (*) 117 (**) 163 (***)	154 (*) 119 (**) 166 (***)	
-2	157 (*) 143 (**) 160 (***)		

Shape of walls  
 Mach on adaptable walls  
 Mach on lateral wall  
 Kp distribution  
 Lift coefficient

Figures 27-28  
 Figures 29-32  
 Figures 33-36  
 Figures 37-44  
 Figures 45-50

Figure 27

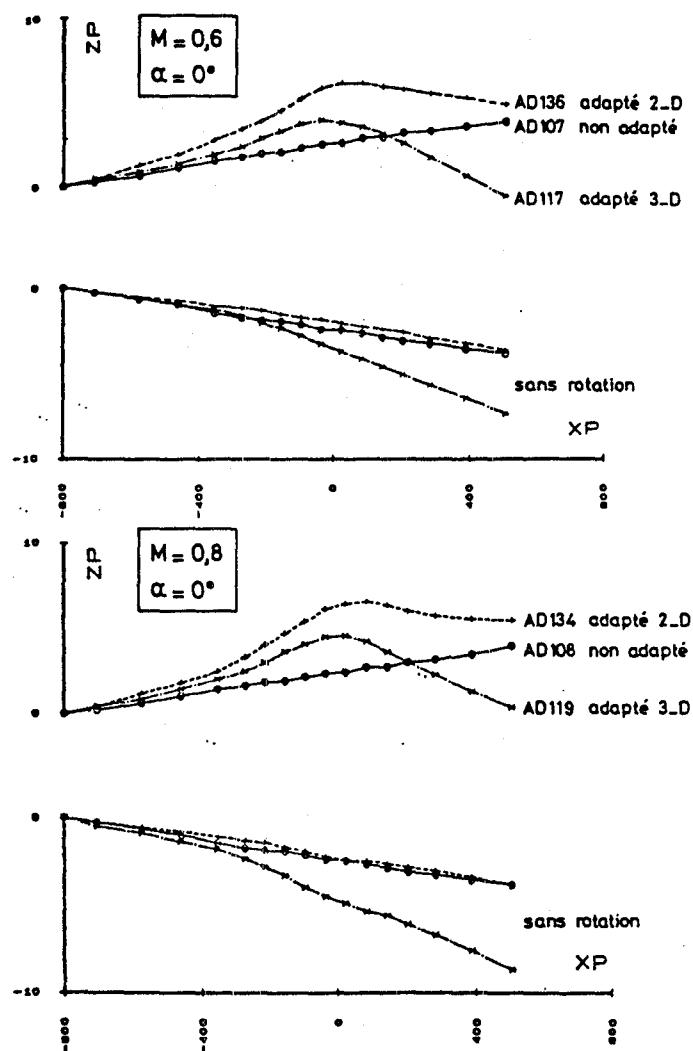
Use of the four base cases - Wall shape



"Sans rotation" = No rotation

Figure 28

Use of the four base cases - Wall shape



"Sans rotation" = No rotation

**Key to Figures 29, 30, 31, and 32:**

- A - Left lateral row
- B - Central row
- C - Right lateral row

Figure 29

Use of the four base cases - Mach of adaptable walls

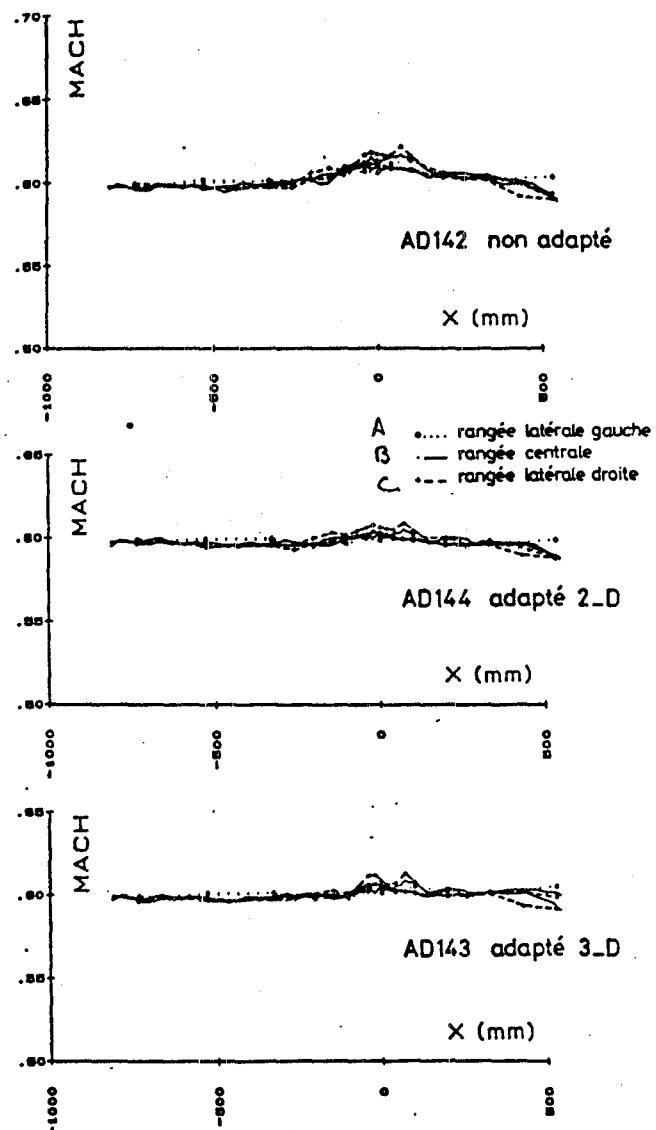


Figure 30

Use of the four base cases - Mach of adaptable walls

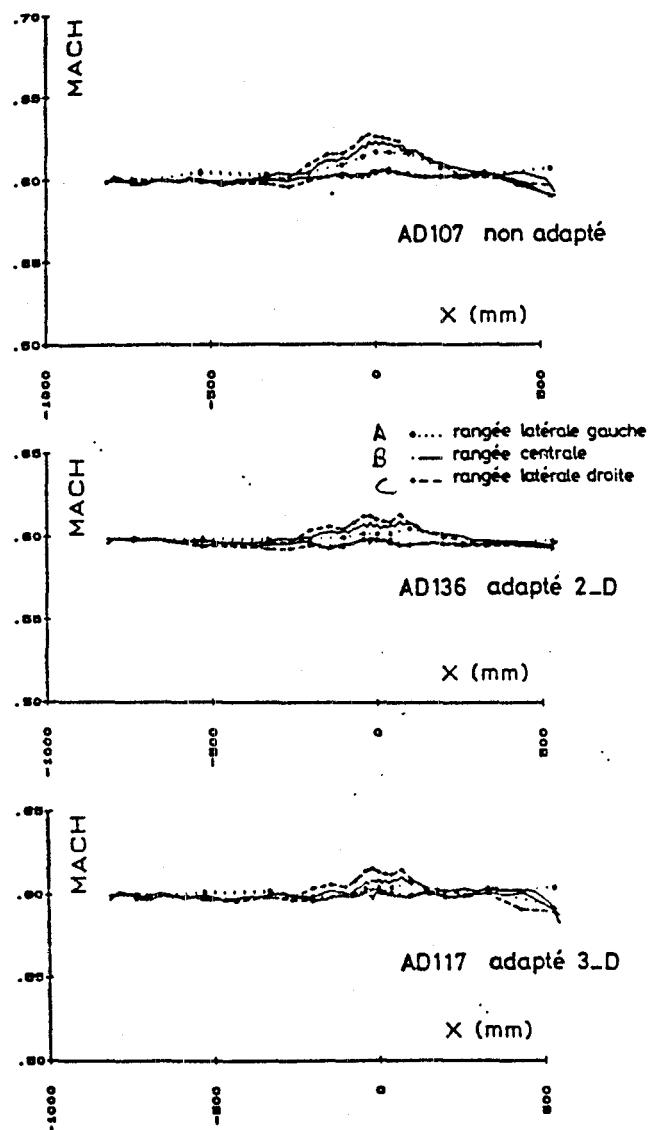


Figure 31

Use of the four base cases - Mach of adaptable walls

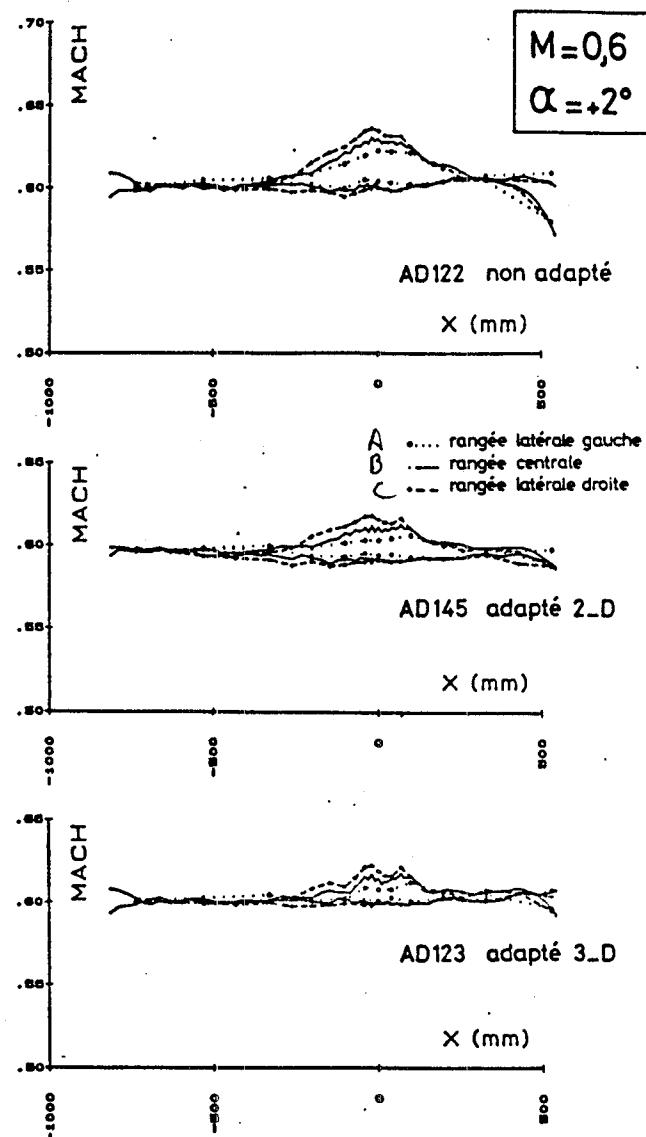
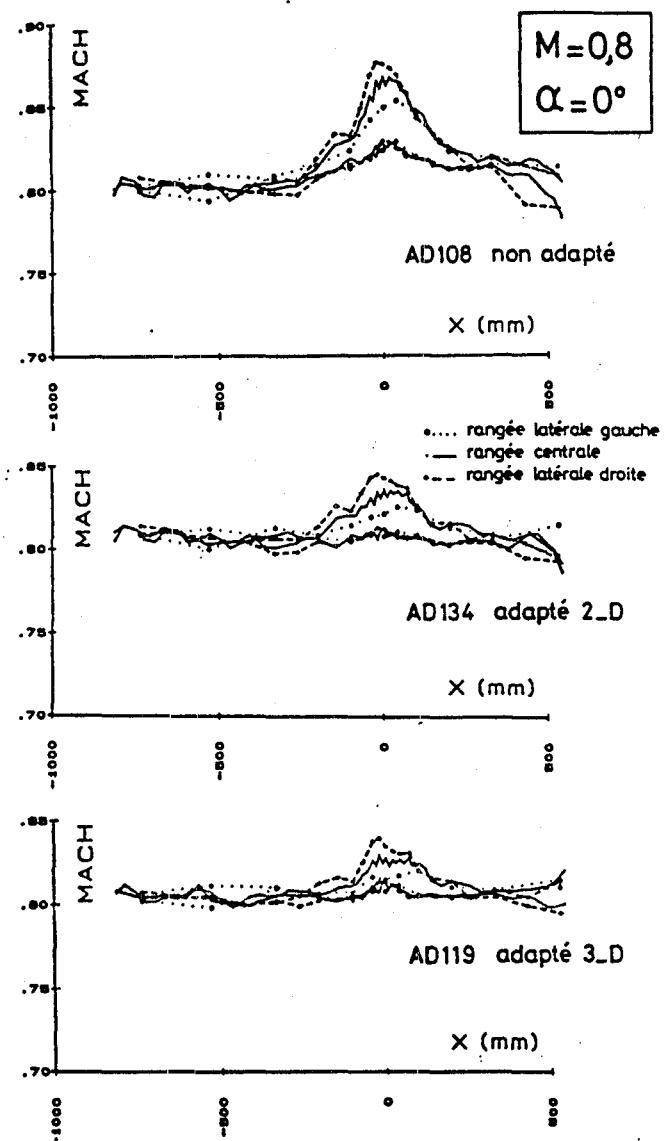


Figure 32

Use of the four base cases - Mach of adaptable walls



**Key to Figures 33, 34, 35, and 36:**

**A - Vertical rows**

- upstream
- middle
- downstream

**B - Horizontal rows**

- upper
- middle
- lower

Figure 33

Use of the four base cases - Mach of lateral walls

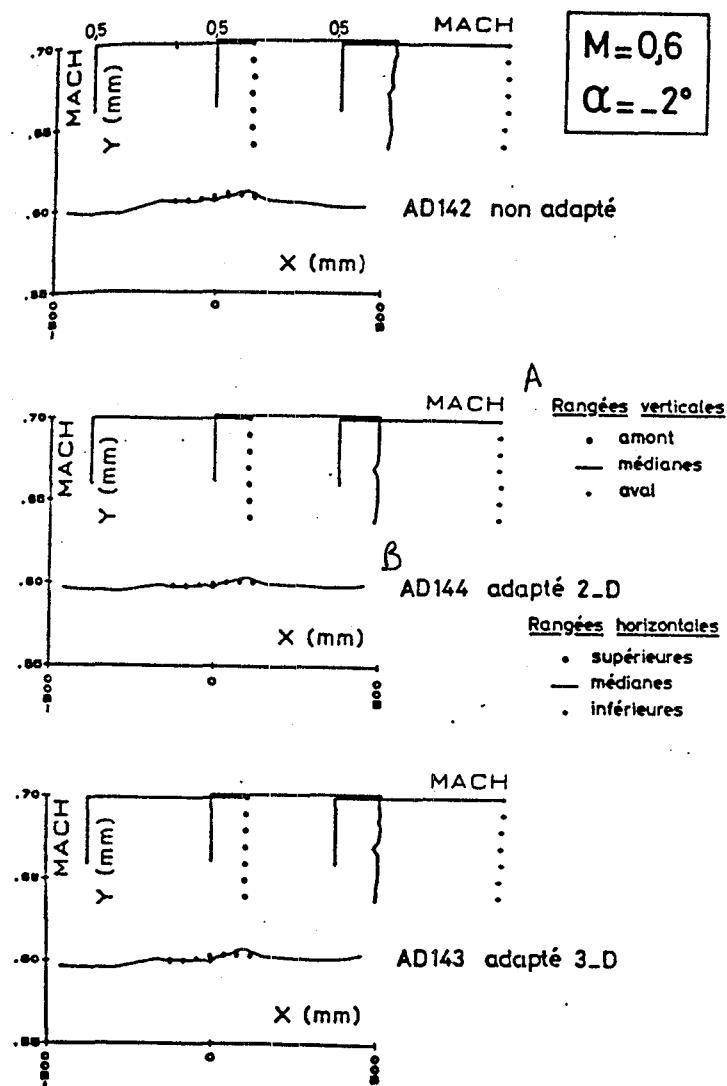


Figure 34

## Use of the four base cases - Mach of lateral walls

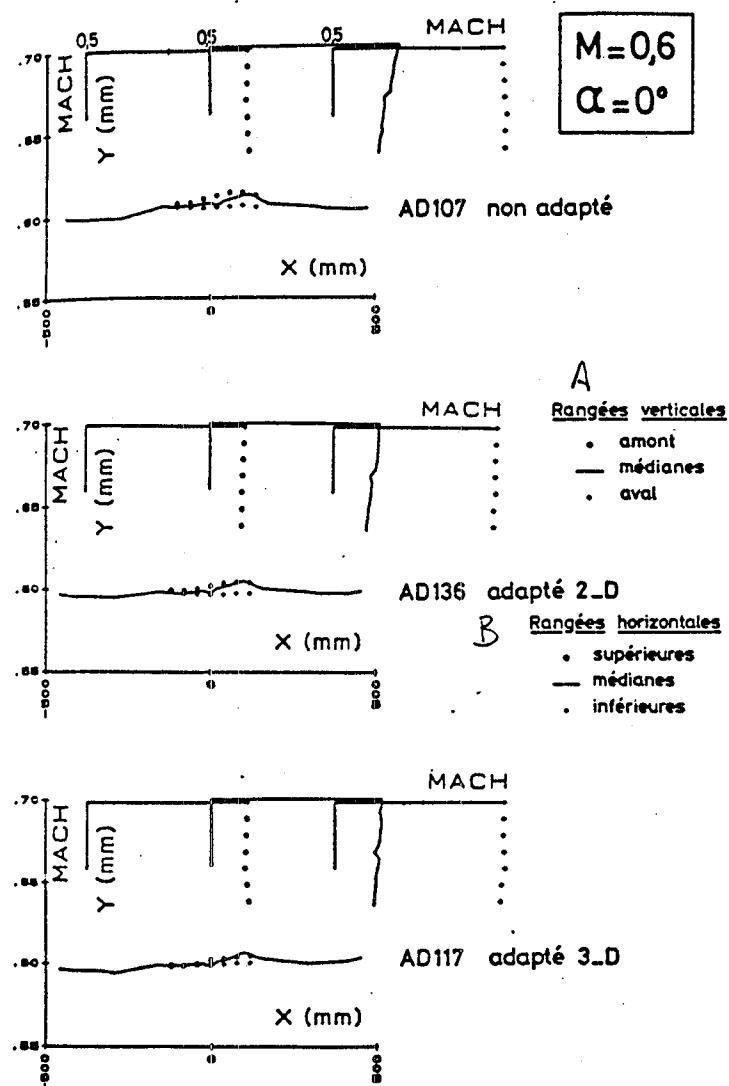


Figure 35

Use of the four base cases - Mach of lateral walls

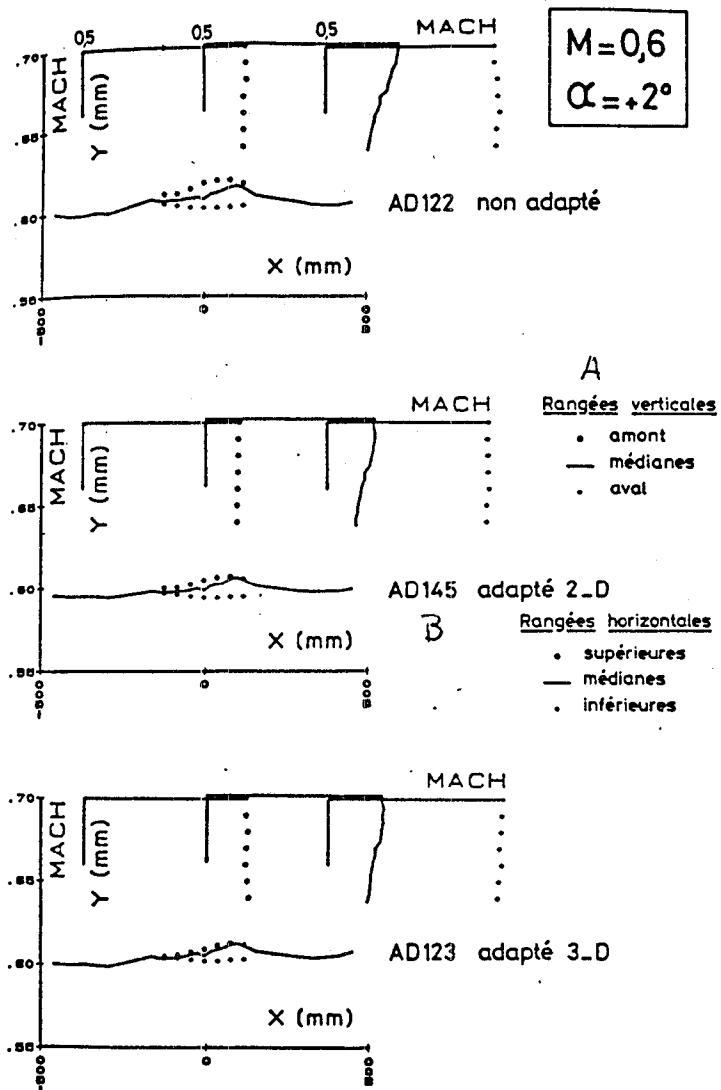


Figure 36

Use of the four base cases - Mach of lateral walls

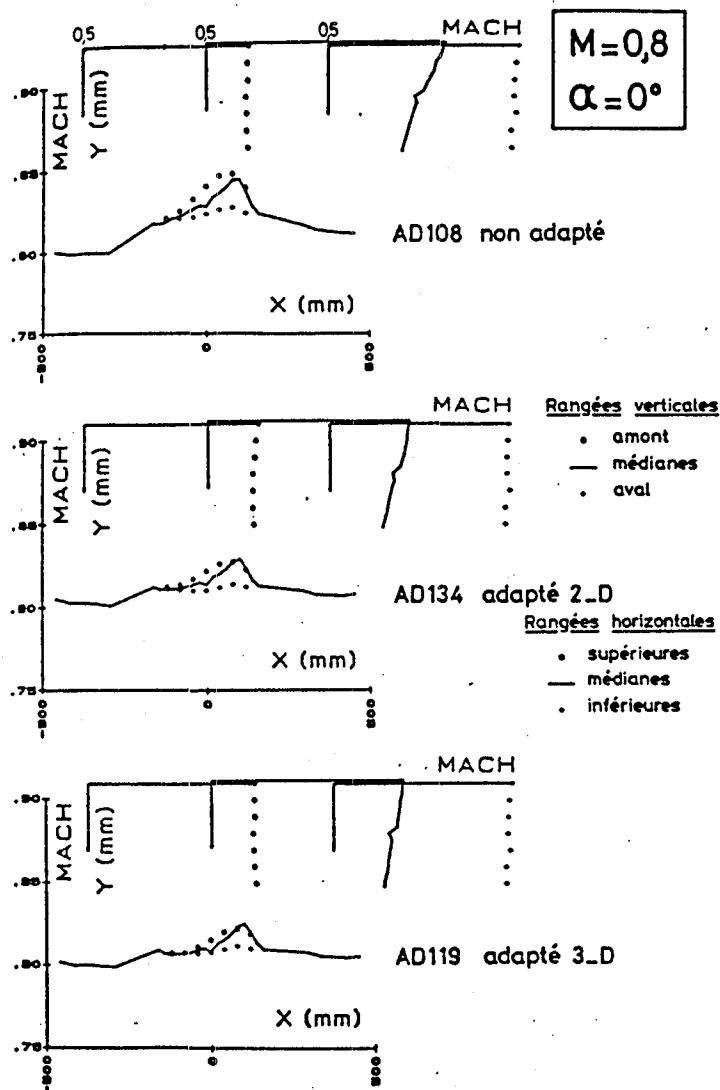


Figure 37

Use of the four base cases - Kp

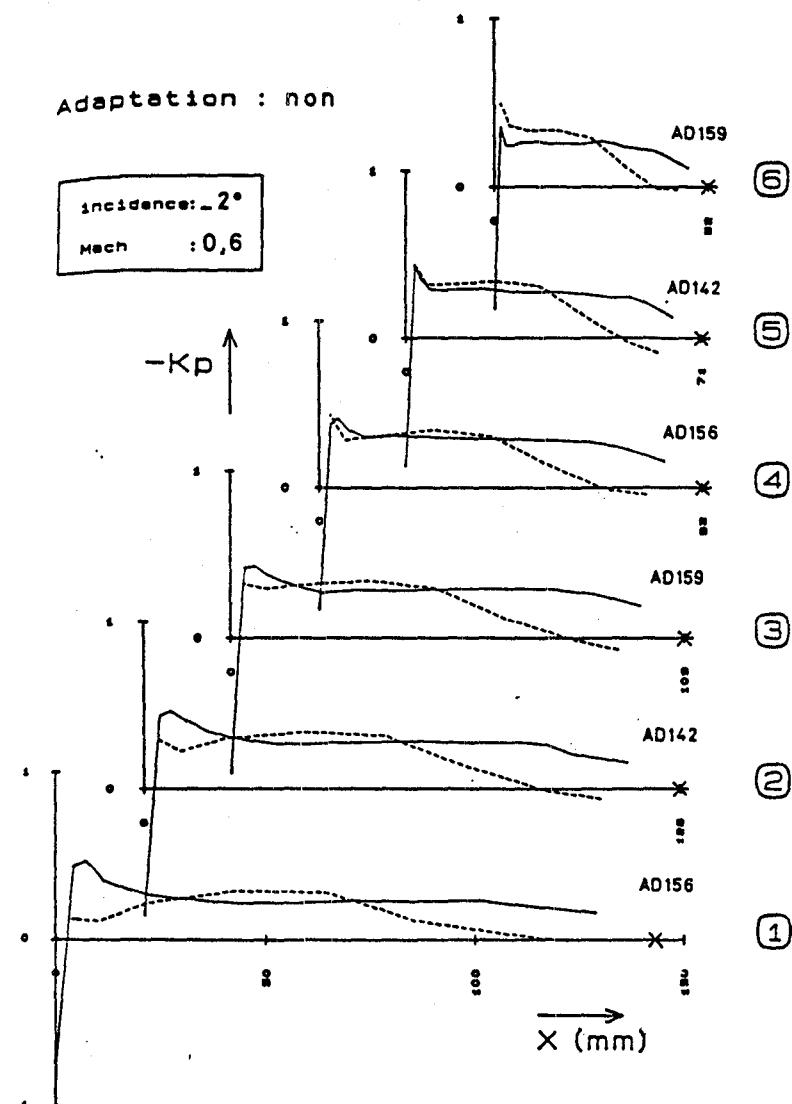


Figure 38

Use of the four base cases -  $K_p$

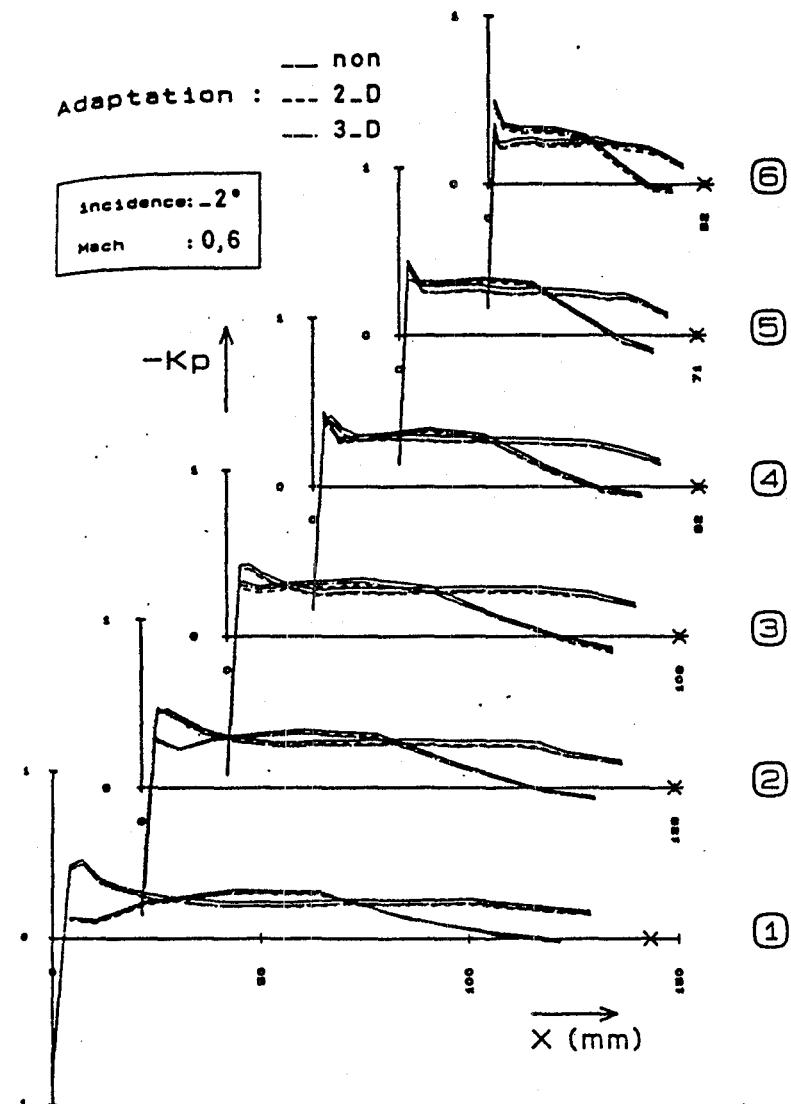


Figure 39

Use of the four base cases -  $K_p$

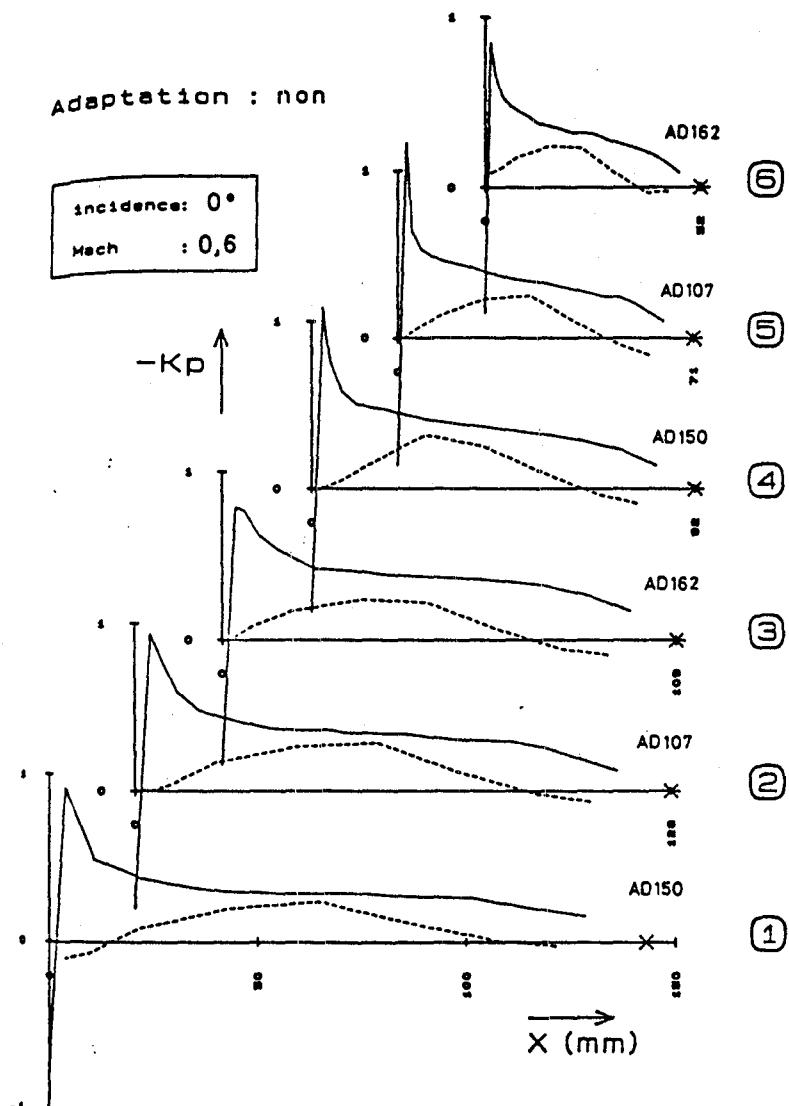


Figure 40

Use of the four base cases -  $K_p$

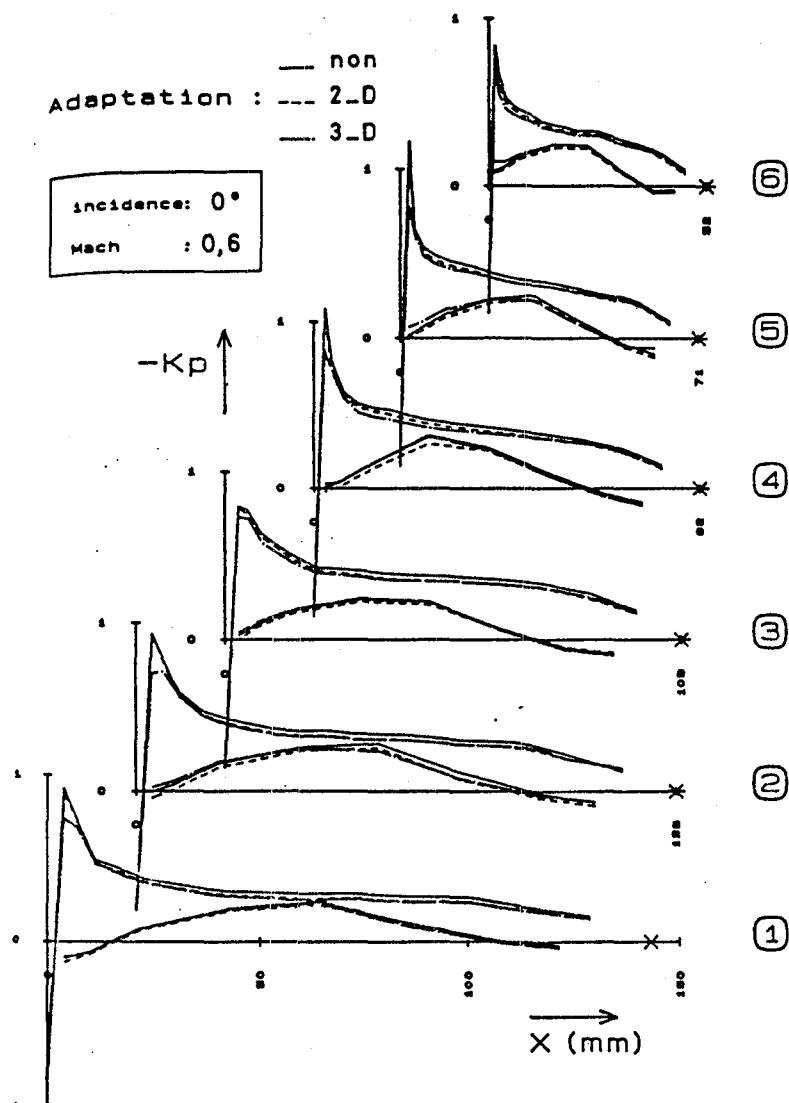


Figure 41

Use of the four base cases -  $K_p$

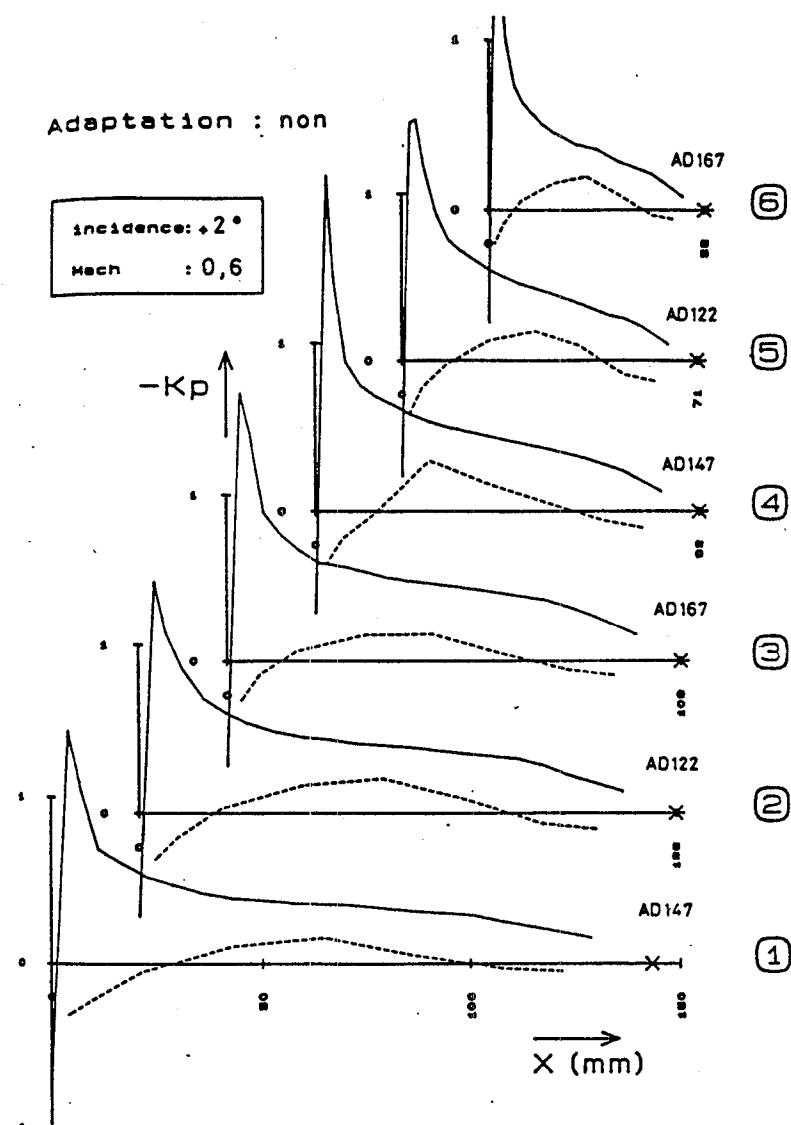


Figure 42

Use of the four base cases -  $K_p$

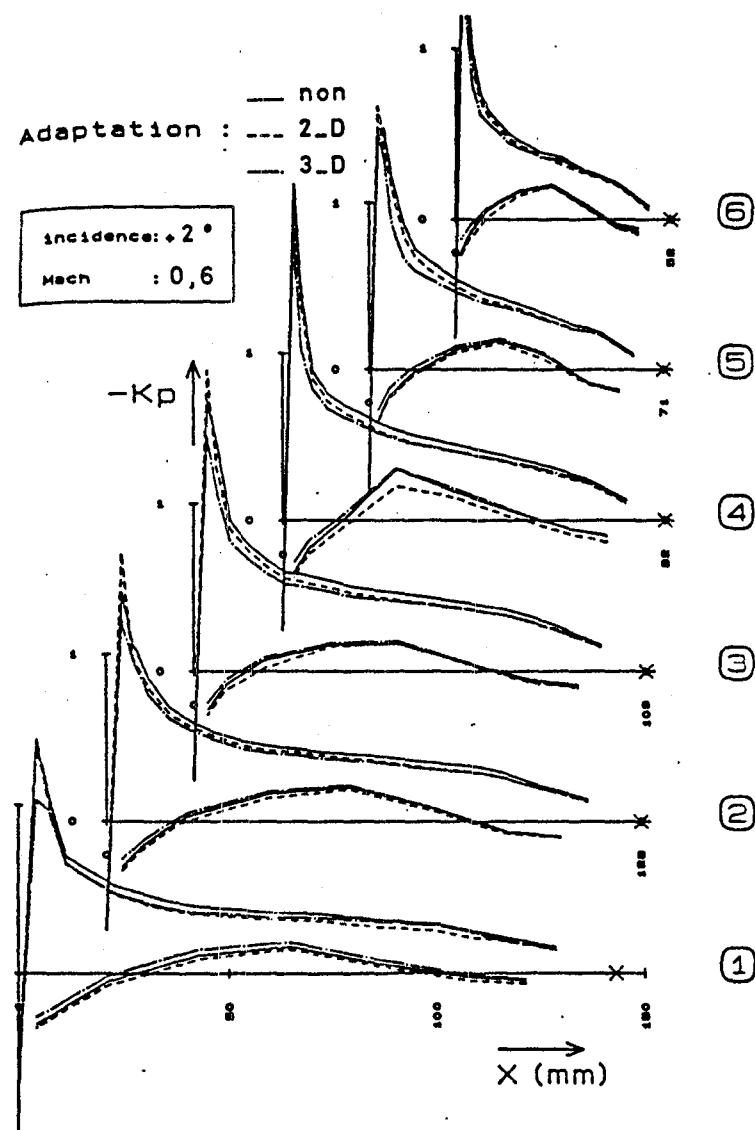


Figure 43

Use of the four base cases -  $K_p$

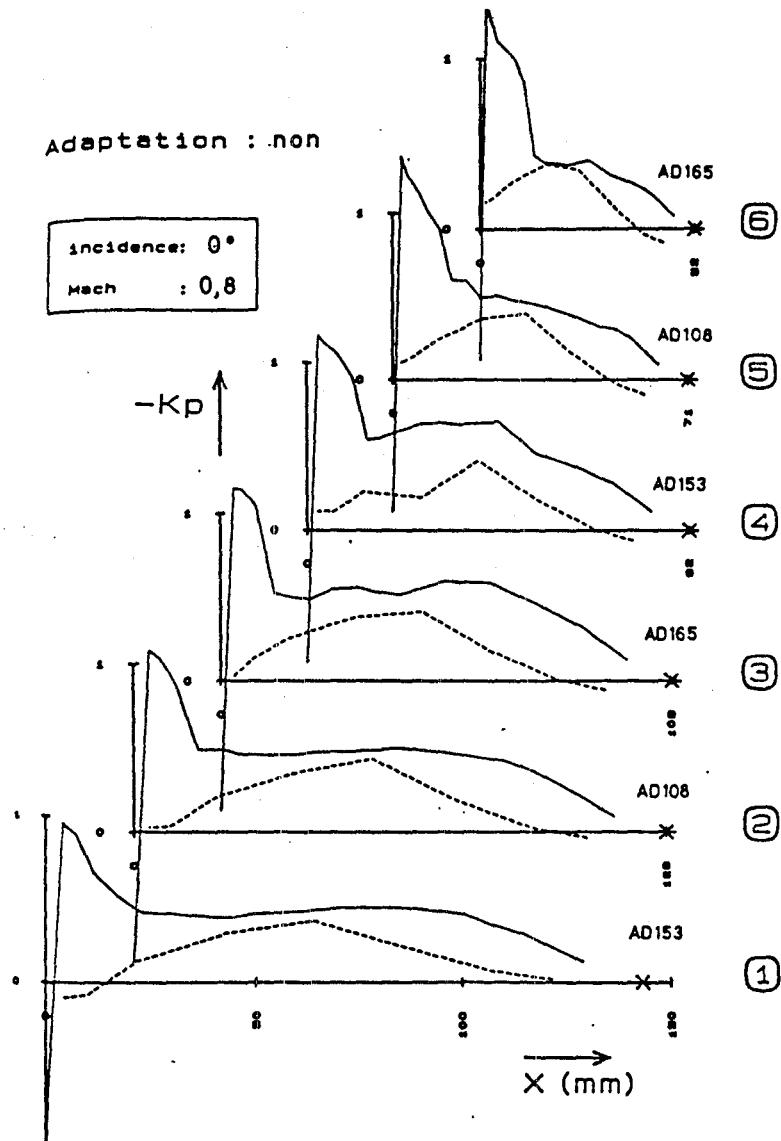


Figure 44

Use of the four base cases -  $K_p$

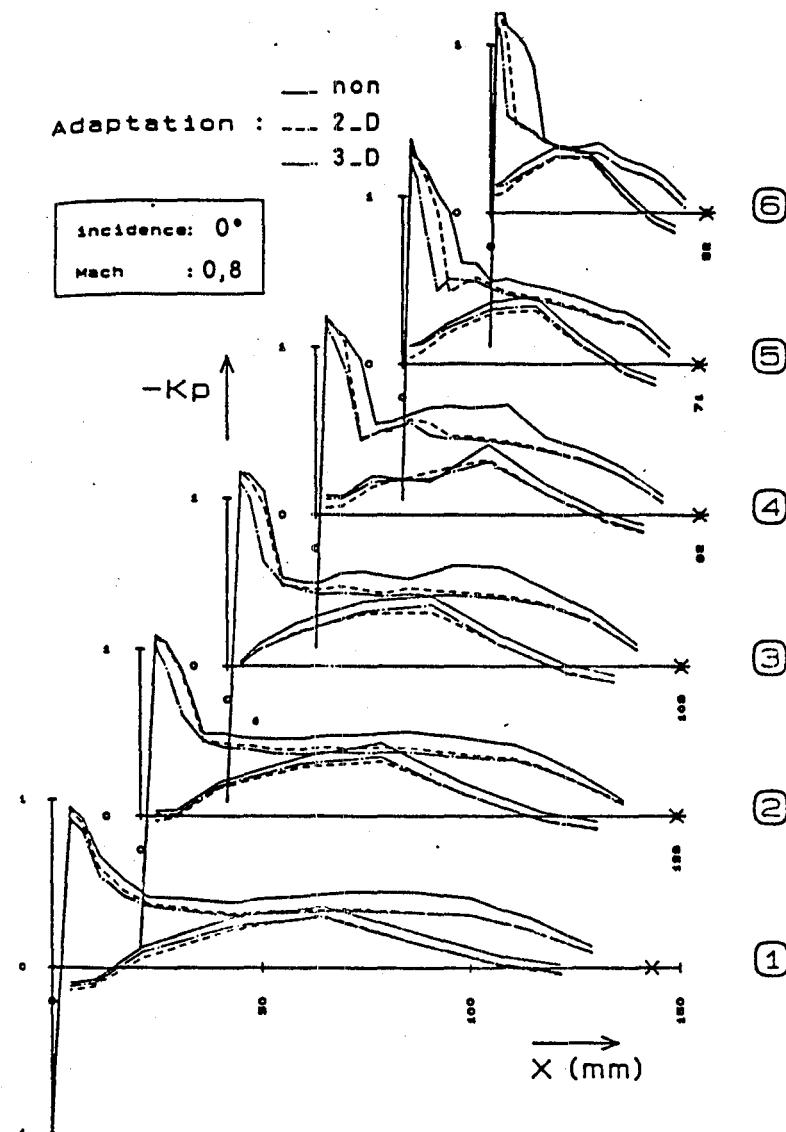


Figure 45

Use of the four base cases - Cz  
Cz recapitulative

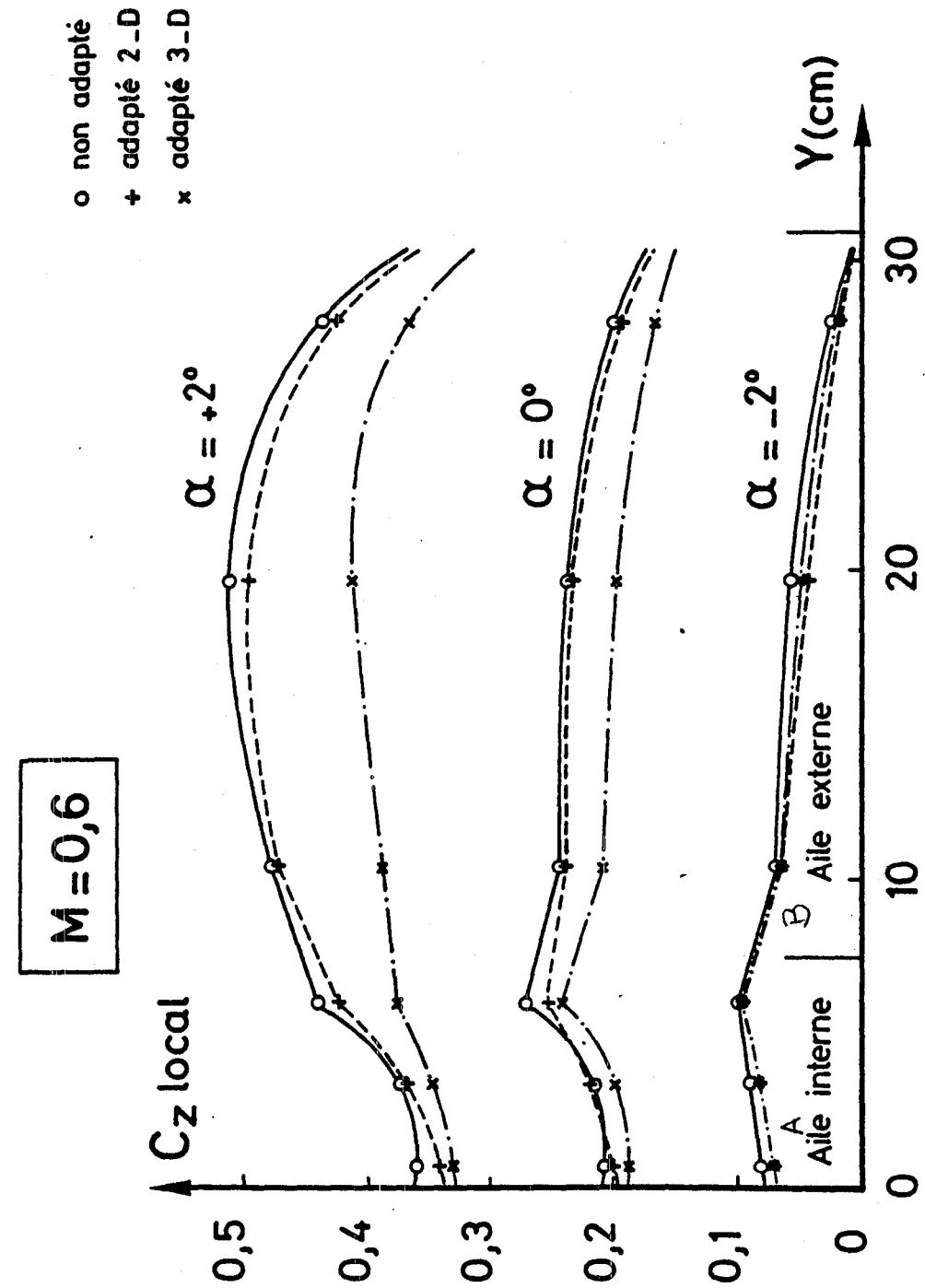
Local lift coefficients

	NON ADAPTE	ADAPTE 2-D	ADAPTE 3-D
I = +2 M = 0.6	R 1 : 0.3600	R 1 : 0.3405	R 1 : 0.3027
	R 2 : 0.3726	R 2 : 0.3687	R 2 : 0.3229
	R 3 : 0.4388	R 3 : 0.4237	R 3 : 0.3752
	R 4 : 0.4740	R 4 : 0.4715	R 4 : 0.3861
	R 5 : 0.5091	R 5 : 0.4948	R 5 : 0.4127
	R 6 : 0.4348	R 6 : 0.4250	R 6 : 0.3658
Aile : 0.448			
I = 0 M = 0.6	R 1 : 0.2081	R 1 : 0.1995	R 1 : 0.1865
	R 2 : 0.2154	R 2 : 0.2198	R 2 : 0.1984
	R 3 : 0.2711	R 3 : 0.2537	R 3 : 0.2411
	R 4 : 0.2418	R 4 : 0.2419	R 4 : 0.2076
	R 5 : 0.2351	R 5 : 0.2337	R 5 : 0.1984
	R 6 : 0.1993	R 6 : 0.1926	R 6 : 0.1647
Aile : 0.231			
I = -2 M = 0.6	R 1 : 0.0798	R 1 : 0.0681	R 1 : 0.0687
	R 2 : 0.0888	R 2 : 0.0819	R 2 : 0.0799
	R 3 : 0.0989	R 3 : 0.0949	R 3 : 0.0945
	R 4 : 0.0665	R 4 : 0.0632	R 4 : 0.0607
	R 5 : 0.0561	R 5 : 0.0440	R 5 : 0.0486
	R 6 : 0.0232	R 6 : 0.0207	R 6 : 0.0174
Aile : 0.066			
I = 0 M = 0.8	R 1 : 0.2400	R 1 : 0.2253	R 1 : 0.2034
	R 2 : 0.2545	R 2 : 0.2509	R 2 : 0.2128
	R 3 : 0.3082	R 3 : 0.2842	R 3 : 0.2488
	R 4 : 0.3755	R 4 : 0.3341	R 4 : 0.3026
	R 5 : 0.4150	R 5 : 0.3825	R 5 : 0.2853
	R 6 : 0.4162	R 6 : 0.3193	R 6 : 0.2555
Aile : 0.353			

"Aile" = wing

Figure 46

Use of the four base cases -  $C_z$

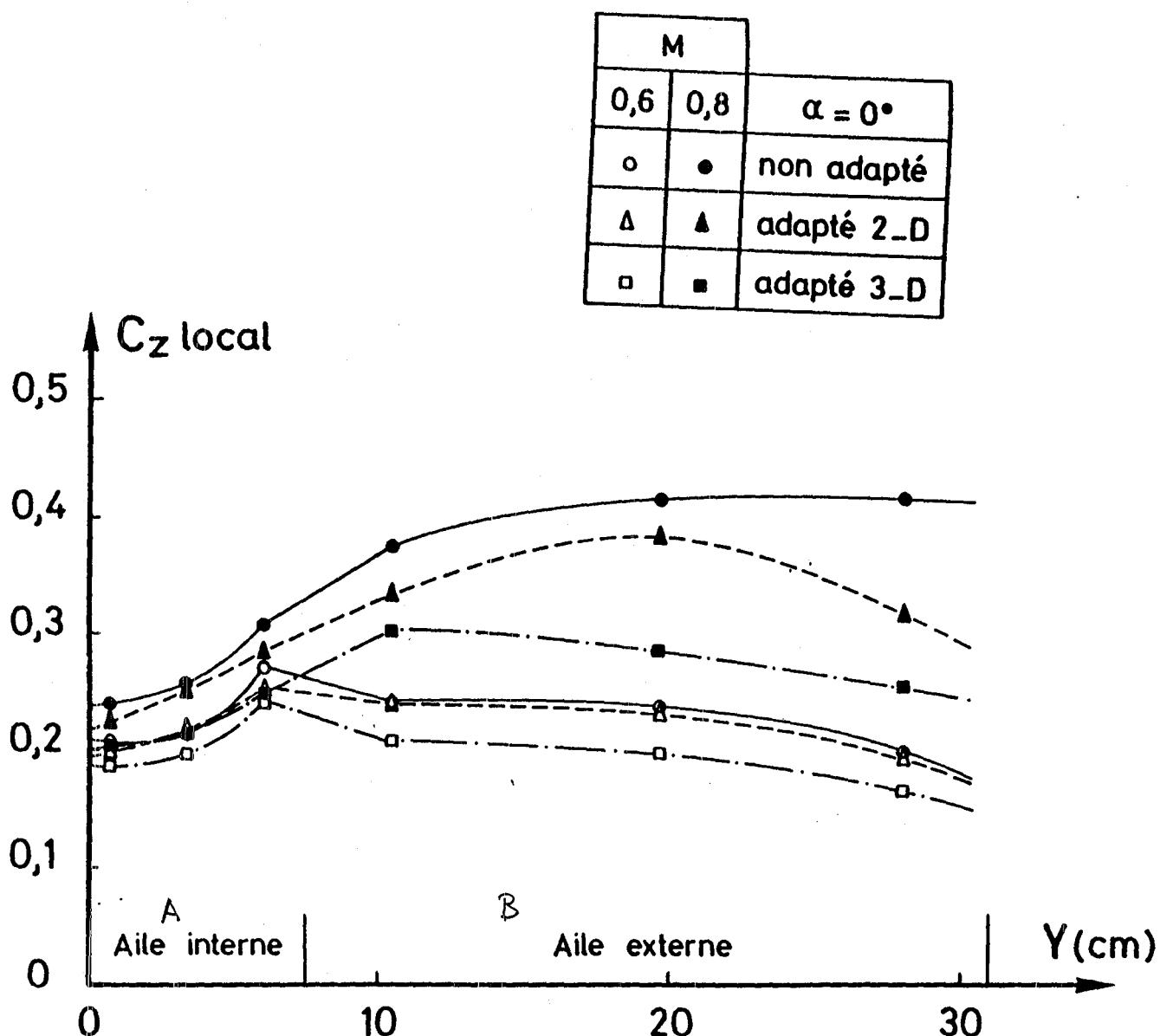


Key

- A - Internal wing  
 B - External wing

Figure 47

Use of the four base cases -  $C_z$

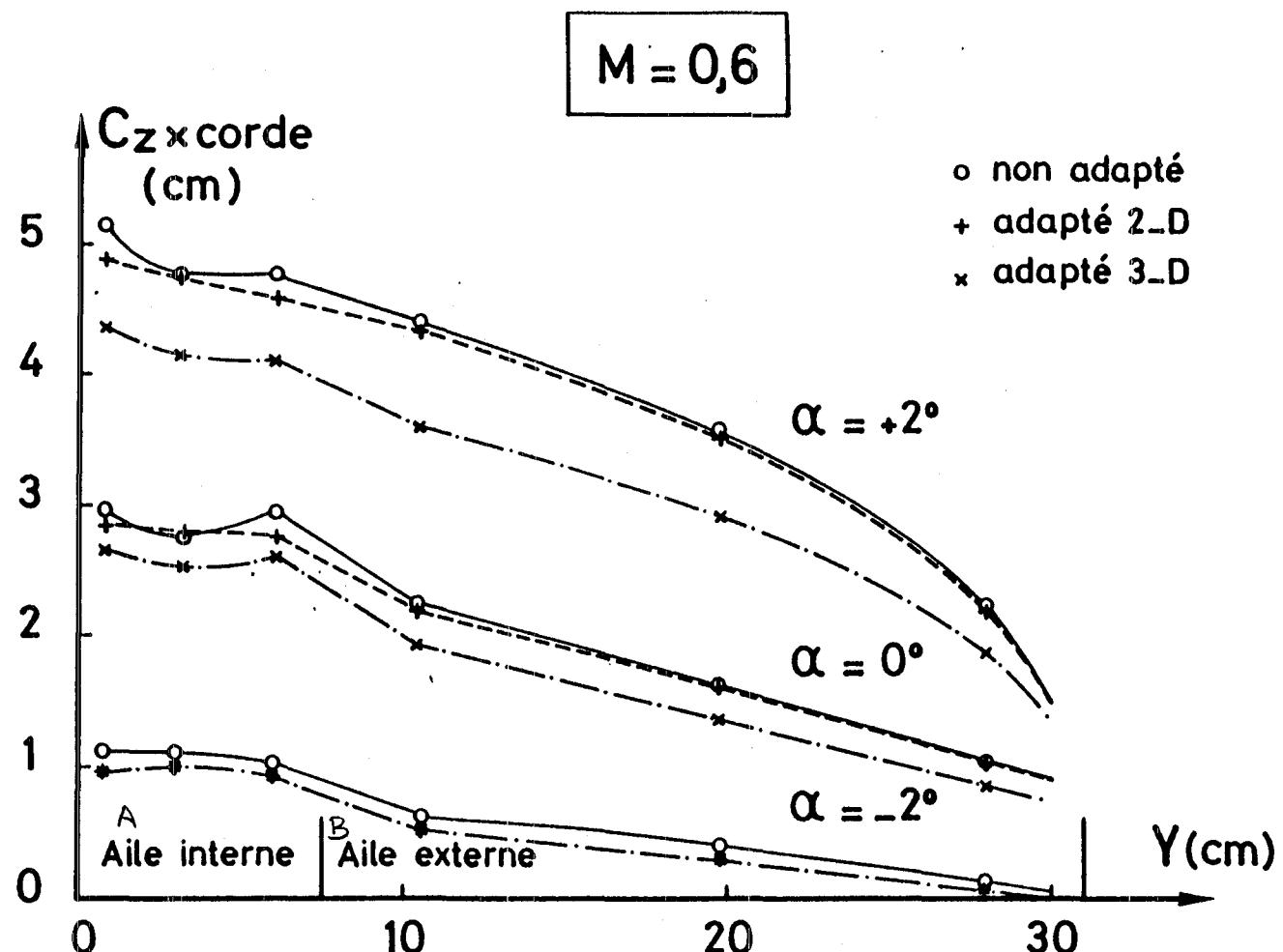


Key

- A - Internal wing
- B - External wing

Figure 48

Use of the four base cases -  $C_z$

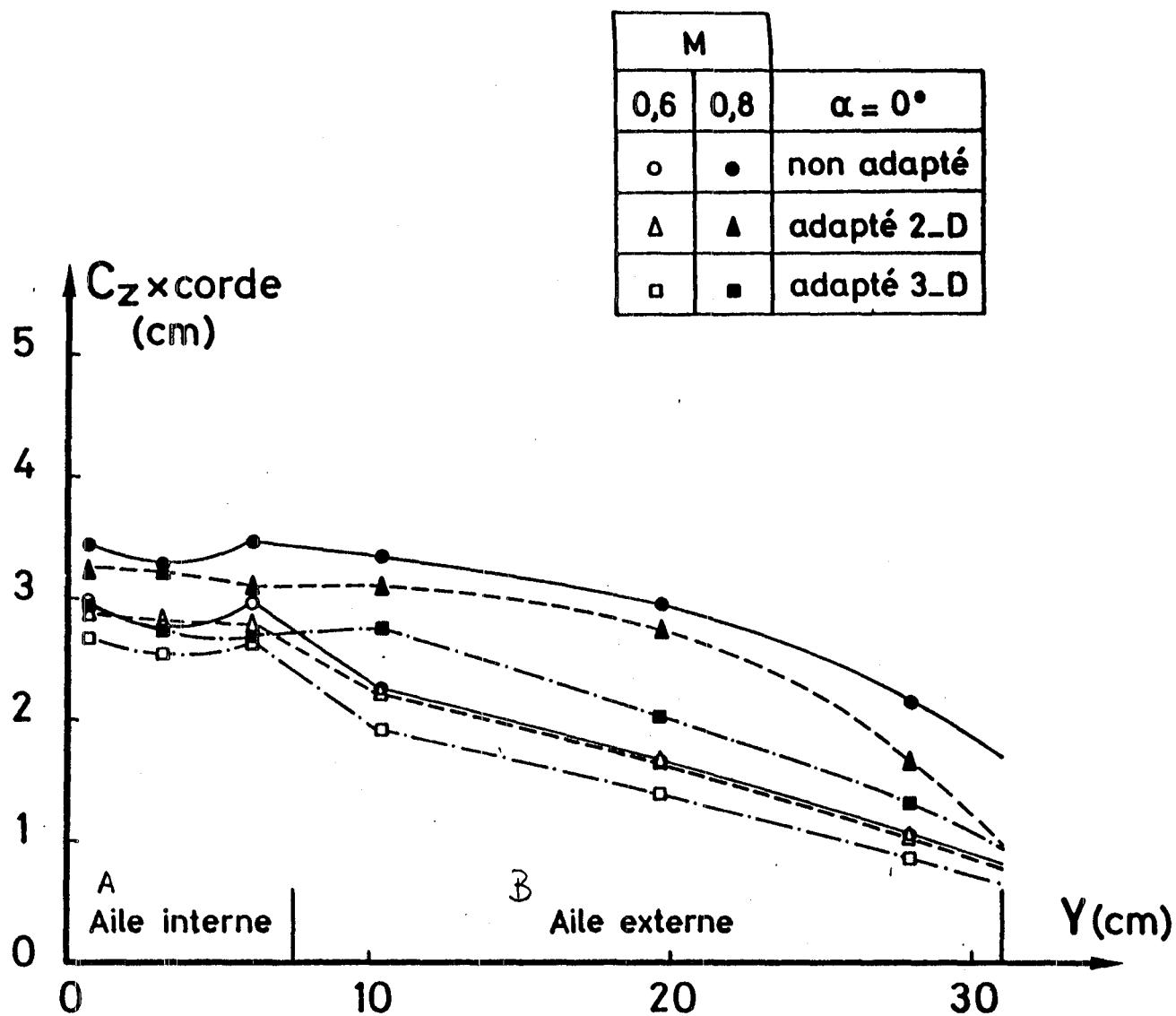


Key

- A - Internal wing
- B - External wing
- C -  $C_z \times \text{chord}$

Figure 49

Use of the four base cases -  $C_z$

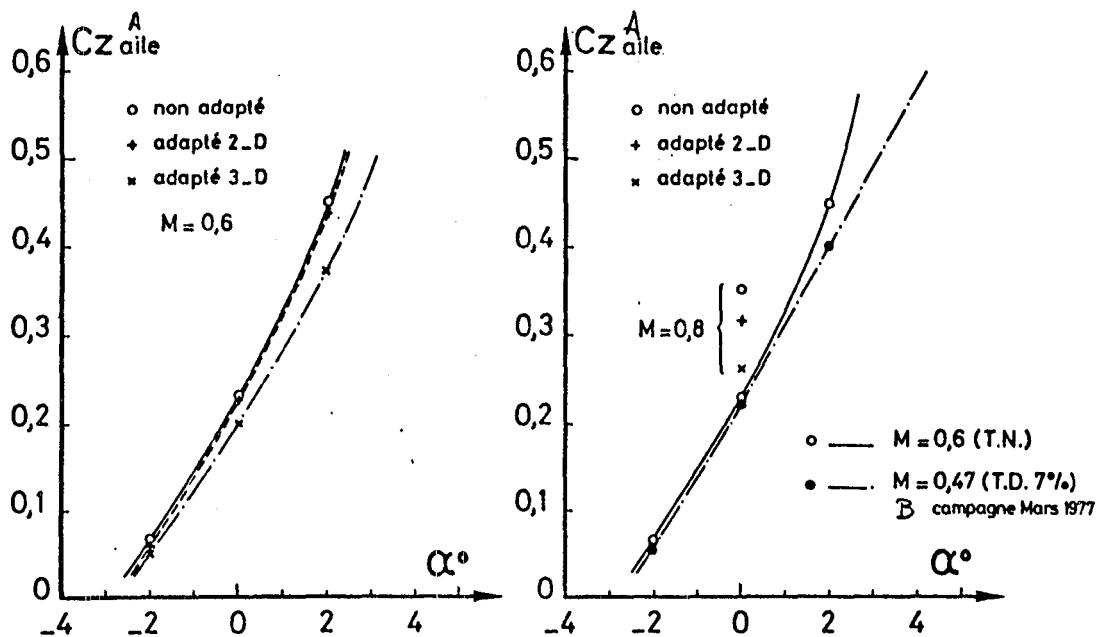


Key

- A - Internal wing
- B - External wing
- C -  $C_z \times \text{chord}$

Figure 50

Use of the four base cases - Cz



Key

A - Wing  
B - March 1977 series

Annex 1

Listing of Cz

Key

Fichier = File  
Rangee = Row  
Corde = Chord

\*\*\*\*\*FICHIER : AD105 \*\*\*\* MACH = .702 INCIDENCE = 0.00 NON  
\* RANGEE : 2 CZ= 2.310E-01 CORDE\*CZ= 2.963E+01  
\* RANGEE : 5 CZ= 2.790E-01 CORDE\*CZ= 1.978E+01  
\*\*\*\*\*  
\*\*\*\*\*FICHIER : AD107 \*\*\*\* MACH = .599 INCIDENCE = 0.00 NON  
\* RANGEE : 2 CZ= 2.154E-01 CORDE\*CZ= 2.763E+01  
\* RANGEE : 5 CZ= 2.351E-01 CORDE\*CZ= 1.667E+01  
\*\*\*\*\*  
\*\*\*\*\*FICHIER : AD108 \*\*\*\* MACH = .801 INCIDENCE = 0.00 NON  
\* RANGEE : 2 CZ= 2.545E-01 CORDE\*CZ= 3.264E+01  
\* RANGEE : 5 CZ= 4.150E-01 CORDE\*CZ= 2.942E+01  
\*\*\*\*\*  
\*\*\*\*\*FICHIER : AD110 \*\*\*\* MACH = .697 INCIDENCE = -2.00 NON  
\* RANGEE : 2 CZ= 6.918E-02 CORDE\*CZ= 8.872E+00  
\* RANGEE : 5 CZ= 3.999E-02 CORDE\*CZ= 2.835E+00  
\*\*\*\*\*  
\*\*\*\*\*FICHIER : AD115 \*\*\*\* MACH = .702 INCIDENCE = 0.00 3D(1)  
\* RANGEE : 2 CZ= 2.063E-01 CORDE\*CZ= 2.645E+01  
\* RANGEE : 5 CZ= 2.215E-01 CORDE\*CZ= 1.570E+01  
\*\*\*\*\*  
\*\*\*\*\*FICHIER : AD116 \*\*\*\* MACH = .701 INCIDENCE = 0.00 3D(2)  
\* RANGEE : 2 CZ= 2.050E-01 CORDE\*CZ= 2.629E+01  
\* RANGEE : 5 CZ= 2.270E-01 CORDE\*CZ= 1.610E+01  
\*\*\*\*\*  
\*\*\*\*\*FICHIER : AD117 \*\*\*\* MACH = .598 INCIDENCE = 0.00 3D(1)  
\* RANGEE : 2 CZ= 1.984E-01 CORDE\*CZ= 2.545E+01  
\* RANGEE : 5 CZ= 1.961E-01 CORDE\*CZ= 1.390E+01  
\*\*\*\*\*  
\*\*\*\*\*FICHIER : AD119 \*\*\*\* MACH = .806 INCIDENCE = 0.00 3D(1)  
\* RANGEE : 2 CZ= 2.070E-01 CORDE\*CZ= 2.655E+01  
\* RANGEE : 5 CZ= 2.732E-01 CORDE\*CZ= 1.937E+01  
\*\*\*\*\*  
\*\*\*\*\*FICHIER : AD119 \*\*\*\* MACH = .805 INCIDENCE = 0.00 3D(2)  
\* RANGEE : 2 CZ= 2.128E-01 CORDE\*CZ= 2.729E+01  
\* RANGEE : 5 CZ= 2.853E-01 CORDE\*CZ= 2.023E+01  
\*\*\*\*\*  
\*\*\*\*\*FICHIER : AD120 \*\*\*\* MACH = .599 INCIDENCE = 2.00 NON  
\* RANGEE : 2 CZ= 3.802E-01 CORDE\*CZ= 4.876E+01  
\* RANGEE : 5 CZ= 5.198E-01 CORDE\*CZ= 3.685E+01  
\*\*\*\*\*  
\*\*\*\*\*FICHIER : AD122 \*\*\*\* MACH = .600 INCIDENCE = 2.00 NON  
\* RANGEE : 2 CZ= 3.726E-01 CORDE\*CZ= 4.779E+01  
\* RANGEE : 5 CZ= 5.091E-01 CORDE\*CZ= 3.609E+01  
\*\*\*\*\*

\*\*\*\*\*FICHIER : AD123 \*\*\*\* MACH = .600 INCIDENCE = 2.00 3D(1)

\* RANGEE : 2 CZ= 3.229E-01 CORDE\*CZ= 4.141E+01

\* RANGEE : 5 CZ= 4.127E-01 CORDE\*CZ= 2.926E+01

\*\*\*\*\*

\*\*\*\*\*FICHIER : AD124 \*\*\*\* MACH = .703 INCIDENCE = 2.00 NON

\* RANGEE : 2 CZ= 4.071E-01 CORDE\*CZ= 5.221E+01

\* RANGEE : 5 CZ= 6.103E-01 CORDE\*CZ= 4.327E+01

\*\*\*\*\*

\*\*\*\*\*FICHIER : AD125 \*\*\*\* MACH = .703 INCIDENCE = 2.00 3D(1)

\* RANGEE : 2 CZ= 3.361E-01 CORDE\*CZ= 4.310E+01

\* RANGEE : 5 CZ= 4.750E-01 CORDE\*CZ= 3.368E+01

\*\*\*\*\*

\*\*\*\*\*FICHIER : AD126 \*\*\*\* MACH = .806 INCIDENCE = 2.00 NON

\* RANGEE : 2 CZ= 5.214E-01 CORDE\*CZ= 6.687E+01

\* RANGEE : 5 CZ= 7.394E-01 CORDE\*CZ= 5.242E+01

\*\*\*\*\*

\*\*\*\*\*FICHIER : AD127 \*\*\*\* MACH = .806 INCIDENCE = 2.00 3D(1)

\* RANGEE : 2 CZ= 3.792E-01 CORDE\*CZ= 4.863E+01

\* RANGEE : 5 CZ= 7.103E-01 CORDE\*CZ= 5.036E+01

\*\*\*\*\*

\*\*\*\*\*FICHIER : AD128 \*\*\*\* MACH = .806 INCIDENCE = 2.00 3D(2)

\* RANGEE : 2 CZ= 4.116E-01 CORDE\*CZ= 5.278E+01

\* RANGEE : 5 CZ= 7.521E-01 CORDE\*CZ= 5.333E+01

\*\*\*\*\*

\*\*\*\*\*FICHIER : AD129 \*\*\*\* MACH = .806 INCIDENCE = 2.00 3D(3)

\* RANGEE : 2 CZ= 3.977E-01 CORDE\*CZ= 5.101E+01

\* RANGEE : 5 CZ= 7.435E-01 CORDE\*CZ= 5.272E+01

\*\*\*\*\*

\*\*\*\*\*FICHIER : AD130 \*\*\*\* MACH = .707 INCIDENCE = 1.50 2D

\* RANGEE : 2 CZ= 3.491E-01 CORDE\*CZ= 4.477E+01

\* RANGEE : 5 CZ= 4.996E-01 CORDE\*CZ= 3.542E+01

\*\*\*\*\*

\*\*\*\*\*FICHIER : AD131 \*\*\*\* MACH = .602 INCIDENCE = 1.50 2D

\* RANGEE : 2 CZ= 3.210E-01 CORDE\*CZ= 4.117E+01

\* RANGEE : 5 CZ= 4.166E-01 CORDE\*CZ= 2.954E+01

\*\*\*\*\*

\*\*\*\*\*FICHIER : AD134 \*\*\*\* MACH = .809 INCIDENCE = 0.00 2D

\* RANGEE : 2 CZ= 2.509E-01 CORDE\*CZ= 3.217E+01

\* RANGEE : 5 CZ= 3.825E-01 CORDE\*CZ= 2.712E+01

\*\*\*\*\*

\*\*\*\*\*FICHIER : AD135 \*\*\*\* MACH = .702 INCIDENCE = 0.00 2D

\* RANGEE : 2 CZ= 2.384E-01 CORDE\*CZ= 3.058E+01

\* RANGEE : 5 CZ= 2.758E-01 CORDE\*CZ= 1.956E+01

\*\*\*\*\*

\*\*\*\*\*FICHIER : AD136 \*\*\*\* MACH = .597 INCIDENCE = 0.00 2D  
\* RANGEE : 2 CZ= 2.198E-01 CORDE\*CZ= 2.819E+01  
\* RANGEE : 5 CZ= 2.337E-01 CORDE\*CZ= 1.657E+01  
\*\*\*\*\*  
\*\*\*\*\*FICHIER : AD137 \*\*\*\* MACH = .598 INCIDENCE = 0.00 NON  
\* RANGEE : 2 CZ= 2.260E-01 CORDE\*CZ= 2.899E+01  
\* RANGEE : 5 CZ= 2.451E-01 CORDE\*CZ= 1.738E+01  
\*\*\*\*\*  
\*\*\*\*\*FICHIER : AD138 \*\*\*\* MACH = .599 INCIDENCE = 0.00 3D(1)  
\* RANGEE : 2 CZ= 2.004E-01 CORDE\*CZ= 2.570E+01  
\* RANGEE : 5 CZ= 1.968E-01 CORDE\*CZ= 1.395E+01  
\*\*\*\*\*  
\*\*\*\*\*FICHIER : AD139 \*\*\*\* MACH = .804 INCIDENCE = 0.00 NON  
\* RANGEE : 2 CZ= 2.686E-01 CORDE\*CZ= 3.445E+01  
\* RANGEE : 5 CZ= 4.513E-01 CORDE\*CZ= 3.199E+01  
\*\*\*\*\*  
\*\*\*\*\*FICHIER : AD140 \*\*\*\* MACH = .804 INCIDENCE = 0.00 3D(1)  
\* RANGEE : 2 CZ= 2.067E-01 CORDE\*CZ= 2.651E+01  
\* RANGEE : 5 CZ= 2.645E-01 CORDE\*CZ= 1.876E+01  
\*\*\*\*\*  
\*\*\*\*\*FICHIER : AD141 \*\*\*\* MACH = .804 INCIDENCE = 0.00 3D(2)  
\* RANGEE : 2 CZ= 2.222E-01 CORDE\*CZ= 2.850E+01  
\* RANGEE : 5 CZ= 2.991E-01 CORDE\*CZ= 2.130E+01  
\*\*\*\*\*  
\*\*\*\*\*FICHIER : AD142 \*\*\*\* MACH = .598 INCIDENCE = -2.00 NON  
\* RANGEE : 2 CZ= 8.875E-02 CORDE\*CZ= 1.138E+01  
\* RANGEE : 5 CZ= 5.611E-02 CORDE\*CZ= 3.978E+00  
\*\*\*\*\*  
\*\*\*\*\*FICHIER : AD143 \*\*\*\* MACH = .598 INCIDENCE = -2.00 3D(1)  
\* RANGEE : 2 CZ= 7.990E-02 CORDE\*CZ= 1.025E+01  
\* RANGEE : 5 CZ= 4.859E-02 CORDE\*CZ= 3.445E+00  
\*\*\*\*\*  
\*\*\*\*\*FICHIER : AD144 \*\*\*\* MACH = .598 INCIDENCE = -2.00 2D  
\* RANGEE : 2 CZ= 8.189E-02 CORDE\*CZ= 1.050E+01  
\* RANGEE : 5 CZ= 4.395E-02 CORDE\*CZ= 3.116E+00  
\*\*\*\*\*  
\*\*\*\*\*FICHIER : AD145 \*\*\*\* MACH = .596 INCIDENCE = 2.00 2D  
\* RANGEE : 2 CZ= 3.687E-01 CORDE\*CZ= 4.729E+01  
\* RANGEE : 5 CZ= 4.948E-01 CORDE\*CZ= 3.508E+01  
\*\*\*\*\*  
\*\*\*\*\*FICHIER : AD146 \*\*\*\* MACH = .594 INCIDENCE = 2.00 2D  
\* RANGEE : 1 CZ= 3.405E-01 CORDE\*CZ= 4.872E+01  
\* RANGEE : 4 CZ= 4.715E-01 CORDE\*CZ= 4.344E+01  
\*\*\*\*\*

\*\*\*\*\*FICHIER : AD147 \*\*\*\* MACH = .593 INCIDENCE = 2.00 NON  
\* RANGEE : 1 CZ= 3.600E-01 CORDE\*CZ= 5.151E+01  
\* RANGEE : 4 CZ= 4.740E-01 CORDE\*CZ= 4.367E+01  
\*\*\*\*\*

\*\*\*\*\*FICHIER : AD148 \*\*\*\* MACH = .594 INCIDENCE = 2.00 3D(1)  
\* RANGEE : 1 CZ= 3.027E-01 CORDE\*CZ= 4.332E+01  
\* RANGEE : 4 CZ= 3.861E-01 CORDE\*CZ= 3.557E+01  
\*\*\*\*\*

\*\*\*\*\*FICHIER : AD149 \*\*\*\* MACH = .594 INCIDENCE = 0.00 2D  
\* RANGEE : 1 CZ= 1.995E-01 CORDE\*CZ= 2.855E+01  
\* RANGEE : 4 CZ= 2.419E-01 CORDE\*CZ= 2.228E+01  
\*\*\*\*\*

\*\*\*\*\*FICHIER : AD150 \*\*\*\* MACH = .595 INCIDENCE = 0.00 NON  
\* RANGEE : 1 CZ= 2.081E-01 CORDE\*CZ= 2.978E+01  
\* RANGEE : 4 CZ= 2.418E-01 CORDE\*CZ= 2.228E+01  
\*\*\*\*\*

\*\*\*\*\*FICHIER : AD151 \*\*\*\* MACH = .594 INCIDENCE = 0.00 3D(1)  
\* RANGEE : 1 CZ= 1.865E-01 CORDE\*CZ= 2.669E+01  
\* RANGEE : 4 CZ= 2.076E-01 CORDE\*CZ= 1.913E+01  
\*\*\*\*\*

\*\*\*\*\*FICHIER : AD152 \*\*\*\* MACH = .802 INCIDENCE = 0.00 2D  
\* RANGEE : 1 CZ= 2.250E-01 CORDE\*CZ= 3.225E+01  
\* RANGEE : 4 CZ= 3.341E-01 CORDE\*CZ= 3.078E+01  
\*\*\*\*\*

\*\*\*\*\*FICHIER : AD153 \*\*\*\* MACH = .803 INCIDENCE = 0.00 NON  
\* RANGEE : 1 CZ= 2.400E-01 CORDE\*CZ= 3.434E+01  
\* RANGEE : 4 CZ= 3.755E-01 CORDE\*CZ= 3.460E+01  
\*\*\*\*\*

\*\*\*\*\*FICHIER : AD154 \*\*\*\* MACH = .803 INCIDENCE = 0.00 3D(1)  
\* RANGEE : 1 CZ= 2.034E-01 CORDE\*CZ= 2.911E+01  
\* RANGEE : 4 CZ= 3.026E-01 CORDE\*CZ= 2.788E+01  
\*\*\*\*\*

\*\*\*\*\*FICHIER : AD155 \*\*\*\* MACH = .595 INCIDENCE =-2.00 2D  
\* RANGEE : 1 CZ= 6.814E-02 CORDE\*CZ= 9.751E+00  
\* RANGEE : 4 CZ= 6.321E-02 CORDE\*CZ= 5.924E+00  
\*\*\*\*\*

\*\*\*\*\*FICHIER : AD156 \*\*\*\* MACH = .596 INCIDENCE =-2.00 NON  
\* RANGEE : 1 CZ= 7.980E-02 CORDE\*CZ= 1.142E+01  
\* RANGEE : 4 CZ= 6.654E-02 CORDE\*CZ= 6.131E+00  
\*\*\*\*\*

\*\*\*\*\*FICHIER : AD157 \*\*\*\* MACH = .596 INCIDENCE =-2.00 3D(1)  
\* RANGEE : 1 CZ= 6.874E-02 CORDE\*CZ= 9.836E+00  
\* RANGEE : 4 CZ= 6.066E-02 CORDE\*CZ= 5.589E+00  
\*\*\*\*\*

\*\*\*\*\*FICHIER : AD158 \*\*\*\* MACH = .595 INCIDENCE =-2.00 2D  
\* RANGEE : 3 CZ= 9.486E-02 CORDE\*CZ= 1.030E+01  
\* RANGEE : 6 CZ= 2.071E-02 CORDE\*CZ= 1.070E+00  
\*\*\*\*\*

\*\*\*\*\*FICHIER : AD159 \*\*\*\* MACH = .596 INCIDENCE =-2.00 NON  
\* RANGEE : 3 CZ= 9.893E-02 CORDE\*CZ= 1.074E+01  
\* RANGEE : 6 CZ= 2.323E-02 CORDE\*CZ= 1.200E+00  
\*\*\*\*\*

\*\*\*\*\*FICHIER : AD160 \*\*\*\* MACH = .596 INCIDENCE =-2.00 3D(1)  
\* RANGEE : 3 CZ= 9.454E-02 CORDE\*CZ= 1.026E+01  
\* RANGEE : 6 CZ= 1.742E-02 CORDE\*CZ= 8.998E-01  
\*\*\*\*\*

\*\*\*\*\*FICHIER : AD161 \*\*\*\* MACH = .597 INCIDENCE = 0.00 2D  
\* RANGEE : 3 CZ= 2.537E-01 CORDE\*CZ= 2.754E+01  
\* RANGEE : 6 CZ= 1.926E-01 CORDE\*CZ= 9.945E+00  
\*\*\*\*\*

\*\*\*\*\*FICHIER : AD162 \*\*\*\* MACH = .598 INCIDENCE = 0.00 NON  
\* RANGEE : 3 CZ= 2.711E-01 CORDE\*CZ= 2.943E+01  
\* RANGEE : 6 CZ= 1.993E-01 CORDE\*CZ= 1.029E+01  
\*\*\*\*\*

\*\*\*\*\*FICHIER : AD163 \*\*\*\* MACH = .598 INCIDENCE = 0.00 3D(1)  
\* RANGEE : 3 CZ= 2.411E-01 CORDE\*CZ= 2.617E+01  
\* RANGEE : 6 CZ= 1.647E-01 CORDE\*CZ= 8.506E+00  
\*\*\*\*\*

\*\*\*\*\*FICHIER : AD164 \*\*\*\* MACH = .807 INCIDENCE = 0.00 2D  
\* RANGEE : 3 CZ= 2.842E-01 CORDE\*CZ= 3.085E+01  
\* RANGEE : 6 CZ= 3.193E-01 CORDE\*CZ= 1.649E+01  
\*\*\*\*\*

\*\*\*\*\*FICHIER : AD165 \*\*\*\* MACH = .805 INCIDENCE = 0.00 NON  
\* RANGEE : 3 CZ= 3.082E-01 CORDE\*CZ= 3.346E+01  
\* RANGEE : 6 CZ= 4.162E-01 CORDE\*CZ= 2.150E+01  
\*\*\*\*\*

\*\*\*\*\*FICHIER : AD166 \*\*\*\* MACH = .804 INCIDENCE = 0.00 3D(1)  
\* RANGEE : 3 CZ= 2.488E-01 CORDE\*CZ= 2.701E+01  
\* RANGEE : 6 CZ= 2.555E-01 CORDE\*CZ= 1.320E+01  
\*\*\*\*\*

\*\*\*\*\*FICHIER : AD167 \*\*\*\* MACH = .599 INCIDENCE = 2.00 NON  
\* RANGEE : 3 CZ= 4.388E-01 CORDE\*CZ= 4.763E+01  
\* RANGEE : 6 CZ= 4.348E-01 CORDE\*CZ= 2.246E+01  
\*\*\*\*\*

\*\*\*\*\*FICHIER : AD168 \*\*\*\* MACH = .599 INCIDENCE = 2.00 3D(1)  
\* RANGEE : 3 CZ= 3.752E-01 CORDE\*CZ= 4.074E+01  
\* RANGEE : 6 CZ= 3.658E-01 CORDE\*CZ= 1.889E+01  
\*\*\*\*\*

\*\*\*\*\*FICHIER : AD169 \*\*\*\* MACH = .599 INCIDENCE = 2.00 2D  
\* RANGEE : 3 CZ= 4.237E-01 CORDE\*CZ= 4.600E+01  
\* RANGEE : 6 CZ= 4.250E-01 CORDE\*CZ= 2.195E+01  
\*\*\*\*\*

Listing of Adaptable Wall Shapes

- 1 -

Listing of adaptable wall shapes (rows 2-5)

ADAPT.:	FORME	:	MACH	:	INCIDENCE
:	DEPART	:	0,6	:	0,8
NON	AD445	:	122	:	
2-D		:	145	:	+2
3-D	AD9122	:	123	:	
NON	AD4 AD4	:	107	:	108
2-D		:	136	:	134
3-D	AD9107 AD9118	:	117	:	119
NON	AD4	:	142	:	
2-D		:	144	:	-2
3-D	AD9142	:	143	:	

Forme depart = Beginning shape

File: AD136  
Lines of current (mm)

N	Absc.	I <sub>Z</sub>	L.C.	Haut	I <sub>Z</sub>	L.C.	Bas
1	-800	1	0.00	0.00			
2	-754	2	0.02	0.02			
3	-711	4	0.14	0.09			
4	-670	9	0.22	0.14			
5	-630	4	0.30	0.19			
6	-592	6	0.38	0.23			
7	-556	5	0.46	0.28			
8	-522	0	0.53	0.32			
9	-488	0	0.62	0.35			
10	-457	6	0.70	0.38			
11	-427	5	0.79	0.40			
12	-398	7	1.04	0.42			
13	-371	2	1.19	0.46			
14	-345	0	1.32	0.47			
15	-319	9	1.46	0.51			
16	-295	9	1.55	0.52			
17	-273	0	1.72	0.52			
18	-251	2	1.94	0.52			
19	-230	3	1.99	0.53			
20	-210	3	2.11	0.54			
21	-181	2	2.25	0.57			
22	-174	4	2.40	0.60			
23	-155	3	2.52	0.62			
24	-136	4	2.63	0.63			
25	-112	3	2.72	0.62			
26	-120	9	2.81	0.61			
27	-109	7	2.89	0.60			
28	-94	0	2.97	0.59			
29	-79	0	3.05	0.59			
30	-79	0	3.14	0.59			
31	-69	80	3.20	0.59			
32	-60	39	3.27	0.57			
33	-51	39	3.34	0.56			
34	-42	57	3.35	0.55			
35	-33	58	3.43	0.55			
36	-25	33	3.47	0.55			
37	-16	94	3.49	0.54			
38	-9	41	3.51	0.52			
39	0	0	3.51	0.52			
40	8	41	3.51	0.52			
41	16	84	3.51	0.52			
42	25	13	3.51	0.51			
43	33	39	3.51	0.51			
44	42	57	3.50	0.51			
45	51	39	3.49	0.51			
46	60	39	3.49	0.51			
47	69	50	3.46	0.51			
48	79	0	3.43	0.51			
49	88	39	3.38	0.51			
50	99	0	3.33	0.51			
51	109	71	3.27	0.51			
52	120	94	3.18	0.51			
53	132	83	3.08	0.51			
54	145	56	2.57	0.51			
55	159	33	2.56	0.49			
56	174	43	2.76	0.48			
57	191	23	2.57	0.47			
58	210	11	2.57	0.46			
59	230	27	2.45	0.45			
60	251	17	2.31	0.44			
61	273	05	2.15	0.44			
62	295	94	1.39	0.44			
63	319	90	1.84	0.43			
64	344	98	1.70	0.43			
65	371	23	1.55	0.43			
66	398	70	1.40	0.41			
67	427	46	1.25	0.40			
68	457	55	1.11	0.36			
69	489	05	.99	0.33			
70	522	01	.87	0.30			

File: AD134  
Lines of current (mm)

N	Absc.	I <sub>Z</sub>	L.C.	Haut	I <sub>Z</sub>	L.C.	Bas
1	-800	1	0.00	0.00			
2	-754	2	0.05	0.05			
3	-711	4	0.13	0.13			
4	-670	9	0.20	0.20			
5	-630	4	0.28	0.28			
6	-592	6	0.36	0.36			
7	-556	5	0.45	0.45			
8	-522	0	0.54	0.54			
9	-488	0	0.63	0.63			
10	-457	6	0.74	0.74			
11	-427	5	0.85	0.85			
12	-398	7	1.04	0.97			
13	-371	2	1.11	0.97			
14	-345	0	1.27	0.97			
15	-319	9	1.43	0.97			
16	-295	9	1.60	0.97			
17	-273	0	1.76	0.97			
18	-251	2	1.91	0.97			
19	-230	3	2.07	0.97			
20	-210	3	2.24	0.97			
21	-191	2	2.42	0.97			
22	-174	4	2.60	0.97			
23	-155	3	2.75	0.97			
24	-145	6	2.98	0.97			
25	-132	9	3.00	0.97			
26	-120	9	3.09	0.97			
27	-109	7	3.18	0.97			
28	-95	08	3.22	0.97			
29	-88	09	3.37	0.97			
30	-79	09	3.48	0.97			
31	-69	04	3.59	0.97			
32	-60	35	3.68	0.97			
33	-51	39	3.78	0.97			
34	-42	57	3.86	0.97			
35	-33	39	3.92	0.97			
36	-23	33	3.99	0.97			
37	-16	94	4.02	0.97			
38	-9	41	4.05	0.97			
39	0	0	4.00	0.97			
40	8	41	4.08	0.97			
41	16	84	4.04	0.97			
42	25	13	4.34	0.97			
43	33	39	4.34	0.97			
44	42	57	4.09	0.97			
45	51	39	4.06	0.97			
46	60	39	4.06	0.97			
47	69	50	4.03	0.97			
48	79	0	3.98	0.97			
49	88	99	3.92	0.97			
50	99	08	3.85	0.97			
51	109	73	3.79	0.97			
52	120	94	3.65	0.97			
53	132	83	3.53	0.97			
54	145	56	3.41	0.97			
55	159	33	3.29	0.97			
56	174	43	3.19	0.97			
57	191	23	3.09	0.97			
58	210	11	2.97	0.97			
59	230	27	2.83	0.97			
60	251	17	2.66	0.97			
61	273	05	2.48	0.97			
62	295	94	2.31	0.97			
63	319	20	2.17	0.97			
64	344	98	2.03	0.97			
65	371	23	1.91	0.97			
66	398	70	1.81	0.97			
67	427	46	1.71	0.97			
68	457	55	1.60	0.97			
69	489	05	1.50	0.97			
70	522	01	1.40	0.97			

Key: Haut = high  
Bas = low

File: AD144  
Lines of current (mm)

N	Absc.	Iz	L.C.Haut	Iz	L.C.Bas		
1	-800.1	0.00	0.00	1	-800.1	0.00	0.00
2	-754.7	.02	0.00	2	-754.7	.12	.10
3	-711.4	.05	.01	3	-711.4	.25	.21
4	-670.0	.08	.01	4	-670.0	.38	.32
5	-630.4	.11	.01	5	-630.4	.51	.42
6	-592.6	.15	.01	6	-592.6	.65	.53
7	-556.5	.19	.01	7	-556.5	.80	.69
8	-522.0	.24	0.00	8	-522.0	.95	.79
9	-489.0	.29	0.00	9	-489.0	1.10	.83
10	-457.6	.35	.02	10	-457.6	1.27	.92
11	-427.5	.42	.04	11	-427.5	1.44	1.00
12	-398.2	.50	.07	12	-398.2	1.61	1.06
13	-371.2	.59	.09	13	-371.2	1.80	1.14
14	-345.0	.68	.11	14	-345.0	1.99	1.22
15	-319.9	.79	.15	15	-319.9	2.20	1.39
16	-295.9	.92	.19	16	-295.9	2.42	1.58
17	-273.0	1.04	.23	17	-273.0	2.62	1.45
18	-251.2	1.05	.27	18	-251.2	2.80	1.51
19	-230.1	1.13	.31	19	-230.1	2.99	1.5
20	-210.1	1.21	.35	20	-210.1	3.17	1.64
21	-191.2	1.30	.39	21	-191.2	3.36	1.73
22	-174.4	1.40	.40	22	-174.4	3.57	1.91
23	-159.3	1.49	.42	23	-159.3	3.75	1.99
24	-145.6	1.56	.45	24	-145.6	3.95	1.92
25	-132.9	1.63	.49	25	-132.9	4.01	1.74
26	-120.9	1.69	.53	26	-120.9	4.11	1.94
27	-110.7	1.75	.56	27	-110.7	4.22	1.94
28	-99.08	1.91	.59	28	-99.08	4.42	1.95
29	-88.89	1.97	.63	29	-88.89	4.41	1.77
30	-79.09	2.04	.65	30	-79.09	4.51	1.99
31	-69.60	2.05	.68	31	-69.60	4.60	2.01
32	-60.39	2.07	.71	32	-60.39	4.69	2.03
33	-51.39	2.13	.74	33	-51.39	4.76	2.04
34	-42.57	2.19	.77	34	-42.57	4.83	2.05
35	-33.89	2.22	.78	35	-33.89	4.88	2.05
36	-25.33	2.25	.78	36	-25.33	4.93	2.05
37	-16.64	2.29	.79	37	-16.64	4.96	2.07
38	-8.41	2.30	.80	38	-8.41	4.96	2.06
39	0.00	2.31	.80	39	0.00	5.00	2.05
40	9.41	2.32	.79	40	9.41	5.00	2.05
41	16.24	2.32	.79	41	16.24	5.00	2.04
42	25.33	2.33	.79	42	25.33	5.00	2.03
43	33.49	2.34	.79	43	33.49	5.00	2.02
44	42.57	2.35	.73	44	42.57	5.00	2.02
45	51.29	2.35	.71	45	51.29	4.99	2.01
46	60.39	2.35	.69	46	60.39	4.97	2.00
47	69.60	2.35	.68	47	69.60	4.94	1.99
48	79.09	2.33	.63	48	79.09	4.90	1.97
49	88.89	2.31	.60	49	88.89	4.83	1.94
50	99.08	2.28	.58	50	99.08	4.76	1.91
51	109.73	2.24	.55	51	109.73	4.67	1.88
52	120.94	2.19	.51	52	120.94	4.55	1.84
53	132.83	2.11	.48	53	132.83	4.41	1.80
54	145.56	2.02	.44	54	145.56	4.27	1.75
55	159.33	1.94	.41	55	159.33	4.13	1.72
56	174.43	1.97	.37	56	174.43	3.99	1.68
57	191.23	1.80	.34	57	191.23	3.85	1.63
58	210.21	1.73	.31	58	210.21	3.70	1.59
59	230.27	1.65	.28	59	230.27	3.53	1.53
60	251.17	1.56	.25	60	251.17	3.34	1.49
61	273.05	1.49	.21	61	273.05	3.13	1.43
62	295.94	1.36	.16	62	295.94	2.91	1.36
63	319.80	1.31	.13	63	319.80	2.69	1.29
64	344.98	1.22	.03	64	344.98	2.47	1.24
65	371.23	1.12	.03	65	371.23	2.24	1.19
66	396.70	1.02	.09	66	396.70	2.02	1.14
67	422.46	.92	.13	67	422.46	1.81	1.05
68	457.55	.82	.12	68	457.55	1.60	1.03
69	495.05	.74	.20	69	495.05	1.41	.96
70	522.01	.66	.23	70	522.01	1.23	.88

File: AD145  
Lines of current (mm)

N	Absc.	Iz	L.C.Haut	Iz	L.C.Bas		
1	-800.1	0.00	0.00	1	-800.1	0.00	0.00
2	-754.7	.12	.10	2	-754.7	.25	.21
3	-711.4	.25	.21	3	-711.4	.42	.32
4	-670.0	.38	.32	4	-670.0	.51	.42
5	-630.4	.51	.42	5	-630.4	.65	.53
6	-592.6	.65	.53	6	-592.6	.80	.69
7	-556.5	.80	.69	7	-556.5	.95	.79
8	-522.0	.95	.79	8	-522.0	1.10	.83
9	-489.0	1.10	.83	9	-489.0	1.27	.92
10	-457.6	1.27	.92	10	-457.6	1.44	1.00
11	-427.5	1.44	1.00	11	-427.5	1.61	1.06
12	-398.2	1.61	1.06	12	-398.2	1.80	1.14
13	-371.2	1.80	1.14	13	-371.2	1.99	1.22
14	-345.0	1.99	1.22	14	-345.0	2.20	1.39
15	-319.9	2.20	1.39	15	-319.9	2.42	1.38
16	-295.9	2.42	1.38	16	-295.9	2.62	1.45
17	-273.0	2.62	1.45	17	-273.0	2.80	1.51
18	-251.2	2.80	1.51	18	-251.2	2.99	1.5
19	-230.1	2.99	1.5	19	-230.1	3.17	1.64
20	-210.1	3.17	1.64	20	-210.1	3.36	1.73
21	-191.2	3.36	1.73	21	-191.2	3.57	1.91
22	-174.4	3.57	1.91	22	-174.4	3.75	1.99
23	-159.3	3.75	1.99	23	-159.3	3.95	1.92
24	-145.6	3.95	1.92	24	-145.6	4.09	1.92
25	-132.9	4.01	1.74	25	-132.9	4.11	1.94
26	-120.9	4.11	1.94	26	-120.9	4.22	1.94
27	-110.7	4.22	1.94	27	-110.7	4.32	1.94
28	-99.08	4.42	1.95	28	-99.08	4.41	1.77
29	-88.89	4.41	1.77	29	-88.89	4.51	1.99
30	-79.09	4.51	1.99	30	-79.09	4.60	2.01
31	-69.60	4.60	2.01	31	-69.60	4.69	2.03
32	-60.39	4.69	2.03	32	-60.39	4.76	2.04
33	-51.39	4.76	2.04	33	-51.39	4.83	2.05
34	-42.57	4.83	2.05	34	-42.57	4.93	2.05
35	-33.89	4.93	2.05	35	-33.89	5.00	2.05
36	-25.33	5.00	2.05	36	-25.33	5.00	2.05
37	-16.64	5.00	2.07	37	-16.64	4.96	2.07
38	-8.41	5.00	2.06	38	-8.41	4.96	2.06
39	0.00	5.00	2.05	39	0.00	5.00	2.05
40	9.41	5.00	2.05	40	9.41	5.00	2.05
41	16.24	5.00	2.04	41	16.24	5.00	2.04
42	25.33	5.00	2.03	42	25.33	5.00	2.03
43	33.49	5.00	2.02	43	33.49	5.00	2.02
44	42.57	5.00	2.02	44	42.57	5.00	2.02
45	51.29	4.99	2.01	45	51.29	4.99	2.01
46	60.39	4.97	2.00	46	60.39	4.97	2.00
47	69.60	4.94	1.99	47	69.60	4.94	1.99
48	79.09	4.90	1.97	48	79.09	4.90	1.97
49	88.89	4.83	1.94	49	88.89	4.83	1.94
50	99.08	4.76	1.91	50	99.08	4.76	1.91
51	109.73	4.67	1.88	51	109.73	4.67	1.88
52	120.94	4.55	1.84	52	120.94	4.55	1.84
53	132.83	4.41	1.80	53	132.83	4.41	1.80
54	145.56	4.27	1.75	54	145.56	4.27	1.75
55	159.33	4.13	1.72	55	159.33	4.13	1.72
56	174.43	3.99	1.68	56	174.43	3.99	1.68
57	191.23	3.85	1.63	57	191.23	3.85	1.63
58	210.21	3.70	1.59	58	210.21	3.70	1.59
59	230.27	3.53	1.53	59	230.27	3.53	1.53
60	251.17	3.34	1.49	60	251.17	3.34	1.49
61	273.05	3.13	1.43	61	273.05	3.13	1.43
62	295.94	2.91	1.36	62	295.94	2.91	1.36
63	319.80	2.69	1.29	63	319.80	2.69	1.29
64	344.98	2.47	1.24	64	344.98	2.47	1.24
65	371.23	2.24	1.19	65	371.23	2.24	1.19
66	399.70	2.02	1.14	66	399.70	2.02	1.14
67	427.46	1.81	1.05	67	427.46	1.81	1.05
68	457.55	1.60	1.03	68	457.55	1.60	1.03
69	495.05	1.41	.96	69	495.05	1.41	.96
70	522.01	1.23	.88	70	522.01	1.23	.88

Key: Haut = high  
Bas = low

Fichier : AD142  
Cotes des parois (mm)

N	Absc.	Z Pl. Haut	Z Pl. Bas
1	-705.0	.24	-.34
2	-525.0	.66	-.72
3	-460.0	1.13	-.1.00
4	-355.0	1.45	-.1.42
5	-275.0	1.69	-.1.70
6	-215.0	1.76	-.1.87
7	-155.0	1.98	-.2.11
8	-95.02	2.24	-.2.13
9	-35.02	2.41	-.2.40
10	24.99	2.46	-.2.64
11	84.99	2.59	-.2.69
12	144.99	2.82	-.2.83
13	204.99	3.07	-.3.05
14	284.99	3.16	-.3.23
15	389.99	3.48	-.3.62
16	504.99	3.79	-.3.83

M = 0,6

$\alpha = -2^\circ$

Non adapté

Fichier : AD144  
Cotes des parois (mm)

N	Absc.	Z Pl. Haut	Z Pl. Bas
1	-705.0	.37	-.21
2	-525.0	.97	-.70
3	-460.0	1.39	-.1.11
4	-355.0	2.09	-.1.48
5	-275.0	2.55	-.1.94
6	-215.0	3.06	-.2.29
7	-155.0	3.46	-.2.52
8	-95.02	3.92	-.1.77
9	-35.02	4.51	-.3.06
10	24.99	4.79	-.3.29
11	84.99	4.91	-.3.35
12	144.99	4.91	-.3.48
13	204.99	4.92	-.3.49
14	284.99	4.78	-.3.56
15	389.99	4.64	-.3.53
16	504.99	4.27	-.3.28

Fichier : AD143  
Cotes des parois (mm)

N	Absc	Z Pl. Haut	Z Pl. Bas
1	-705.0	.45	-.40
2	-525.0	.83	-.70
3	-460.0	1.25	-.1.00
4	-355.0	1.86	-.1.43
5	-275.0	2.32	-.1.71
6	-215.0	2.82	-.2.07
7	-155.0	3.23	-.2.49
8	-95.02	3.57	-.2.96
9	-35.02	3.89	-.3.23
10	24.99	4.12	-.3.47
11	84.99	4.06	-.3.53
12	144.99	4.05	-.3.54
13	204.99	3.73	-.3.68
14	284.99	3.48	-.3.69
15	389.99	2.87	-.3.72
16	504.99	2.34	-.3.87

Key

Fichier = File  
Cotes des parois =  
Wall specifications  
Haut = High  
Bas = Low

M  
C

Fichier : AD102  
Cotes des parois (mm)

N	Absc.	I2 Pl.Haut	I2 Pl.Bas
1	-705.0	.24	-.26
2	-575.0	.63	-.66
3	-460.0	1.05	-.98
4	-355.0	1.45	-.145
5	-275.0	1.69	-.173
6	-215.0	1.89	-.188
7	-155.0	1.98	-.194
8	-95.02	2.23	-.213
9	-35.02	2.43	-.241
10	24.98	2.50	-.246
11	94.98	2.79	-.256
12	144.98	2.83	-.290
13	204.98	3.08	-.311
14	294.93	3.23	-.326
15	389.98	3.53	-.355
16	504.93	3.89	-.383

Non adapté

Fichier : AD136  
Cotes des parois (mm)

N	Absc.	I2 Pl.Haut	I2 Pl.Bas
1	-725.0	.39	-.21
2	-575.0	1.19	-.51
3	-460.0	1.92	-.72
4	-355.0	2.71	-.103
5	-275.0	3.38	-.112
6	-215.0	3.90	-.129
7	-155.0	4.43	-.150
8	-95.02	5.12	-.170
9	-35.02	5.27	-.181
10	24.98	6.04	-.204
11	94.98	6.62	-.227
12	144.98	5.80	-.243
13	204.98	5.64	-.260
14	294.93	5.42	-.284
15	389.93	5.19	-.311
16	504.93	4.82	-.350

2-D

Fichier : AD112  
Cotes des parois (mm)

N	Absc.	I2 Pl.Haut	I2 Pl.Bas
1	-725.0	.44	-.29
2	-575.0	.64	-.66
3	-460.0	1.26	-.100
4	-355.0	1.86	-.125
5	-275.0	2.51	-.156
6	-215.0	2.82	-.207
7	-155.0	3.23	-.236
8	-95.02	3.53	-.277
9	-35.02	3.89	-.324
10	24.98	3.74	-.370
11	94.98	3.45	-.414
12	144.98	3.03	-.463
13	204.98	2.47	-.511
14	294.93	1.85	-.570
15	389.93	.56	-.647
16	504.93	-.58	-.739

3-D

Key

Fichier = File  
Cotes des parois =  
Wall specifications  
Haut = High  
Bas = Low

Fichier : AD122 Cotes des parois (mm)			
N	Absc.	I2 Pl. Haut	I2 Pl. Bas
1	-705.0	1.67	.76
2	-575.0	3.15	1.60
3	-460.0	4.55	2.30
4	-355.0	5.02	2.00
5	-275.0	6.70	3.43
6	-215.0	7.42	3.76
7	-155.0	8.05	4.11
8	-95.02	8.70	4.33
9	-35.02	9.52	4.83
10	24.98	10.22	5.03
11	84.98	10.96	5.44
12	144.98	11.58	5.87
13	204.98	12.28	6.13
14	264.98	13.25	6.66
15	329.98	14.17	7.21
16	504.98	15.71	7.73

M = 0.6  
α = + 2°

Non adapte'

Fichier : AD145 Cotes des parois (mm)			
N	Absc.	I2 Pl. Haut	I2 Pl. Bas
1	-705.0	1.55	.02
2	-575.0	1.50	.16
3	-460.0	2.39	.26
4	-355.0	3.23	.23
5	-275.0	4.19	.16
6	-215.0	4.92	.23
7	-155.0	5.74	.27
8	-95.02	6.43	.17
9	-35.02	7.20	.14
10	24.98	7.42	.58
11	84.98	7.44	.91
12	144.98	7.21	1.24
13	204.98	6.55	1.55
14	264.98	6.37	1.90
15	329.98	5.75	2.36
16	504.98	5.30	2.95

2-D

Fichier : AD123 Cotes des parois (mm)			
N	Absc.	I2 Pl. Haut	I2 Pl. Bas
1	-705.0	1.98	.95
2	-575.0	3.13	1.62
3	-460.0	4.54	2.32
4	-355.0	5.02	2.87
5	-275.0	7.12	3.23
6	-215.0	8.03	3.35
7	-155.0	8.69	3.50
8	-95.02	9.74	3.50
9	-35.02	10.16	3.20
10	24.98	10.41	2.99
11	84.98	10.16	2.76
12	144.98	9.93	2.45
13	204.98	9.33	2.17
14	264.98	8.62	1.42
15	329.98	7.50	1.02
16	504.98	6.55	.75

3-D

### Key

Fichier = File  
Cotes des parois =  
Wall specifications  
Haut = High  
Bas = Low

Fichier : AD108 Cotes des parois (mm)			
N	Absc.	IZ Pl.Haut	IZ Pl.Bas
1	-705.0	.23	-.26
2	-575.0	.63	-.66
3	-460.0	1.04	-.99
4	-355.0	1.46	-.1.45
5	-275.0	1.69	-.1.74
6	-215.0	1.89	-.1.88
7	-155.0	1.92	-.1.94
8	-95.02	2.22	-.2.13
9	-35.02	2.43	-.2.40
10	24.98	2.50	-.2.46
11	84.98	2.79	-.2.67
12	144.98	2.82	-.2.89
13	204.98	3.08	-.3.11
14	284.98	3.23	-.3.27
15	389.98	3.52	-.3.55
16	504.98	4.00	-.3.83

M = 0,8  
 $\alpha = 0^\circ$

Non adapté

Fichier : AD124 Cotes des parois (mm)			
N	Absc.	IZ Pl.Haut	IZ Pl.Bas
1	-705.0	.42	-.26
2	-575.0	1.21	-.54
3	-460.0	1.33	-.77
4	-355.0	2.52	-.1.99
5	-275.0	2.55	-.1.50
6	-215.0	4.03	-.1.44
7	-155.0	4.63	-.1.49
8	-95.02	5.11	-.2.91
9	-35.02	5.13	-.2.19
10	24.98	5.44	-.2.43
11	84.98	5.57	-.2.49
12	144.98	5.34	-.2.63
13	204.98	5.01	-.2.84
14	284.98	5.74	-.3.03
15	389.98	5.55	-.3.40
16	504.98	5.47	-.3.91

2-D

Fichier : AD119 Cotes des parois (mm)			
N	Absc.	IZ Pl.Haut	IZ Pl.Bas
1	-705.0	.44	-.51
2	-575.0	.67	-.89
3	-460.0	1.47	-.1.39
4	-355.0	2.06	-.1.64
5	-275.0	2.53	-.2.33
6	-215.0	3.03	-.2.89
7	-155.0	3.64	-.3.36
8	-95.02	4.11	-.3.98
9	-35.02	4.51	-.4.52
10	24.98	4.94	-.4.93
11	84.98	4.25	-.5.33
12	144.98	3.65	-.5.60
13	204.98	3.08	-.5.11
14	284.98	2.37	-.5.71
15	389.98	1.26	-.7.60
16	504.98	.45	-.9.69

3-D

### Key

Fichier = File  
Cotes des parois =  
Wall specifications  
Haut = High  
Bas = Low

Listing of Test Files

Key to Annex 3

Fichier = File

Parois rectilingues = Rectilinear walls

Symetriques = Symmetrical

Page format:

MACH HIGH AND LOW WALLS                  MACH LATERAL WALLS                  AS07 WING

I    HIGH    LOW            I    HIGH    LOW            I    MACH            I    MACH            I    MACH

DBL. RECORDERS                  UPSTM PTHOLE

LFT. LAT. RECORDERS

DNSTRM PTHOLE                  RT. PTHOLE

RT. LAT. RECORDERS

LFT. PTHOLE

NECK RECORDERS

## LISTE DES ESSAIS "AILE AS07"

\*\*\*\*\*  
 \* FICHIER RD4 : PAROIS RECTILIGNES DIVERGENTES \*  
 \* RD445 : IDEM + ROTATION DE 30' (VERS LE HAUT) \*  
 \* RD--- : FICHIER DE L'ESSAI N --- \*  
 \* RD9--- : CALCUL 3-D DE LA NOUVELLE POSITION DES PAROIS \*  
 \*\*\*\*\*

	INC.	RANGEE3	FICHIER	ROT.	NB.			
	FICHIER	AFF.	MACH.	DE PRISES	DE DEPART	PAROIS	ADAPT.	D'ITER.
*	RD105	0	.7	2 - 5	RD4	0	NON	1
*	RD107	0	.6	"	"	0	"	1
*	RD108	0	.8	"	"	0	"	1
*	RD110	-2	.7	"	"	0	"	1
*	RD113	-2	.7	"	AD9105	0	3-D (1)	1
*	RD116	0	.7	"	AD9113	0	3-D (2)	1
*	RD117	0	.6	"	AD9107	0	3-D	1
*	RD118	0	.3	"	AD9108	0	3-D (1)	1
*	RD119	0	.3	"	AD9118	0	3-D (2)	1
*	RD120	+2	.6	"	RD4	0	NON	1
*	RD122	+1.5	.6	"	AD445	30'	NON	1
*	RD123	+1.5	.6	"	AD9122	30'	3-D	1
*	RD124	+1.5	.7	"	AD445	30'	NON	1
*	RD125	+1.5	.7	"	AD9124	30'	3-D	1
*	RD126	+1.5	.3	"	AD445	30'	NON	1
*	RD127	+1.5	.3	"	AD9136	30'	3-D (1)	1
*	RD128	+1.5	.3	"	AD9127	30'	3-D (2)	1
*	RD129	+1.5	.3	"	AD9128	30'	3-D (3)	1
*	RD130	+1.5	.7	"	RD4	0	2-D	4
*	RD131	+1.5	.6	"	RD4	0	2-D	4
*	RD133	0	.6	"	AD133	0	2-D	4
*	RD134	0	.6	"	AD134	0	2-D	4
*	RD135	0	.6	"	AD135	0	2-D	4
*	RD136	-0.5	.6	"	AD445	30'	NON	1
*	RD137	-0.5	.6	"	AD9137	30'	3-D	1
*	RD138	-0.5	.6	"	AD445	30'	NON	1
*	RD139	-0.5	.6	"	AD9139	30'	3-D (1)	1
*	RD140	-0.5	.6	"	AD9140	30'	3-D (2)	1
*	RD141	-0.5	.6	"	RD4	0	NON	1
*	RD142	-2	.6	"	AD9142	0	3-D	1
*	RD143	-2	.6	"	AD136	0	2-D	4
*	RD144	-2	.6	"	AD131	0	2-D	4
*	RD145	+2	.6	"	-----	-----	-----	-----
*	RD146	+2	.6	1 - 4	AD145	0	2-D	4
*	RD147	+1.5	.6	"	AD445	30'	NON	1
*	RD148	+1.5	.6	"	AD9122	30'	3-D	1
*	RD149	0	.6	"	AD136	0	3-D	4
*	RD150	0	.6	"	RD4	0	NON	1
*	RD151	0	.6	"	AD9107	0	3-D	1
*	RD152	0	.3	"	AD134	0	3-D	4
*	RD153	0	.3	"	RD4	0	NON	1
*	RD154	0	.3	"	AD9118	0	3-D	1
*	RD155	-2	.6	"	AD144	0	2-D	4
*	RD156	-2	.6	"	AD4	0	NON	1
*	RD157	-2	.6	"	AD9142	0	3-D	1
*	RD158	-2	.6	3 - 6	AD144	0	2-D	4
*	RD159	-2	.6	"	AD4	0	NON	1
*	RD160	-2	.6	"	AD9142	0	3-D	1
*	RD161	0	.6	"	AD136	0	2-D	4
*	RD162	0	.6	"	RD4	0	NON	1
*	RD163	0	.6	"	AD9107	0	3-D	1
*	RD164	0	.3	"	AD134	0	2-D	4
*	RD165	0	.3	"	RD4	0	NON	1
*	RD166	0	.3	"	AD9118	0	3-D	1
*	RD167	+1.5	.6	"	AD445	30'	NON	1
*	RD168	+1.5	.6	"	AD9122	30'	3-D	1
*	RD169	+2	.6	"	AD145	0	2-D	4

\*\*\*\*\* FICHIER AD105 NO(ITE)= 1  
14/8/85 11H40 AS07 M=.7 I=0 R 3-5 NON ADAPTE AD105  
DE AD4 1'ITE. PAROIS RECTILIGNES SYMETRIQUES

MACH DE REFERENCE= .7019      UINF= 231.103 M/S  
TIV=299.6 K      PIV= 1557 MB

FICHIER AD107 NO(IT)= 1  
 14 8 85 11H55 R307 M=.6 I=0 R 2-5 NON ADAPTE AD107  
 DE RD4 1'ITE. PAROIS RECTILIGNES SYMETRIQUES

MACH DE REFERENCE=.5983 UINF= 231.108 M/S  
 TIV=296.8 K PIV= 1534 MB

	MACH PAROIS HAUTE ET BASSE				*	MACH PAROIS LATER.				*	AILE R307			
I	HAUT	BAS	I	HAUT	BAS	*	I	MACH	I	MACH	*	I	MACH	
1	.599	.599		PRISES DOUBLES				HUB. AMONT	33	.595	*	1	.579	
2	.599	.602	*	PRISES LAT. GAUCHE					34	.595	*	2	.593	
3	.599	.599	*	59	.598	.597	*	1	.598	35	.594	*	.535	
4	.597	.597	*	60	.599	.600	*		.598	36	.594	*	.588	
5	.597	.598	*	61	.599	.601	*		.598	37	.594	*	.682	
6	.599	.600		PRISES LAT. DROITES					.598	38	.594	*	.552	
7	.599	.599	*	PRISES COL					.597	39	.594	*	.512	
8	.599	.599	*	PRISES LAT. DROITES					.597	40	.595	*	.599	
9	.600	.601		PRISES COL					.597	41	.595	*	.245	
10	.600	.597		PRISES COL					.597	42	.595	*	.885	
11	.597	.598		PRISES COL					.598	43	.593	*	.889	
12	.595	.598		PRISES COL					.598	44	.592	*	.747	
13	.597	.598		PRISES COL					.599	45	.592	*	.725	
14	.598	.600		PRISES COL				HUB. AVAL		HUB. DROIT				
15	.599	.600		PRISES COL						1	.599	*	.725	
16	.600	.599		PRISES COL						2	.599	*	.714	
17	.591	.599		PRISES COL						3	.599	*	.711	
18	.603	.599		PRISES COL						4	.599	*	.706	
19	.602	.599		PRISES COL						5	.599	*	.704	
20	.603	.600		PRISES COL						6	.599	*	.691	
21	.593	.600		PRISES COL						7	.599	*	.682	
22	.608	.601		PRISES COL						8	.599	*	.587	
23	.611	.600		PRISES COL						9	.599	*	.686	
24	.610	.602		PRISES COL						10	.599	*	.686	
25	.612	.603		PRISES COL						11	.599	*	.686	
26	.612	.603		PRISES COL						12	.599	*	.686	
27	.614	.601		PRISES COL						13	.599	*	.686	
28	.616	.603		PRISES COL						14	.599	*	.644	
29	.619	.603		PRISES COL						15	.599	*	.519	
30	.618	.603		PRISES COL						16	.599	*	.516	
31	.622	.601		PRISES COL						17	.599	*	.516	
32	.622	.605		PRISES COL						18	.599	*	.516	
33	.622	.605		PRISES COL						19	.599	*	.516	
34	.620	.604		PRISES COL						20	.599	*	.516	
35	.622	.605		PRISES COL						21	.599	*	.516	
36	.620	.604		PRISES COL						22	.599	*	.520	
37	.621	.605		PRISES COL						23	.599	*	.521	
38	.619	.604		PRISES COL						24	.599	*	.521	
39	.618	.603		PRISES COL						25	.599	*	.521	
40	.622	.601		PRISES COL						26	.599	*	.521	
41	.617	.603		PRISES COL						27	.599	*	.521	
42	.617	.603		PRISES COL						28	.599	*	.521	
43	.617	.602		PRISES COL						29	.599	*	.521	
44	.613	.601		PRISES COL						30	.599	*	.521	
45	.612	.600		PRISES COL						31	.599	*	.521	
46	.609	.601		PRISES COL						32	.599	*	.521	
47	.609	.601		PRISES COL						33	.599	*	.521	
48	.607	.602		PRISES COL						34	.599	*	.521	
49	.606	.602		PRISES COL						35	.599	*	.521	
50	.604	.602		PRISES COL						36	.599	*	.521	
51	.601	.602		PRISES COL						37	.599	*	.521	
52	.599	.603		PRISES COL						38	.599	*	.521	
53	.598	.603		PRISES COL						39	.599	*	.521	
54	.596	.602		PRISES COL						40	.599	*	.521	
55	.594	.601		PRISES COL						41	.599	*	.521	
56	.593	.600		PRISES COL						42	.599	*	.521	
57	.591	.599		PRISES COL						43	.599	*	.521	
58	.590	.599		PRISES COL						44	.599	*	.521	
59				PRISES COL						45	.599	*	.521	
60				PRISES COL						46	.599	*	.521	
61				PRISES COL						47	.599	*	.521	
62				PRISES COL						48	.599	*	.521	
63				PRISES COL						49	.599	*	.521	
64				PRISES COL						50	.599	*	.521	
65				PRISES COL						51	.599	*	.521	
66				PRISES COL						52	.599	*	.521	
67				PRISES COL						53	.599	*	.521	
68				PRISES COL						54	.599	*	.521	
69				PRISES COL						55	.599	*	.521	
70				PRISES COL						56	.599	*	.521	
71				PRISES COL						57	.599	*	.521	
72				PRISES COL						58	.599	*	.521	
73				PRISES COL						59	.599	*	.521	
74				PRISES COL						60	.599	*	.521	
75				PRISES COL						61	.599	*	.521	
76				PRISES COL						62	.599	*	.521	
77				PRISES COL						63	.599	*	.521	
78				PRISES COL						64	.599	*	.521	
79				PRISES COL						65	.599	*	.521	
80				PRISES COL						66	.599	*	.521	
81				PRISES COL						67	.599	*	.521	
82				PRISES COL						68	.599	*	.521	
83				PRISES COL						69	.599	*	.521	
84				PRISES COL						70	.599	*	.521	
85				PRISES COL						71	.599	*	.521	
86				PRISES COL						72	.599	*	.521	
87				PRISES COL						73	.599	*	.521	
88				PRISES COL						74	.599	*	.521	
89				PRISES COL						75	.599	*	.521	
90				PRISES COL						76	.599	*	.521	
91				PRISES COL						77	.599	*	.521	
92				PRISES COL						78	.599	*	.521	
93				PRISES COL						79	.599	*	.521	
94				PRISES COL						80	.599	*	.521	
95				PRISES COL						81	.599	*	.521	
96				PRISES COL						82	.599	*	.521	
97				PRISES COL						83	.599	*	.521	
98				PRISES COL						84	.599	*	.521	
99				PRISES COL						85	.599	*	.521	
100				PRISES COL						86	.599	*	.521	
101				PRISES COL						8				

FICHIER AD108 NO(ITE)= 1  
 14 3 35 12H AS07 M=.9 I=0 R 2-5 NON ADAPTE AD108  
 DE RD4 1'ITE PAROIS RECTILIGNES SYMETRIQUES

MACH DE REFERENCE= .3012 UINF= 231.108 M/S  
 TIV=298.5 K PIV= 1504 MB

	MACH PAROIS HAUTE ET BASSE						*	MACH PAROIS LATER.			*	AILE AS07	
I	HAUT	BAS	I	HAUT	BAS	*	I	MACH	I	MACH	*	I	MACH
1	.301	.798	*	PRISES DOUBLES			*	HUB. AMONT	33	.827		1	.786
2	.304	.808	*				*		34	.826		2	.812
3	.303	.905	*	59	.803	.802	*	1	.801	.85	*	3	.882
4	.797	.801	*	60	.803	.805	*	2	.800	.86	*	4	.886
5	.796	.801	*	61	.811	.807	*	3	.800	.87	*	5	.890
6	.803	.805	*				*		.800	.88	*	6	.894
7	.803	.804	*	PRISES LAT. GAUCHE	*		*		.798	.89	*	7	.898
8	.802	.799	*				*		.799	.48	*	8	.474
9	.801	.803	*	62	.800	.803	*		.799	.41	*	9	.479
10	.804	.808	*	63	.793	.809	*	3	.799	.42	*	10	.482
11	.799	.802	*	64	.803	.806	*	9	.799	.43	*	11	.483
12	.794	.808	*	65	.814	.808	*	10	.799	.44	*	12	.483
13	.797	.799	*	66	.823	.812	*	11	.800	.45	*	13	.483
14	.799	.803	*	67	.841	.818	*				*	14	
15	.803	.803	*	68	.848	.823	*	HUB. AVAL	HUB. DROIT	*	15	.817	
16	.803	.808	*	69	.852	.828	*				*	16	.818
17	.804	.801	*	70	.845	.819	*	1	.815	1	*	17	.818
18	.805	.802	*	71	.822	.812	*	2	.814	2	*	18	.824
19	.805	.802	*	72	.818	.814	*	3	.813	3	*	19	.825
20	.809	.806	*	73	.807	.813	*	4	.817	4	*	20	.825
21	.812	.808	*				*		.814	5	*	21	.818
22	.820	.818	*	PRISES LAT. DROITES	*		*		.813	6	*	22	.827
23	.826	.819	*				*		.812	7	*	23	.828
24	.828	.815	*	74	.801	.808	*		.811	8	*	24	.751
25	.829	.813	*	75	.804	.803	*		.814	9	*	25	.751
26	.831	.817	*	76	.802	.801	*	10	.811	10	*	26	.875
27	.840	.815	*	77	.798	.799	*	11	.811	11	*	27	.868
28	.844	.819	*	78	.800	.797	*			12	*	28	.870
29	.855	.821	*	79	.803	.797	*	HUB. GAUCHE	13	.801	*	29	.888
30	.852	.821	*	80	.818	.806	*		.806	14	*	30	.863
31	.854	.819	*	81	.832	.811	*	1	.846	15	*	31	.848
32	.859	.826	*	82	.831	.815	*	2	.844	16	*	32	.849
33	.867	.823	*	83	.848	.816	*	3	.843	17	*	33	.853
34	.861	.824	*	84	.868	.819	*	4	.821	18	*	34	.845
35	.866	.826	*	85	.875	.825	*		.825	19	*	35	.834
36	.864	.828	*	86	.874	.829	*		.833	20	*	36	.838
37	.864	.825	*	87	.873	.823	*		.848	21	*	37	.842
38	.858	.824	*	88	.868	.824	*		.846	22	*	38	.832
39	.857	.822	*	89	.857	.819	*		.847	23	*	39	.879
40	.850	.820	*	90	.842	.818	*	10	.839	24	*	40	.828
41	.847	.818	*	91	.835	.817	*	11	.839	25	*	41	.836
42	.847	.819	*	92	.825	.812	*	12	.837	26	*	42	.823
43	.843	.817	*	93	.813	.811	*	13	.835	27	*	43	.807
44	.835	.815	*	94	.830	.813	*	14	.833	28	*	44	.801
45	.832	.813	*	95	.813	.798	*	15	.817	29	*	45	.847
46	.827	.814	*	96	.807	.788	*	16	.817	30	*	46	.841
47	.825	.811	*				*	17	.819	31	*	47	.821
48	.822	.813	*				*		.821	32	*	48	.844
49	.820	.813	*				*		.821	33	*	49	.847
50	.816	.812	*				*		.824	34	*	50	.843
51	.819	.814	*				*		.826	35	*		
52	.813	.808	*				PPISES COL		.828	36	*		
53	.815	.808	*						.827	37	*		
54	.817	.807	*						.834	38	*		
55	.816	.808	*						.836	39	*		
56	.813	.795	*						.839	40	*		
57	.810	.783	*						.844	41	*		
58	.804	.782	*						.844	42	*		
				1.146	.759		*		.837	43	*		
							*		.828	44	*		
							*		.829	45	*		
							*		.829	46	*		

\*\*\*\*\* FICHIER RD110 : NO(ITD)= 1  
14 8 85 16H50 RS07 M=.7 I=-3 R 2-5 NON ADAPTE RD110  
DE AD4 L'ITE. PAROIS RECTILIGNES SYMETRIQUES

MACH DE REFERENCE= .6974 UINR= 231.108 M/S  
TIV=299.3 K PIV= 1553 M8

FICHIER AD115 NO CITE = 1  
 20/ 8/85 11H15 AS07 M=.7 I=0 R 2-5 ADAPTE 3D 1'ITE AD115  
 DE AD9105 1'ITE.

MACH DE REFERENCE= .7018 UINF= 231.108 M/S  
 TIV=298.7 K PIV= 1517 MB

	MACH PAROIS HAUTE ET BASSE						MACH PAROIS LATÉR.						AILE AS07	
I	HAUT	BAS	I	HAUT	BAS	*	I	MACH	I	MACH	*	I	MACH	
1	.703	.701	*	PRISES DOUBLES		*	HUB.	AMONT	33	.705	*	1	.701	
2	.702	.705	*			*			34	.704	*	2	.701	
3	.701	.702	*	59	.700	.699	*	1	.702	35	.704	*	3	.701
4	.699	.701	*	60	.703	.704	*	2	.701	36	.705	*	4	.702
5	.698	.701	*	61	.706	.704	*	3	.701	37	.704	*	5	.703
6	.701	.702	*			*			38	.704	*	6	.702	
7	.700	.700	*	PRISES LAT. GAUCHE	3	*	5	.699	39	.704	*	7	.701	
8	.703	.700	*			*	6	.700	40	.705	*	8	.701	
9	.704	.705	*	52	.699	.703	*	7	.699	41	.705	*	9	.702
10	.704	.701	*	53	.700	.707	*	8	.699	42	.706	*	10	.703
11	.702	.703	*	54	.707	.705	*	9	.700	43	.704	*	11	.702
12	.699	.704	*	55	.702	.701	*	10	.700	44	.703	*	12	.701
13	.701	.703	*	56	.703	.702	*	11	.701	45	.703	*	13	.702
14	.702	.703	*	57	.710	.704	*					*	14	.703
15	.703	.702	*	58	.708	.708	*					*	15	.704
16	.704	.701	*	59	.708	.708	*					*	16	.703
17	.704	.702	*	70	.715	.703	*	1	.707	1	.703	*	17	.701
18	.705	.704	*	71	.708	.704	*	2	.706	2	.703	*	18	.702
19	.702	.703	*	72	.707	.706	*	3	.706	3	.703	*	19	.701
20	.702	.701	*	73	.712	.710	*	4	.706	4	.703	*	20	.700
21	.702	.702	*			*	5	.705	5	.705	*	21	.701	
22	.706	.702	*	PRISES LAT. DROITES	3	*	6	.705	6	.706	*	22	.701	
23	.707	.703	*			*	7	.706	7	.706	*	23	.701	
24	.707	.703	*	74	.700	.704	*	8	.707	8	.706	*	24	.702
25	.707	.704	*	75	.700	.701	*	9	.706	9	.705	*	25	.703
26	.707	.702	*	76	.702	.701	*	10	.704	10	.706	*	26	.702
27	.711	.701	*	77	.702	.701	*	11	.705	11	.706	*	27	.701
28	.713	.704	*	78	.702	.699	*					*	28	.702
29	.717	.705	*	79	.701	.699	*					*	29	.703
30	.715	.705	*	80	.708	.708	*					*	30	.704
31	.719	.703	*	81	.712	.704	*	1	.710	1	.706	*	31	.702
32	.715	.707	*	82	.710	.703	*	2	.710	15	.706	*	32	.701
33	.716	.707	*	83	.716	.703	*	3	.710	17	.706	*	33	.702
34	.712	.705	*	84	.724	.705	*	4	.705	18	.706	*	34	.703
35	.714	.706	*	85	.725	.707	*	5	.704	19	.706	*	35	.704
36	.713	.706	*	86	.720	.707	*	6	.707	20	.706	*	36	.705
37	.716	.704	*	87	.718	.706	*	7	.709	21	.706	*	37	.704
38	.716	.704	*	88	.718	.704	*	8	.712	22	.706	*	38	.703
39	.720	.703	*	89	.723	.702	*	9	.714	23	.706	*	39	.702
40	.717	.702	*	90	.717	.703	*	10	.709	24	.706	*	40	.701
41	.718	.703	*	91	.709	.705	*	11	.709	25	.706	*	41	.702
42	.719	.703	*	92	.712	.705	*	12	.709	26	.706	*	42	.701
43	.714	.704	*	93	.704	.702	*	13	.708	27	.706	*	43	.700
44	.708	.704	*	94	.707	.703	*	14	.707	28	.705	*	44	.699
45	.707	.704	*	95	.707	.699	*	15	.705	29	.706	*	45	.698
46	.707	.705	*	96	.711	.699	*	16	.704	30	.706	*	46	.697
47	.711	.704	*			*	17	.704	31	.706	*	47	.696	
48	.710	.704	*			*	18	.704	32	.706	*	48	.695	
49	.709	.703	*			*	19	.704	33	.706	*	49	.694	
50	.705	.703	*			*	20	.705	34	.706	*	50	.693	
51	.707	.704	*			*	21	.706	35	.706	*	51	.692	
52	.707	.705	*			*	22	.706	36	.706	*	52	.691	
53	.709	.706	*			*	23	.705	37	.706	*	53	.690	
54	.710	.706	*			*	24	.709	38	.706	*	54	.689	
55	.711	.702	*			*	25	.710	39	.706	*	55	.688	
56	.710	.699	*			*	26	.711	40	.706	*	56	.687	
57	.712	.695	*			*	27	.714	41	.706	*	57	.686	
58	.713	.698	*			*	28	.715	42	.706	*	58	.685	
				PRISES COL			29	.716	43	.706	*			
							30	.713	44	.706	*			
							31	.707	45	.706	*			
							32	.706			*			

FICHIER AD115 NOITE= 1  
 20/8/85 11H30 R507 M=.7 I=0 R 2-5 ADAPTE 3D 2<sup>e</sup> ITE. AD116  
 DE AD9115 1<sup>e</sup> ITE.

MACH DE REFERENCE=.7014 UINF= 231.108 M/S  
 TIV=300.3 K PIV= 1517 MB

	MACH PAROIS HAUTE ET BASSE					MACH PAROIS LATÉR.					AILE R507			
I	HAUT	BAS	I	HAUT	BAS	I	MACH	I	MACH	I	I	MACH		
1	.703	.701	*	PRISES DOUBLES	*	*	HUB. AMONT	33	.705	*	*	1	.675	
2	.704	.706	*					34	.704	*	*	2	.639	
3	.702	.703	*	59	.702	.701		35	.703	*	*	3	.747	
4	.699	.701	*	60	.704	.703		36	.703	*	*	4	.816	
5	.699	.701	*	61	.702	.703		37	.703	*	*	5	.897	
6	.702	.703	*					38	.703	*	*	6	.770	
7	.702	.702	*	PRISES LAT. GAUCHE	*	*		39	.703	*	*	7	.714	
8	.703	.700	*					40	.704	*	*	8	.707	
9	.703	.704	*	62	.700	.703		41	.705	*	*	9	.884	
10	.704	.700	*	63	.700	.705		42	.705	*	*	10	.855	
11	.701	.701	*	64	.704	.705		43	.703	*	*	11	.909	
12	.697	.701	*	65	.701	.701		44	.702	*	*	12	.914	
13	.698	.700	*	66	.705	.700		45	.702	*	*	13	.875	
14	.698	.701	*	67	.710	.705						14	.881	
15	.699	.702	*	68	.708	.705	*	HUB. AVAL		HUB. DROIT	*	*	15	.849
16	.700	.701	*	69	.709	.705					*	*	16	.837
17	.701	.701	*	70	.712	.702					*	*	17	.833
18	.705	.700	*	71	.705	.701					*	*	18	.835
19	.704	.700	*	72	.706	.704					*	*	19	.831
20	.703	.702	*	73	.706	.708					*	*	20	.833
21	.702	.701	*								*	*	21	.815
22	.702	.698	*	PRISES LAT. DROITES	*	*					*	*	22	.813
23	.703	.696	*								*	*	23	.801
24	.706	.698	*	74	.700	.704					*	*	24	.867
25	.708	.700	*	75	.702	.701					*	*	25	.682
26	.708	.700	*	76	.702	.700					*	*	26	.741
27	.713	.701	*	77	.698	.699					*	*	27	.805
28	.713	.704	*	78	.699	.693					*	*	28	.801
29	.715	.705	*	79	.702	.695		HUB. GAUCHE	13				29	.771
30	.713	.705	*	80	.707	.699			14	.702			30	.738
31	.717	.702	*	81	.709	.698			15	.702			31	.723
32	.713	.707	*	82	.712	.699			16	.702			32	.762
33	.716	.707	*	83	.713	.702			17	.702			33	1.132
34	.712	.705	*	84	.724	.706			18	.702			34	1.011
35	.714	.705	*	85	.725	.708			19	.701			35	.993
36	.713	.704	*	86	.721	.708			20	.701			36	.883
37	.715	.702	*	87	.719	.706			21	.701			37	.871
38	.714	.701	*	88	.719	.703			22	.702			38	.871
39	.718	.701	*	89	.721	.699			23	.702			39	.874
40	.716	.700	*	90	.714	.701			24	.703			40	.853
41	.715	.700	*	91	.708	.706			25	.702			41	.844
42	.716	.701	*	92	.708	.703			26	.702			42	.837
43	.713	.703	*	93	.702	.699			27	.702			43	.833
44	.707	.704	*	94	.705	.703			28	.702			44	.813
45	.706	.704	*	95	.705	.698			29	.702			45	.795
46	.706	.705	*	96	.704	.696			30	.702			46	.793
47	.708	.701	*						31	.703			47	.791
48	.708	.701	*						32	.703			48	.747
49	.707	.700	*						33	.703			49	.747
50	.704	.701	*						34	.703			50	.720
51	.705	.703	*						35	.704				
52	.703	.704	*				PRISES COL		36	.705				
53	.705	.705	*						37	.705				
54	.707	.704	*						38	.705				
55	.708	.700	*						39	.705				
56	.707	.696	*						40	.705				
57	.707	.691	*						41	.705				
58	.703	.681	*						42	.705				
									43	.705				
									44	.705				
									45	.705				
									46	.705				
									47	.705				
									48	.705				
									49	.705				
									50	.705				

\*\*\*\*\* FICHIER AD117 NO(ITE)= 1  
30/ 3/85 11H50 R507 M=.6 I=0 R 2-5 ADAPTE 3D 1'ITE. AD117  
DE AD9107 1'ITE

MACH DE REFERENCE=.5983 UINE= 231.108 M/S  
TIV=300.1 K PIV= 1386 MB

MACH PAROIS HAUTE ET BASSE						MACH PAROIS LATÉR.						RILE AER.	
I	HAUT	BAS	I	HAUT	BAS	*	I	MACH	I	MACH	*	I	MACH
1	.599	.597	*	PRISES DOUBLES		*	HUB. AMONT	33	.601	*	*	1	.599
2	.600	.602	*			*		34	.600	*	*	2	.599
3	.599	.600	*	59	.599	.599	*	1	.598	35	.599	*	*
4	.597	.599	*	60	.599	.598	*	2	.597	36	.600	*	*
5	.596	.600	*	61	.601	.599	*	3	.597	37	.600	*	*
6	.599	.601	*			*		4	.597	38	.599	*	*
7	.599	.600	*	PRISES LAT. GAUCHE		5		.596	39	.599	*	*	*
8	.598	.597	*			*		.596	40	.600	*	*	*
9	.598	.599	*	62	.597	.599	*	6	.596	41	.601	*	*
10	.600	.596	*	63	.601	.592	*	7	.595	42	.601	*	*
11	.598	.597	*	64	.601	.592	*	8	.596	43	.599	*	*
12	.595	.598	*	65	.599	.597	*	10	.597	44	.599	*	*
13	.597	.596	*	66	.599	.599	*	11	.598	45	.598	*	*
14	.598	.598	*	67	.604	.601	*					14	
15	.599	.599	*	68	.604	.602	*	HUB. AVAL		HUB. DROIT		15	
16	.598	.598	*	69	.604	.601	*					16	
17	.599	.600	*	70	.607	.600	*	1	.602	1	.599	*	*
18	.601	.601	*	71	.601	.598	*	2	.601	2	.599	*	*
19	.599	.599	*	72	.602	.592	*	3	.601	3	.598	*	*
20	.599	.597	*	73	.592	.604	*	4	.600	4	.599	*	*
21	.598	.596	*					.601	5	.599	*	*	*
22	.601	.596	*	PRISES LAT. DROITES		*		.602	6	.599	*	*	*
23	.602	.597	*			*		.602	7	.599	*	*	*
24	.602	.599	*	74	.598	.601	*	8	.604	8	.598	*	*
25	.601	.599	*	75	.599	.599	*	9	.602	9	.598	*	*
26	.599	.599	*	76	.599	.597	*	10	.600	10	.599	*	*
27	.604	.599	*	77	.597	.596	*	11	.599	11	.599	*	*
28	.604	.600	*	78	.598	.598	*					12	
29	.607	.601	*	79	.599	.596	*	HUB. GAUCHE		13	.598	*	*
30	.605	.600	*	80	.604	.596	*					14	
31	.603	.597	*	81	.606	.593	*	1	.604	15	.598	*	*
32	.607	.601	*	82	.604	.600	*	2	.603	16	.599	*	*
33	.609	.601	*	83	.608	.601	*	3	.602	17	.599	*	*
34	.606	.600	*	84	.614	.601	*	4	.599	18	.599	*	*
35	.608	.600	*	85	.615	.603	*	5	.599	19	.599	*	*
36	.607	.599	*	86	.613	.603	*	6	.601	20	.599	*	*
37	.609	.599	*	87	.612	.602	*	7	.603	21	.599	*	*
38	.608	.599	*	88	.611	.600	*	8	.604	22	.598	*	*
39	.610	.599	*	89	.614	.599	*	9	.605	23	.598	*	*
40	.608	.598	*	90	.609	.600	*	10	.605	24	.598	*	*
41	.607	.598	*	91	.604	.601	*	11	.603	25	.598	*	*
42	.608	.598	*	92	.602	.599	*	12	.602	26	.598	*	*
43	.606	.600	*	93	.599	.598	*	13	.602	27	.599	*	*
44	.604	.601	*	94	.604	.590	*	14	.601	28	.600	*	*
45	.602	.599	*	95	.601	.590	*	15	.600	29	.600	*	*
46	.601	.600	*	96	.599	.599	*	16	.599	30	.600	*	*
47	.602	.598	*					17	.599	31	.600	*	*
48	.602	.598	*					18	.600	32	.599	*	*
49	.603	.599	*					19	.599	33	.599	*	*
50	.602	.600	*					20	.600	34	.599	*	*
51	.603	.601	*					21	.601	35	.599	*	*
52	.602	.599	*					22	.600	36	.599	*	*
53	.603	.600	*					23	.599	37	.599	*	*
54	.602	.600	*					24	.602	38	.599	*	*
55	.601	.597	*					25	.603	39	.599	*	*
56	.598	.594	*					26	.604	40	.599	*	*
57	.594	.591	*					27	.606	41	.599	*	*
58	.588	.587	*					28	.607	42	.599	*	*
								29	.606	43	.599	*	*
								30	.604	44	.599	*	*
								31	.603	45	.599	*	*
								32	.602	46	.599	*	*

PRISES COL

.661	1.060
.584	.309
.799	.793
.885	.639
1.023	.629

\*\*\*\*\* FICHIER AD113 \*\*\*\*\*  
20 / 3/35 14H35 A507 M=.3 I=0 R 2-5 ADAPTE 3D 1'ITE. AD113  
DE AD9103 1'ITE.

MATCH BE REFERENCE = :30059      UNIF= 331:193 M/S

TIME, 300. 3 K

FICHIER ADD113 N°(IT) = 1

2-5 ADAPTE 3D 1,ITE.

卷之三

YIN= 231:198 11/3

PTW = 144 MB

卷之三

\*\*\*\*\* 3/35 15H10 AS907 N.3 I=0 R 2-5 ADAPTÉ 3D 2-ITE. AD113  
DE AD113 1, ITE.

MACH DE REFERENCE= 3942 . VIN= 231.198 M-S

TIV= 301.4 K PIW= 1643 MB

\*\*\*\*\* FICHIER AD113 1, NCIT)= 1  
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MACH PAROIS HAUTE ET BASSE

MACH PAROIS LATÉR.

MACH AILE

MACH

112

PRISES DOUBLES

PRISES LAT.

PRISES LAT. GAUCHE

HUB. DROIT

HUB. AVANT

HUB. GAUCHE

PRISES COL

PRISES

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\*\*\*\*\* FICHIER RD122 NO(ITE)= 1  
30/ 8/83 16H50 R907 M=.6 I=+2(+1.5+ROT.30°) R 2-5 NON ADAPTE RD122  
DE RD445 1'ITE. PAROIS RECTILIGNES + 30'

MACH DE REFERENCE= .6002      UINF= 231.108 M/S  
TIY=302.0 K      PIV= 1393 MB

MACH PAROIS HAUTE ET BASSE						MACH PAROIS LATÉR.						AILE RSP			
I	HAUT	BAS	I	HAUT	BAS	I	MACH	I	MACH	I	MACH	I	MACH		
1	.503	.594	*	PRISES DOUBLES			HUB.	AMONT	33	.507	*	1	.573		
2	.503	.598	*	PRISES DOUBLES					34	.505	*	2	.531		
3	.504	.598	*	59	.600	.599		1	.600	35	.605	*	3	.523	
4	.599	.597	*	60	.601	.601		2	.600	36	.605	*	4	.566	
5	.597	.598	*	61	.601	.603		3	.601	37	.604	*	5	.553	
6	.600	.601	*	PRISES LAT. GAUCHE 3					.600	38	.604	*	6	.583	
7	.600	.600	*	PRISES LAT. GAUCHE 3					.599	39	.603	*	7	.555	
8	.601	.598	*	PRISES LAT. GAUCHE 3					.599	40	.603	*	8	.510	
9	.600	.601	*	62	.601	.598			.600	41	.604	*	9	.581	
10	.602	.598	*	63	.603	.604			.600	42	.605	*	10	.523	
11	.599	.599	*	64	.605	.603			.599	43	.603	*	11	.568	
12	.597	.599	*	65	.607	.601		10	.599	44	.602	*	12	.562	
13	.599	.598	*	66	.613	.599		11	.599	45	.601	*	13	.589	
14	.600	.600	*	67	.619	.604						*	14	.584	
15	.601	.600	*	68	.621	.603		HUB.	AVAL	HUB.	DROIT	*	15	.585	
16	.601	.599	*	69	.621	.602						*	16	.578	
17	.603	.600	*	70	.620	.601						*	17	.741	
18	.606	.601	*	71	.611	.603						*	18	.736	
19	.606	.601	*	72	.604	.596						*	19	.729	
20	.607	.601	*	73	.579	.608						*	20	.723	
21	.607	.599	*	PRISES LAT. DROITE 3								*	21	.711	
22	.611	.599	*	PRISES LAT. DROITE 3								*	22	.702	
23	.615	.597	*	PRISES LAT. DROITE 3								*	23	.698	
24	.615	.598	*	74	.602	.600						*	24	.588	
25	.620	.597	*	75	.601	.598						*	25	.573	
26	.620	.598	*	76	.601	.599						*	26	.523	
27	.624	.598	*	77	.599	.597		10	.584	10	.601	*	27	.556	
28	.624	.600	*	78	.601	.598		11	.584	11	.600	*	28	.639	
29	.627	.600	*	79	.585	.596			HUB.	GAUCHE	12	.600	*	29	.533
30	.626	.602	*	80	.614	.597					14	.601	*	30	.543
31	.630	.598	*	81	.620	.598					15	.601	*	31	.497
32	.627	.602	*	82	.624	.594					16	.601	*	32	.342
33	.629	.599	*	83	.629	.595					17	.601	*	33	1.042
34	.626	.599	*	84	.633	.598					18	.601	*	34	1.046
35	.627	.598	*	85	.635	.599					19	.601	*	35	.350
36	.626	.599	*	86	.633	.599					20	.601	*	36	.363
37	.627	.597	*	87	.631	.598					21	.600	*	37	.322
38	.625	.597	*	88	.630	.597					22	.600	*	38	.304
39	.627	.598	*	89	.631	.598					23	.600	*	39	.295
40	.625	.599	*	90	.624	.600					24	.600	*	40	.297
41	.624	.599	*	91	.617	.601					25	.600	*	41	.754
42	.624	.600	*	92	.612	.603					26	.600	*	42	.741
43	.620	.600	*	93	.605	.604					27	.600	*	43	.725
44	.617	.600	*	94	.605	.603					28	.600	*	44	.706
45	.615	.600	*	95	.598	.603					29	.600	*	45	.624
46	.613	.602	*	96	.579	.602					30	.600	*	46	.573
47	.613	.603	*	PRISES COL							31	.600	*	47	.571
48	.612	.605	*	PRISES COL							32	.600	*	48	.642
49	.609	.605	*	PRISES COL							33	.601	*	49	.567
50	.605	.605	*	PRISES COL							34	.601	*	50	.600
51	.604	.605	*	PRISES COL							35	.601	*		
52	.602	.604	*	PRISES COL							36	.601	*		
53	.600	.605	*	PRISES COL							37	.601	*		
54	.598	.606	*	PRISES COL							38	.601	*		
55	.595	.605	*	PRISES COL							39	.600	*		
56	.599	.603	*	PRISES COL							40	.600	*		
57	.592	.603	*	PRISES COL							41	.600	*		
58	.571	.600	*	PRISES COL							42	.600	*		

\*\*\*\*\* FICHIER AD123 NO(CIT)=  
26/3/35 17H15 AS07 M=.6 I=+2(+1.5+ROT.30) R 2-5 ADAPTE 3D 1,ITE. HD123  
DE AD9122 1,ITE.

MACH PAROIS HAUTE ET BASSE										MACH PAROIS LATÉR.										MACH PAROIS									
	I	HAUT	BAS	I	MACH	I	MACH	I	MACH	I	MACH	I	MACH	I	MACH	I	MACH	I	MACH	I	MACH								
I	.693	.593	* PRISES DOUBLES		HUB.	AMONT	.33	.693	.593	.569	.593	.593	.593	.593	.593	.593	.593	.593	.593	.593									
	.697	.597	.599	.599	.599	.599	.1	.699	.599	.39	.699	.599	.599	.599	.599	.599	.599	.599	.599	.599									
	.693	.593	.599	.599	.602	.601	.12	.599	.599	.36	.694	.601	.601	.601	.601	.601	.601	.601	.601	.601									
	.699	.601	.601	.601	.606	.601	.3	.600	.600	.37	.603	.601	.601	.601	.601	.601	.601	.601	.601	.601									
	.699	.603	* PRISES LAT.	GAUCHE				.600	.600	.38	.602	.601	.601	.601	.601	.601	.601	.601	.601	.601									
	.691	.601	.602	.602	.601	.599	.7	.599	.599	.41	.602	.602	.602	.602	.602	.602	.602	.602	.602	.602									
	.697	.603	.602	.602	.601	.599	.8	.599	.599	.42	.602	.602	.602	.602	.602	.602	.602	.602	.602	.602									
	.693	.604	.604	.604	.605	.601	.9	.599	.599	.43	.601	.601	.601	.601	.601	.601	.601	.601	.601	.601									
	.699	.602	.602	.602	.601	.601	.10	.600	.600	.44	.600	.600	.600	.600	.600	.600	.600	.600	.600	.600									
	.699	.601	.601	.601	.601	.601	.11	.601	.601	.45	.599	.13	.14	.15	.16	.17	.18	.19	.20	.21									
	.693	.602	.602	.602	.601	.599	.12	.599	.599	.46	.601	.11	.12	.13	.14	.15	.16	.17	.18	.19									
	.698	.603	.603	.603	.602	.602	.13	.602	.602	.47	.602	.12	.13	.14	.15	.16	.17	.18	.19	.20									
	.699	.600	.600	.600	.601	.601	.14	.601	.601	.48	.601	.11	.12	.13	.14	.15	.16	.17	.18	.19									
	.699	.600	.600	.600	.601	.601	.15	.601	.601	.49	.601	.10	.11	.12	.13	.14	.15	.16	.17	.18									
	.699	.601	.601	.601	.601	.601	.16	.601	.601	.50	.601	.9	.10	.11	.12	.13	.14	.15	.16	.17									
	.699	.601	.601	.601	.601	.601	.17	.601	.601	.51	.601	.8	.9	.10	.11	.12	.13	.14	.15	.16									
	.699	.601	.601	.601	.601	.601	.18	.601	.601	.52	.601	.7	.8	.9	.10	.11	.12	.13	.14	.15									
	.699	.601	.601	.601	.601	.601	.19	.601	.601	.53	.601	.6	.7	.8	.9	.10	.11	.12	.13	.14									
	.699	.601	.601	.601	.601	.601	.20	.601	.601	.54	.601	.5	.6	.7	.8	.9	.10	.11	.12	.13									
	.699	.601	.601	.601	.601	.601	.21	.601	.601	.55	.601	.4	.5	.6	.7	.8	.9	.10	.11	.12									
	.699	.601	.601	.601	.601	.601	.22	.601	.601	.56	.601	.3	.4	.5	.6	.7	.8	.9	.10	.11									
	.699	.601	.601	.601	.601	.601	.23	.601	.601	.57	.601	.2	.3	.4	.5	.6	.7	.8	.9	.10									
	.699	.601	.601	.601	.601	.601	.24	.601	.601	.58	.601	.1	.2	.3	.4	.5	.6	.7	.8	.9									
	.699	.601	.601	.601	.601	.601	.25	.601	.601	.59	.601	.0	.1	.2	.3	.4	.5	.6	.7	.8									
	.699	.601	.601	.601	.601	.601	.26	.601	.601	.60	.601	.9	.10	.11	.12	.13	.14	.15	.16	.17									
	.699	.601	.601	.601	.601	.601	.27	.601	.601	.61	.601	.8	.9	.10	.11	.12	.13	.14	.15	.16									
	.699	.601	.601	.601	.601	.601	.28	.601	.601	.62	.601	.7	.8	.9	.10	.11	.12	.13	.14	.15									
	.699	.601	.601	.601	.601	.601	.29	.601	.601	.63	.601	.6	.7	.8	.9	.10	.11	.12	.13	.14									
	.699	.601	.601	.601	.601	.601	.30	.601	.601	.64	.601	.5	.6	.7	.8	.9	.10	.11	.12	.13									
	.699	.601	.601	.601	.601	.601	.31	.601	.601	.65	.601	.4	.5	.6	.7	.8	.9	.10	.11	.12									
	.699	.601	.601	.601	.601	.601	.32	.601	.601	.66	.601	.3	.4	.5	.6	.7	.8	.9	.10	.11									
	.699	.601	.601	.601	.601	.601	.33	.601	.601	.67	.601	.2	.3	.4	.5	.6	.7	.8	.9	.10									
	.699	.601	.601	.601	.601	.601	.34	.601	.601	.68	.601	.1	.2	.3	.4	.5	.6	.7	.8	.9									
	.699	.601	.601	.601	.601	.601	.35	.601	.601	.69	.601	.0	.1	.2	.3	.4	.5	.6	.7	.8									
	.699	.601	.601	.601	.601	.601	.36	.601	.601	.70	.601	.9	.10	.11	.12	.13	.14	.15	.16	.17									
	.699	.601	.601	.601	.601	.601	.37	.601	.601	.71	.601	.8	.9	.10	.11	.12	.13	.14	.15	.16									
	.699	.601	.601	.601	.601	.601	.38	.601	.601	.72	.601	.7	.8	.9	.10	.11	.12	.13	.14	.15									
	.699	.601	.601	.601	.601	.601	.39	.601	.601	.73	.601	.6	.7	.8	.9	.10	.11	.12	.13	.14									
	.699	.601	.601	.601	.601	.601	.40	.601	.601	.74	.601	.5	.6	.7	.8	.9	.10	.11	.12	.13									
	.699	.601	.601	.601	.601	.601	.41	.601	.601	.75	.601	.4	.5	.6	.7	.8	.9	.10	.11	.12									
	.699	.601	.601	.601	.601	.601	.42	.601	.601	.76	.601	.3	.4	.5	.6	.7	.8	.9	.10	.11									
	.699	.601	.601	.601	.601	.601	.43	.601	.601	.77	.601	.2	.3	.4	.5	.6	.7	.8	.9	.10									
	.699	.601	.601	.601	.601	.601	.44	.601	.601	.78	.601	.1	.2	.3	.4	.5	.6	.7	.8	.9									
	.699	.601	.601	.601	.601	.601	.45	.601	.601	.79	.601	.0	.1	.2	.3	.4	.5	.6	.7	.8									
	.699	.601	.601	.601	.601	.601	.46	.601	.601	.80	.601	.9	.10	.11	.12	.13	.14	.15	.16	.17									
	.699	.601	.601	.601	.601	.601	.47	.601	.601	.81	.601	.8	.9	.10	.11	.12	.13	.14	.15	.16									
	.699	.601	.601	.601	.601	.601	.48	.601	.601	.82	.601	.7	.8	.9	.10	.11	.12	.13	.14	.15									
	.699	.601	.601	.601	.601	.601	.49	.601	.601	.83	.601	.6	.7	.8	.9	.10	.11	.12	.13	.14									
	.699	.601	.601	.601	.601	.601	.50	.601	.601	.84	.601	.5	.6	.7	.8	.9	.10	.11	.12	.13									
	.699	.601	.601	.601	.601	.601	.51	.601	.601	.85	.601	.4	.5	.6	.7	.8	.9	.10	.11	.12									
	.699	.601	.601	.601	.601	.601	.52	.601	.601	.86	.601	.3	.4	.5	.6	.7	.8	.9	.10	.11									
	.699	.601	.601	.601	.601	.601	.53	.601	.601	.87	.601	.2	.3	.4	.5	.6	.7	.8	.9	.10									
	.699	.601	.601	.601	.601	.601	.54	.601	.601	.88	.601	.1	.2	.3	.4	.5	.6	.7	.8	.9									
	.699	.601	.601	.601	.601	.601	.55	.601	.601	.89	.601	.0	.1	.2	.3	.4	.5	.6	.7	.8									
	.699	.601	.601	.601	.601	.601	.56	.601	.601	.90	.601	.9	.10	.11	.12	.13	.14	.15	.16	.17									
	.699	.601	.601	.601	.601	.601	.57	.601	.601	.91	.601	.8	.9	.10	.11	.12	.13	.14	.15	.16									
	.699	.601	.601	.601	.601	.601	.58	.601	.601	.92	.601	.7	.8	.9	.10	.11	.12	.13	.14	.15									
	.699	.601	.601	.601	.601	.601	.59	.601	.601	.93	.601	.6	.7	.8	.9	.10	.11	.12	.13	.14									
	.699	.601	.601	.601	.601	.601	.60	.601	.601	.94	.601	.5	.6	.7	.8	.9	.10	.11	.12	.13									
	.699	.601	.601	.601	.601	.601	.61	.601	.601	.95	.601	.4	.5	.6	.7	.8	.9	.10	.11	.12									
	.699	.601	.601	.601	.601	.601	.62	.601	.601	.96	.601	.3	.4	.5	.6	.7	.8	.9	.10	.11									
	.699	.601	.601	.601	.601	.601	.63	.601	.601	.97	.601	.2	.3	.4	.5	.6	.7	.8	.9	.10									
	.699	.601	.601	.601	.601	.601	.64	.601	.601	.98	.601	.1	.2	.3	.4	.5	.6	.7	.8	.9									
	.699	.601	.601	.601	.601	.601	.65	.601	.601	.99	.601	.0	.1	.2	.3	.4	.5	.6	.7	.8									
	.699	.601	.601	.601	.601	.601	.66	.601	.601	.00	.601	.9	.10	.11	.12	.13	.14	.15	.16	.17									
	.699	.601	.601	.601	.601	.601	.67	.601	.601	.01	.601	.8	.9	.10	.11	.12	.13	.14	.15	.16									
	.699	.601	.601	.601	.601	.601	.68	.601	.601	.02	.601	.7	.8	.9	.10	.11	.12	.13	.14	.15									
	.699	.601	.601	.601	.601	.601	.69	.601	.601	.03	.601	.6	.7	.8	.9</td														

21/3/35 9H35 As07 N°. 7.1=+2(+1.5+ROT.30') R 2-5 NON ADAPTE AD124  
DE AD45 1,ITE, PAROIS RECTILIGNES + 30,

MACH DE REFERENICE = .7034 .

UTIN = 23.1103 M. S

PIV = 1521 MB

#### MACH PAROIS HAUTE ET BASSE

\*\*\*\*\* PRISES LAT. GAUCHE \*\*\*\*\*

BAS I HAUT BAS

.639 .59 .702 .702

.639 .60 .705 .705

.639 .61 .706 .706

.639 .62 .707 .707

.639 .63 .708 .708

.639 .64 .709 .709

.639 .65 .710 .710

.639 .66 .711 .711

.639 .67 .712 .712

.639 .68 .713 .713

.639 .69 .714 .714

.639 .70 .715 .715

.639 .71 .716 .716

.639 .72 .717 .717

.639 .73 .718 .718

.639 .74 .719 .719

.639 .75 .720 .720

.639 .76 .721 .721

.639 .77 .722 .722

.639 .78 .723 .723

.639 .79 .724 .724

.639 .80 .725 .725

.639 .81 .726 .726

.639 .82 .727 .727

.639 .83 .728 .728

.639 .84 .729 .729

.639 .85 .730 .730

.639 .86 .731 .731

.639 .87 .732 .732

.639 .88 .733 .733

.639 .89 .734 .734

.639 .90 .735 .735

.639 .91 .736 .736

.639 .92 .737 .737

.639 .93 .738 .738

.639 .94 .739 .739

.639 .95 .740 .740

.639 .96 .741 .741

.639 .97 .742 .742

.639 .98 .743 .743

.639 .99 .744 .744

.639 .100 .745 .745

.639 .101 .746 .746

.639 .102 .747 .747

.639 .103 .748 .748

.639 .104 .749 .749

.639 .105 .750 .750

.639 .106 .751 .751

.639 .107 .752 .752

.639 .108 .753 .753

.639 .109 .754 .754

.639 .110 .755 .755

.639 .111 .756 .756

\*\*\*\*\* PRISES LAT. DROIT \*\*\*\*\*

I HAUT I BAS

.713 .59 .703 .703

.713 .60 .704 .704

.713 .61 .705 .705

.713 .62 .706 .706

.713 .63 .707 .707

.713 .64 .708 .708

.713 .65 .709 .709

.713 .66 .710 .710

.713 .67 .711 .711

.713 .68 .712 .712

.713 .69 .713 .713

.713 .70 .714 .714

.713 .71 .715 .715

.713 .72 .716 .716

.713 .73 .717 .717

.713 .74 .718 .718

.713 .75 .719 .719

.713 .76 .720 .720

.713 .77 .721 .721

.713 .78 .722 .722

.713 .79 .723 .723

.713 .80 .724 .724

.713 .81 .725 .725

.713 .82 .726 .726

.713 .83 .727 .727

.713 .84 .728 .728

.713 .85 .729 .729

.713 .86 .730 .730

.713 .87 .731 .731

.713 .88 .732 .732

.713 .89 .733 .733

.713 .90 .734 .734

.713 .91 .735 .735

.713 .92 .736 .736

.713 .93 .737 .737

.713 .94 .738 .738

.713 .95 .739 .739

.713 .96 .740 .740

.713 .97 .741 .741

.713 .98 .742 .742

.713 .99 .743 .743

.713 .100 .744 .744

.713 .101 .745 .745

.713 .102 .746 .746

.713 .103 .747 .747

.713 .104 .748 .748

.713 .105 .749 .749

.713 .106 .750 .750

.713 .107 .751 .751

.713 .108 .752 .752

.713 .109 .753 .753

.713 .110 .754 .754

.713 .111 .755 .755

\*\*\*\*\* MACH PAROIS LATER. \*\*\*\*\*

I HAUT I BAS

.713 .59 .703 .703

.713 .60 .704 .704

.713 .61 .705 .705

.713 .62 .706 .706

.713 .63 .707 .707

.713 .64 .708 .708

.713 .65 .709 .709

.713 .66 .710 .710

.713 .67 .711 .711

.713 .68 .712 .712

.713 .69 .713 .713

.713 .70 .714 .714

.713 .71 .715 .715

.713 .72 .716 .716

.713 .73 .717 .717

.713 .74 .718 .718

.713 .75 .719 .719

.713 .76 .720 .720

.713 .77 .721 .721

.713 .78 .722 .722

.713 .79 .723 .723

.713 .80 .724 .724

.713 .81 .725 .725

.713 .82 .726 .726

.713 .83 .727 .727

.713 .84 .728 .728

.713 .85 .729 .729

.713 .86 .730 .730

.713 .87 .731 .731

.713 .88 .732 .732

.713 .89 .733 .733

.713 .90 .734 .734

.713 .91 .735 .735

.713 .92 .736 .736

.713 .93 .737 .737

.713 .94 .738 .738

.713 .95 .739 .739

.713 .96 .740 .740

.713 .97 .741 .741

.713 .98 .742 .742

.713 .99 .743 .743

.713 .100 .744 .744

.713 .101 .745 .745

.713 .102 .746 .746

.713 .103 .747 .747

.713 .104 .748 .748

.713 .105 .749 .749

.713 .106 .750 .750

.713 .107 .751 .751

.713 .108 .752 .752

.713 .109 .753 .753

.713 .110 .754 .754

.713 .111 .755 .755

\*\*\*\*\* MACH PAROIS HIGHT \*\*\*\*\*

I HAUT I BAS

.713 .59 .703 .703

.713 .60 .704 .704

.713 .61 .705 .705

.713 .62 .706 .706

.713 .63 .707 .707

.713 .64 .708 .708

.713 .65 .709 .709

.713 .66 .710 .710

.713 .67 .711 .711

.713 .68 .712 .712

.713 .69 .713 .713

.713 .70 .714 .714

.713 .71 .715 .715

.713 .72 .716 .716

.713 .73 .717 .717

.713 .74 .718 .718

.713 .75 .719 .719

.713 .76 .720 .720

.713 .77 .721 .721

.713 .78 .722 .722

.713 .79 .723 .723

.713 .80 .724 .724

.713 .81 .725 .725

.713 .82 .726 .726

.713 .83 .727 .727

.713 .84 .728 .728

.713 .85 .729 .729

.713 .86 .730 .730

.713 .87 .731 .731

.713 .88 .732 .732

.713 .89 .733 .733

.713 .90 .734 .734

.713 .91 .735 .735

.713 .92 .736 .736

.713 .93 .737 .737

.713 .94 .738 .738

.713 .95 .739 .739

.713 .96 .740 .740

.713 .97 .741 .741

.713 .98 .742 .742

.713 .99 .743 .743

.713 .100 .744 .744

.713 .101 .745 .745

.713 .102 .746 .746

.713 .103 .747 .747

.713 .104 .748 .748

.713 .105 .749 .749

.713 .106 .750 .750

.713 .107 .751 .751

.713 .108 .752 .752

.713 .109 .753 .753

.713 .110 .754 .754

.713 .111 .755 .755

\*\*\*\*\* MACH PAROIS LATER. \*\*\*\*\*

I HAUT I BAS

.713 .59 .703 .703

.713 .60 .704 .704

.713 .61 .705 .705

.713 .62 .706 .706

.713 .63 .707 .707

.713 .64 .708 .708

.713 .65 .709 .709

.713 .66 .710 .710

.713 .67 .711 .711

FICHIER AD125 NO(CIT)= 1  
 85 9H50 AS07 M=.7 I=+2(+1.5+ROT.30') R 2-5 ADAPTE 3D 1'ITE. AD125  
 9124 1'ITE.

MACH DE REFERENCE= .7031 UINR= 331.108 M/S  
 TIV=300.7 K PIV= 1522 MB

MACH PAROIS HAUTE ET BASSE \* MACH PAROIS LATER. \* AILE AS07

HAUT	BAS	I	HAUT	BAS	*	I	MACH	I	MACH	*	I	MACH	
.713	.694	*	PRISES DOUBLES		*	HUB. AMONT	33	.705	*	1	.668		
.712	.699	*			*		34	.704	*	2	.683		
.707	.700	*	52	.701	.702	*	1	.702	35	.703	*	3	.731
.702	.702	*	60	.705	.704	*	2	.701	36	.706	*	4	.738
.700	.705	*	61	.706	.696	*	3	.701	37	.705	*	5	.737
.702	.706	*			*		4	.702	38	.704	*	6	.737
.702	.704	*	PRISES LAT. GAUCHE	*	*		5	.700	39	.703	*	7	.663
.704	.702	*			*		6	.700	40	.703	*	8	.632
.705	.705	*	62	.704	.702	*	7	.700	41	.704	*	9	.414
.706	.700	*	53	.703	.706	*	8	.699	42	.704	*	10	1.291
.703	.702	*	64	.707	.705	*	9	.700	43	.702	*	11	1.356
.700	.702	*	55	.702	.702	*	10	.700	44	.702	*	12	.363
.702	.702	*	56	.703	.702	*	11	.702	45	.701	*	13	.365
.701	.704	*	57	.713	.706	*					*	14	.310
.701	.704	*	58	.713	.704	*					*	15	.394
.702	.702	*	69	.711	.704	*					*	16	.875
.704	.702	*	70	.713	.701	*	1	.706	1	.704	*	17	.863
.708	.703	*	71	.709	.703	*	2	.705	2	.704	*	18	.865
.707	.702	*	72	.706	.701	*	3	.704	3	.703	*	19	.857
.705	.703	*	73	.701	.703	*	4	.705	4	.703	*	20	.349
.703	.702	*			*		5	.704	5	.703	*	21	.362
.706	.703	*	PRISES LAT. DROITES	*	*		6	.704	6	.703	*	22	.331
.708	.701	*			*		7	.703	7	.704	*	23	.306
.706	.701	*	74	.705	.704	*	8	.704	8	.703	*	24	.655
.708	.700	*	75	.702	.703	*	9	.704	9	.703	*	25	.617
.709	.701	*	76	.704	.702	*	10	.700	10	.703	*	26	.739
.715	.700	*	77	.701	.700	*	11	.699	11	.703	*	27	.731
.716	.703	*	78	.702	.700	*			12	.703	*	28	.735
.722	.703	*	79	.705	.697	*			13	.703	*	29	.716
.719	.704	*	80	.710	.699	*			14	.703	*	30	.663
.725	.700	*	81	.713	.699	*	1	.714	15	.703	*	31	.385
.721	.704	*	82	.712	.697	*	2	.713	16	.703	*	32	.385
.723	.703	*	83	.721	.699	*	3	.713	17	.703	*	33	.366
.719	.701	*	84	.731	.701	*	4	.705	18	.703	*	34	.1.276
.721	.700	*	85	.732	.703	*	5	.706	19	.703	*	35	.1.138
.718	.701	*	86	.729	.702	*	6	.709	20	.703	*	36	1.034
.719	.699	*	87	.725	.701	*	7	.713	21	.703	*	37	.353
.717	.699	*	88	.722	.698	*	8	.716	22	.703	*	38	.311
.720	.699	*	89	.724	.698	*	9	.716	23	.703	*	39	.393
.717	.700	*	90	.716	.699	*	10	.714	24	.703	*	40	.376
.716	.699	*	91	.712	.699	*	11	.713	25	.703	*	41	.364
.715	.699	*	92	.709	.703	*	12	.713	26	.704	*	42	.347
.715	.698	*	93	.702	.702	*	13	.711	27	.704	*	43	.825
.713	.699	*	94	.709	.698	*	14	.710	28	.704	*	44	.808
.712	.699	*	95	.706	.695	*	15	.707	29	.703	*	45	.794
.709	.701	*	96	.700	.692	*	16	.705	30	.703	*	46	.783
.710	.703	*			*		17	.705	31	.703	*	47	.740
.710	.705	*			*		18	.705	32	.703	*	48	.773
.709	.704	*			*		19	.705	33	.703	*	49	.731
.707	.702	*			*		20	.706	34	.703	*	50	
.708	.700	*			*		21	.706	35	.703	*		
.707	.697	*			PRISES COL		22	.707	36	.703	*		
.709	.699	*					23	.706	37	.703	*		
.707	.701	*					24	.710	38	.703	*		
.706	.700	*					25	.712	39	.703	*		
.705	.699	*					26	.714	40	.703	*		
.703	.697	*					27	.717	41	.703	*		
.701	.691	*					28	.718	42	.703	*		
							29	.715	43	.703	*		
							30	.711	44	.703	*		
							31	.709	45	.703	*		
							32	.707		.703	*		

\*\*\*\*\* FICHIER RD126 NO(ITE)= 1  
21/ 8/85 10H 5 AS07 M=.8 I=+3(+1.5+ROT.30') R 2-5 NON ADAPTE RD126  
DE RD445 1'ITE. PAROIS RECTILIGNES + 30'

MACH DE REFERENCE= .8060 UINF= 231.103 M/S  
- TIV=300.3 K PIV= 1653 MB

MACH PAROIS HAUTE ET BASSE						MACH PAROIS LATER.						AILE A807		
I	HAUT	BAS	I	HAUT	BAS	*	I	MACH	I	MACH	*	I	MACH	
1	.819	.795	*	PRISES DOUBLES		*	HUB.	AMONT	23	.639	*	1	.794	
2	.818	.800	*			*			34	.836	*	2	.811	
3	.811	.801	*	59	.801	.804	*	1	.808	35	.833	*	3	.873
4	.804	.803	*	60	.810	.809	*	2	.807	36	.827	*	4	.854
5	.800	.806	*	61	.820	.825	*	3	.808	37	.828	*	5	.823
6	.802	.803	*				*		.807	38	.830	*	6	.847
7	.801	.806	*	PRISES LAT. GAUCHE		*			.806	39	.831	*	7	.757
8	.807	.806	*			*			.807	40	.835	*	8	.713
9	.809	.812	*	62	.806	.802	*		.803	41	.840	*	9	.443
10	.811	.804	*	63	.801	.813	*		.808	42	.840	*	10	.463
11	.808	.806	*	64	.816	.815	*		.806	43	.829	*	11	.504
12	.805	.807	*	65	.824	.816	*	10	.806	44	.827	*	12	.483
13	.807	.806	*	66	.846	.824	*	11	.807	45	.825	*	13	.443
14	.806	.809	*	67	.871	.825	*					*	14	.390
15	.807	.809	*	68	.883	.825	*	HUB.	AVAL	HUB.	DROIT	*	15	.123
16	.808	.808	*	69	.897	.832	*					*	16	.389
17	.811	.809	*	70	.887	.831	*	1	.827	1	.806	*	17	.879
18	.817	.813	*	71	.847	.829	*	2	.827	2	.806	*	18	.112
19	.813	.813	*	72	.832	.835	*	3	.828	3	.807	*	19	.114
20	.820	.815	*	73	.788	.835	*		.825	4	.806	*	20	.143
21	.824	.815	*				*		.831	5	.806	*	21	.159
22	.833	.814	*	PRISES LAT. DROITES		*			.830	5	.805	*	22	.131
23	.842	.813	*			*			.828	7	.806	*	23	.320
24	.847	.819	*	74	.808	.804	*		.830	8	.805	*	24	.764
25	.853	.821	*	75	.802	.806	*		.832	9	.806	*	25	.791
26	.858	.821	*	76	.808	.806	*	10	.830	10	.806	*	26	.862
27	.872	.817	*	77	.807	.804	*	11	.830	11	.805	*	27	.846
28	.877	.821	*	78	.808	.805	*			12	.806	*	28	.919
29	.835	.820	*	79	.817	.806	*	HUB.	GAUCHE	13	.805	*	29	.842
30	.891	.821	*	80	.823	.811	*			14	.806	*	30	.784
31	.911	.816	*	81	.851	.810	*	1	.830	15	.805	*	31	.735
32	.904	.824	*	82	.860	.815	*		.877	16	.805	*	32	.441
33	.920	.823	*	83	.888	.814	*	3	.874	17	.806	*	33	.633
34	.911	.822	*	84	.920	.816	*		.836	18	.805	*	34	.540
35	.924	.822	*	85	.834	.821	*		.844	19	.805	*	35	.632
36	.919	.825	*	86	.932	.823	*		.855	20	.806	*	36	.581
37	.922	.823	*	87	.929	.824	*		.871	21	.806	*	37	.513
38	.914	.825	*	88	.920	.822	*		.887	22	.805	*	38	.581
39	.908	.824	*	89	.902	.822	*		.895	23	.806	*	39	.493
40	.900	.824	*	90	.877	.825	*	10	.876	24	.805	*	40	.430
41	.888	.823	*	91	.858	.827	*	11	.867	25	.806	*	41	.473
42	.888	.824	*	92	.848	.830	*	12	.863	26	.806	*	42	.463
43	.871	.824	*	93	.831	.829	*	13	.858	27	.805	*	43	.463
44	.860	.827	*	94	.830	.829	*	14	.853	28	.806	*	44	.164
45	.855	.825	*	95	.818	.850	*	15	.828	29	.806	*	45	.934
46	.851	.828	*	96	.789	.848	*	16	.828	30	.806	*	46	.384
47	.843	.828	*				*	17	.830	31	.805	*	47	.341
48	.843	.831	*				*	18	.832	32	.805	*	48	.357
49	.838	.830	*				*	19	.834	33	.806	*	49	.333
50	.832	.831	*				*	20	.838	34	.806	*	50	.353
51	.830	.830	*				*	21	.841	35	.806	*		
52	.823	.827	*				*	22	.845	36	.806	*		
53	.823	.829	*				*	23	.845	37	.806	*		
54	.822	.831	*				*	24	.853	38	.806	*		
55	.820	.832	*				*	25	.859	39	.806	*		
56	.811	.833	*				*	26	.863	40	.806	*		
57	.798	.845	*				*	27	.882	41	.806	*		
58	.775	.864	*				*	28	.891	42	.806	*		
							*	29	.874	43	.806	*		
							*	30	.856	44	.806	*		
							*	31	.848	45	.806	*		
							*	32	.843					

\*\*\*\*\* FICHIER AD127 MQ(ITE)= 1  
31/ 8/85 10H20 AS07 M=.8 I=+3(+1.5+ROT.30') R 2-5 ADAPTE 3D 1' ITE. AD127  
DE RD126 1' ITE.

MACH DE REFERENCE= .8056      UINF= 331.108 M/S  
TIV=299.9 K      PIV= 1651 MB

## MACH PAROIS HAUTE ET BASSE

PRICES COLD

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\*\*\*\*\* FICHIER AD128 NO(IT)= 1  
 21/ 8/85 10H35 A607 M=.3 I=+2(+1.5+ROT.30') R 2-5 ADAPTE 3D 2'ITE. AD128  
 DE AD9127 1'ITE.

MACH DE REFERENCE= .8058 UINF= 231.198 M/S  
 TIV=299.8 K PIV= 1649 MB

	MACH PAROIS HAUTE ET BASSE				MACH PAROIS LATÉR.				AILE A607		
I	HAUT	BAS	I	HAUT	BAS	I	MACH	I	MACH	I	MACH
PRISES DOUBLES											
1	.819	.795	*	PRISES DOUBLES				HUB. AMONT	33	.809	*
2	.818	.801	*	59	.805	.806	*	1	.802	34	.807
3	.811	.801	*	60	.810	.808	*	2	.801	35	.805
4	.803	.802	*	61	.803	.806	*	3	.801	36	.807
5	.800	.805	*	61	.803	.806	*	4	.804	37	.805
6	.805	.809	*	62	.806	.801	*	5	.801	38	.804
7	.805	.808	*	62	.806	.801	*	6	.800	39	.803
8	.809	.809	*	63	.801	.811	*	7	.799	40	.804
9	.811	.803	*	64	.808	.810	*	8	.801	41	.807
10	.806	.804	*	65	.808	.803	*	9	.801	42	.807
11	.800	.803	*	66	.808	.809	*	10	.801	43	.803
12	.802	.802	*	67	.809	.800	*	11	.803	44	.802
13	.802	.805	*	68	.822	.805	*	12	.800	45	.800
14	.803	.807	*	69	.825	.804	*	13	HUB. AVANT		*
15	.803	.805	*	70	.831	.805	*	14	HUB. DROIT		*
16	.804	.805	*	70	.831	.802	*	15	HUB. AVANT		*
17	.805	.803	*	71	.814	.801	*	16	HUB. DROIT		*
18	.805	.800	*	72	.811	.809	*	17	HUB. AVANT		*
19	.807	.802	*	73	.805	.815	*	18	HUB. DROIT		*
20	.809	.802	*	PRISES LAT. DROITES				19	HUB. AVANT		*
21	.813	.803	*	PRISES LAT. DROITES				20	HUB. DROIT		*
22	.817	.800	*	74	.808	.804	*	21	HUB. AVANT		*
23	.818	.800	*	75	.805	.807	*	22	HUB. DROIT		*
24	.817	.799	*	76	.808	.804	*	23	HUB. AVANT		*
25	.819	.799	*	77	.802	.800	*	24	HUB. DROIT		*
26	.826	.795	*	78	.800	.801	*	25	HUB. AVANT		*
27	.828	.801	*	79	.804	.794	*	26	HUB. DROIT		*
28	.833	.801	*	80	.817	.798	*	27	HUB. AVANT		*
29	.833	.802	*	81	.825	.798	*	28	HUB. DROIT		*
30	.844	.797	*	82	.822	.793	*	29	HUB. AVANT		*
31	.838	.803	*	83	.838	.794	*	30	HUB. DROIT		*
32	.845	.802	*	84	.854	.798	*	31	HUB. AVANT		*
33	.839	.799	*	85	.857	.802	*	32	HUB. DROIT		*
34	.844	.799	*	86	.853	.802	*	33	HUB. AVANT		*
35	.842	.800	*	87	.858	.800	*	34	HUB. DROIT		*
36	.844	.798	*	88	.847	.797	*	35	HUB. AVANT		*
37	.841	.798	*	89	.843	.797	*	36	HUB. DROIT		*
38	.842	.798	*	90	.829	.799	*	37	HUB. AVANT		*
39	.837	.798	*	91	.819	.801	*	38	HUB. DROIT		*
40	.834	.798	*	92	.816	.803	*	39	HUB. AVANT		*
41	.834	.799	*	93	.807	.801	*	40	HUB. DROIT		*
42	.834	.799	*	94	.810	.805	*	41	HUB. AVANT		*
43	.819	.801	*	95	.803	.806	*	42	HUB. DROIT		*
44	.817	.800	*	96	.804	.802	*	43	HUB. AVANT		*
45	.815	.801	*	PRISES COL				44	HUB. DROIT		*
46	.816	.801	*	PRISES COL				45	HUB. AVANT		*
47	.816	.804	*	PRISES COL				46	HUB. DROIT		*
48	.816	.803	*	PRISES COL				47	HUB. AVANT		*
49	.812	.805	*	PRISES COL				48	HUB. DROIT		*
50	.811	.807	*	PRISES COL				49	HUB. AVANT		*
51	.805	.806	*	PRISES COL				50	HUB. DROIT		*
52	.807	.810	*	PRISES COL				51	HUB. AVANT		*
53	.808	.810	*	858	1.1220	*	52	HUB. DROIT		*	
54	.808	.808	*	866	1.1220	*	53	HUB. AVANT		*	
55	.807	.806	*	942	1.1220	*	54	HUB. DROIT		*	
56	.807	.806	*	986	1.1220	*	55	HUB. AVANT		*	
57	.806	.803	*	1.147	1.1220	*	56	HUB. DROIT		*	

FICHIER RD129 NO(ITE)= 1  
 21/ 8/85 10H50 R607 M=.8 I=+2(+1.5+ROT.30') R 2-5 ADAPTE 3D 3'ITE. RD129  
 DE RD129 1'ITE.

MACH DE REFERENCE=.8053 UINP= 231.103 M/S  
 TIV=299.3 K PIV= 1649 MB

MACH PAROIS HAUTE ET BASSE						MACH PAROIS LATER.			AILE R607		
I	HAUT	BAS	I	HAUT	BAS	I	MACH	I	MACH	I	MACH
1	.820	.797	+ PRISES DOUBLES			* HUB. AMONT	33	.810	*	1	.763
2	.820	.803	*			* 34	.809	*	2	.781	
3	.814	.803	*	.59	.803	* 35	.807	*	3	.845	
4	.806	.804	*	.60	.807	* 36	.809	*	4	.832	
5	.802	.805	*	.61	.808	* 37	.809	*	5	.808	
6	.805	.810	*			* 38	.807	*	6	.837	
7	.803	.806	+ PRISES LAT. GAUCHE	*	*	* 39	.806	*	7	.747	
8	.805	.803	*	.62	.809	* 40	.807	*	8	.713	
9	.806	.808	*	.63	.812	* 41	.809	*	9	.441	
10	.808	.803	*	.64	.812	* 42	.809	*	10	1.475	
11	.805	.805	*	.65	.806	* 43	.804	*	11	1.473	
12	.801	.807	*	.66	.805	* 44	.803	*	12	1.434	
13	.804	.805	*	.67	.824	* 45	.802	*	13	1.384	
14	.805	.808	*	.68	.824	* 46	.802	*	14	1.059	
15	.807	.807	*	.69	.824	* 47	.802	*	15	1.323	
16	.807	.804	*	.70	.832	* 48	.805	*	16	1.014	
17	.807	.803	*	.71	.815	* 49	.806	*	17	1.024	
18	.810	.805	*	.72	.802	* 50	.809	*	18	1.040	
19	.808	.805	*	.73	.812	* 51	.809	*	19	1.039	
20	.807	.807	*	.74	.810	* 52	.806	*	20	1.029	
21	.808	.805	*			* 53	.806	*	21	1.001	
22	.812	.802	+ PRISES LAT. DROITES	*	*	* 54	.806	*	22	.974	
23	.816	.799	*	.74	.811	* 55	.809	*	23	.746	
24	.813	.803	*	.75	.804	* 56	.810	*	24	.733	
25	.814	.805	*	.76	.806	* 57	.811	*	25	.761	
26	.815	.805	*	.77	.804	* 58	.807	*	26	.832	
27	.825	.802	*	.78	.803	* 59	.807	*	27	.803	
28	.809	.805	*	.79	.805	* 60	.805	*	28	.889	
29	.840	.805	*	.80	.801	* 61	.805	*	29	.823	
30	.835	.805	*	.81	.816	* 62	.806	*	30	.756	
31	.845	.799	*	.82	.824	* 63	.826	*	31	.723	
32	.838	.805	*	.83	.819	* 64	.826	*	32	1.427	
33	.844	.802	*	.84	.836	* 65	.825	*	33	1.576	
34	.837	.803	*	.85	.854	* 66	.810	*	34	1.594	
35	.841	.799	*	.86	.857	* 67	.812	*	35	1.581	
36	.839	.800	*	.87	.851	* 68	.817	*	36	1.510	
37	.842	.798	*	.88	.847	* 69	.825	*	37	1.474	
38	.840	.800	*	.89	.844	* 70	.833	*	38	1.455	
39	.843	.799	*	.90	.845	* 71	.835	*	39	1.440	
40	.838	.800	*	.90	.831	* 72	.828	*	40	1.423	
41	.835	.800	*	.91	.817	* 73	.824	*	41	1.363	
42	.835	.801	*	.92	.816	* 74	.823	*	42	1.039	
43	.826	.802	*	.93	.807	* 75	.820	*	43	.944	
44	.817	.803	*	.94	.813	* 76	.813	*	44	.932	
45	.815	.802	*	.95	.808	* 77	.810	*	45	.913	
46	.813	.802	*	.96	.808	* 78	.808	*	46	.913	
47	.816	.801	*			* 79	.808	*	47	.911	
48	.817	.804	*			* 80	.810	*	48	.836	
49	.815	.805	*			* 81	.810	*	49	.825	
50	.812	.807	*			* 82	.811	*	50	.835	
51	.813	.803	*			* 83	.812	*			
52	.811	.806	*			* 84	.814	*			
53	.811	.809	*			* 85	.812	*			
54	.812	.810	*			* 86	.818	*			
55	.813	.806	*			* 87	.822	*			
56	.811	.802	*			* 88	.827	*			
57	.811	.795	*			* 89	.833	*			
58	.811	.776	*		1.146	* 90	.835	*			
						* 91	.827	*			
						* 92	.819	*			
						* 93	.814	*			
						* 94	.806	*			
						* 95	.812	*			
						* 96					

\*\*\*\*\* FICHIER RD130 NO(ITE)= 4  
21/ 8/85 12H20 AS07 M=.7 I=1.5 R 3-5 ADAPTE 2D RD130  
DE RD4 1'ITE. PARDIS RECTILIGNES SYMETRIQUES

MACH DE REFERENCE=.7971 UINF= 231.109 M/S  
TIV=394.0 K PIY= 1525 MB

• 111 +5 . 188  
• 79

\*\*\*\*\* FICHIER AD131 NO(IT)= 4  
 21/8/85 14H50 AS07 M=.6 I=1.5 R 2-5 ADAPTE 2D AD131  
 DE AD130 4'ITE.

MACH DE REFERENCE=.6019 UINF= 231.108 M/S  
 TIV=296.4 K PIV= 1393 MB

MACH PAROIS HAUTE ET BASSE						MACH PAROIS LATER.			AILE AS07			
I	HAUT	BAS	I	HAUT	BAS	I	MACH	I	MACH	I	MACH	
<b>PRISES DOUBLES</b>												
1	.604	.600	*			*	HUB. AMONT	33	.603	*	1	.573
2	.604	.603	*			*		34	.602	*	2	.581
3	.603	.601	*	59	.602	.600	*	1	.602	*	3	.623
4	.601	.601	*	60	.604	.600	*	2	.601	*	4	.559
5	.601	.602	*	61	.602	.599	*	3	.601	*	5	.553
6	.603	.603	*				*	4	.601	*	6	.517
7	.602	.601	*				*	5	.600	*	7	.566
8	.603	.601	*				*	6	.600	*	8	.528
9	.602	.602	*	62	.602	.602	*	7	.600	*	9	.375
10	.604	.598	*	63	.605	.604	*	8	.599	*	10	1.021
11	.602	.597	*	64	.603	.603	*	9	.600	*	11	.386
12	.601	.599	*	65	.605	.601	*	10	.599	*	12	.326
13	.602	.600	*	66	.606	.599	*	11	.600	*	13	.184
14	.601	.602	*	67	.609	.602	*			*	14	.755
15	.602	.605	*	68	.609	.601	*	HUB. AVAL	HUB. DROIT	*	15	.750
16	.602	.601	*	69	.609	.602	*			*	16	.735
17	.601	.598	*	70	.612	.599	*	1	.604	1	.602	*
18	.603	.598	*	71	.607	.600	*	2	.603	*	.602	*
19	.603	.598	*	72	.604	.602	*	3	.604	*	.601	*
20	.605	.601	*	73	.596	.603	*	4	.604	*	.602	*
21	.600	.599	*				*	5	.603	*	.602	*
22	.607	.599	*				*	6	.603	*	.602	*
23	.608	.597	*				*	7	.603	*	.602	*
24	.608	.597	*	74	.603	.603	*	8	.605	*	.601	*
25	.610	.597	*	75	.602	.602	*	9	.603	*	.602	*
26	.609	.597	*	76	.602	.597	*	10	.602	*	.602	*
27	.613	.596	*	77	.602	.593	*	11	.602	*	.602	*
28	.613	.599	*	78	.600	.595	*			*	.602	*
29	.616	.599	*	79	.602	.594	*	HUB. GAUCHE		*	.602	*
30	.614	.599	*	80	.612	.593	*			*	.602	*
31	.617	.596	*	81	.613	.595	*	1	.610	15	.602	*
32	.614	.599	*	82	.614	.595	*	2	.609	16	.602	*
33	.616	.599	*	83	.618	.596	*	3	.609	17	.601	*
34	.613	.599	*	84	.622	.597	*	4	.605	18	.602	*
35	.615	.598	*	85	.623	.599	*	5	.605	19	.602	*
36	.613	.599	*	86	.620	.599	*	6	.608	20	.601	*
37	.615	.598	*	87	.619	.599	*	7	.609	21	.602	*
38	.615	.598	*	88	.618	.598	*	8	.611	22	.602	*
39	.617	.598	*	89	.621	.598	*	9	.612	23	.602	*
40	.615	.598	*	90	.616	.599	*	10	.611	24	.602	*
41	.615	.598	*	91	.610	.600	*	11	.609	25	.602	*
42	.615	.599	*	92	.608	.599	*	12	.609	26	.601	*
43	.613	.599	*	93	.602	.599	*	13	.607	27	.602	*
44	.610	.599	*	94	.603	.600	*	14	.607	28	.601	*
45	.608	.599	*	95	.601	.595	*	15	.604	29	.601	*
46	.607	.599	*	96	.593	.593	*	16	.603	30	.602	*
47	.609	.599	*				*	17	.603	31	.602	*
48	.608	.600	*				*	18	.603	32	.602	*
49	.606	.600	*				*	19	.604	33	.602	*
50	.603	.600	*				*	20	.603	34	.602	*
51	.604	.601	*				*	21	.604	35	.602	*
52	.603	.600	*				*	22	.605	36	.602	*
53	.604	.601	*				*	23	.603	37	.602	*
54	.604	.601	*				*	24	.607	38	.602	*
55	.602	.599	*				*	25	.603	39	.601	*
56	.600	.598	*				*	26	.603	40	.602	*
57	.597	.595	*				*	27	.611	41	.602	*
58	.593	.593	*				*	28	.611	42	.602	*
							*	29	.609	43	.601	*
							*	30	.608	44	.601	*
							*	31	.606	45	.602	*
							*	32	.604			
<b>PRISES COL</b>												

\*\*\*\*\* SH55 R307 N°.3 169  
21 / 3/55 R307 N°.3 169  
DE AD4 1.ITE. PAROIS FESTILLIGNE SYMETRIQUE

FICHIER AD133 HOMI= 4

R32-S ADAPTE 2D AD133

MACH DE REFERENCE= 307.3 UINF= 231.193 M/S

TIV= 296.2 K PIV= 1653 MB

MACH PAROIS HAUTE ET BASSE			MACH PAROIS LATÉR.			FILE SHOT		
I	HAUT	BAS	I	HAUT	BAS	I	MACH	MACH
309	304	PRISES DOUBLES	304	312	319	303	312	312
311	312		309	59	304	303	311	311
309	309		305	60	304	303	311	311
304	304		305	61	304	303	311	311
303	303		312	312	PRISES LAT. GAUCHE	303	311	311
319	319		307	62	306	301	312	312
309	309		309	63	302	301	312	312
311	311		309	64	313	301	312	312
309	309		309	65	314	301	312	312
312	312		309	66	305	301	312	312
309	309		309	67	306	302	312	312
311	311		309	68	307	302	312	312
309	309		309	69	308	303	312	312
312	312		309	70	309	303	312	312
309	309		309	71	310	303	312	312
312	312		309	72	311	303	312	312
309	309		309	73	312	303	312	312
311	311		309	74	PRISES LAT. DROITES	303	312	312
309	309		309	75	313	303	312	312
312	312		309	76	314	303	312	312
309	309		309	77	315	303	312	312
311	311		309	78	316	303	312	312
309	309		309	79	317	303	312	312
312	312		309	80	318	303	312	312
309	309		309	81	319	303	312	312
311	311		309	82	320	303	312	312
309	309		309	83	321	303	312	312
312	312		309	84	322	303	312	312
309	309		309	85	323	303	312	312
311	311		309	86	324	303	312	312
309	309		309	87	325	303	312	312
312	312		309	88	326	303	312	312
309	309		309	89	327	303	312	312
311	311		309	90	328	303	312	312
309	309		309	91	329	303	312	312
312	312		309	92	330	303	312	312
309	309		309	93	331	303	312	312
311	311		309	94	332	303	312	312
309	309		309	95	333	303	312	312
312	312		309	96	334	303	312	312
309	309		309	97	335	303	312	312
311	311		309	98	336	303	312	312
309	309		309	99	337	303	312	312
312	312		309	100	338	303	312	312
309	309		309	101	339	303	312	312
311	311		309	102	340	303	312	312
309	309		309	103	341	303	312	312
312	312		309	104	342	303	312	312
309	309		309	105	343	303	312	312
311	311		309	106	344	303	312	312
309	309		309	107	345	303	312	312
312	312		309	108	346	303	312	312
309	309		309	109	347	303	312	312
311	311		309	110	348	303	312	312
309	309		309	111	349	303	312	312
312	312		309	112	350	303	312	312
309	309		309	113	351	303	312	312
311	311		309	114	352	303	312	312
309	309		309	115	353	303	312	312
312	312		309	116	354	303	312	312
309	309		309	117	355	303	312	312
311	311		309	118	356	303	312	312
309	309		309	119	357	303	312	312
312	312		309	120	358	303	312	312
309	309		309	121	359	303	312	312
311	311		309	122	360	303	312	312
309	309		309	123	361	303	312	312
312	312		309	124	362	303	312	312
309	309		309	125	363	303	312	312
311	311		309	126	364	303	312	312
309	309		309	127	365	303	312	312
312	312		309	128	366	303	312	312
309	309		309	129	367	303	312	312
311	311		309	130	368	303	312	312
309	309		309	131	369	303	312	312
312	312		309	132	370	303	312	312
309	309		309	133	371	303	312	312
311	311		309	134	372	303	312	312
309	309		309	135	373	303	312	312
312	312		309	136	374	303	312	312
309	309		309	137	375	303	312	312
311	311		309	138	376	303	312	312
309	309		309	139	377	303	312	312
312	312		309	140	378	303	312	312
309	309		309	141	379	303	312	312
311	311		309	142	380	303	312	312
309	309		309	143	381	303	312	312
312	312		309	144	382	303	312	312
309	309		309	145	383	303	312	312
311	311		309	146	384	303	312	312
309	309		309	147	385	303	312	312
312	312		309	148	386	303	312	312
309	309		309	149	387	303	312	312
311	311		309	150	388	303	312	312
309	309		309	151	389	303	312	312
312	312		309	152	390	303	312	312
309	309		309	153	391	303	312	312
311	311		309	154	392	303	312	312
309	309		309	155	393	303	312	312
312	312		309	156	394	303	312	312
309	309		309	157	395	303	312	312
311	311		309	158	396	303	312	312
309	309		309	159	397	303	312	312
312	312		309	160	398	303	312	312
309	309		309	161	399	303	312	312
311	311		309	162	400	303	312	312
309	309		309	163	401	303	312	312
312	312		309	164	402	303	312	312
309	309		309	165	403	303	312	312
311	311		309	166	404	303	312	312
309	309		309	167	405	303	312	312
312	312		309	168	406	303	312	312
309	309		309	169	407	303	312	312
311	311		309	170	408	303	312	312
309	309		309	171	409	303	312	312
312	312		309	172	410	303	312	312
309	309		309	173	411	303	312	312
311	311		309	174	412	303	312	312
309	309		309	175	413	303	312	312
312	312		309	176	414	303	312	312
309	309		309	177	415	303	312	312
311	311		309	178	416	303	312	312
309	309		309	179	417	303	312	312
312	312		309	180	418	303	312	312
309	309		309	181	419	303	312	312
311	311		309	182	420	303	312	312
309	309		309	183	421	303	312	312
312	312		309	184	422	303	312	312
309	309		309	185	423	303	312	312
311	311		309	186	424	303	312	312
309	309		309	187	425	303	312	312
312	312		309	188	426	303	312	312
309	309		309	189	427	303	312	312
311	311		309	190	428	303	312	312
309	309		309	191	429	303	312	312
312	312		309	192	430	303	312	312
309	309		309	193	431	303	312	312
311	311		309	194	432	303	312	312
309	309		309	195	433	303	312	312
312	312		309	196	434	303	312	312
309	309		309	197	435	303	312	312
311	311		309	198	436	303	312	312
309	309		309	199	437	303	312	312
312	312		309	200	438	303	312	312
309	309		309	201	439	303	312	312
311	311		309	202	440	303	312	312
309	309		309	203	441	303	312	312
3								

FICHIER AD134 NO(IT)= 4  
 21/ 3/85 17H15 RS07 M=.8 I=0 R 2-5 ADAPTE 2D AD134  
 DE AD133 4'ITE

MACH DE REFERENCE= .8085 UINF= 231.108 M/S  
 TIV=297.1 K PIV= 1652 MB

MACH PAROIS HAUTE ET BASSE						MACH PAROIS LATER.						FILE RS07	
I	HAUT	BAS	I	HAUT	BAS	I	MACH	I	MACH	I	MACH	*	*
1	.811	.805	*	PRISES DOUBLES	*	HUB. AMONT	33	.813	*	1	.774		
2	.814	.814	*				34	.812	*	2	.797		
3	.812	.812	*	59	.809	.810	*	1	.806	35	.811	*	3
4	.806	.808	*	60	.809	.807	*	2	.804	36	.811	*	4
5	.805	.809	*	61	.804	.800	*	3	.803	37	.810	*	5
6	.811	.813	*					.804	38	.810	*	6	.865
7	.809	.811	*	PRISES LAT. GAUCHE	*		4	.802	39	.810	*	7	.864
8	.807	.804	*					.802	40	.812	*	8	.795
9	.806	.806	*	62	.809	.809	*	5	.802	41	.814	*	9
10	.810	.802	*	63	.808	.813	*	6	.800	42	.812	*	10
11	.805	.805	*	64	.813	.807	*	7	.802	43	.809	*	11
12	.801	.805	*	65	.809	.807	*	8	.802	44	.808	*	12
13	.803	.805	*	66	.815	.806	*	9	.802	45	.807	*	13
14	.805	.809	*	67	.820	.809	*	10	.802			*	14
15	.807	.808	*	68	.832	.809	*	HUB. AVAL	HUB. DROIT	*	15	*	15
16	.808	.802	*	69	.826	.811	*					*	.895
17	.809	.801	*	70	.824	.809	*	1	.808	1	.808	*	.895
18	.811	.803	*	71	.814	.804	*	2	.808	2	.808	*	18
19	.808	.804	*	72	.810	.807	*	3	.807	3	.808	*	.898
20	.807	.808	*	73	.797	.816	*	4	.810	4	.808	*	18
21	.807	.807	*					.807	5	.808	*	21	.881
22	.814	.804	*	PRISES LAT. DROITES	*			.807	6	.808	*	22	.887
23	.819	.801	*					.807	7	.808	*	23	.844
24	.820	.805	*	74	.810	.814	*	8	.808	8	.808	*	.744
25	.821	.809	*	75	.810	.811	*	9	.809	9	.808	*	.779
26	.821	.809	*	76	.807	.803	*	10	.806	10	.808	*	.868
27	.826	.807	*	77	.804	.805	*	11	.806	11	.808	*	.857
28	.826	.810	*	78	.807	.799	*	HUB. GAUCHE		12	.808	*	.847
29	.832	.811	*	79	.806	.799	*			13	.808	*	.881
30	.827	.811	*	80	.814	.805	*			14	.808	*	.843
31	.835	.807	*	81	.827	.802	*	1	.823	15	.808	*	.826
32	.831	.813	*	82	.824	.807	*	2	.823	16	.808	*	.410
33	.837	.813	*	83	.834	.807	*	3	.822	17	.808	*	.523
34	.832	.809	*	84	.844	.810	*	4	.812	18	.808	*	.454
35	.836	.809	*	85	.846	.814	*	5	.813	19	.808	*	.388
36	.834	.810	*	86	.843	.813	*	6	.817	20	.808	*	.266
37	.836	.808	*	87	.842	.810	*	7	.822	21	.808	*	.005
38	.833	.809	*	88	.839	.803	*	8	.825	22	.808	*	.829
39	.835	.809	*	89	.833	.807	*	9	.827	23	.808	*	.858
40	.829	.808	*	90	.825	.808	*	10	.823	24	.808	*	.829
41	.827	.808	*	91	.817	.807	*	11	.821	25	.808	*	.008
42	.828	.807	*	92	.817	.804	*	12	.820	26	.808	*	.000
43	.822	.807	*	93	.807	.805	*	13	.819	27	.808	*	.887
44	.815	.806	*	94	.810	.804	*	14	.818	28	.808	*	.859
45	.815	.804	*	95	.805	.796	*	15	.813	29	.808	*	.927
46	.813	.805	*	96	.795	.793	*	16	.810	30	.808	*	.921
47	.816	.803	*					17	.810	31	.808	*	.912
48	.816	.806	*					18	.811	32	.808	*	.848
49	.815	.806	*					19	.811	33	.808	*	.809
50	.810	.805	*					20	.812	34	.808	*	.830
51	.810	.805	*					21	.813	35	.808	*	
52	.806	.801	*					22	.815	36	.808	*	
53	.809	.807	*					23	.813	37	.808	*	
54	.810	.810	*					24	.813	38	.808	*	
55	.810	.807	*					25	.820	39	.808	*	
56	.805	.803	*					26	.823	40	.808	*	
57	.801	.799	*					27	.827	41	.808	*	
58	.793	.787	*					28	.829	42	.808	*	
								29	.824	43	.808	*	
								30	.816	44	.808	*	
								31	.812	45	.808	*	
								32	.814		.808	*	

PRISES COL

\*\*\*\*\* FICHIER RD135 NO(IT)= 4  
 23/ 8/85 9H30 RS07 M=.7 I=0 R 2-5 ADAPTE 3D RD135  
 DE RD134 4'ITE

MACH DE REFERENCE= .7021 UINF= 231.108 M/S  
 TIV=297.2 K PIV= 1521 MB

	MACH PAROIS HAUTE ET BASSE						MACH PAROIS LATÉR.						FILE AS07		
	I	HAUT	BAS	I	HAUT	BAS	*	I	MACH	I	MACH	*	I	MACH	
1	.703	.700	*	PRISES DOUBLES			*	HUB.	AMONT	33	.704	*	1	.672	
2	.704	.704	*				*			34	.703	*	2	.639	
3	.703	.702	*	59	.700	.701	*			35	.702	*	3	.742	
4	.700	.702	*	60	.703	.700	*			36	.703	*	4	.608	
5	.699	.703	*	61	.702	.701	*			37	.702	*	5	.797	
6	.702	.704	*	PRISES LAT. GAUCHE			*			38	.702	*	6	.762	
7	.701	.702	*	PRISES LAT. GRUCHE			*			39	.702	*	7	.787	
8	.702	.700	*				*			40	.703	*	8	.691	
9	.702	.702	*	62	.701	.703	*			41	.704	*	9	.686	
10	.704	.697	*	63	.701	.704	*			42	.704	*	10	1.088	
11	.702	.697	*	64	.704	.705	*			43	.702	*	11	1.054	
12	.699	.698	*	65	.706	.701	*			44	.701	*	12	.935	
13	.701	.698	*	66	.703	.636	*			45	.700	*	13	.937	
14	.701	.700	*	67	.713	.702	*					*	14	.879	
15	.701	.703	*	68	.710	.701	*	HUB.	AVAL		HUB.	DROIT	*	15	.858
16	.701	.702	*	69	.710	.702	*					*	16	.845	
17	.701	.702	*	70	.715	.702	*			1	.704	*	17	.842	
18	.704	.699	*	71	.707	.700	*			2	.703	*	18	.843	
19	.704	.698	*	72	.703	.702	*			3	.703	*	19	.838	
20	.707	.700	*	73	.635	.705	*			4	.704	*	20	.835	
21	.706	.701	*	PRISES LAT. DROITES			*			5	.702	*	21	.822	
22	.707	.701	*	PRISES LAT. DROITES			*			6	.702	*	22	.815	
23	.707	.700	*				*			7	.702	*	23	.803	
24	.706	.699	*	74	.702	.704	*			8	.702	*	24	.857	
25	.703	.693	*	75	.701	.703	*			9	.703	*	25	.769	
26	.703	.699	*	76	.702	.697	*			10	.702	*	26	.738	
27	.714	.699	*	77	.701	.697	*			11	.702	*	27	.796	
28	.716	.703	*	78	.699	.698	*	HUB.	GRUCHE			*	28	.782	
29	.721	.704	*	79	.703	.635	*			12	.702	*	29	.759	
30	.718	.704	*	80	.712	.599	*			13	.702	*	30	.725	
31	.722	.701	*	81	.712	.701	*			14	.702	*	31	.787	
32	.717	.704	*	82	.711	.638	*			15	.711	*	32	.858	
33	.719	.704	*	83	.719	.638	*			16	.710	*	33	1.136	
34	.714	.701	*	84	.723	.701	*			17	.704	*	34	1.075	
35	.715	.701	*	85	.723	.704	*			18	.705	*	35	.832	
36	.714	.701	*	86	.723	.703	*			19	.707	*	36	.934	
37	.717	.700	*	87	.720	.702	*			20	.710	*	37	.886	
38	.717	.700	*	88	.719	.700	*			21	.712	*	38	.879	
39	.721	.700	*	89	.725	.699	*			22	.713	*	39	.869	
40	.718	.700	*	90	.718	.701	*			23	.711	*	40	.856	
41	.718	.700	*	91	.708	.703	*			24	.710	*	41	.844	
42	.713	.700	*	92	.709	.701	*			25	.709	*	42	.828	
43	.713	.701	*	93	.702	.699	*			26	.708	*	43	.829	
44	.708	.702	*	94	.704	.700	*			27	.708	*	44	.812	
45	.706	.701	*	95	.701	.638	*			28	.704	*	45	.793	
46	.705	.702	*	96	.633	.635	*			29	.703	*	46	.790	
47	.709	.700	*	PRISES COL			*			30	.704	*	47	.781	
48	.709	.701	*				*			31	.705	*	48	.743	
49	.708	.700	*				*			32	.704	*	49	.777	
50	.705	.700	*				*			33	.704	*	50	.729	
51	.704	.701	*				*			34	.702	*			
52	.704	.701	*				*			35	.702	*			
53	.704	.702	*				*			36	.702	*			
54	.703	.700	*				*			37	.702	*			
55	.703	.699	*				*			38	.702	*			
56	.700	.697	*				*			39	.702	*			
57	.697	.696	*				*			40	.712	*			
58	.692	.697	*				*			41	.714	*			
							*			42	.714	*			
							*			43	.707	*			
							*			44	.706	*			
							*			45	.705	*			
							*			46	.702	*			
							*			47	.702	*			
							*			48	.702	*			
							*			49	.702	*			
							*			50	.702	*			

\*\*\*\*\* FICHIER AD136 NO(KIT)= 4  
 32/ 3/85 9H55 AS07 M=6 I=0 R 2-5 ADAPTE 2D AD136  
 DE AD135 4'ITE

MACH DE REFERENCE= .5972 UINF= 231.109 M/S  
 TIV=295.8 K PIV= 1393 MB

	MACH PAROIS HAUTE ET BASSE						MACH PAROIS LATER.						AILE AS07	
I	HAUT	BAS	I	HAUT	BAS	*	I	MACH	I	MACH	*	I	MACH	
1	.598	.596	*	PRISES DOUBLES	*	*	HUB.	AMONT	33	.598	*	1	.583	
3	.598	.599	*	*	*	*			34	.598	*	2	.583	
4	.599	.598	*	59	.597	.597	*		35	.597	*	3	.619	
5	.598	.598	*	60	.598	.597	*		36	.598	*	4	.630	
6	.598	.598	*	61	.596	.596	*		37	.597	*	5	.673	
7	.597	.597	*	PRISES LAT. GAUCHE	*	*			38	.596	*	6	.642	
8	.597	.596	*	*	*	*			39	.596	*	7	.581	
9	.598	.597	*	*	*	*			40	.596	*	8	.584	
10	.598	.594	*	*	*	*			41	.597	*	9	.338	
11	.597	.595	*	*	*	*			42	.597	*	10	.381	
12	.596	.595	*	*	*	*			43	.596	*	11	.385	
13	.597	.595	*	*	*	*			44	.595	*	12	.763	
14	.596	.596	*	*	*	*			45	.595	*	13	.738	
15	.596	.596	*	*	*	*					*	14	.724	
16	.596	.594	*	*	*	*					*	15	.715	
17	.597	.595	*	*	*	*					*	16	.705	
18	.599	.595	*	*	*	*					*	17	.701	
19	.598	.596	*	*	*	*					*	18	.701	
20	.599	.597	*	*	*	*					*	19	.636	
21	.600	.597	*	*	*	*					*	20	.633	
22	.602	.594	*	PRISES LAT. DROITES	*	*					*	21	.633	
23	.603	.593	*	*	*	*					*	22	.580	
24	.602	.595	*	*	74	.599	.599	*			*	23	.671	
25	.603	.596	*	*	75	.597	.597	*			*	24	.559	
26	.602	.595	*	*	75	.597	.594	*			*	25	.573	
27	.605	.596	*	*	77	.596	.594	*			*	26	.624	
28	.605	.598	*	*	78	.596	.592	*			*	27	.670	
29	.608	.598	*	*	79	.597	.592	*			*	28	.564	
30	.606	.598	*	*	80	.604	.595	*			*	29	.635	
31	.606	.598	*	*	81	.605	.594	*			*	30	.519	
32	.606	.599	*	*	82	.609	.596	*			*	31	.595	
33	.607	.599	*	*	83	.612	.598	*			*	32	.310	
34	.605	.597	*	*	84	.613	.599	*			*	33	.939	
35	.606	.597	*	*	85	.610	.598	*			*	34	.797	
36	.606	.598	*	*	86	.609	.598	*			*	35	.753	
37	.607	.596	*	*	87	.609	.598	*			*	36	.740	
38	.606	.596	*	*	88	.609	.598	*			*	37	.733	
39	.610	.595	*	*	89	.614	.593	*			*	38	.121	
40	.609	.595	*	*	90	.608	.595	*			*	39	.721	
41	.608	.595	*	*	91	.604	.596	*			*	40	.711	
42	.609	.595	*	*	92	.602	.595	*			*	41	.703	
43	.607	.596	*	*	93	.597	.595	*			*	42	.693	
44	.604	.596	*	*	94	.598	.594	*			*	43	.630	
45	.603	.596	*	*	95	.595	.595	*			*	44	.633	
46	.602	.597	*	*	96	.593	.593	*			*	45	.666	
47	.602	.596	*	*	*	*	*	*			*	46	.658	
48	.601	.596	*	*	*	*	*	*			*	47	.658	
49	.600	.595	*	*	*	*	*	*			*	48	.633	
50	.598	.595	*	*	*	*	*	*			*	49	.657	
51	.598	.595	*	*	*	*	*	*			*	50	.624	
52	.597	.595	*	*	*	*	*	*			*			
53	.597	.595	*	*	*	*	*	*			*			
54	.597	.595	*	*	*	*	*	*			*			
55	.597	.595	*	*	*	*	*	*			*			
56	.597	.595	*	*	*	*	*	*			*			
57	.597	.595	*	*	*	*	*	*			*			
58	.597	.595	*	*	*	*	*	*			*			
59	.597	.596	*	*	*	*	1.014	.532	*	*	*			
									22	.599	*			
									23	.597	*			
									24	.600	*			
									25	.601	*			
									26	.602	*			
									27	.604	*			
									28	.605	*			
									29	.603	*			
									30	.601	*			
									31	.600	*			
									32	.598	*			

PRISES COL

\*\*\*\*\* FICHIER RD137 NO(IT)= 1  
 23/ 3/85 10H25 AS07 M=.6 I=0(-30'+ROT.30') R 2-5 NON ADAPTE RD137  
 DE RD445 1'ITE PAROIS RECTILIGNES + 30'

MACH DE REFERENCE= .5979 UINF= 231.108 M/S  
 TIV=301.0 K PIV= 1393 MB

	MACH PAROIS HAUTE ET BASSE						MACH PAROIS LATER.						AILE AS07	
I	HAUT	BAS	I	HAUT	BAS	I	MACH	I	MACH	I	MACH	I	MACH	
1	.605	.591	*	PRISES DOUBLES	*	*	HUB. AMONT	33	.605	*	*	1	.574	
2	.594	.595	*	*	*	*		34	.594	*	*	2	.556	
3	.591	.596	*	59	.597	.598		35	.593	*	*	3	.555	
4	.597	.597	*	60	.598	.597		36	.593	*	*	4	.584	
5	.595	.599	*	61	.597	.601		37	.593	*	*	5	.581	
6	.598	.600	*	*	*	*		38	.593	*	*	6	.641	
7	.597	.597	*	PRISES LAT. GAUCHE	*	*		39	.594	*	*	7	.597	
8	.598	.597	*	*	*	*		40	.594	*	*	8	.591	
9	.598	.598	*	*	*	*		41	.594	*	*	9	.598	
10	.595	.595	*	*	*	*		42	.593	*	*	10	.598	
11	.596	.596	*	*	*	*		43	.593	*	*	11	.643	
12	.594	.596	*	*	*	*		44	.592	*	*	12	.593	
13	.595	.595	*	*	*	*		45	.601	*	*	13	.593	
14	.596	.597	*	*	*	*						14	.733	
15	.597	.598	*	*	*	*						15	.733	
16	.598	.598	*	*	*	*						16	.733	
17	.599	.599	*	*	*	*						17	.733	
18	.599	.599	*	*	*	*						18	.733	
19	.599	.599	*	*	*	*						19	.733	
20	.599	.599	*	*	*	*						20	.733	
21	.599	.599	*	*	*	*						21	.591	
22	.597	.598	*	PRISES LAT. DROITES	*	*						22	.591	
23	.616	.599	*	*	*	*						23	.573	
24	.611	.599	*	*	*	*						24	.563	
25	.612	.600	*	*	*	*						25	.563	
26	.612	.600	*	*	*	*						26	.563	
27	.615	.600	*	*	*	*						27	.563	
28	.616	.603	*	*	*	*						28	.563	
29	.616	.603	*	*	*	*						29	.563	
30	.617	.605	*	*	*	*						30	.563	
31	.621	.603	*	*	*	*						31	.593	
32	.618	.606	*	*	*	*						32	.513	
33	.619	.605	*	*	*	*						33	.563	
34	.617	.602	*	*	*	*						34	.563	
35	.619	.602	*	*	*	*						35	.563	
36	.618	.603	*	*	*	*						36	.563	
37	.619	.601	*	*	*	*						37	.563	
38	.619	.601	*	*	*	*						38	.563	
39	.619	.601	*	*	*	*						39	.563	
40	.616	.600	*	*	*	*						40	.563	
41	.616	.601	*	*	*	*						41	.563	
42	.614	.601	*	*	*	*						42	.563	
43	.616	.601	*	*	*	*						43	.563	
44	.611	.604	*	*	*	*						44	.563	
45	.610	.603	*	*	*	*						45	.563	
46	.599	.603	*	*	*	*						46	.563	
47	.599	.601	*	*	*	*						47	.563	
48	.606	.601	*	*	*	*						48	.563	
49	.604	.601	*	*	*	*						49	.563	
50	.601	.602	*	*	*	*						50	.563	
51	.601	.602	*	*	*	*						51	.563	
52	.599	.601	*	*	*	*						52	.563	
53	.597	.602	*	*	*	*						53	.563	
54	.595	.602	*	*	*	*						54	.563	
55	.598	.602	*	*	*	*						55	.563	
56	.587	.602	*	*	*	*						56	.563	
57	.589	.604	*	*	*	*						57	.563	
58	.572	.608	*	*	*	*						58	.563	

PRISES DDL

.665 1.060  
 .594 .950  
 .601 .735  
 .667 .692  
 1.027

21 20 21 20 20  
 22 21 20 21 20  
 23 22 21 20 20  
 24 23 22 21 20  
 25 24 23 22 21  
 26 25 24 23 22  
 27 26 25 24 23  
 28 27 26 25 24  
 29 28 27 26 25  
 30 29 28 27 26  
 31 30 29 28 27  
 32 31 30 29 28

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\*\*\*\*\* FICHIER AD138 NO(ITE)= 1  
22/ 8/85 10H45 RS07 M=.6 I=0(-30'+ROT.30') R 2-5 ADAPTE 3D AD138  
DE RD9137 1' ITE

MACH DE REFERENCE = .5985      UIMF = 231.198 M/S  
TIV=300.6 K      PIV = 1392 MB

FICHIER AD139 N°(IT)= 1  
 23/ 8/85 11H 0 RS07 M=.8 I=0(-30'+ROT.30') R 2-5 NON ADAPTE AD139  
 DE AD445 1'ITE PAROIS RECTILIGNES + 30'

MACH DE REFERENCE= .8043				UINF= 231.108 M/S				TIV=301.2 K				PIV= 1651 MB											
MACH PAROIS HAUTE ET BASSE								MACH PAROIS LATÉR.								AILE AER.							
I	HAUT	BAS	I	HAUT	BAS	I	MACH	I	MACH	I	MACH	I	MACH	I	MACH								
1	.817	.792	*	PRISES DOUBLES		*	HUB. RMONT	33	.834	*	1	.799	*	1	.799								
2	.815	.738	*	*	*	*		34	.833	*	2	.832	*	2	.832								
3	.809	.800	*	59	.799	.805	*	1	.805	35	.826	*	3	.826									
4	.802	.804	*	60	.807	.806	*	2	.805	36	.825	*	4	.825									
5	.798	.808	*	61	.812	.815	*	3	.805	37	.827	*	5	.827									
6	.800	.809	*	*	*	*	*	4	.805	38	.829	*	6	.829									
7	.800	.805	*	PRISES LAT. GRUCHES*		*	5	.803	39	.831	*	7	.831	*	7	.831							
8	.805	.803	*	*	*	*	*	6	.804	40	.833	*	8	.833	*	8	.833						
9	.807	.807	*	62	.804	.803	*	7	.805	41	.835	*	9	.835	*	9	.835						
10	.809	.809	*	63	.799	.809	*	8	.807	42	.832	*	10	.832	*	10	.832						
11	.805	.802	*	64	.813	.813	*	9	.805	43	.830	*	11	.830	*	11	.830						
12	.803	.804	*	65	.819	.819	*	10	.804	44	.829	*	12	.829	*	12	.829						
13	.804	.804	*	66	.835	.817	*	11	.806	45	.827	*	13	.827	*	13	.827						
14	.803	.807	*	67	.851	.832	*	*	*	*	*	*	*	*	*	14	1.026						
15	.804	.809	*	68	.855	.831	*	HUB. AVRL	HUB. DROIT	*	*	*	*	*	*	15	1.025						
16	.805	.803	*	69	.859	.832	*	*	*	*	*	*	*	*	*	16	1.022						
17	.806	.808	*	70	.854	.827	*	1	.817	1	.804	*	17	.804	*	17	.804						
18	.814	.807	*	71	.832	.821	*	2	.817	2	.805	*	18	.805	*	18	.805						
19	.815	.808	*	72	.820	.823	*	3	.818	3	.805	*	19	.805	*	19	.805						
20	.816	.815	*	73	.776	.827	*	4	.823	4	.805	*	20	.805	*	20	.805						
21	.813	.813	*	*	*	*	*	5	.829	5	.804	*	21	.804	*	21	.804						
22	.826	.813	*	PRISES LAT. DROITES*		*	*	6	.819	6	.804	*	22	.804	*	22	.804						
23	.833	.815	*	*	*	*	*	7	.817	7	.804	*	23	.804	*	23	.804						
24	.836	.817	*	74	.806	.805	*	8	.818	8	.805	*	24	.805	*	24	.805						
25	.841	.820	*	75	.800	.806	*	9	.821	9	.805	*	25	.805	*	25	.805						
26	.844	.821	*	76	.806	.802	*	10	.826	10	.805	*	26	.805	*	26	.805						
27	.852	.822	*	77	.804	.803	*	11	.820	11	.805	*	27	.805	*	27	.805						
28	.855	.830	*	78	.806	.804	*	*	*	*	*	*	*	*	*	28	.805						
29	.865	.834	*	79	.812	.801	*	HUB. GRUCHE	13	.804	*	29	.804	*	29	.804							
30	.862	.835	*	80	.826	.815	*	*	*	*	*	*	*	*	*	30	.804						
31	.872	.831	*	81	.840	.816	*	1	.854	15	.805	*	31	.805	*	31	.805						
32	.867	.837	*	82	.842	.817	*	2	.852	16	.805	*	32	.805	*	32	.805						
33	.872	.837	*	83	.850	.823	*	3	.851	17	.805	*	33	.805	*	33	.805						
34	.866	.830	*	84	.873	.834	*	4	.839	18	.804	*	34	.804	*	34	.804						
35	.871	.831	*	85	.863	.839	*	5	.833	19	.804	*	35	.804	*	35	.804						
36	.869	.830	*	86	.879	.838	*	*	*	*	*	*	*	*	*	36	.804						
37	.870	.829	*	87	.875	.833	*	6	.843	21	.804	*	37	.804	*	37	.804						
38	.865	.826	*	88	.872	.838	*	7	.856	22	.804	*	38	.804	*	38	.804						
39	.866	.825	*	89	.869	.825	*	8	.856	23	.804	*	39	.804	*	39	.804						
40	.860	.825	*	90	.853	.825	*	10	.847	24	.805	*	40	.805	*	40	.805						
41	.857	.825	*	91	.841	.823	*	11	.847	25	.804	*	41	.804	*	41	.804						
42	.857	.825	*	92	.834	.823	*	12	.846	26	.805	*	42	.805	*	42	.805						
43	.848	.823	*	93	.818	.818	*	13	.843	27	.805	*	43	.805	*	43	.805						
44	.839	.823	*	94	.819	.818	*	14	.841	28	.804	*	44	.804	*	44	.804						
45	.837	.821	*	95	.809	.839	*	15	.835	29	.804	*	45	.804	*	45	.804						
46	.834	.823	*	96	.775	.838	*	16	.825	30	.804	*	46	.804	*	46	.804						
47	.833	.821	*	*	*	*	*	17	.826	31	.804	*	47	.804	*	47	.804						
48	.830	.823	*	*	*	*	*	18	.828	32	.804	*	48	.804	*	48	.804						
49	.825	.821	*	*	*	*	*	19	.829	33	.804	*	49	.804	*	49	.804						
50	.830	.821	*	*	*	*	*	20	.831	34	.804	*	50	.804	*	50	.804						
51	.819	.820	*	*	*	*	*	21	.834	35	.804	*	51	.804	*	51	.804						
52	.815	.815	*	PRISES COL		*	*	22	.836	36	.804	*	52	.804	*	52	.804						
53	.814	.819	*	*	*	*	*	23	.835	37	.804	*	53	.804	*	53	.804						
54	.813	.821	*	*	869	1.821	*	24	.842	38	.804	*	54	.804	*	54	.804						
55	.810	.822	*	*	868	.878	*	25	.845	39	.804	*	55	.804	*	55	.804						
56	.801	.823	*	*	849	.881	*	26	.848	40	.805	*	56	.805	*	56	.805						
57	.736	.835	*	*	892	.819	*	27	.853	41	.804	*	57	.804	*	57	.804						
58	.761	.852	*	1.150	.779	*	*	28	.854	42	.805	*	58	.805	*	58	.805						
			*	*	*	*	*	29	.848	43	.804	*		*	*								
			*	*	*	*	*	30	.835	44	.804	*		*	*								
			*	*	*	*	*	31	.831	45	.804	*		*	*								
			*	*	*	*	*	32	.836			*		*	*								







\*\*\*\*\* FICHIER AD143 NO(IT)= 1  
 22/ 8/85 14H40 AG07 M=.6 I=-2 R 2-5 ADAPTE 3D AD143  
 DE AD9142 1'ITE.

MACH DE REFERENCE= .5982 UINF= 231.103 M/S  
 TIV=301.5 K PIV= 1391 MB

MACH PAROIS HAUTE ET BASSE						MACH PAROIS LATÉR.						FILE AG07		
I	HAUT	BAS	I	HAUT	BAS	I	MACH	I	MACH	I	MACH	I	MACH	
1	.599	.597	*	PRISES DOUBLES	*	*	HUB. AMONT	33	.601	*	1	.575		
2	.599	.600	*	*	*	*		34	.601	*	2	.592		
3	.598	.599	*	59	.599	.599	*	1	.597	35	.601	*	3	.598
4	.596	.598	*	60	.599	.599	*	2	.596	36	.601	*	4	.599
5	.595	.598	*	61	.602	.600	*	3	.596	37	.601	*	5	.600
6	.598	.600	*	*	*	*	*	4	.596	38	.601	*	6	.599
7	.598	.599	*	PRISES LAT. GAUCHE3*	*	5	.596	39	.601	*	7	.579		
8	.599	.598	*	*	*	*	*	6	.596	40	.602	*	8	.596
9	.599	.599	*	62	.598	.598	*	7	.595	41	.603	*	9	.513
10	.599	.596	*	63	.600	.601	*	8	.595	42	.602	*	10	.546
11	.597	.596	*	64	.601	.601	*	9	.596	43	.601	*	11	.532
12	.595	.597	*	65	.599	.600	*	10	.595	44	.600	*	12	.518
13	.596	.597	*	66	.599	.598	*	11	.596	45	.600	*	13	.597
14	.597	.599	*	67	.605	.602	*	*	*	*	*	*	14	.536
15	.597	.599	*	68	.602	.601	*	HUB. AVANT	HUB. DROIT	*	*	*	15	.631
16	.598	.598	*	69	.602	.603	*	*	*	*	*	*	16	.575
17	.599	.599	*	70	.605	.601	*	1	.603	1	.599	*	17	.575
18	.601	.599	*	71	.602	.599	*	2	.602	2	.598	*	18	.573
19	.599	.600	*	72	.602	.602	*	3	.601	3	.598	*	19	.575
20	.599	.601	*	73	.600	.605	*	4	.601	4	.598	*	20	.579
21	.598	.601	*	*	*	*	*	5	.600	5	.599	*	21	.574
22	.601	.599	*	PRISES LAT. DROITE3*	*	6	.601	6	.599	*	22	.575		
23	.600	.597	*	*	*	*	*	7	.601	7	.599	*	23	.570
24	.598	.598	*	74	.597	.600	*	8	.603	8	.599	*	24	.563
25	.600	.601	*	75	.597	.599	*	9	.601	9	.598	*	25	.562
26	.600	.600	*	76	.598	.596	*	10	.600	10	.598	*	26	.534
27	.603	.601	*	77	.597	.597	*	11	.599	11	.598	*	27	.693
28	.605	.603	*	78	.597	.595	*	*	*	12	.599	*	28	.703
29	.607	.604	*	79	.598	.597	*	HUB. GAUCHE	13	.599	*	29	.536	
30	.606	.603	*	80	.601	.600	*	*	14	.599	*	30	.535	
31	.607	.601	*	81	.603	.600	*	1	.604	15	.533	*	31	.734
32	.606	.604	*	82	.600	.602	*	2	.602	16	.598	*	32	.511
33	.606	.605	*	83	.605	.605	*	3	.602	17	.598	*	33	.516
34	.604	.603	*	84	.612	.606	*	4	.599	18	.598	*	34	.639
35	.604	.603	*	85	.612	.606	*	5	.599	19	.598	*	35	.673
36	.603	.603	*	86	.608	.605	*	6	.601	20	.598	*	36	.673
37	.605	.602	*	87	.606	.605	*	7	.603	21	.598	*	37	.620
38	.606	.602	*	88	.607	.603	*	8	.603	22	.598	*	38	.582
39	.609	.602	*	89	.613	.602	*	9	.604	23	.598	*	39	.682
40	.607	.602	*	90	.608	.601	*	10	.603	24	.598	*	40	.673
41	.607	.602	*	91	.601	.600	*	11	.602	25	.599	*	41	.575
42	.608	.601	*	92	.604	.599	*	12	.603	26	.598	*	42	.577
43	.604	.599	*	93	.599	.599	*	13	.602	27	.599	*	43	.577
44	.600	.599	*	94	.602	.601	*	14	.602	28	.599	*	44	.673
45	.601	.599	*	95	.602	.593	*	15	.601	29	.598	*	45	.666
46	.601	.600	*	96	.598	.591	*	16	.600	30	.599	*	46	.663
47	.604	.599	*	*	*	*	*	17	.600	31	.598	*	47	.556
48	.603	.601	*	*	*	*	*	18	.600	32	.598	*	48	.542
49	.602	.600	*	*	*	*	*	19	.600	33	.598	*	49	.560
50	.600	.601	*	*	*	*	*	20	.600	34	.598	*	50	.534
51	.602	.601	*	*	*	*	*	21	.600	35	.598	*	*	
52	.603	.600	*	*	*	*	*	22	.600	36	.598	*	*	
53	.603	.601	*	*	*	*	*	23	.598	37	.598	*	*	
54	.603	.601	*	*	663	1.059	*	24	.602	38	.598	*	*	
55	.603	.599	*	*	.591	.917	*	25	.603	39	.598	*	*	
56	.602	.597	*	*	.793	.796	*	26	.604	40	.598	*	*	
57	.601	.595	*	*	.865	.692	*	27	.606	41	.598	*	*	
58	.599	.599	*	*	1.023	.631	*	28	.607	42	.598	*	*	
59	.	.	*	*	*	*	*	29	.606	43	.598	*	*	
	*	*	*	*	*	*	*	30	.604	44	.598	*	*	
	*	*	*	*	*	*	*	31	.602	45	.598	*	*	
	*	*	*	*	*	*	*	32	.601	*	*	*	*	

\*\*\*\*\* FICHIER AD144 NO(CIT)= 4  
 22/ 3/85 15H10 AS07 M=.6 I=-2 R 2-3 ADAPTE 2D AD144  
 DE AD136 1'ITE.

MACH DE REFERENCE= .5964 UINF= 231.108 M/S  
 TIV=296.8 K PIV= 1392 MB

MACH PAROIS HAUTE ET BASSE						MACH PAROIS LATER.						AILE AS07	
I	HAUT	BAS	I	HAUT	BAS	I	MACH	I	MACH	I	MACH	*	*
1	.598	.595	*	PRISES DOUBLES	*	HUB. AMONT	.33	.599	*	1	.575	*	*
2	.598	.599	*				.34	.599	*	2	.591	*	*
3	.597	.598	*	59	.596	.597	*	1	.596	.35	.599	*	*
4	.596	.598	*	60	.597	.597	*	2	.596	.36	.599	*	*
5	.596	.599	*	61	.596	.595	*	3	.596	.37	.599	*	*
6	.598	.600	*				.597	.38	.599	.39	.599	*	*
7	.596	.597	*	PRISES LAT. GAUCHE	*	*	4	.596	.39	.599	*	*	*
8	.597	.596	*				.595	.40	.600	*	*	3	.681
9	.597	.597	*	62	.597	.598	*	5	.595	.41	.600	*	*
10	.598	.594	*	63	.599	.599	*	6	.594	.42	.600	*	*
11	.597	.595	*	64	.599	.600	*	7	.595	.43	.598	*	11
12	.595	.596	*	65	.596	.595	*	8	.596	.44	.598	*	12
13	.596	.595	*	66	.599	.597	*	9	.596	.45	.597	*	13
14	.596	.597	*	67	.600	.599	*	10	.596	.46	.597	*	14
15	.595	.597	*	68	.599	.598	*		HUB. AVAL		HUB. DROIT	*	15
16	.595	.596	*	69	.601	.599	*					*	16
17	.596	.597	*	70	.602	.598	*	1	.598	1	.597	*	17
18	.599	.596	*	71	.599	.596	*	2	.598	2	.597	*	18
19	.597	.595	*	72	.597	.597	*	3	.598	3	.597	*	19
20	.597	.596	*	73	.589	.598	*	4	.598	4	.597	*	20
21	.595	.596	*									*	21
22	.599	.595	*	PRISES LAT. DROITES	*	*	5	.598	5	.597	*	*	22
23	.600	.596	*				6	.598	6	.597	*	*	23
24	.600	.597	*	74	.597	.599	*	7	.599	7	.597	*	24
25	.601	.600	*	75	.597	.597	*	8	.598	8	.597	*	25
26	.600	.599	*	76	.597	.594	*	9	.598	9	.597	*	26
27	.601	.600	*	77	.595	.595	*	10	.597	10	.597	*	27
28	.602	.601	*	78	.595	.595	*	11	.597	11	.597	*	28
29	.603	.592	*	79	.595	.593	*		HUB. GAUCHE	12	.597	*	29
30	.601	.601	*	80	.600	.595	*			13	.597	*	30
31	.604	.599	*	81	.603	.598	*	1	.600	14	.597	*	31
32	.602	.601	*	82	.602	.601	*	2	.600	15	.597	*	32
33	.603	.602	*	83	.604	.601	*	3	.600	16	.597	*	33
34	.601	.599	*	84	.606	.602	*	4	.598	17	.597	*	34
35	.603	.600	*	85	.607	.604	*	5	.597	18	.597	*	35
36	.601	.600	*	86	.606	.603	*	6	.599	19	.597	*	36
37	.603	.600	*	87	.605	.602	*	7	.600	20	.597	*	37
38	.602	.599	*	88	.605	.600	*	8	.600	21	.597	*	38
39	.605	.599	*	89	.609	.599	*	9	.601	22	.597	*	39
40	.603	.599	*	90	.604	.600	*	10	.600	23	.597	*	40
41	.602	.599	*	91	.600	.598	*	11	.599	24	.597	*	41
42	.604	.598	*	92	.600	.596	*	12	.599	25	.597	*	42
43	.601	.598	*	93	.596	.595	*	13	.599	26	.597	*	43
44	.600	.597	*	94	.599	.596	*	14	.599	27	.597	*	44
45	.598	.596	*	95	.594	.590	*	15	.599	28	.597	*	45
46	.598	.597	*	96	.587	.588	*	16	.598	29	.597	*	46
47	.600	.595	*				*	17	.597	30	.597	*	47
48	.600	.596	*				*	18	.597	31	.597	*	48
49	.599	.596	*				*	19	.597	32	.597	*	49
50	.596	.596	*				*	20	.598	33	.597	*	50
51	.598	.596	*				*	21	.598	34	.597	*	
52	.597	.595	*				*	22	.599	35	.597	*	
53	.597	.596	*				*	23	.597	36	.597	*	
54	.596	.596	*		.658	1.053	*	24	.599	37	.597	*	
55	.596	.594	*		.635	.925	*	25	.600	38	.597	*	
56	.593	.592	*		.794	.881	*	26	.601	39	.597	*	
57	.590	.590	*		.861	.633	*	27	.602	40	.597	*	
58	.587	.588	*		1.019	.632	*	28	.603	41	.597	*	
					*	*	*	29	.602	42	.597	*	
					*	*	*	30	.600	43	.597	*	
					*	*	*	31	.599	44	.597	*	
					*	*	*	32	.599	45	.597	*	
					*	*	*					*	

FICHIER AD145 NO(IT)= 4  
 22/ 8/85 17H15 RS07 M=.5 I=+2 R 2-5 ADAPTE 2D AD145  
 DE AD131 4'ITE.

MACH DE REFERENCE= .5959 UINF= 231.109 M/S  
 TIV=297.1 K PIV= 1391 MB

MACH PAROIS HAUTE ET BASSE						MACH PAROIS LATÉR.						AILE RS07		
I	HAUT	BAS	I	HAUT	BAS	*	I	MACH	I	MACH	*	I	MACH	
1	.598	.593	*	PRISES DOUBLES		*	HUB. AMONT	33	.597	*	1	.582		
2	.599	.597	*			*		34	.596	*	2	.571		
3	.598	.596	*	59	.596	.596	*	35	.595	*	3	.519		
4	.596	.596	*	60	.598	.596	*	36	.596	*	4	.556		
5	.595	.597	*	61	.597	.595	*	37	.595	*	5	.546		
6	.598	.598	*			*		38	.595	*	6	.521		
7	.597	.596	*	PRISES LAT. GAUCHE*		*		39	.594	*	7	.544		
8	.597	.595	*			*		40	.594	*	8	.439		
9	.597	.596	*	62	.596	.596	*	41	.594	*	9	.384		
10	.598	.593	*	63	.599	.598	*	42	.594	*	10	1.093		
11	.596	.594	*	64	.600	.597	*	43	.594	*	11	.896		
12	.594	.594	*	65	.599	.594	*	44	.592	*	12	.839		
13	.596	.593	*	66	.602	.593	*	45	.593	*	13	.793		
14	.594	.594	*	67	.603	.595	*			*	14	.753		
15	.596	.595	*	68	.603	.594	*	HUB. AVAL	HUB. DROIT	*	15	.753		
16	.597	.594	*	69	.605	.595	*			*	16	.738		
17	.598	.594	*	70	.606	.593	*	1	.598	1	17	.729		
18	.600	.593	*	71	.600	.592	*	2	.597	2	18	.724		
19	.599	.592	*	72	.598	.596	*	3	.598	3	19	.713		
20	.600	.594	*	73	.589	.598	*	4	.598	4	20	.703		
21	.599	.593	*			*		5	.597	*	21	.699		
22	.601	.591	*	PRISES LAT. DROITES*		*		6	.598	6	22	.686		
23	.603	.589	*			*		7	.598	7	23	.675		
24	.604	.591	*	74	.597	.598	*	8	.599	8	24	.532		
25	.602	.592	*	75	.597	.596	*	9	.598	9	25	.567		
26	.605	.592	*	76	.597	.593	*	10	.597	10	26	.615		
27	.609	.591	*	77	.595	.592	*	11	.597	11	27	.645		
28	.608	.593	*	78	.595	.591	*			*	28	.629		
29	.611	.592	*	79	.598	.588	*	HUB. GRUCHE	13	.596	*	29	.583	
30	.608	.593	*	80	.606	.590	*		14	.596	*	30	.513	
31	.612	.589	*	81	.609	.588	*	1	.605	15	.596	*	31	.439
32	.608	.592	*	82	.612	.589	*	2	.604	16	.596	*	32	.349
33	.611	.592	*	83	.614	.590	*	3	.605	17	.596	*	33	1.079
34	.608	.591	*	84	.613	.590	*	4	.600	18	.596	*	34	1.312
35	.610	.590	*	85	.613	.592	*	5	.600	19	.596	*	35	.934
36	.609	.592	*	86	.616	.591	*	6	.602	20	.596	*	36	.839
37	.611	.590	*	87	.614	.591	*	7	.604	21	.596	*	37	.801
38	.610	.591	*	88	.613	.590	*	8	.606	22	.597	*	38	.732
39	.613	.591	*	89	.617	.591	*	9	.607	23	.597	*	39	.755
40	.610	.591	*	90	.610	.592	*	10	.606	24	.596	*	40	.742
41	.610	.591	*	91	.604	.593	*	11	.604	25	.597	*	41	.735
42	.610	.591	*	92	.602	.593	*	12	.603	26	.596	*	42	.731
43	.607	.592	*	93	.597	.593	*	13	.602	27	.596	*	43	.688
44	.604	.593	*	94	.598	.594	*	14	.601	28	.597	*	44	.671
45	.603	.592	*	95	.596	.589	*	15	.598	29	.597	*	45	.671
46	.601	.592	*	96	.587	.588	*	16	.597	30	.597	*	46	.661
47	.593	.592	*			*		17	.597	31	.597	*	47	.568
48	.602	.592	*			*		18	.597	32	.597	*	48	.533
49	.601	.593	*			*		19	.598	33	.597	*	49	.551
50	.599	.595	*			*		20	.598	34	.597	*	50	.531
51	.599	.595	*			*		21	.599	35	.597	*		
52	.599	.594	*			*		22	.600	36	.596	*		
53	.599	.595	*			*		23	.598	37	.596	*		
54	.599	.595	*			*		24	.601	38	.596	*		
55	.598	.593	*			*		25	.602	39	.596	*		
56	.594	.592	*			*		26	.603	40	.596	*		
57	.591	.591	*			*		27	.605	41	.596	*		
58	.595	.598	*			*		28	.606	42	.596	*		
						*		29	.605	43	.596	*		
						*		30	.603	44	.596	*		
						*		31	.601	45	.596	*		
						*		32	.599			*		

PRISES COL

FICHIER AD146 NO(CIT)= 4  
 23/ 8/85 9H50 RS07 M=.6 I=+2 R 1-4 ADAPTE 2D AD146  
 DE AD145 4'ITE.

MACH DE REFERENCE= .5936 UINF= 231.198 M/S  
 TIV=297.0 K PIV= 1393 MB

	MACH PAROIS HAUTE ET BASSE						MACH PAROIS LATER.						FILE RS07	
I	HAUT	BAS	I	HAUT	BAS	*	I	MACH	I	MACH	*	I	MACH	
1	.595	.591	+ PRISES DOUBLES			*	HUB. AMONT	33	.594		*	1	.573	
2	.596	.595	+ *			*		34	.593		*	2	.579	
3	.595	.593	+ 59	.593	.593	*		35	.592		*	3	.588	
4	.593	.592	+ 60	.596	.594	*		36	.593		*	4	.587	
5	.592	.593	+ 51	.595	.590	*		37	.593		*	5	.519	
6	.594	.594	+ *			*		38	.593		*	6	.571	
7	.594	.593	+ PRISES LAT. GAUCHE			*		39	.592		*	7	.486	
8	.594	.594	+ *			*		40	.591		*	8	.328	
9	.595	.591	+ *			*		41	.592		*	9	1.818	
10	.593	.591	+ *			*		42	.593		*	10	.398	
11	.595	.591	+ *			*		43	.591		*	11	.739	
12	.593	.591	+ *			*		44	.590		*	12	.762	
13	.595	.591	+ *			*		45	.590		*	13	.735	
14	.594	.592	+ *			*							.709	
15	.594	.593	+ *			*							.700	
16	.595	.591	+ *			*							.697	
17	.594	.591	+ *			*							.692	
18	.595	.591	+ *			*							.689	
19	.597	.591	+ *			*							.679	
20	.597	.591	+ *			*							.671	
21	.597	.592	+ *			*							.659	
22	.599	.591	+ PRISES LAT. DROITES			*							.652	
23	.601	.589	+ *			*							.657	
24	.601	.588	+ *			*							.601	
25	.604	.588	+ *			*							.636	
26	.603	.588	+ *			*							.631	
27	.607	.587	+ *			*							.623	
28	.609	.589	+ *			*							.623	
29	.611	.589	+ *			*							.574	
30	.608	.588	+ *			*							.536	
31	.608	.588	+ *			*							.482	
32	.608	.588	+ *			*							.374	
33	.609	.588	+ *			*							1.213	
34	.605	.588	+ *			*							.383	
35	.607	.588	+ *			*							.350	
36	.605	.588	+ *			*							.308	
37	.607	.587	+ *			*							.789	
38	.606	.587	+ *			*							.715	
39	.607	.587	+ *			*							.714	
40	.607	.587	+ *			*							.714	
41	.607	.587	+ *			*							.714	
42	.607	.588	+ *			*							.712	
43	.604	.588	+ *			*							.693	
44	.608	.588	+ *			*							.694	
45	.608	.589	+ *			*							.694	
46	.608	.591	+ *			*							.694	
47	.608	.591	+ *			*							.694	
48	.608	.592	+ *			*							.694	
49	.599	.593	+ *			*							.681	
50	.595	.592	+ *			*							.625	
51	.596	.591	+ *			*								
52	.595	.591	+ *			*								
53	.596	.591	+ *			*								
54	.595	.591	+ *			*								
55	.596	.591	+ *			*								
56	.595	.591	+ *			*								
57	.596	.591	+ *			*								
58	.595	.591	+ *			*								
59	.596	.591	+ *			*								
60	.595	.591	+ *			*								
61	.596	.591	+ *			*								
62	.595	.591	+ *			*								
63	.596	.591	+ *			*								
64	.595	.591	+ *			*								
65	.596	.591	+ *			*								
66	.595	.591	+ *			*								
67	.596	.591	+ *			*								
68	.595	.591	+ *			*								
69	.596	.591	+ *			*								
70	.595	.591	+ *			*								
71	.596	.591	+ *			*								
72	.595	.591	+ *			*								
73	.596	.591	+ *			*								
74	.595	.591	+ *			*								
75	.596	.591	+ *			*								
76	.595	.591	+ *			*								
77	.596	.591	+ *			*								
78	.595	.591	+ *			*								
79	.596	.591	+ *			*								
80	.595	.591	+ *			*								
81	.596	.591	+ *			*								
82	.595	.591	+ *			*								
83	.596	.591	+ *			*								
84	.595	.591	+ *			*								
85	.596	.591	+ *			*								
86	.595	.591	+ *			*								
87	.596	.591	+ *			*								
88	.595	.591	+ *			*								
89	.596	.591	+ *			*								
90	.595	.591	+ *			*								
91	.596	.591	+ *			*								
92	.595	.591	+ *			*								
93	.596	.591	+ *			*								
94	.595	.591	+ *			*								
95	.596	.591	+ *			*								
96	.595	.591	+ *			*								
97	.596	.591	+ *			*								
98	.595	.591	+ *			*								
99	.596	.591	+ *			*								
100	.595	.591	+ *			*								
101	.596	.591	+ *			*								
102	.595	.591	+ *			*								
103	.596	.591	+ *			*								
104	.595	.591	+ *			*								
105	.596	.591	+ *			*								
106	.595	.591	+ *			*								
107	.596	.591	+ *			*								
108	.595	.591	+ *			*								
109	.596	.591	+ *			*								
110	.595	.591	+ *			*								
111	.596	.591	+ *			*								
112	.595	.591	+ *			*								
113	.596	.591	+ *			*								
114	.595	.591	+ *			*								
115	.596	.591	+ *			*								
116	.595	.591	+ *			*								
117	.596	.591	+ *			*								
118	.595	.591	+ *			*								
119	.596	.591	+ *			*								
120	.595	.591	+ *			*								
121	.596	.591	+ *			*								
122	.595	.591	+ *			*								
123	.596	.591	+ *			*								
124	.595	.591	+ *			*								
125	.596	.591	+ *			*								
126	.595	.591	+ *			*								
127	.596	.591	+ *			*								
128	.595	.591	+ *			*								
129	.596	.591	+ *			*								
130	.595	.591	+ *			*								
131	.596	.591	+ *			*								
132	.595	.591	+ *			*								
133	.596	.591	+ *			*								
134	.595	.591	+ *			*								
135	.596	.591	+ *			*								
136	.595	.591	+ *			*								
137	.596	.591	+ *			*								
138	.595	.591	+ *			*								
139	.596	.591	+ *			*								
140	.595	.591	+ *			*								
141	.596	.591	+ *			*								
14														

\*\*\*\*\* FICHIER AD147 NO(IT)= 1  
 23/ 3/35 10H25 AS07 M=.5 I=+2(+1.3+ROT.30°) R 1-4 NON ADAPTE AD147  
 DE AD445 1'ITE PAROIS RECTILIGNES + 30'

MACH DE REFERENCE= .5931 UINF= 331.108 M/S  
 TIW=301.2 K PIV= 1393 MB

MACH PAROIS HAUTE ET BASSE								MACH PAROIS LATÉR.								AILE AS07	
I	HAUT	BAS	I	HAUT	BAS	I	MACH	I	MACH	I	MACH	I	MACH	I	MACH	I	MACH
1	.601	.587	*	PRISES DOUBLES		*	HUB. AMONT	33	.580	*	*	1	.588				
2	.590	*				*		34	.598	*	*	2	.583				
3	.596	.591	*	59	.593	.593	*	1	.595	35	.597	*	3	.581			
4	.593	.593	*	60	.594	.593	*	2	.594	36	.598	*	4	.583			
5	.591	.594	*	61	.592	.597	*	3	.595	37	.597	*	5	.585			
6	.593	.595	*				*	4	.594	38	.596	*	6	.587			
7	.593	.593	*	PRISES LAT. GAUCHE		*		5	.593	39	.595	*	7	.589			
8	.594	.592	*			*		6	.593	40	.595	*	8	.590			
9	.594	.594	*	62	.594	.592	*	7	.594	41	.596	*	9	.591			
10	.594	.590	*	63	.595	.595	*	8	.594	42	.597	*	10	.591			
11	.591	.591	*	64	.598	.593	*	9	.593	43	.594	*	11	.591			
12	.590	.591	*	65	.599	.593	*	10	.593	44	.593	*	12	.593			
13	.591	.591	*	66	.608	.595	*	11	.593	45	.592	*	13	.595			
14	.592	.592	*	67	.612	.594	*					*	14	.591			
15	.593	.593	*	68	.614	.594	*	HUB. AVAL		HUB. DROIT	*	*	15	.593			
16	.594	.592	*	69	.614	.595	*					*	16	.593			
17	.596	.593	*	70	.613	.594	*	1	.597			*	17	.594			
18	.599	.594	*	71	.604	.595	*	2	.597			*	18	.595			
19	.599	.594	*	72	.598	.593	*	3	.598			*	19	.595			
20	.598	.594	*	73	.574	.600	*	4	.600			*	20	.591			
21	.601	.593	*				*	5	.598			*	21	.591			
22	.605	.592	*	PRISES LAT. DROITES		*		6	.599			*	22	.593			
23	.608	.590	*			*		7	.598			*	23	.592			
24	.609	.593	*	74	.595	.594	*	8	.599			*	24	.593			
25	.613	.593	*	75	.592	.592	*	9	.600			*	25	.593			
26	.612	.593	*	76	.593	.591	*	10	.599			*	26	.591			
27	.591	*	77	.591	.590	*	11	.599			*	27	.591				
28	.617	.592	*	78	.595	.590	*	HUB. GAUCHE			*	28	.594				
29	.620	.590	*	79	.598	.589	*				*	29	.594				
30	.619	.591	*	80	.606	.589	*	1	.613			*	30	.594			
31	.623	.588	*	81	.613	.588	*	2	.611			*	31	.594			
32	.619	.591	*	82	.516	.590	*	3	.611			*	32	.592			
33	.621	.590	*	83	.622	.590	*	4	.604			*	33	.593			
34	.618	.590	*	84	.626	.583	*	5	.605			*	34	.593			
35	.620	.590	*	85	.623	.589	*	6	.608			*	35	.593			
36	.619	.592	*	86	.625	.590	*	7	.616			*	36	.593			
37	.621	.591	*	87	.624	.592	*	8	.612			*	37	.593			
38	.618	.591	*	88	.623	.590	*	9	.613			*	38	.593			
39	.620	.591	*	89	.624	.590	*	10	.610			*	39	.593			
40	.617	.590	*	90	.617	.593	*	11	.610			*	40	.591			
41	.617	.591	*	91	.619	.595	*	12	.611			*	41	.591			
42	.616	.592	*	92	.605	.595	*	13	.609			*	42	.593			
43	.613	.593	*	93	.593	.595	*	14	.608			*	43	.594			
44	.610	.595	*	94	.597	.596	*	15	.606			*	44	.593			
45	.609	.596	*	95	.589	.601	*	16	.601			*	45	.593			
46	.607	.596	*	96	.573	.593	*	17	.599			*	46	.593			
47	.607	.595	*				*	18	.600			*	47	.593			
48	.605	.596	*				*	19	.600			*	48	.594			
49	.602	.596	*				*	20	.601			*	49	.593			
50	.598	.597	*				*	21	.602			*	50	.591			
51	.597	.597	*				*	22	.603			*					
52	.593	.597	*				*	23	.601			*					
53	.592	.598	*				*	24	.604			*					
54	.590	.598	*				*	25	.606			*					
55	.587	.598	*				*	26	.607			*					
56	.584	.598	*				*	27	.609			*					
57	.579	.601	*				*	28	.609			*					
58	.570	.605	*				*	29	.608			*					
							*	30	.606			*					
							*	31	.604			*					
							*	32	.602			*					

\*\*\*\*\* FICHIER AD148 NO(IT)= 1  
23/ 8/85 10H40 AS07 M=.6 I=+2(1.5+ROT.30') R 1-4 ADAPTE 3D AD148  
DE AD9122 1'ITE.

MACH DE REFERENCE= .5936 UINF= 231.109 M/S  
TIV=300.6 K PIV= 1392 MB

140



\*\*\*\*\* FICHIER AD151 NO(ITE)= 1  
23/ 8/85 11H40 RS07 M=.6 I=0 R 1-4 ADAPTE SD AD151  
DE AD9107 1'ITE, .

MACH DE REFERENCE= .5943      UINR= 231.108 M/S  
TIV=300.0 K      PIV= 1391 MB

FICHIER AD152 NO(IT)= 4  
 23/ 8/85 11H55 AS07 M=.8 I=0 R 1-4 ADAPTE 2D AD152  
 DE AD134 4'ITE.

MACH DE REFERENCE=.8022 UINF= 231.108 M/S  
 TIV=295.3 K PIV= 1632 MB

MACH PAROIS HAUTE ET BASSE \* MACH PAROIS LATÉR. + AILE AS07

I	HAUT	BAS	I	HAUT	BAS	*	I	MACH	I	MACH	*	I	MACH		
PRISES DOUBLES															
1	.804	.800	*			*		HUB. AMONT	32	.807	*	1	.794		
2	.804	.806	*			*			34	.805	*	2	.808		
3	.803	.802	*	53	.803	.802	*	1	.797	35	.805	*	3	.808	
4	.799	.801	*	60	.805	.803	*	2	.796	36	.804	*	4	.844	
5	.800	.802	*	61	.799	.798	*	3	.798	37	.804	*	5	.803	
6	.804	.805	*			*			38	.804	*	6	.829		
7	.803	.802	*			*			39	.804	*	7	.752		
8	.805	.801	*			*			40	.805	*	8	.741		
9	.805	.804	*	62	.801	.801	*			41	.808	*	9	.834	
10	.806	.798	*	63	.796	.807	*	8	.795	42	.807	*	10	.871	
11	.801	.799	*	64	.806	.804	*	9	.796	43	.803	*	11	.813	
12	.796	.799	*	65	.803	.801	*	10	.796	44	.803	*	12	.878	
13	.798	.799	*	66	.810	.800	*	11	.797	45	.801	*	13	.818	
14	.797	.801	*	67	.814	.804	*					*	14	.878	
15	.799	.802	*	68	.816	.802	*					*	15	.863	
16	.799	.799	*	69	.828	.805	*					*	16	.858	
17	.802	.798	*	70	.813	.804	*	1	.802	1	.802	*	17	.951	
18	.806	.797	*	71	.808	.793	*	2	.802	2	.802	*	18	.858	
19	.804	.798	*	72	.805	.803	*	3	.801	3	.802	*	19	.955	
20	.802	.802	*	73	.800	.807	*	4	.804	4	.802	*	20	.954	
21	.801	.801	*						5	.802	*	21	.953		
22	.808	.797	*			*			6	.802	*	22	.844		
23	.813	.796	*			*			7	.802	*	23	.821		
24	.814	.799	*	74	.803	.805	*	8	.802	8	.802	*	24	.754	
25	.815	.803	*	75	.804	.803	*	9	.803	9	.803	*	25	.783	
26	.815	.803	*	76	.803	.793	*	10	.800	10	.803	*	26	.853	
27	.820	.801	*	77	.793	.793	*	11	.800	11	.802	*	27	.854	
28	.820	.804	*	78	.799	.785	*			12	.802	*	28	.819	
29	.825	.805	*	79	.802	.793	*			13	.802	*	29	.879	
30	.821	.804	*	80	.809	.799	*			14	.802	*	30	.825	
31	.823	.800	*	81	.821	.797	*	1	.816	15	.803	*	31	.831	
32	.823	.805	*	82	.818	.801	*	2	.815	16	.802	*	32	.441	
33	.823	.805	*	83	.828	.801	*	3	.815	17	.802	*	33	.421	
34	.824	.801	*	84	.837	.804	*	4	.806	18	.802	*	34	.1.379	
35	.828	.802	*	85	.839	.807	*	5	.807	19	.802	*	35	.1.315	
36	.827	.803	*	86	.836	.807	*	6	.811	20	.803	*	36	.1.014	
37	.830	.801	*	87	.835	.805	*	7	.815	21	.802	*	37	.1.223	
38	.826	.802	*	88	.833	.803	*	8	.820	22	.802	*	38	.1.037	
39	.828	.801	*	89	.832	.800	*	9	.821	23	.802	*	39	.1.070	
40	.823	.801	*	90	.821	.802	*	10	.817	24	.802	*	40	.1.058	
41	.821	.801	*	91	.811	.804	*	11	.815	25	.802	*	41	.1.019	
42	.821	.802	*	92	.812	.799	*	12	.814	26	.802	*	42	.818	
43	.816	.802	*	93	.802	.798	*	13	.813	27	.802	*	43	.1.002	
44	.818	.803	*	94	.804	.799	*	14	.812	28	.802	*	44	.981	
45	.809	.801	*	95	.797	.799	*	15	.806	29	.802	*	45	.951	
46	.807	.801	*	96	.796	.796	*	16	.805	30	.802	*	46	.928	
47	.812	.798	*			*			17	.804	31	.802	*	47	.903
48	.810	.799	*			*			18	.805	32	.802	*	48	.845
49	.809	.799	*			*			19	.806	33	.802	*	49	.995
50	.805	.800	*			*			20	.806	34	.802	*	50	.838
51	.804	.801	*			*			21	.808	35	.802	*		
52	.802	.797	*			*			22	.809	36	.802	*		
53	.801	.800	*			*			23	.807	37	.802	*		
54	.801	.801	*			*			24	.812	38	.802	*		
55	.802	.800	*			*			25	.814	39	.802	*		
56	.801	.798	*			*			26	.817	40	.802	*		
57	.800	.799	*			*			27	.821	41	.802	*		
58	.799	.797	*			*			28	.823	42	.802	*		
						PRISES COL			29	.818	43	.802	*		
									30	.811	44	.802	*		
									31	.807	45	.802	*		
									32	.808			*		

FICHIER AD153 N°(IT)= 1  
 23/3/85 14H40 AS07 M=8 I=0 R 1-4 NON ADAPTE AD153  
 DE AD4 1'ITE. PAROIS RECTILIGNES SYMETRIQUES

MACH DE REFERENCE= .8029 UINF= 231.108 M/S  
 TIV=302.4 K PIV= 1550 MB

MACH PAROIS HAUTE ET BASSE								MACH PAROIS LATÉR.				AILE AS07						
I	HAUT	BAS	I	HAUT	BAS	I	MACH	I	MACH	I	MACH	I	MACH	I	MACH			
<b>PRISES DOUBLES</b>																		
1	.802	.801	*	PRISES DOUBLES				33	.833	*	1	.811	*	1	.833			
2	.801	.805	*	59	.800	.801	*	34	.831	*	2	.833	*	2	.833			
3	.801	.802	*	59	.800	.801	*	35	.839	*	3	.834	*	3	.838			
4	.800	.803	*	60	.803	.804	*	36	.832	*	4	.837	*	4	.832			
5	.800	.804	*	61	.813	.811	*	37	.825	*	5	.831	*	5	.831			
6	.802	.805	*	PRISES LAT. GAUCHE				38	.826	*	6	.831	*	6	.832			
7	.800	.801	*	PRISES LAT. DROITE				39	.829	*	7	.831	*	7	.831			
8	.804	.802	*	62	.800	.802	*	40	.833	*	8	.834	*	8	.832			
9	.805	.807	*	63	.795	.809	*	41	.834	*	9	.839	*	9	.837			
10	.804	.799	*	64	.812	.810	*	42	.830	*	10	.837	*	10	.837			
11	.800	.801	*	64	.812	.810	*	43	.828	*	11	.838	*	11	.838			
12	.798	.802	*	65	.819	.814	*	44	.827	*	12	.843	*	12	.843			
13	.800	.803	*	66	.829	.821	*	45	.826	*	13	.843	*	13	.843			
14	.799	.805	*	67	.848	.824	*	PRISES COL				*	14	.836				
15	.802	.806	*	68	.855	.838	*	HUB. AMONT	33	.833	*	15	.834	*	15	.834		
16	.804	.804	*	69	.860	.834	*	34	.831	*	16	.887	*	16	.887			
17	.805	.803	*	70	.851	.826	*	35	.839	*	17	.880	*	17	.880			
18	.810	.805	*	71	.828	.813	*	36	.833	*	18	.892	*	18	.892			
19	.812	.807	*	72	.821	.818	*	37	.833	*	19	.897	*	19	.897			
20	.817	.813	*	73	.815	.823	*	38	.820	*	20	.803	*	20	.803			
21	.813	.813	*	PRISES LAT. DROITE				39	.804	*	21	.801	*	21	.801			
22	.820	.809	*	PRISES LAT. DROITE				40	.804	*	22	.893	*	22	.893			
23	.825	.809	*	PRISES LAT. DROITE				41	.803	*	23	.861	*	23	.861			
24	.829	.817	*	74	.801	.805	*	42	.803	*	24	.775	*	24	.775			
25	.834	.824	*	75	.801	.803	*	43	.803	*	25	.806	*	25	.806			
26	.838	.823	*	76	.802	.801	*	44	.803	*	26	.887	*	26	.887			
27	.847	.821	*	77	.801	.802	*	45	.814	*	27	.936	*	27	.936			
28	.852	.825	*	78	.803	.801	*	46	.815	*	28	.883	*	28	.883			
29	.863	.827	*	79	.810	.802	*	HUB. GAUCHE				29	.803	*	29	.803		
30	.858	.826	*	80	.826	.811	*	47	.803	*	30	.851	*	30	.851			
31	.871	.823	*	81	.832	.811	*	48	.854	*	31	.855	*	31	.855			
32	.867	.831	*	82	.838	.823	*	49	.851	*	32	.421	*	32	.421			
33	.875	.833	*	83	.855	.822	*	50	.843	*	33	.411	*	33	.411			
34	.869	.830	*	84	.876	.825	*	51	.824	*	34	.373	*	34	.373			
35	.875	.831	*	85	.883	.831	*	52	.830	*	35	.341	*	35	.341			
36	.871	.832	*	86	.883	.833	*	53	.828	*	36	.357	*	36	.357			
37	.871	.829	*	87	.881	.833	*	54	.847	*	37	.356	*	37	.356			
38	.866	.829	*	88	.874	.838	*	55	.853	*	38	.364	*	38	.364			
39	.864	.827	*	89	.865	.825	*	56	.854	*	39	.365	*	39	.365			
40	.858	.824	*	90	.850	.824	*	57	.845	*	40	.195	*	40	.195			
41	.853	.823	*	91	.841	.826	*	58	.846	*	41	.198	*	41	.198			
42	.854	.823	*	92	.832	.819	*	59	.843	*	42	.103	*	42	.103			
43	.847	.823	*	93	.813	.815	*	60	.841	*	43	.113	*	43	.113			
44	.840	.824	*	94	.828	.815	*	61	.839	*	44	.316	*	44	.316			
45	.837	.821	*	95	.812	.803	*	62	.821	*	45	.372	*	45	.372			
46	.833	.822	*	96	.813	.799	*	63	.821	*	46	.355	*	46	.355			
47	.830	.818	*	PRISES COL				64	.821	*	47	.357	*	47	.357			
48	.826	.818	*	PRISES COL				65	.824	*	48	.360	*	48	.360			
49	.824	.816	*	PRISES COL				66	.826	*	49	.360	*	49	.360			
50	.820	.816	*	PRISES COL				67	.828	*	50	.354	*	50	.354			
51	.819	.813	*	PRISES COL				68	.831	*	PRISES COL				PRISES COL			
52	.815	.811	*	PRISES COL				69	.834	*	PRISES COL				PRISES COL			
53	.817	.815	*	PRISES COL				70	.838	*	PRISES COL				PRISES COL			
54	.816	.817	*	PRISES COL				71	.839	*	PRISES COL				PRISES COL			
55	.816	.813	*	PRISES COL				72	.842	*	PRISES COL				PRISES COL			
56	.814	.809	*	PRISES COL				73	.846	*	PRISES COL				PRISES COL			
57	.815	.805	*	PRISES COL				74	.851	*	PRISES COL				PRISES COL			
58	.818	.794	*	PRISES COL				75	.843	*	PRISES COL				PRISES COL			
								76	.834	*	PRISES COL				PRISES COL			
								77	.831	*	PRISES COL				PRISES COL			
								78	.830	*	PRISES COL				PRISES COL			
								79	.831	*	PRISES COL				PRISES COL			
								80	.834	*	PRISES COL				PRISES COL			
								81	.829	*	PRISES COL				PRISES COL			
								82	.834	*	PRISES COL				PRISES COL			

\*\*\*\*\* FICHIER AD154 NO(ITE)= 1  
 23/ 8/85 14H50 AS07 M=.8 I=0 R 1-4 ADAPTE SD AD154  
 DE ADP11B 1'ITE.

MACH PAROIS HAUTE ET BASSE						MACH PAROIS LATÉR.						FILE AS07					
I	HAUT	BAS	I	HAUT	BAS	I	MACH	I	MACH	I	MACH	I	MACH	I	MACH	I	MACH
1	.805	.803	*	PRISES DOUBLES	*	*	HUB. AMONT	33	.807	*	*	1	.787				
2	.802	.806	*					34	.806	*	*	2	.811				
3	.801	.804	*	59	.799	.802		35	.805	*	*	3	.811				
4	.800	.806	*	58	.803	.802		36	.805	*	*	4	.814				
5	.800	.807	*	61	.804	.799		37	.805	*	*	5	.814				
6	.801	.806	*					38	.805	*	*	6	.814				
7	.800	.802	*	PRISES LAT. GAUCHE	33*	*		39	.805	*	*	7	.814				
8	.806	.803	*					40	.807	*	*	8	.814				
9	.808	.803	*	62	.800	.804		41	.809	*	*	9	.814				
10	.804	.796	*	63	.795	.805		42	.808	*	*	10	.814				
11	.799	.796	*	64	.807	.803		43	.804	*	*	11	.814				
12	.796	.798	*	65	.804	.800		44	.803	*	*	12	.814				
13	.797	.799	*	66	.805	.805		45	.802	*	*	13	.814				
14	.796	.801	*	67	.814	.803						14	.814				
15	.798	.803	*	68	.812	.803	*					15	.814				
16	.800	.802	*	69	.814	.808	*					16	.814				
17	.802	.802	*	70	.813	.805		1	.805	*	*	17	.846				
18	.805	.802	*	71	.808	.800		2	.803	*	*	18	.846				
19	.804	.802	*	72	.805	.804		3	.803	*	*	19	.850				
20	.804	.802	*	73	.818	.808		4	.805	*	*	20	.857				
21	.803	.800	*					5	.803	*	*	21	.851				
22	.805	.797	*	PRISES LAT. DROITE	33*	*		6	.802	*	*	22	.844				
23	.807	.798	*					7	.802	*	*	23	.853				
24	.808	.803	*	74	.801	.807		8	.803	*	*	24	.857				
25	.809	.808	*	75	.800	.803		9	.804	*	*	25	.858				
26	.810	.806	*	76	.801	.793		10	.801	*	*	26	.860				
27	.816	.803	*	77	.797	.798		11	.801	*	*	27	.867				
28	.817	.805	*	78	.799	.798		12	.801	*	*	28	.867				
29	.824	.805	*	79	.801	.796	*					29	.868				
30	.819	.804	*	80	.811	.798	*					30	.868				
31	.827	.801	*	81	.814	.799	*	1	.814	*	*	31	.845				
32	.823	.805	*	82	.812	.806		2	.814	*	*	32	.845				
33	.825	.807	*	83	.823	.808		3	.813	*	*	33	.882				
34	.820	.804	*	84	.825	.806		4	.804	*	*	34	.882				
35	.824	.806	*	85	.837	.809		5	.805	*	*	35	.886				
36	.822	.807	*	86	.832	.809		6	.809	*	*	36	.886				
37	.824	.905	*	87	.830	.809		7	.813	*	*	37	.886				
38	.821	.804	*	88	.827	.805	*	8	.813	*	*	38	.844				
39	.825	.804	*	89	.839	.803	*	9	.813	*	*	39	.859				
40	.821	.803	*	90	.819	.805		10	.813	*	*	40	.881				
41	.820	.803	*	91	.812	.805	*	11	.813	*	*	41	.813				
42	.821	.803	*	92	.811	.800		12	.813	*	*	42	.813				
43	.817	.803	*	93	.801	.801		13	.811	*	*	43	.813				
44	.811	.803	*	94	.805	.803		14	.810	*	*	44	.877				
45	.810	.801	*	95	.802	.787		15	.808	*	*	45	.848				
46	.807	.801	*	96	.815	.784		16	.804	*	*	46	.829				
47	.811	.799	*					17	.804	*	*	47	.801				
48	.808	.801	*					18	.804	*	*	48	.844				
49	.808	.802	*					19	.804	*	*	49	.804				
50	.805	.804	*					20	.805	*	*	50	.806				
51	.805	.803	*					21	.807	*	*						
52	.806	.806	*					22	.806	*	*						
53	.807	.802	*					23	.807	*	*						
54	.806	.802	*					24	.806	*	*						
55	.809	.799	*					25	.811	*	*						
56	.811	.796	*					26	.814	*	*						
57	.817	.792	*					27	.817	*	*						
58	.827	.773	*					28	.821	*	*						
59								29	.823	*	*						
60								30	.817	*	*						
61								31	.816	*	*						
62								32	.807	*	*						
63								33	.808	*	*						
64								34									
65								35									
66								36									
67								37									
68								38									
69								39									
70								40									
71								41									
72								42									
73								43									
74								44									
75								45									
76								46									
77								47									
78								48									
79								49									
80								50									

\*\*\*\*\* FICHIER RD155 NO(ITE)= 4  
23/ 8/85 15H20 RS07 M=.6 I=-2 R 1-4 ADAPTE 2D RD155  
DE RD144 4'ITE

MACH DE REFERENCE= .5951      UINF= 231.108 M/S  
TIV=296.6 K.      PIV= 1094 MB

MACH PAROIS HAUTE ET BASSE						MACH PAROIS LATÉR.						FILE ASST	
I	HAUT	BAS	I	HAUT	BAS	I	MACH	I	MACH	I	MACH	I	MACH
1	.596	.594	+	PRISES DOUBLES			HUB.	AMONT	33	.597			
2	.596	.598	+						34	.597			
3	.595	.595	+	59	.594	.595			35	.597			
4	.593	.594	+	60	.596	.595			36	.595			
5	.593	.595	+	61	.594	.594			37	.597			
6	.595	.597	+						38	.595			
7	.594	.595	+						39	.597			
8	.595	.595	+						40	.598			
9	.596	.597	+						41	.598			
10	.597	.598	+						42	.597			
11	.595	.593	+						43	.597			
12	.593	.593	+						44	.596			
13	.594	.593	+						45	.596			
14	.594	.593	+						46	.596			
15	.594	.593	+						47	.596			
16	.593	.593	+						48	.596			
17	.594	.594	+						49	.596			
18	.597	.595	+						50	.596			
19	.595	.595	+						51	.596			
20	.595	.595	+						52	.596			
21	.593	.595	+						53	.596			
22	.596	.595	+						54	.596			
23	.597	.595	+						55	.596			
24	.597	.596	+						56	.596			
25	.597	.597	+						57	.596			
26	.597	.597	+						58	.596			
27	.599	.597	+						59	.596			
28	.598	.596	+						60	.596			
29	.598	.596	+						61	.596			
30	.598	.596	+						62	.596			
31	.595	.595	+						63	.596			
32	.596	.595	+						64	.596			
33	.597	.595	+						65	.596			
34	.599	.597	+						66	.596			
35	.599	.597	+						67	.596			
36	.598	.598	+						68	.596			
37	.598	.598	+						69	.596			
38	.598	.598	+						70	.596			
39	.598	.598	+						71	.596			
40	.598	.598	+						72	.596			
41	.598	.598	+						73	.596			
42	.598	.598	+						74	.595			
43	.598	.598	+						75	.595			
44	.598	.598	+						76	.595			
45	.598	.598	+						77	.594			
46	.598	.598	+						78	.593			
47	.598	.598	+						79	.593			
48	.598	.598	+						80	.593			
49	.598	.598	+						81	.593			
50	.598	.598	+						82	.593			
51	.598	.598	+						83	.593			
52	.598	.598	+						84	.593			
53	.598	.598	+						85	.593			
54	.598	.598	+						86	.593			
55	.598	.598	+						87	.593			
56	.598	.598	+						88	.593			
57	.598	.598	+						89	.593			
58	.598	.598	+						90	.593			
59	.598	.598	+						91	.593			
60	.598	.598	+						92	.593			
61	.598	.598	+						93	.593			
62	.598	.598	+						94	.593			
63	.598	.598	+						95	.593			
64	.598	.598	+						96	.593			
65	.598	.598	+						97	.593			
66	.598	.598	+						98	.593			
67	.598	.598	+						99	.593			
68	.598	.598	+						100	.593			
69	.598	.598	+						101	.593			
70	.598	.598	+						102	.593			
71	.598	.598	+						103	.593			
72	.598	.598	+						104	.593			
73	.598	.598	+						105	.593			
74	.598	.598	+						106	.593			
75	.598	.598	+						107	.593			
76	.598	.598	+						108	.593			
77	.598	.598	+						109	.593			
78	.598	.598	+						110	.593			
79	.598	.598	+						111	.593			
80	.598	.598	+						112	.593			
81	.598	.598	+						113	.593			
82	.598	.598	+						114	.593			
83	.598	.598	+						115	.593			
84	.598	.598	+						116	.593			
85	.598	.598	+						117	.593			
86	.598	.598	+						118	.593			
87	.598	.598	+						119	.593			
88	.598	.598	+						120	.593			
89	.598	.598	+						121	.593			
90	.598	.598	+						122	.593			
91	.598	.598	+						123	.593			
92	.598	.598	+						124	.593			
93	.598	.598	+						125	.593			
94	.598	.598	+						126	.593			
95	.598	.598	+						127	.593			
96	.598	.598	+						128	.593			
97	.598	.598	+						129	.593			
98	.598	.598	+						130	.593			
99	.598	.598	+						131	.593			
100	.598	.598	+						132	.593			
101	.598	.598	+						133	.593			
102	.598	.598	+						134	.593			
103	.598	.598	+						135	.593			
104	.598	.598	+						136	.593			
105	.598	.598	+						137	.593			
106	.598	.598	+						138	.593			
107	.598	.598	+						139	.593			
108	.598	.598	+						140	.593			
109	.598	.598	+						141	.593			
110	.598	.598	+						142	.593			
111	.598	.598	+						143	.593			
112	.598	.598	+						144	.593			
113	.598	.598	+						145	.593			
114	.598	.598	+						146	.593			
115	.598	.598	+						147	.593			
116	.598	.598	+						148	.593			
117	.598	.598	+						149	.593			
118	.598	.598	+						150	.593			
119	.598	.598	+						151	.593			
120	.598	.598	+						152	.593			
121	.598	.598	+						153	.593			
122	.598	.598	+						154	.593			
123	.598	.598	+						155	.593			
124	.598	.598	+						156	.593			
125	.598	.598	+						157	.593			
126	.598	.598	+						158	.593			
127	.598	.598	+						159	.593			
128	.598	.598	+						160	.593			
129	.598	.598	+						161	.593			
130	.598	.598	+						162	.593			
131	.598	.598	+						163	.593			
132	.598	.598	+						164	.593			
133	.598	.598	+						165	.593			
134	.598	.598	+						166	.593			
135	.598	.598	+						167	.593			
136	.598	.598	+						168	.593			
137	.598	.598	+						169	.593			
138	.598	.598	+						170	.593			
139	.598	.598	+						171	.593			
140	.598	.598	+						172	.593			
141	.598	.598	+						173	.593			
142	.598	.598	+						174	.593			
143	.598	.598	+						175	.593			
144	.598	.598	+						176	.593			
145	.598	.598	+						177	.593			
146	.598	.598	+						178	.593			
147	.598	.598	+						179	.593			

\*\*\*\*\* FICHIER AD156 NOITE= 1  
23/ 3/85 15H40 RS07 M=.6 I=-3 R 1-4 NON ADAPTE AD156  
DE AD4 1'ITE. PAROIS RECTILIGNES SYMETRIQUES

MACH DE REFERENCE= .5958      UINF= 231.109 M/S  
TIV=301.1 K      PIV= 1395 MB

## MACH PAROIS HAUTÉ ET BASSE

\*\*\*\*\* FICHIER AD157 NO(ITE)= 1  
33/ 8/85 16H10 AS07 M=.6 I=-2 R 1-4 ADAPTE SD AD157  
DE AD9142 1'ITE.

MACH DE REFERENCE= .5961      UINF= 231.108 M/S  
TIV=301.3 K      PIV= 1395 MB

## MACH PAROIS HAUTE ET BASSE

\*\*\*\*\* FICHIER AD158 NO(ITE)= 4  
 35/ 8/95 10H35 AS07 M=.6 I=-2 R 3-6 ADAPTE 2D AD158  
 DE AD144 4'ITE.

MACH DE REFERENCE= .5955 UINF= 331.198 M/S  
 TIV=294.7 K PIV= 1393 MB

	MACH PAROIS HAUTE ET BASSE				MACH PAROIS LATÉR.				AILE AS07		
I	HAUT	BAS	I	HAUT	BAS	I	MACH	I	MACH	I	MACH
1	.596	.594	*	PRISES DOUBLES				HUB. AMONT	33	.598	*
2	.596	.598	*						34	.598	*
3	.596	.596	*	59	.595	.595	*		35	.598	*
4	.595	.597	*	60	.596	.596	*		36	.597	*
5	.595	.597	*	61	.594	.594	*		37	.598	*
6	.595	.598	*	PRISES LAT. GAUCHE					38	.598	*
7	.595	.594	*						39	.599	*
8	.596	.596	*	62	.595	.597	*		40	.600	*
9	.596	.593	*	63	.597	.597	*		41	.598	*
10	.595	.594	*	64	.597	.597	*		42	.598	*
11	.595	.595	*	65	.597	.597	*		43	.597	*
12	.594	.595	*	66	.596	.594	*		44	.597	*
13	.595	.594	*	67	.598	.596	*		45	.596	*
14	.595	.595	*	68	.599	.597	*				
15	.596	.594	*	69	.599	.597	*	HUB. AVAL	HUB. DROIT		
16	.595	.594	*	70	.601	.599	*		46		
17	.595	.594	*	71	.598	.598	*		47		
18	.596	.595	*	72	.597	.597	*		48		
19	.594	.595	*	73	.598	.597	*		49		
20	.596	.598	*	73	.598	.597	*		50		
21	.596	.598	*	PRISES LAT. DROITES							
22	.600	.594	*	74	.596	.599	*				
23	.599	.593	*	75	.595	.595	*				
24	.598	.595	*	76	.595	.595	*				
25	.597	.599	*	77	.595	.595	*				
26	.599	.598	*	78	.594	.594	*				
27	.599	.599	*	79	.593	.593	*				
28	.600	.599	*	80	.601	.598	*				
29	.600	.599	*	81	.602	.598	*				
30	.600	.599	*	82	.601	.597	*				
31	.601	.599	*	83	.603	.595	*				
32	.602	.599	*	84	.601	.594	*				
33	.602	.599	*	85	.602	.595	*				
34	.603	.601	*	86	.602	.595	*				
35	.601	.598	*	87	.601	.595	*				
36	.602	.599	*	88	.603	.598	*				
37	.602	.599	*	89	.603	.598	*				
38	.603	.597	*	90	.604	.605	*				
39	.603	.597	*	91	.605	.605	*				
40	.603	.597	*	92	.606	.606	*				
41	.603	.597	*	93	.607	.605	*				
42	.603	.597	*	94	.607	.605	*				
43	.601	.599	*	95	.607	.605	*				
44	.599	.595	*	96	.607	.605	*				
45	.598	.595	*	97	.607	.605	*				
46	.599	.597	*	98	.608	.605	*				
47	.600	.597	*	99	.608	.605	*				
48	.600	.597	*	100	.608	.605	*				
49	.600	.597	*	101	.608	.605	*				
50	.600	.597	*	102	.608	.605	*				
51	.600	.597	*	103	.608	.605	*				
52	.600	.597	*	104	.608	.605	*				
53	.600	.597	*	105	.608	.605	*				
54	.600	.597	*	106	.608	.605	*				
55	.600	.597	*	107	.608	.605	*				
56	.600	.597	*	108	.608	.605	*				
57	.600	.597	*	109	.608	.605	*				
58	.600	.597	*	110	.608	.605	*				
59	.600	.597	*	111	.608	.605	*				
60	.600	.597	*	112	.608	.605	*				
61	.600	.597	*	113	.608	.605	*				
62	.600	.597	*	114	.608	.605	*				
63	.600	.597	*	115	.608	.605	*				
64	.600	.597	*	116	.608	.605	*				
65	.600	.597	*	117	.608	.605	*				
66	.600	.597	*	118	.608	.605	*				
67	.600	.597	*	119	.608	.605	*				
68	.600	.597	*	120	.608	.605	*				
69	.600	.597	*	121	.608	.605	*				
70	.600	.597	*	122	.608	.605	*				
71	.600	.597	*	123	.608	.605	*				
72	.600	.597	*	124	.608	.605	*				
73	.600	.597	*	125	.608	.605	*				
74	.600	.597	*	126	.608	.605	*				
75	.600	.597	*	127	.608	.605	*				
76	.600	.597	*	128	.608	.605	*				
77	.600	.597	*	129	.608	.605	*				
78	.600	.597	*	130	.608	.605	*				
79	.600	.597	*	131	.608	.605	*				
80	.600	.597	*	132	.608	.605	*				
81	.600	.597	*	133	.608	.605	*				
82	.600	.597	*	134	.608	.605	*				
83	.600	.597	*	135	.608	.605	*				
84	.600	.597	*	136	.608	.605	*				
85	.600	.597	*	137	.608	.605	*				
86	.600	.597	*	138	.608	.605	*				
87	.600	.597	*	139	.608	.605	*				
88	.600	.597	*	140	.608	.605	*				
89	.600	.597	*	141	.608	.605	*				
90	.600	.597	*	142	.608	.605	*				
91	.600	.597	*	143	.608	.605	*				
92	.600	.597	*	144	.608	.605	*				
93	.600	.597	*	145	.608	.605	*				
94	.600	.597	*	146	.608	.605	*				
95	.600	.597	*	147	.608	.605	*				
96	.600	.597	*	148	.608	.605	*				
97	.600	.597	*	149	.608	.605	*				
98	.600	.597	*	150	.608	.605	*				
99	.600	.597	*	151	.608	.605	*				
100	.600	.597	*	152	.608	.605	*				
101	.600	.597	*	153	.608	.605	*				
102	.600	.597	*	154	.608	.605	*				
103	.600	.597	*	155	.608	.605	*				
104	.600	.597	*	156	.608	.605	*				
105	.600	.597	*	157	.608	.605	*				
106	.600	.597	*	158	.608	.605	*				
107	.600	.597	*	159	.608	.605	*				
108	.600	.597	*	160	.608	.605	*				
109	.600	.597	*	161	.608	.605	*				
110	.600	.597	*	162	.608	.605	*				
111	.600	.597	*	163	.608	.605	*				
112	.600	.597	*	164	.608	.605	*				
113	.600	.597	*	165	.608	.605	*				
114	.600	.597	*	166	.608	.605	*				
115	.600	.597	*	167	.608	.605	*				
116	.600	.597	*	168	.608	.605	*				
117	.600	.597	*	169	.608	.605	*				
118	.600	.597	*	170	.608	.605	*				
119	.600	.597	*	171	.608	.605	*				
120	.600	.597	*	172	.608	.605	*				
121	.600	.597	*	173	.608	.605	*				
122	.600	.597	*	174	.608	.605	*				
123	.600	.597	*	175	.608	.605	*				
124	.600	.597	*	176	.608	.605	*				
125	.600	.597	*	177	.608	.605	*				
126	.600	.597	*	178	.608	.605	*				
127	.600	.597	*	179	.608	.605	*				
128	.600	.597	*	180	.608	.605	*				
129	.600	.597	*	181	.608	.605	*				
130	.600	.597	*	182	.608	.605	*				
131	.600	.597	*	183	.608	.605	*				
132	.600	.597	*	184	.608	.605	*				
133	.600	.597	*	185	.608	.605	*				
134	.600	.597	*	186	.608	.605	*				
135	.600	.597	*	187	.608	.605	*				
136	.600	.597	*	188	.608	.605	*				
137	.600	.597	*	189	.608	.605	*				
138	.600	.597	*	190	.608	.605	*				
139	.600	.597	*	191	.608	.605	*				
140</td											

\*\*\*\*\* FICHIER AD159 NO(IT)= 1  
 26/ 8/85 11H 0 AS07 M=.6 I=-3 R 3-5 NON ADAPTE AD159  
 DE AD4 1'ITE. PAROIS RECTILIGNES SYMETRIQUES

MACH DE REFERENCE= .5953 UINF= 231.108 M/S  
 TIV=398.9 K PIW= 1392 MB

MACH PAROIS HAUTE ET BASSE						MACH PAROIS LATER.						FILE AS07			
I	HAUT	BAS	I	HAUT	BAS	I	MACH	I	MACH	I	MACH	I	MACH		
1	.596	.595	*	PRISES DOUBLES			HUB. AMONT	33	.605	*	*	1	.574		
2	.597	.599	*	*	*	*	*	34	.604	*	*	2	.592		
3	.596	.596	*	59	.595	.595	*	35	.604	*	*	3	.594		
4	.595	.596	*	60	.597	.598	*	36	.602	*	*	4	.593		
5	.594	.596	*	61	.597	.595	*	37	.603	*	*	5	.594		
6	.596	.597	*	*	*	*	*	38	.603	*	*	6	.595		
7	.596	.596	*	PRISES LAT. GAUCHE			*	39	.604	*	*	7	.595		
8	.597	.595	*	*	62	.595	.596	*	40	.605	*	*	8	.595	
9	.597	.598	*	*	63	.597	.598	*	41	.606	*	*	9	.595	
10	.597	.595	*	*	64	.599	.599	*	42	.605	*	*	10	.595	
11	.595	.596	*	*	65	.600	.599	*	43	.604	*	*	11	.595	
12	.592	.595	*	*	66	.602	.599	*	44	.603	*	*	12	.595	
13	.593	.595	*	*	67	.611	.601	*	45	.603	*	*	13	.595	
14	.594	.595	*	*	68	.610	.603	*	HUB. AVAL	HUB. DROIT			14	.595	
15	.595	.597	*	*	69	.607	.605	*	*	*	*	*	15	.595	
16	.596	.596	*	*	70	.610	.601	*	46	.596	*	*	16	.595	
17	.597	.597	*	*	71	.601	.599	*	47	.596	*	*	17	.595	
18	.599	.597	*	*	72	.601	.599	*	48	.596	*	*	18	.595	
19	.600	.599	*	*	73	.589	.599	*	49	.596	*	*	19	.595	
20	.599	.600	*	*	*	*	*	*	*	*	*	*	20	.595	
21	.603	.600	*	PRISES LAT. DROITES			*	*	*	*	*	*	21	.595	
22	.604	.602	*	*	74	.595	.593	*	*	*	*	*	22	.595	
23	.603	.604	*	*	75	.596	.595	*	*	*	*	*	23	.595	
24	.603	.605	*	*	76	.595	.595	*	*	*	*	*	24	.595	
25	.603	.603	*	*	77	.594	.594	*	*	*	*	*	25	.595	
26	.606	.604	*	*	78	.595	.595	*	*	*	*	*	26	.595	
27	.610	.605	*	*	79	.597	.595	*	*	*	*	*	27	.595	
28	.614	.605	*	*	80	.604	.598	*	*	*	*	*	28	.595	
29	.612	.605	*	*	81	.605	.603	*	*	*	*	*	29	.595	
30	.614	.604	*	*	82	.604	.604	*	*	*	*	*	30	.595	
31	.612	.607	*	*	83	.609	.603	*	*	*	*	*	31	.595	
32	.612	.608	*	*	84	.617	.604	*	*	*	*	*	32	.595	
33	.610	.605	*	*	85	.619	.619	*	*	*	*	*	33	.595	
34	.610	.606	*	*	86	.616	.607	*	*	*	*	*	34	.595	
35	.610	.606	*	*	87	.617	.616	*	*	*	*	*	35	.595	
36	.611	.606	*	*	88	.613	.605	*	*	*	*	*	36	.595	
37	.611	.604	*	*	89	.617	.603	*	*	*	*	*	37	.595	
38	.614	.604	*	*	90	.613	.603	*	*	*	*	*	38	.595	
39	.611	.602	*	*	91	.607	.602	*	*	*	*	*	39	.595	
40	.611	.602	*	*	92	.603	.597	*	*	*	*	*	40	.595	
41	.612	.602	*	*	93	.608	.597	*	*	*	*	*	41	.595	
42	.610	.603	*	*	94	.601	.597	*	*	*	*	*	42	.595	
43	.607	.603	*	*	95	.596	.589	*	*	*	*	*	43	.595	
44	.605	.601	*	*	96	.587	.587	*	*	*	*	*	44	.595	
45	.603	.598	*	*	*	*	*	PRISES COL	*	*	*	*	*	45	.595
46	.603	.598	*	*	*	*	*	*	*	*	*	*	*	46	.595
47	.603	.598	*	*	*	*	*	*	*	*	*	*	*	47	.595
48	.603	.598	*	*	*	*	*	*	*	*	*	*	*	48	.595
49	.603	.598	*	*	*	*	*	*	*	*	*	*	*	49	.595
50	.602	.598	*	*	*	*	*	*	*	*	*	*	*	50	.595
51	.601	.593	*	*	*	*	*	*	*	*	*	*	*	51	.595
52	.599	.595	*	*	*	*	*	*	*	*	*	*	*	52	.595
53	.598	.597	*	*	*	*	*	*	*	*	*	*	*	53	.595
54	.598	.597	*	*	*	*	*	654	1.045	*	*	*	*	54	.595
55	.597	.595	*	*	*	*	*	692	.935	*	*	*	*	55	.595
56	.594	.593	*	*	*	*	*	793	.801	*	*	*	*	56	.595
57	.592	.591	*	*	*	*	*	860	.692	*	*	*	*	57	.595
58	.588	.589	*	*	*	*	*	1.015	.603	*	*	*	*	58	.595

FICHIER AD160 NO(ITE)= 1  
 26/ 8/85 11H25 R607 M=.6 I=-2 R 3-5 ADAPTE 3D AD160  
 DE AD9142 1'ITE.

MACH DE REFERENCE= .5964 UINR= 231.108 M/S  
 TIV=297.3 K PIV= 1390 MB

	MACH PAROIS HAUTE ET BASSE						MACH PAROIS LATÉR.						FILE R607			
I	HAUT	BAS	I	HAUT	BAS	*	I	MACH	I	MACH	*	I	MACH	*	I	MACH
1	.598	.596	*	PRISES DOUBLES	*	*	HUB. AMONT	33	.599	*	*	*	*	1	.570	
2	.597	.599	*	*	*	*		34	.599	*	*	*	*	2	.589	
3	.596	.597	*	59	.595	.595		35	.599	*	*	*	*	3	.600	
4	.594	.597	*	60	.598	.599		36	.599	*	*	*	*	4	.601	
5	.594	.597	*	61	.600	.597		37	.599	*	*	*	*	5	.602	
6	.596	.598	*	*	*	*		38	.599	*	*	*	*	6	.603	
7	.597	.595	*	PRISES LAT. GAUCHE	34	*		39	.599	*	*	*	*	7	.604	
8	.598	.598	*	62	.595	.597		40	.600	*	*	*	*	8	.605	
9	.598	.595	*	63	.599	.601		41	.601	*	*	*	*	9	.606	
10	.595	.597	*	64	.600	.599		42	.601	*	*	*	*	10	.607	
11	.594	.598	*	65	.597	.598		43	.599	*	*	*	*	11	.608	
12	.595	.597	*	66	.597	.595		44	.599	*	*	*	*	12	.609	
13	.595	.597	*	67	.603	.598		45	.598	*	*	*	*	13	.610	
14	.596	.597	*	68	.601	.598								14	.611	
15	.597	.595	*	*	*	*	HUB. AVAL		HUB. DROIT	*	*	*	*	15	.612	
16	.597	.596	*	69	.600	.599								16	.613	
17	.598	.597	*	70	.604	.597								17	.614	
18	.600	.598	*	71	.600	.597								18	.615	
19	.598	.599	*	72	.601	.599								19	.616	
20	.597	.600	*	73	.594	.602								20	.617	
21	.596	.599	*	PRISES LAT. DROITE	34	*								21	.618	
22	.599	.597	*	*	*	*								22	.619	
23	.598	.596	*	74	.596	.599								23	.620	
24	.597	.597	*	75	.596	.597								24	.621	
25	.598	.599	*	76	.597	.596								25	.622	
26	.598	.598	*	77	.595	.595								26	.623	
27	.601	.600	*	78	.595	.596								27	.624	
28	.601	.601	*	79	.596	.595								28	.625	
29	.606	.603	*	80	.600	.599		HUB. GAUCHE						29	.626	
30	.604	.602	*	81	.601	.599								30	.627	
31	.606	.602	*	82	.599	.600								31	.628	
32	.604	.602	*	83	.603	.600								32	.629	
33	.604	.603	*	84	.609	.602								33	.630	
34	.601	.600	*	85	.610	.603								34	.631	
35	.602	.601	*	86	.607	.603								35	.632	
36	.602	.601	*	87	.605	.602								36	.633	
37	.603	.600	*	88	.605	.601								37	.634	
38	.603	.600	*	89	.618	.599								38	.635	
39	.606	.600	*	90	.607	.598								39	.636	
40	.604	.599	*	91	.603	.596								40	.637	
41	.604	.598	*	92	.602	.598								41	.638	
42	.605	.598	*	93	.597	.597								42	.639	
43	.604	.597	*	94	.601	.597								43	.640	
44	.602	.596	*	95	.600	.594								44	.641	
45	.601	.596	*	96	.592	.592								45	.642	
46	.600	.597	*	97	*	*								46	.643	
47	.602	.598	*	*	*	*								47	.644	
48	.601	.599	*	*	*	*								48	.645	
49	.600	.599	*	*	*	*								49	.646	
50	.599	.598	*	*	*	*								50	.647	
51	.600	.598	*	*	*	*								51	.648	
52	.601	.597	*	PRISES COL	*	*								52	.649	
53	.601	.599	*	*	*	*								53	.650	
54	.601	.599	*	*	*	*								54	.651	
55	.601	.598	*	*	*	*								55	.652	
56	.598	.596	*	*	*	*								56	.653	
57	.596	.595	*	*	*	*								57	.654	
58	.592	.594	*	1.020	.602	.602	*	*	*	*	*	*	*	58	.655	



\*\*\*\*\* FICHIER AD162 NO(CIT)= 1  
25/8/85 14H20 AS07 M=.6 I=0 R 3-6 NON ADAPTE AD162  
DE AD4 1'ITE. PAROIS RECTILIGNES SYMETRIQUES

MACH DE REFERENCE= .5979      UINR= 231.193 M/S  
TIV=399.4 K      PIV= 1391 MB

## MACH PAROIS HAUTE ET BASSE

I	HAUT	BAS	I	HAUT	BAS	*	I	MACH	I	MACH	*	MACH
1	.597	.596	*	PRISES DOUBLES	*	*	HUB.	AMONT	33	.604	*	.599
2	.597	.600	*	*	*	*			34	.604	*	.599
3	.597	.598	*	59	.597	.598	*		35	.603	*	.599
4	.596	.597	*	60	.599	.599	*		36	.602	*	.599
5	.596	.597	*	61	.602	.599	*		37	.603	*	.599
6	.593	.599	*	*	*	*			38	.602	*	.599
7	.598	.598	*	PRISES LAT.	GAUCHE	*			39	.603	*	.599
8	.593	.597	*	*	*	*			40	.603	*	.599
9	.598	.599	*	62	.596	.597	*		41	.605	*	.606
10	.599	.596	*	63	.600	.591	*		42	.604	*	.604
11	.593	.593	*	64	.600	.591	*		43	.603	*	.603
12	.596	.598	*	65	.603	.599	*		44	.603	*	.603
13	.598	.598	*	66	.607	.600	*		45	.602	*	.602
14	.598	.600	*	67	.611	.600	*		46	.602	*	.602
15	.599	.600	*	68	.613	.601	*	HUB.	AVAL	HUB.	DROIT	*
16	.598	.598	*	69	.614	.604	*					*
17	.599	.598	*	70	.615	.600	*		1	.602	*	.597
18	.601	.598	*	71	.605	.600	*		2	.593	*	.599
19	.600	.597	*	72	.602	.601	*		3	.603	*	.599
20	.603	.599	*	73	.589	.603	*		4	.598	*	.598
21	.604	.599	*	*	*	*			5	.596	*	.598
22	.607	.599	*	PRISES LAT.	DROITES	*			6	.596	*	.598
23	.609	.599	*	*	*	*			7	.596	*	.598
24	.609	.602	*	74	.597	.599	*		8	.599	*	.599
25	.611	.602	*	75	.537	.538	*		9	.599	*	.599
26	.610	.602	*	76	.597	.595	*		10	.602	*	.599
27	.613	.600	*	77	.598	.597	*		11	.602	*	.599
28	.614	.601	*	78	.597	.536	*		12	.598	*	.598
29	.617	.601	*	79	.600	.595	*	HUB.	GAUCHE			
30	.616	.601	*	80	.609	.593	*		13	.598	*	.598
31	.620	.599	*	81	.612	.600	*		14	.598	*	.598
32	.618	.603	*	82	.613	.602	*		15	.598	*	.598
33	.619	.603	*	83	.617	.600	*		16	.598	*	.598
34	.617	.602	*	84	.623	.600	*		17	.598	*	.598
35	.620	.603	*	85	.625	.601	*		18	.598	*	.598
36	.619	.604	*	86	.623	.602	*		19	.598	*	.598
37	.620	.602	*	87	.622	.603	*		20	.598	*	.598
38	.619	.602	*	88	.621	.602	*		21	.598	*	.598
39	.621	.601	*	89	.624	.601	*		22	.598	*	.598
40	.618	.601	*	90	.613	.601	*		23	.598	*	.598
41	.619	.601	*	91	.613	.600	*		24	.598	*	.598
42	.618	.601	*	92	.607	.539	*		25	.598	*	.598
43	.615	.600	*	93	.601	.539	*		26	.598	*	.598
44	.612	.600	*	94	.603	.500	*		27	.598	*	.598
45	.610	.599	*	95	.539	.531	*		28	.598	*	.598
46	.608	.600	*	96	.536	.538	*		29	.598	*	.598
47	.607	.599	*	*	*	*			30	.595	*	.597
48	.606	.600	*	*	*	*			31	.595	*	.597
49	.605	.600	*	*	*	*			32	.595	*	.597
50	.604	.601	*	*	*	*			33	.595	*	.597
51	.604	.601	*	*	*	*			34	.595	*	.597
52	.603	.600	*	*	*	*			35	.596	*	.597
53	.602	.600	*	*	*	*			36	.595	*	.597
54	.601	.600	*	*	*	*			37	.595	*	.597
55	.599	.597	*	*	*	*			38	.595	*	.597
56	.595	.595	*	*	*	*			39	.595	*	.597
57	.591	.592	*	*	*	*			40	.510	*	.597
58	.584	.587	*	*	*	*			41	.511	*	.597
				PRISES COL					42	.510	*	.597
									43	.508	*	.597
									44	.508	*	.597
									45	.508	*	.597

\*\*\*\*\* FICHIER AD163 NO(IT)= 1  
 26/ 8/85 14H40 RS87 M=.6 I=0 R 3-6 ADAPTE 3D AD163  
 DE AD9107 1'ITE.

MACH DE REFERENCE= .5980 VINF= 331.108 M/S  
 TIV=298.8 K PIV= 1390 MB

MACH PAROIS HAUTE ET BASSE						MACH PAROIS LATÉR.						FILE RS87					
I	HAUT	BAS	I	HAUT	BAS	*	I	MACH	I	MACH	*	I	MACH	*	I	MACH	
1	.599	.597	*	PRISES DOUBLES			*	HUB. AMONT	33	.601	*	1	.597	*	1	.597	
2	.599	.601	*				*		34	.600	*	2	.597	*	2	.597	
3	.598	.599	*	59	.598	.599	*	1	.599	35	.600	*	3	.597	*	.597	
4	.596	.598	*	60	.598	.598	*	2	.598	36	.600	*	4	.596	*	.596	
5	.596	.599	*	61	.603	.599	*	3	.598	37	.600	*	5	.596	*	.596	
6	.599	.600	*				*		38	.600	*	6	.596	*	.596		
7	.598	.598	*				*		39	.600	*	7	.596	*	.596		
8	.599	.597	*				*		40	.600	*	8	.597	*	.597		
9	.598	.598	*	62	.597	.598	*	7	.598	41	.601	*	9	.597	*	.597	
10	.599	.596	*	63	.600	.601	*	8	.597	42	.600	*	10	.597	*	.597	
11	.598	.597	*	64	.601	.602	*	9	.597	43	.599	*	11	.597	*	.597	
12	.596	.597	*	65	.598	.597	*	10	.597	44	.598	*	12	.597	*	.597	
13	.597	.597	*	66	.599	.598	*	11	.598	45	.598	*	13	.597	*	.597	
14	.598	.599	*	67	.603	.601	*					*	14				
15	.598	.600	*	68	.604	.600	*		HUB. AVAL	HUB. DROIT	*	15					
16	.599	.599	*	69	.594	.592	*					*	16				
17	.599	.600	*	70	.606	.599	*	1	.604	1	.598	*	17				
18	.602	.598	*	71	.600	.597	*	2	.604		.598	*	18				
19	.600	.597	*	72	.593	.599	*	3	.603		.598	*	19				
20	.599	.598	*	73	.598	.602	*	4	.603		.599	*	20				
21	.599	.598	*				*		.602		.599	*	21				
22	.601	.598	*		PRISES LAT. DROITES			*	.603		.599	*	22				
23	.602	.597	*				*		.603		.599	*	23				
24	.601	.599	*	74	.598	.600	*	5	.605		.598	*	24				
25	.602	.600	*	75	.598	.599	*	6	.604		.598	*	25				
26	.601	.599	*	76	.598	.595	*	7	.603		.598	*	26				
27	.604	.599	*	77	.597	.596	*	10	.601		.598	*	27				
28	.605	.601	*	78	.597	.597	*	11	.601		.598	*	28				
29	.608	.601	*	79	.598	.594	*		HUB. GRUCHE		.598	*	29				
30	.606	.600	*	80	.603	.596	*				.598	*	30				
31	.599	.598	*	81	.605	.597	*	1	.604		.598	*	31				
32	.607	.601	*	82	.603	.599	*	2	.603		.598	*	32				
33	.609	.601	*	83	.608	.600	*	3	.603		.598	*	33				
34	.607	.599	*	84	.613	.600	*	4	.600		.598	*	34				
35	.608	.600	*	85	.615	.601	*	5	.600		.598	*	35				
36	.607	.600	*	86	.613	.601	*	6	.602		.598	*	36				
37	.609	.599	*	87	.612	.601	*	7	.604		.598	*	37				
38	.609	.600	*	88	.612	.600	*	8	.605		.598	*	38				
39	.611	.600	*	89	.615	.600	*	9	.605		.598	*	39				
40	.610	.599	*	90	.609	.600	*	10	.604		.598	*	40				
41	.609	.599	*	91	.605	.597	*	11	.603		.598	*	41				
42	.608	.598	*	92	.603	.598	*	12	.603		.598	*	42				
43	.606	.597	*	93	.609	.597	*	13	.603		.598	*	43				
44	.603	.597	*	94	.604	.598	*	14	.603		.598	*	44				
45	.602	.596	*	95	.602	.597	*	15	.605		.598	*	45				
46	.602	.597	*	96	.605	.594	*	16	.606		.598	*	46				
47	.603	.597	*				*		.606		.598	*	47				
48	.603	.599	*				*		.608		.598	*	48				
49	.603	.599	*				*		.609		.598	*	49				
50	.593	.599	*				*		.610		.598	*	50				
51	.605	.600	*				*		.611		.598	*	51				
52	.604	.599	*				*		.611		.598	*	52				
53	.605	.600	*				*		.611		.598	*	53				
54	.605	.600	*				*		.612		.598	*	54				
55	.597		*				*		.612		.598	*	55				
56	.594		*				*		.613		.598	*	56				
57	.591		*				*		.613		.598	*	57				
58	.599		*				*		.614		.598	*	58				
	.595		*				*		.614		.598	*	59				
			*				*		.615		.598	*	60				
			*				*		.616		.598	*	61				
			*				*		.617		.598	*	62				
			*				*		.618		.598	*	63				
			*				*		.619		.598	*	64				
			*				*		.620		.598	*	65				
			*				*		.621		.598	*	66				
			*				*					*	67				
			*				*					*	68				
			*				*					*	69				
			*				*					*	70				
			*				*					*	71				
			*				*					*	72				
			*				*					*	73				
			*				*					*	74				
			*				*					*	75				
			*				*					*	76				
			*				*					*	77				
			*				*					*	78				
			*				*					*	79				
			*				*					*	80				
			*				*					*	81				
			*				*					*	82				
			*				*					*	83				
			*				*					*	84				
			*				*					*	85				
			*				*					*	86				
			*				*					*	87				
			*				*					*	88				
			*				*					*	89				
			*				*					*	90				
			*				*					*	91				
			*				*					*	92				
			*				*					*	93				
			*				*					*	94				
			*				*					*	95				
			*				*					*	96				
			*				*					*	97				
			*				*					*	98				
			*				*					*	99				
			*				*					*	100				
			*				*					*	101				
			*				*					*	102				
			*				*					*	103				
			*				*					*	104				
			*				*					*	105				
			*				*					*	106				
			*				*					*	107				
			*				*					*	108				
			*				*					*	109				
			*				*					*	110				
			*				*					*	111				
			*				*					*	112				
			*				*					*	113				
			*				*					*	114				
			*				*					*	115				
			*				*					*	116				
		</															

FICHIER AD164 NO(IT)= 4  
 26/8/85 15H 5 AS07 M=.8 I=0 R 3-6 ADAPTE 2D AD164  
 DE AD134 4'ITE.

MACH DE REFERENCE= .8067 UINF= 231.108 M/S  
 TIV=294.0 K PIV= 1653 MB

MACH PAROIS HAUTE ET BASSE						MACH PAROIS LATÉR.						FILE AS07		
I	HAUT	BAS	I	HAUT	BAS	I	MACH	I	MACH	I	MACH	*	*	
1	.806	.802	*	PRISES DOUBLES	*	*	HUB. AMONT	33	.811	*	1	.763		
2	.806	.803	*		*	*		34	.810	*	2	.763		
3	.807	.806	*	59	.804	.804	*	1	.804	35	.809	*	3	.865
4	.805	.806	*	60	.805	.805	*	2	.802	36	.808	*	4	.855
5	.805	.808	*	61	.807	.807	*	3	.801	37	.808	*	5	.850
6	.807	.808	*				*	4	.802	38	.807	*	6	.839
7	.804	.804	*	PRISES LAT. GAUCHE	3	*		5	.800	39	.808	*	7	.851
8	.805	.802	*			*	*	6	.800	40	.810	*	8	.811
9	.805	.806	*	62	.805	.805	*	7	.800	41	.812	*	9	.846
10	.806	.808	*	63	.797	.809	*	8	.799	42	.810	*	10	1.414
11	.803	.802	*	64	.810	.805	*	9	.800	43	.807	*	11	1.370
12	.800	.804	*	65	.811	.807	*	10	.800	44	.807	*	12	1.285
13	.803	.803	*	66	.811	.802	*	11	.800	45	.805	*	13	1.039
14	.803	.805	*	67	.823	.805	*					*	14	1.025
15	.805	.804	*	68	.819	.808	*					*	15	1.018
16	.806	.800	*	69	.821	.813	*					*	16	1.023
17	.806	.800	*	70	.825	.805	*	1	.808	1	.805	*	17	1.018
18	.806	.803	*	71	.810	.802	*	2	.807	2	.805	*	18	1.010
19	.806	.804	*	72	.808	.805	*	3	.806	3	.805	*	19	1.023
20	.810	.807	*	73	.805	.810	*	4	.807	4	.805	*	20	1.013
21	.811	.807	*				*	5	.806	5	.804	*	21	1.003
22	.812	.805	*	PRISES LAT. DROITE	3	*		6	.805	6	.805	*	22	.980
23	.814	.802	*				*	7	.805	7	.805	*	23	.955
24	.814	.803	*	74	.806	.809	*	8	.806	8	.805	*	24	.953
25	.816	.805	*	75	.804	.804	*	9	.807	9	.804	*	25	.889
26	.818	.803	*	76	.803	.803	*	10	.805	10	.805	*	26	.889
27	.825	.801	*	77	.802	.802	*	11	.805	11	.805	*	27	.956
28	.827	.805	*	78	.802	.795	*					*	28	.953
29	.835	.806	*	79	.804	.798	*					*	29	.903
30	.830	.807	*	80	.818	.804	*					*	30	.863
31	.837	.804	*	81	.820	.803	*	1	.822	1	.805	*	31	.855
32	.831	.811	*	82	.819	.802	*	2	.821	2	.805	*	32	.845
33	.834	.813	*	83	.833	.803	*	3	.821	3	.805	*	33	1.513
34	.827	.810	*	84	.846	.806	*	4	.810	4	.805	*	34	1.433
35	.830	.812	*	85	.847	.810	*	5	.811	5	.805	*	35	1.324
36	.828	.813	*	86	.840	.813	*	6	.816	6	.805	*	36	1.081
37	.832	.810	*	87	.835	.813	*	7	.820	7	.805	*	37	1.043
38	.829	.809	*	88	.833	.818	*	8	.825	8	.805	*	38	1.034
39	.833	.807	*	89	.837	.804	*	9	.826	9	.805	*	39	1.005
40	.830	.805	*	90	.827	.804	*	10	.822	10	.805	*	40	.996
41	.829	.804	*	91	.817	.805	*	11	.820	11	.805	*	41	.986
42	.830	.804	*	92	.814	.803	*	12	.819	12	.805	*	42	.971
43	.824	.804	*	93	.803	.802	*	13	.818	13	.805	*	43	.927
44	.817	.804	*	94	.807	.803	*	14	.816	14	.805	*	44	.906
45	.817	.803	*	95	.806	.806	*	15	.810	15	.805	*	45	.893
46	.812	.804	*	96	.802	.797	*	16	.809	16	.805	*	46	.881
47	.813	.803	*				*	17	.808	17	.805	*	47	.870
48	.811	.804	*				*	18	.809	18	.805	*	48	.850
49	.810	.804	*				*	19	.810	19	.804	*	49	.875
50	.807	.805	*				*	20	.810	20	.804	*	50	.882
51	.808	.804	*				*	21	.812	21	.804	*		
52	.810	.803	*				*	22	.813	22	.804	*		
53	.810	.805	*				*	23	.814	23	.804	*		
54	.809	.804	*				*	24	.817	24	.804	*		
55	.809	.804	*				*	25	.819	25	.804	*		
56	.809	.803	*				*	26	.822	26	.804	*		
57	.806	.801	*				*	27	.825	27	.804	*		
58	.806	.802	*				*	28	.826	28	.804	*		
				PRISES COL			*	29	.822	29	.804	*		
							*	30	.815	30	.804	*		
							*	31	.811	31	.804	*		
							*	32	.813	32	.804	*		



FICHIER AD166 NO(ITE)= 1  
 26/8/85 15H45 RS07 M=.8 I=0 R 3-6 ADAPTE 3D RD166  
 DE RD9118 1'ITE.

MACH DE REFERENCE=.3039 UINF= 231.109 M-S  
 TIV=298.8 K PIV= 1649 MB

	MACH PAROIS HAUTE ET BASSE						MACH PAROIS LATÉR.						FILE RS07		
I	HAUT	BAS	I	HAUT	BAS	*	I	MACH	I	MACH	*	I	MACH		
1	.306	.303	*	PRISES DOUBLES	*	*	HUB.	AMONT	33	.306	*	1	.758		
2	.307	.311	*			*			34	.305	*	2	.786		
3	.305	.307	*	59	.305	.305	*	1	.799	35	.305	*	3	.862	
4	.300	.304	*	60	.305	.305	*	2	.798	36	.304	*	4	.872	
5	.799	.305	*	61	.303	.301	*	3	.798	37	.303	*	5	.953	
6	.304	.303	*			*			.800	38	.303	*	6	.893	
7	.305	.306	*	PRISES LAT. GAUCHE	*	*			.798	39	.303	*	7	.849	
8	.306	.303	*			*			.798	40	.306	*	8	.887	
9	.306	.306	*	62	.302	.304	*	7	.797	41	.308	*	9	.425	
10	.307	.300	*	63	.797	.308	*	8	.795	42	.307	*	10	1.378	
11	.302	.301	*	64	.305	.306	*	9	.798	43	.303	*	11	1.301	
12	.796	.300	*	65	.303	.300	*	10	.799	44	.302	*	12	1.097	
13	.798	.300	*	66	.304	.798	*	11	.800	45	.301	*	13	1.030	
14	.798	.303	*	67	.813	.803	*					*	14	1.015	
15	.799	.304	*	68	.312	.303	*	HUB.	AVAL	HUB.	DROIT	*	15	1.001	
16	.799	.301	*	69	.814	.807	*					*	16	1.006	
17	.301	.302	*	70	.816	.806	*	1	.807	1	.304	*	17	1.003	
18	.305	.302	*	71	.806	.797	*	2	.805	2	.304	*	18	.997	
19	.304	.300	*	72	.808	.807	*	3	.805	3	.304	*	19	1.003	
20	.304	.301	*	73	.306	.310	*	4	.806	4	.304	*	20	.998	
21	.303	.301	*			*			.805	5	.304	*	21	.991	
22	.305	.799	*	PRISES LAT. DROITES	*	*			.805	6	.304	*	22	.971	
23	.307	.798	*			*			.805	7	.304	*	23	.948	
24	.308	.799	*	74	.303	.309	*	8	.806	8	.304	*	24	.751	
25	.308	.302	*	75	.305	.306	*	9	.806	9	.304	*	25	.777	
26	.309	.308	*	76	.304	.301	*	10	.803	10	.304	*	26	.857	
27	.315	.799	*	77	.798	.799	*	11	.804	11	.304	*	27	.957	
28	.317	.304	*	78	.797	.798	*			12	.304	*	28	.959	
29	.323	.305	*	79	.802	.796	*	HUB.	GAUCHE	13	.304	*	29	.959	
30	.319	.304	*	80	.810	.798	*			14	.304	*	30	.972	
31	.326	.301	*	81	.813	.799	*	1	.814	15	.304	*	31	.872	
32	.321	.306	*	82	.811	.800	*	2	.813	16	.304	*	32	.416	
33	.325	.307	*	83	.822	.801	*	3	.813	17	.304	*	33	1.403	
34	.329	.303	*	84	.834	.805	*	4	.803	18	.304	*	34	1.336	
35	.323	.304	*	85	.836	.803	*	5	.804	19	.304	*	35	1.073	
36	.321	.905	*	86	.832	.808	*	6	.808	20	.304	*	36	1.056	
37	.323	.303	*	87	.829	.807	*	7	.812	21	.304	*	37	1.343	
38	.321	.905	*	88	.827	.804	*	8	.815	22	.304	*	38	1.026	
39	.325	.305	*	89	.828	.803	*	9	.818	23	.304	*	39	1.000	
40	.330	.905	*	90	.819	.805	*	10	.815	24	.304	*	40	.991	
41	.319	.905	*	91	.811	.804	*	11	.812	25	.304	*	41	.982	
42	.320	.905	*	92	.809	.797	*	12	.811	26	.304	*	42	.968	
43	.317	.905	*	93	.801	.800	*	13	.811	27	.304	*	43	.956	
44	.311	.804	*	94	.808	.805	*	14	.810	28	.304	*	44	.924	
45	.311	.901	*	95	.804	.796	*	15	.804	29	.304	*	45	.904	
46	.307	.901	*	96	.803	.794	*	16	.803	30	.304	*	46	.993	
47	.309	.797	*			*	*	*	17	.803	31	.304	*	47	.947
48	.307	.799	*			*	*	*	18	.804	32	.304	*	48	.947
49	.308	.902	*			*	*	*	19	.804	33	.304	*	49	.970
50	.306	.905	*			*	*	*	20	.804	34	.304	*	50	.818
51	.308	.907	*			*	*	*	21	.805	35	.304	*		
52	.307	.902	*			*	*	*	22	.807	36	.304	*		
53	.807	.903	*			*	*	*	23	.805	37	.304	*		
54	.308	.904	*		848	1.310	*	24	.811	38	.304	*			
55	.810	.901	*		856	1.128	*	25	.813	39	.304	*			
56	.308	.798	*		936	.894	*	26	.815	40	.803	*			
57	.308	.798	*		981	.819	*	27	.829	41	.803	*			
58	.304	.798	*		1.141	.790	*	28	.832	42	.803	*			
						*	*	*	29	.817	43	.803	*		
						*	*	*	30	.819	44	.804	*		
						*	*	*	31	.807	45	.804	*		
						*	*	*	32	.807					



\*\*\*\*\* FICHIER AD168 NO(ITE)= 1  
26/ 8/85 16H25 AS07 M=.5 I=+2(1.5+ROT.30') R 3-6 ADAPTE 3D AD168  
DE AD9122 1'ITE.

MACH DE REFERENCE= .5994      UINF= 231.108 M/S  
TIV=298.4 K      PIW= 1391 MB

MACH PAROIS HAUTE ET BASSE						MACH PAROIS LATÉR.						FILE ASST	
I	HAUT	BAS	I	HAUT	BAS	I	MACH	I	MACH	I	MACH	I	MACH
1	.597	.592	*	PRISES DOUBLES			HUB.	AMONT	33	.592		.568	
2	.596	.595	*						34	.591		.576	
3	.593	.597	*	59	.598	.599			35	.590		.517	
4	.599	.598	*	60	.599	.599			36	.592		.656	
5	.597	.599	*	61	.594	.599			37	.591		.654	
6	.599	.601	*						38	.590		.584	
7	.598	.600	*	PRISES LAT. GAUCHE					39	.590		.537	
8	.599	.599	*						40	.590		.563	
9	.600	.601	*	62	.600	.597			41	.591		.563	
10	.591	.597	*	63	.602	.603			42	.591		.563	
11	.599	.593	*	64	.603	.604			43	.599		.837	
12	.597	.598	*	65	.601	.600			44	.599		.804	
13	.598	.597	*	66	.599	.601			45	.598		.779	
14	.598	.599	*	67	.607	.600						.761	
15	.599	.600	*		.606	.600	HUB.	AVAL		HUB.	DROIT		
16	.599	.599	*	68	.606	.601						.755	
17	.601	.600	*	70	.611	.600						.747	
18	.603	.601	*	71	.604	.599						.738	
19	.602	.600	*	72	.605	.602						.733	
20	.602	.600	*	73	.596	.605						.726	
21	.602	.599	*									.716	
22	.605	.599	*	PRISES LAT. DROITES								.704	
23	.605	.597	*									.693	
24	.603	.600	*	74	.601	.599						.575	
25	.604	.600	*	75	.599	.599						.568	
26	.604	.600	*	76	.598	.599						.529	
27	.608	.598	*	77	.599	.597						.560	
28	.610	.599	*	78	.599	.598						.500	
29	.614	.593	*	79	.602	.596						.500	
30	.612	.593	*	80	.607	.597						.500	
31	.615	.594	*	81	.611	.597						.500	
32	.612	.598	*	82	.608	.598						.500	
33	.613	.597	*	83	.613	.597						.500	
34	.609	.597	*	84	.620	.596						.500	
35	.611	.597	*	85	.620	.597						.500	
36	.609	.598	*	86	.617	.598						.500	
37	.613	.597	*	87	.615	.599						.500	
38	.613	.598	*	88	.614	.597						.500	
39	.616	.598	*	89	.620	.597						.500	
40	.614	.597	*	90	.615	.599						.500	
41	.613	.597	*	91	.607	.598						.500	
42	.613	.598	*	92	.606	.599						.500	
43	.609	.597	*	93	.602	.600						.500	
44	.606	.598	*	94	.606	.601						.500	
45	.606	.597	*	95	.604	.599						.500	
46	.604	.598	*	96	.594	.597						.500	
47	.606	.598	*									.500	
48	.606	.601	*									.500	
49	.606	.601	*									.500	
50	.604	.601	*									.500	
51	.605	.601	*									.500	
52	.605	.599	*									.500	
53	.606	.601	*									.500	
54	.605	.602	*									.500	
55	.604	.601	*									.500	
56	.601	.600	*									.500	
57	.598	.599	*									.500	
58	.591	.598	*									.500	
				PRISES COL									
					1.071	1.072							
					.591	.591							
					.806	.793							
					.672	.591							
					1.002	.533							

FICHIER AD169 N°(IT)= 4  
 26/ 8/85 16H50 R607 M=.6 I=+2 R 3-6 ADAPTE 2D AD169  
 DE AD145 4'ITE.

MACH DE REFERENCE= .5991 UINF= 231.108 M/S  
 TIV=294.2 K PIV= 1391 MB

MACH PAROIS HAUTE ET BASSE						MACH PAROIS LATÉR.						FILE R607	
I	HAUT	BAS	I	HAUT	BAS	I	MACH	I	MACH	I	MACH	I	MACH
<b>PRISES DOUBLES</b>													
1	.591	.596	1	.591	.596	1	.591	1	.591	1	.591	1	.591
2	.591	.598	2	.591	.598	2	.591	2	.591	2	.591	2	.591
3	.590	.599	3	.590	.599	3	.590	3	.590	3	.590	3	.590
4	.597	.599	4	.597	.599	4	.597	4	.597	4	.597	4	.597
5	.597	.599	5	.597	.599	5	.597	5	.597	5	.597	5	.597
6	.598	.599	6	.598	.599	6	.598	6	.598	6	.598	6	.598
7	.598	.599	7	.598	.599	7	.598	7	.598	7	.598	7	.598
8	.599	.599	8	.599	.599	8	.599	8	.599	8	.599	8	.599
9	.599	.599	9	.599	.599	9	.599	9	.599	9	.599	9	.599
10	.599	.599	10	.599	.599	10	.599	10	.599	10	.599	10	.599
11	.599	.599	11	.599	.599	11	.599	11	.599	11	.599	11	.599
12	.596	.598	12	.596	.598	12	.596	12	.596	12	.596	12	.596
13	.598	.598	13	.598	.598	13	.598	13	.598	13	.598	13	.598
14	.599	.597	14	.599	.597	14	.599	14	.599	14	.599	14	.599
15	.599	.597	15	.599	.597	15	.599	15	.599	15	.599	15	.599
16	.598	.596	16	.598	.596	16	.598	16	.598	16	.598	16	.598
17	.591	.596	17	.591	.596	17	.591	17	.591	17	.591	17	.591
18	.593	.598	18	.593	.598	18	.593	18	.593	18	.593	18	.593
19	.593	.597	19	.593	.597	19	.593	19	.593	19	.593	19	.593
20	.594	.596	20	.594	.596	20	.594	20	.594	20	.594	20	.594
21	.594	.595	21	.594	.595	21	.594	21	.594	21	.594	21	.594
22	.596	.595	22	.596	.595	22	.596	22	.596	22	.596	22	.596
23	.598	.595	23	.598	.595	23	.598	23	.598	23	.598	23	.598
24	.595	.595	24	.595	.595	24	.595	24	.595	24	.595	24	.595
25	.598	.594	25	.598	.594	25	.598	25	.598	25	.598	25	.598
26	.598	.594	26	.598	.594	26	.598	26	.598	26	.598	26	.598
27	.597	.594	27	.597	.594	27	.597	27	.597	27	.597	27	.597
28	.597	.593	28	.597	.593	28	.597	28	.597	28	.597	28	.597
29	.595	.593	29	.595	.593	29	.595	29	.595	29	.595	29	.595
30	.595	.593	30	.595	.593	30	.595	30	.595	30	.595	30	.595
31	.593	.593	31	.593	.593	31	.593	31	.593	31	.593	31	.593
32	.593	.593	32	.593	.593	32	.593	32	.593	32	.593	32	.593
33	.595	.593	33	.595	.593	33	.595	33	.595	33	.595	33	.595
34	.595	.593	34	.595	.593	34	.595	34	.595	34	.595	34	.595
35	.595	.593	35	.595	.593	35	.595	35	.595	35	.595	35	.595
36	.595	.593	36	.595	.593	36	.595	36	.595	36	.595	36	.595
37	.595	.593	37	.595	.593	37	.595	37	.595	37	.595	37	.595
38	.595	.593	38	.595	.593	38	.595	38	.595	38	.595	38	.595
39	.595	.593	39	.595	.593	39	.595	39	.595	39	.595	39	.595
40	.595	.593	40	.595	.593	40	.595	40	.595	40	.595	40	.595
41	.595	.593	41	.595	.593	41	.595	41	.595	41	.595	41	.595
42	.595	.593	42	.595	.593	42	.595	42	.595	42	.595	42	.595
43	.595	.593	43	.595	.593	43	.595	43	.595	43	.595	43	.595
44	.595	.593	44	.595	.593	44	.595	44	.595	44	.595	44	.595
45	.595	.593	45	.595	.593	45	.595	45	.595	45	.595	45	.595
46	.595	.593	46	.595	.593	46	.595	46	.595	46	.595	46	.595
47	.595	.593	47	.595	.593	47	.595	47	.595	47	.595	47	.595
48	.595	.593	48	.595	.593	48	.595	48	.595	48	.595	48	.595
49	.595	.593	49	.595	.593	49	.595	49	.595	49	.595	49	.595
50	.595	.593	50	.595	.593	50	.595	50	.595	50	.595	50	.595
51	.595	.593	51	.595	.593	51	.595	51	.595	51	.595	51	.595
52	.595	.593	52	.595	.593	52	.595	52	.595	52	.595	52	.595
53	.595	.593	53	.595	.593	53	.595	53	.595	53	.595	53	.595
54	.595	.593	54	.595	.593	54	.595	54	.595	54	.595	54	.595
55	.595	.593	55	.595	.593	55	.595	55	.595	55	.595	55	.595
56	.595	.593	56	.595	.593	56	.595	56	.595	56	.595	56	.595
57	.595	.593	57	.595	.593	57	.595	57	.595	57	.595	57	.595
58	.595	.593	58	.595	.593	58	.595	58	.595	58	.595	58	.595
59	.595	.593	59	.595	.593	59	.595	59	.595	59	.595	59	.595
60	.595	.593	60	.595	.593	60	.595	60	.595	60	.595	60	.595
61	.595	.593	61	.595	.593	61	.595	61	.595	61	.595	61	.595
62	.595	.593	62	.595	.593	62	.595	62	.595	62	.595	62	.595
63	.595	.593	63	.595	.593	63	.595	63	.595	63	.595	63	.595
64	.595	.593	64	.595	.593	64	.595	64	.595	64	.595	64	.595
65	.595	.593	65	.595	.593	65	.595	65	.595	65	.595	65	.595
66	.595	.593	66	.595	.593	66	.595	66	.595	66	.595	66	.595
67	.595	.593	67	.595	.593	67	.595	67	.595	67	.595	67	.595
68	.595	.593	68	.595	.593	68	.595	68	.595	68	.595	68	.595
69	.595	.593	69	.595	.593	69	.595	69	.595	69	.595	69	.595
70	.595	.593	70	.595	.593	70	.595	70	.595	70	.595	70	.595
71	.595	.593	71	.595	.593	71	.595	71	.595	71	.595	71	.595
72	.595	.593	72	.595	.593	72	.595	72	.595	72	.595	72	.595
73	.595	.593	73	.595	.593	73	.595	73	.595	73	.595	73	.595
74	.595	.593	74	.595	.593	74	.595	74	.595	74	.595	74	.595
75	.595	.593	75	.595	.593	75	.595	75	.595	75	.595	75	.595
76	.595	.593	76	.595	.593	76	.595	76	.595	76	.595	76	.595
77	.595	.593	77	.595	.593	77	.595	77	.595	77	.595	77	.595
78	.595	.593	78	.595	.593	78	.595	78	.595	78	.595	78	.595
79	.595	.593	79	.595	.593	79	.595	79	.595	79	.595	79	.595
80	.595	.593	80	.595	.593	80	.595	80	.595	80	.595	80	.595
81	.595	.593	81	.595	.593	81	.595	81	.595	81	.595	81	.595
82	.595	.593	82	.595	.593	82	.595	82	.595	82	.595	82	.595
83	.595	.593	83	.595	.593	83	.595	83	.595	83	.595	83	.595
84	.595	.593	84	.595	.593	84	.595	84	.595	84	.595	84	.595
85	.595	.593	85	.595	.593	85	.595	85	.595	85	.595	85	.595
86	.595	.593	86	.595	.593	86	.595	86	.595	86	.595	86	.595
87	.595	.593	87	.595	.593	87	.595	87	.595	87	.595	87	.595
88	.595	.593	88	.595	.593	88	.595	88	.595	88	.595	88	.595
89	.595	.593	89	.595	.593	89	.595	89	.595	89	.595	89	.595
90	.595	.593	90	.595	.593	90	.595	90	.595	90	.595	90	.595
91	.595	.593	91	.595	.593	91	.595	91	.595	91	.595	91	.595
92	.595	.593	92	.595	.593	92	.595	92	.595	92	.595	92	.595
93	.595	.593	93	.595	.593	93	.595	93	.595	93	.595	93	.595
94	.595	.593	94	.595	.593	94	.595	94	.595	94	.595	94	.595
95	.595	.593	95	.595	.593	95	.595	95	.595	95	.595	95	.595
96	.595	.593	96	.595	.59								

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NASA TECHNICAL MEMORANDUM

NASA TM-88442

N86-28964 #

ADAPTATIONS

TESTS WITH THREE-DIMENSIONAL ADJUSTMENTS IN THE RECTANGULAR WORKING SECTION OF THE FRENCH T2 WIND TUNNEL, WITH AN AS 07-TYPE SWEPT-BACK WING MODEL INSTALLED

A. Blanchard, M. J. Payry, J. F. Breil

ACCO  
*Marie-Jeanne de la Chene*  
Translation of "Essais 'd'adaptation tridimensionnelle' de la veine rectangulaire de la soufflerie T2, en presence d'une maquette d'aile en fleche du type AS 07," Rapport Technique OA 34/3075 (DERAT 12/5015 DN), O.N.E.R.A., Centre d'Etudes et de Recherches de Toulouse, November 1985, pp. 1-24 (plus figures).

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A. Blanchard, M. J. Payry, and J. F. Breil Jul. 1986 161 p  
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The results obtained on the AS 07 wing and the working section walls for three types of configurations are reported. The first, called non-adapted, corresponds to the divergent upper and lower rectilinear walls which compensate for limit layer thickening. It can serve as a basis for complete flow calculations. The second configuration corresponds to wall shapes determined from calculations which tend to minimize interference at the level of the fuselage. Finally, the third configuration, called two-dimensional adaptation, uses the standard method for T2 profile tests. This case was tested to determine the influence of wall shape and error magnitude. These results are not sufficient to validate the three-dimensional adaptation; they must be coordinated with calculations or with unlimited atmosphere tests.

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NASA TECHNICAL MEMORANDUM

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WASHINGTON, DC 20546

JULY 1986

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<p style="text-align: center;"><i>boundary growth</i></p> <p><i>half-model</i></p> <p><i>infinite</i></p> <p><i>boundary growth</i></p> <p><i>flexible</i></p> <p><i>unconfined flow</i></p> <p><i>unconfined flow</i></p> <p><i>different</i></p> <p><i>2D model</i></p>				
16. Abstract This report presents the results obtained on the AS 07 wing and the working section walls for three types of configurations. The first, called "non-adapted," corresponds to the divergent upper and lower <del>rectilinear</del> walls which compensate for <del>boundary</del> layer thickening. It can serve as a basis for complete flow calculations. The second configuration corresponds to wall shapes determined from calculations which tend to minimize interference at the level of the fuselage. Finally, the third configuration, called "two-dimensional adaptation," uses the standard method for <sup>T2 model</sup> profile tests. This case was tested to determine the influence of wall shape and error magnitudes. These results are not sufficient to validate the three-dimensional adaptation; they must be coordinated with calculations or with <del>unlimited atmosphere</del> tests.				
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## NOTATION

$x_p \quad \left. \begin{array}{l} \\ \\ \end{array} \right\}$  Cartesian coordinates in the reference working section  
 $y_p \quad \left. \begin{array}{l} \\ \\ \end{array} \right\}$  (porthole axis)  
 $z_p \quad \left. \begin{array}{l} \\ \\ \end{array} \right\}$

$x \quad \left. \begin{array}{l} \\ \\ \end{array} \right\}$  Cartesian coordinates in the wing reference (leading edge to socket)  
 $y \quad \left. \begin{array}{l} \\ \\ \end{array} \right\}$   
 $z \quad \left. \begin{array}{l} \\ \\ \end{array} \right\}$

C Profile chord of the wing section considered

$\alpha$  Angle of the model (fuselage axis)

$M_0$  ~~Infinite Mach upstream of the flow~~  
 Total number  
 number

M Local Mach (wing or wall)

$$K_p = \frac{p - p_0}{\frac{1}{2} \rho_{\infty} V_0^2} \quad \text{Pressure coefficient}$$

$C_z$  Local or complete-wing lift coefficient

$$\left\{ \begin{array}{l} C_z \text{ local} = \int_{\text{profil}} K_p \cdot d(\frac{x}{C_{\text{local}}}) \\ C_z = \frac{F_z}{\frac{1}{2} \rho_{\infty} V_0^2 \cdot S_{\text{aile}}} \end{array} \right.$$

ADAPTATIONS  
TESTS WITH THREE-DIMENSIONAL ADJUSTMENTS IN THE RECTANGULAR  
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A. Blanchard, M. J. Payry, J. F. Breil

1 - INTRODUCTION

17\*

This test series follows a study done in the T2 wind tunnel with the goal of defining a shape for the adaptable walls which would minimize their influence on three-dimensional objects models placed in the center of the section or fastened on the sidewall.

The present configuration of the working section does not allow obtaining a shape identical to that of the layer of the streamlines current existing around a three-dimensional model in unlimited atmosphere (two completely rectilinear and parallel lateral walls, two flexible and bendable upper and lower walls). The planned solution thus consists of using the two bendable walls to minimize the influence of the walls on the model.

The method implemented uses solutions developed by "E. Wedemeyer and L. Lamarche" [5]. A first series of tests was done in cooperation with the <sup>Technical</sup> University of Berlin on various existing models [6]:

- a C5 revolving body 166 mm long, 0.3% blockage;
- a civil F4 airplane model with 120-mm wingspan and three-component balance;
- a duck-type military airplane model with the same balance.

Another series of tests was then done on a bigger model [7]:

- a C5 body 400 mm long, 1.8% blockage.

---

\*Numbers in the margin indicate pagination in the foreign text.

The results and calculations were compared.

The calculation method was optimized for ~~revolving~~ bodies of revolution placed in the center of the <sup>test</sup> section; an extrapolation was tried which placed a half-wing at the wall. In this case, calculations are done as if the section were twice its actual width, using the Mach distribution at the wall measured near the plane of symmetry.

The results obtained on the "16/1000-scale" AS 07 are discussed in this report. They can be divided into two groups: control tests and systematic tests.

Included in the first group is control of wing angling by rotating the walls. The <sup>lower</sup> path of the jacks would not permit the displacements required by calculation for angling the model to +2°; we thus used this "artificial" method after having verified its validity.

The three-dimensional adaptation method supplies the optimal shape of the walls from the first calculation, whatever the initial position of the walls; this was verified in /8 several test configurations. Finally, an adaptation called <sup>2D</sup> "two-dimensional" was tested; it uses the normal method for ~~T220~~ <sup>model</sup> profile tests. This case, without theoretical justification, was tried to see the influence of the ~~shape of the wall~~ <sup>shapes</sup> and the ~~magnitude of the corresponding interferences~~ size of errors which can be made.

The second part of this study corresponds to systematic tests: four configurations were chosen which gave different lift coefficients, without making highly supersonic zones appear on the profiles. For each configuration, three wall positions were tested:

- The first, called "unadapted," corresponds to the upper and lower divergent ~~rectilinear~~ walls compensating for

*boundary  
boundary*

thickening of the limit layers; it served as our basis for beginning three-dimensional adaptation calculations. These particularly simple limit conditions can also be used for complete calculation of the flow in the working section.

- The second wall shape comes from the three-dimensional adaptation calculation; the flexible sheets are positioned before the ~~test tunnel~~ <sup>walls</sup> ~~is run~~ <sup>run</sup>.
- Finally, the last case corresponds to "two-dimensional adaptation"; the iterative process converges <sup>in</sup> ~~on~~ a single ~~gust~~ <sup>tunnel runs</sup> ~~tunnel run~~:

*tunnel runs*  
For each type of test, three ~~gusts~~ <sup>tunnel runs</sup> are necessary to obtain readings from the six rows of pressure recorders spread along the AS 07 wing.

The experimental results gathered during this series are not sufficient to validate the three-dimensional adaptation method used. Additional calculations must be made to estimate residual corrections. In these tests, ~~the small~~ <sup>a negligible</sup> influence of the walls is observed for low lift values or low Mach numbers; inversely, for 2 degrees of incidence or for Mach 0.8, the ~~influence~~ <sup>become significant</sup> and can in part be interpreted as variations in aerodynamic incidence.

*differences*

## 2 - ADAPTATION PRINCIPLE

The purpose of the adaptable walls is to create an ~~unconfined~~ <sup>unlimited</sup> flow around a model, in a working section with finite dimensions; this can be done by controlling the wall conditions, either by their shape in the case of solid walls or by flows of mass through porous walls. The first solution has been chosen at T2, where flexible sheets moved by jacks form the upper and lower <sup>walls</sup> ~~plates~~ of the working section [3].

In the case of a three-dimensional body, it is necessary to bend the walls located around the model to arrive at a shape ~~corresponding~~  
~~such a streamline to a streamtube~~  
~~near the layer of current~~  
~~existing around the model in unlimited~~  
~~atmosphere.~~ This solution is not at present possible ~~at T2~~, but  
on the other hand it is possible to use the two flexible <sup>/9</sup>  
walls to minimize residual corrections due to the influence of  
the walls on the object ~~model~~.

### 2.1 Two-dimensional adaptation

The details of the process will be found in [2] and [4]; it uses a coupling between the real flow in the working section (internal field) and a calculated <sup>imaginarily</sup> ~~virtual~~ flow outside the wind tunnel (external field). Coupling occurs on a control surface near the walls through speed vector components. Adaptation is achieved by an iterative process acting on the shape of the walls: the components of ~~the speed on the control surface~~ <sup>velocity at</sup> becomes available at each iteration; they are extrapolated from the pressure measurements at the wall. The velocities needed on the control surface to achieve an unlimited external flow are calculated by the Green function following an inverse method. A method of optimized relaxation between the internal and external flows for the vertical velocity component, followed by an integration along each flexible wall, supplies the new shape of the wall. The real shape needed is obtained by adding the thickness displacement of the four wall limit layers.

### 2.2 Three-dimensional adaptation

For three-dimensional adaptation, the process is different [5]: it uses <sup>a representation</sup> ~~schematization~~ of the model through by a distribution of sources and vortices in a narrow horseshoe, placed on the <sup>test</sup> <sup>centerline</sup> ~~section axis.~~ This <sup>representation</sup> <sup>is</sup> ~~approximation~~ gives a good representation of axisymmetrical bodies mounted in the middle of the working section.

The originality of the method lies in then doing a linear transformation, which permits passing directly from distribution of velocities at the walls to the adapted form without needing to determine the intensity of singularities. The optimized shape of the walls is thus theoretically obtained from the first calculation; this shape, which is not exactly "adapted," minimizes residual corrections on the model caused by the influence of the walls.

~~Using this method for a half-wing at the wall is not quite correct~~ Using this method for a half-wing at the wall is not quite abusive, because the ~~basic representation~~ does not ~~represent~~ <sup>resemble</sup> a wingspan; it has nonetheless been tried here by replacing the one lateral <sup>sidewall</sup> door by a plane of symmetry leading to a ~~fictional~~ <sup>frictionless</sup> double section width, and taking the Mach distribution of the flexible walls near the plane of symmetry as reference.

### 3 - EXPERIMENTAL EQUIPMENT

The T2 transonic wind tunnel ~~is~~ <sup>can be</sup> pressurizable and can function at low temperatures; only minimum-pressure and ambient-temperature tests were ~~done~~ <sup>used</sup> during this series.

#### 3.1 Working section equipment

/10

The working section has an almost square section of  $0.39 \times 0.37 \text{ mm}^2$  at the entrance. Flexible sheets of Invar make up the upper and lower walls, equipped with three rows of pressure recorders whose coordinates are given in figures 7 and 8. The sheet-positioning mechanism is described in [2], [3], and [4].

<sup>sidewall</sup>  
<sup>sidewall</sup>

The left lateral ~~door~~ has three portholes with pressure recorders placed along horizontal and vertical lines whose coordinates are shown in Figures 7 and 9.

The pressure recorders are linked to the Scanivalves, each of whose head can observe 48 positions in 5 seconds.

The position of the wing in the working section is given in figure 6.

The Mach number of the flow is set by a ~~second neck throat~~ controlled by the computer which controls the ~~gust tunnel run~~.

No other equipment or wind tunnel measurement method were used.

### 3.2 Mounting the wing

The AS 07 wing model with a scale of "16/1000" is shown by the photographs in figure 5. The method of mounting the wing on the wall is shown (figure 6), the plane of the wing and its specifications are given (figures 10 and 11), and the shape of the profiles ~~at different spanwise locations are shown~~ which compose it, and the positions of the pressure recorders are indicated (figures 12 and 13).  
*at different spanwise locations are shown*

There are six rows, each with 16 recorders on the inner and outer sections and one on the leading edge; they are placed across the wingspan so as to form lines with constant chord percentages. These recorders communicate with tubes placed in grooves along the wingspan; each tube communicates with three recorders (either on the external wing or on the internal wing). When one of the three rows of recorders is used to measure pressure, the other two are covered with thin (0.05-mm) adhesive strips. It is thus possible to simultaneously measure pressure on two sections of the wing (one internal and one external); measurement of velocities over the entire wing thus requires three different ~~gusts tunnel runs~~.

The wing is mounted on a half-fuselage linked to a porthole, whose rotation ensures the angling of the wing-  
*which rotates to change the angle of attack of*

*straight*  
fuselage assembly; the angular reference is the ~~rectilinear~~ part on the back of the fuselage [1].

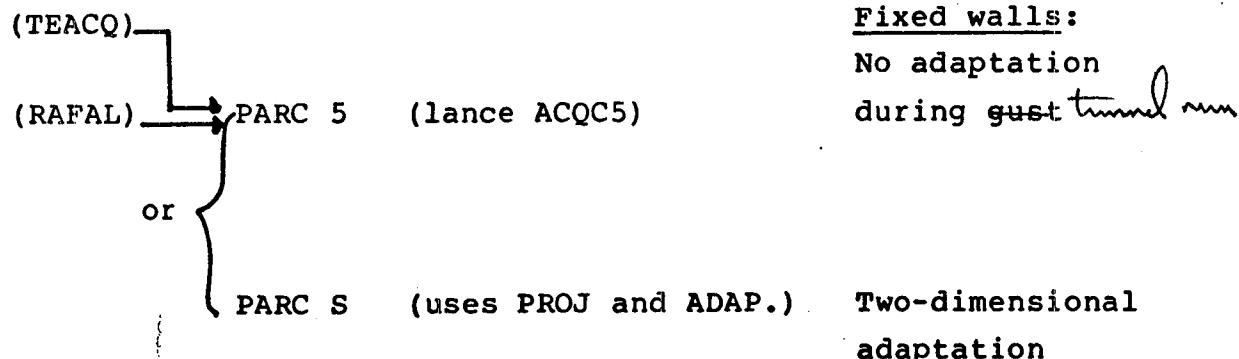
### 3.3 Acquisition and examination programs *graphics*

The T2 wind tunnel is linked to a team of two ~~tunnel run~~ computers, one concerned with creating and ~~controlling~~ regulating the gust and the other with obtaining data and storing measurements to disk at the end of ~~the~~ <sup>each</sup> ~~tunnel run~~.

These tests are <sup>similar</sup> ~~pursuant~~ to the series done on the 11 C5 body and use its principal elements.

Disk cartridge      LU 26, Program  
                          LU 34, Test files, calculation files

#### Acquisition program



Initialization of programs { with (TR,) RINC 5 (For PARC 5)  
                              or (TR,) RINC S (For PARC S)

#### Test file

AD --- test number      from AD 100 to AD 173

### wall positioning file

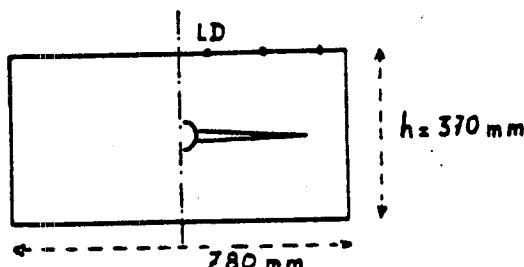
- any test file AD---
- or calculation file AD 9 ---
- or special file {
  - AD 4: Divergent rectilinear walls of with  
symmetrical limit layers.
  - AD 444: AD 4 + 10° rotation upward
  - AD 445: AD 4 + 30° rotation upward

### Three-dimensional adaptation calculation

Calculation from a test file AD ---

VKJ 43 Calculation of wall shapes without rotation

VKI M Calculation of wall shapes with rotation



- section length 780 mm
- ratio  $c = h/b = 2.1081$
- reference recorders:  
right lateral RL
- weighting coefficients  
file VKJ - R (cartridge  
LU 43)

→ Filing to disk

### File for new calculated wall shapes

AD 9 --- beginning test number for the calculation

### Programs for examination of AD--- files

LTCS:

- graphs local profile Mach numbers
- graphs Kp
- lists AD file
- calculates Cz

LTC 51:

- graphs wall Mach numbers
- graphs wall shapes
- starts LTC 52 (does an RP, LTC 52)

LTC VK:

- graphs only wall shapes calculated by VKI 43 or VKIM  
(from AD 9---).

4 - SUMMARY OF TESTS PERFORMED

A previous study was done on the AS 07 wing [1]. We verified in one case that the same results would occur, although the working section was modified when the T2 wind tunnel was *modified* adapted for cryogenics.

The first control tests were done by measuring rows 2 and 5 of pressure recorders for the Mach numbers and incidences indicated below:

$M_\infty$	0,6	:	0,7	:	0,8	)
$\alpha$	:		:		)	
{	:		:		)	
{	X	:	X	:	X	)
{	X	:	X	:	X	)
{	X	:	X	:	)	
{	:		:		)	

Four configurations were selected for systematic tests: /13

$\alpha$	$M_\infty$	0,6	:	0,7	:	0,8
+2°	X	:	:	:	:	)
0°	X	:	:	:	X	)
-2°	X	:	:	:	)	)

They correspond to a sampling of lift coefficients and to an infinite Mach effect upstream, while limiting the supersonic zones which appear on the profiles.

Figure 1 shows the list of tests in chronological order, and figures 2, 3, and 4 classify them by configuration.

We first showed that rotation of the upper and lower walls was equivalent to angling the model at the same angle. This ~~change in the angle of attack of~~ <sup>geometric</sup> ~~angle~~ <sup>power</sup> ~~stiffness~~ was made necessary because the ~~path~~ <sup>power</sup> of the jacks did not permit the displacements required by calculation of three-dimensional adaptation for a model incidence of +2°.

#### - Divergent rectilinear walls

$\alpha$	$\alpha$	Wall	$M_\infty$
accord.	(Display	Stadt	0,6 : 0,8 )
+2°	+2°	AD 4	AD 120 : -
	+1,5°	AD 445	AD 122 : -
0°	0°	AD 4	AD 107 - AD 109 : AD 108 - AD 132 )
	-0,5°	AD 445	AD 137 : AD 139 : -

- Three-dimensional adapted walls

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M <sub>0</sub>		
(		)
( α CALCUL	0,6	: 0,8
(	:	)
(		)
( 0° VKI 43	117	: AD 119
( -0,5° VKI M	138	: AD 141
(	:	)

α<sub>aérod.</sub> = 0°

The three-dimensional adaptation method theoretically supplies the optimal<sup>num</sup> shape of the walls from the first calculation, whatever the initial position of the flexible <sup>walls</sup> <sub>Test</sub>. Controls were done in this respect for the following configurations:

M <sub>0</sub>		
(		)
( α display	0,7	: 0,8
(	:	)
(		)
( +1,5°		: AD 127 (1) )
(		: AD 128 (2) )
(		: AD 129 (3) )
(		: )
(		: )
( 0°	AD 115 (1)	: AD 118 (1) )
(	AD 116 (2)	: AD 119 (2) )
(		: )
(		: )
( -0,5°		: AD 140 (1) )
(		: AD 141 (2) )
(		: )

The figure in parentheses after the file number indicates the order of the iteration; the wall-positioning file thus results from calculation of the preceding test. (Iteration (0) is the test done with rectilinear <sub>straight</sub> walls.)

We also verified that the tests called "two-dimensional <sup>2D model</sup> adaptation" converged rapidly, as is the case for the profile 2D Model tests; it is sufficient for that to compare the wall positions of

performed  
performed

the 3rd and 4th iterations, done during the same gust; the two positions are always close. In general, the beginning shape chosen is near the adapted shape, but we have tested this convergence in the two particular cases when the beginning shape was far from the adapted shape. The beginning file chosen was

AD 4: ~~rectilinear~~ <sup>straight</sup> walls diverge ~~from limit layers and~~ <sup>symmetrically</sup> for boundary layers.  
~~symmetrical~~

/15

Configuration:  $M_0 = 0.7 \alpha = +1.5^\circ$  File AD 130 (1)  
Configuration:  $M_0 = 0.8 \alpha = 0^\circ$  File AD 133 (1)  
followed by File AD 134 (2)

Comparisons were made between the various wall positions; they are noted:

- "Non," for divergent <sup>straight</sup> ~~rectilinear~~ walls
- "2D," for two-dimensional adaptation done with the PARCS program
- "3d," for positioning of the walls in the shape calculated by the VKI 43 or VKI M program

It was decided to do systematic tests for the three cases of "adaptation," the non-adapted case serving as a basis for three-dimensional calculation (any wall shape will work); this case can also serve as a basis for complete flow calculations, because here the limit conditions are particularly simple. The two-dimensional adaptation, <sup>beyond</sup> ~~and~~ outside the subject of the study, was systematically tested to use as a comparison with the assumed optimal shape.

Finally, four configurations for three cases of adaptation, reproduced three times to have the velocity field on all of the wing, were tested; these 36 <sup>tunnel runs</sup> gusts make up the systematic tests listed in figure 26a.

## 5 - CONTROL TESTS

We will not present all the tests done, but only a selection of cases judged most interesting, since the goal of this series ~~was~~ not to evaluate the AS 07 wing.

### *Change of flow angle*      *Change of flow angle* 5.1 Angling by wall rotation

Of the five configurations tested (paragraph 4), three are presented. The first corresponds to  $M_\infty = 0.6$  and  $\alpha = +2^\circ$  for ~~rectilinear~~<sup>straight</sup> walls (figure 14); this is the configuration which obliged us to use this ~~artifice~~<sup>technique</sup>, as the three-dimensional case could not be tested.

Figure 15 shows the comparison of Mach numbers on the walls and on the wing, for an aerodynamic incidence equal to  $0^\circ$  and a Mach number equal to 0.8, in the case of ~~rectilinear~~<sup>straight</sup> walls. Figure 16 presents the same configurations but for wall shapes coming respectively from <sup>3D</sup> calculations VKI 43 and VKI M.

The results of figures 14 and 15 show that the high Mach case is the most ~~interesting~~<sup>interesting</sup>, but the ~~correspondence~~<sup>quality</sup> of the tests remains good. Figure 16 shows that the VKI M calculation makes perfect allowance for ~~total~~<sup>axis</sup> rotation.

It is thus possible to display a model incidence <sup>/16</sup> different from that desired and to compensate by rotating the walls.

### *Adaptation* 5.2 Convergence of iterations

#### 5.2.1 Three-dimensional adaptation

Several calculations for optimization of wall shape were <sup>made</sup> connected for one configuration. The last test is always recalculated, leading to a wall shape which by definition

will not be used, but which will in fact constitute an additional iteration.

Of the four tested cases, two are presented in figures 17 and 18; the first ( $M_0 = 0.7$  and  $\alpha = 0^\circ$ ) shows that the adapted shape is practically obtained from the first iteration; in the second case--much more difficult ( $M_0 = 0.8$  and  $\alpha = +2^\circ$ )--it is necessary to wait for the second calculation. This second case corresponds to a ~~freely influenced by the~~ supersonic regime of the wing which will not be studied systematically herein.

### 5.2.2 Two-dimensional adaptation

In all tests done, the 3rd iteration is always identical to the 4th and last iteration of the ~~gust~~ <sup>tunnel run</sup>, even when the upper and lower walls have been prepositioned in a shape very different from the "adapted" shape. This is the case shown in figure 19 corresponding to  $M_0 = 0.8$  and  $\alpha = 0^\circ$ .

To confirm the validity of this statement, a second test was done, positioning the flexible <sup>walls</sup> sheets on the preceding shape; the values obtained can thus be considered to correspond to the 4th, 5th, 6th, and 7th iterations of the test; they are all identical (figure 20), which confirms that the convergence was well obtained.

### 5.3 Non/2-D/3-D comparison

Two cases are presented here, one of which is not part of the systematic tests:

- $M_0 = 0.7 \quad \alpha = 0^\circ$
- $M_0 = 0.8 \quad \alpha = 0^\circ$

*differences*    *various*  
The gaps observed following the types of "adaptation" <sup>test</sup> will become more significant as lift and Mach number upstream increase. The adaptation called "two-dimensional" gives results nearer to the non-adapted case; in fact, everything happens as if the aerodynamic incidence of the two-dimensional case were higher than that of the tests with a wall shape adapted in three dimensions. On the other hand, rectilinear walls lead to a higher effective Mach number upstream (blockage effect).

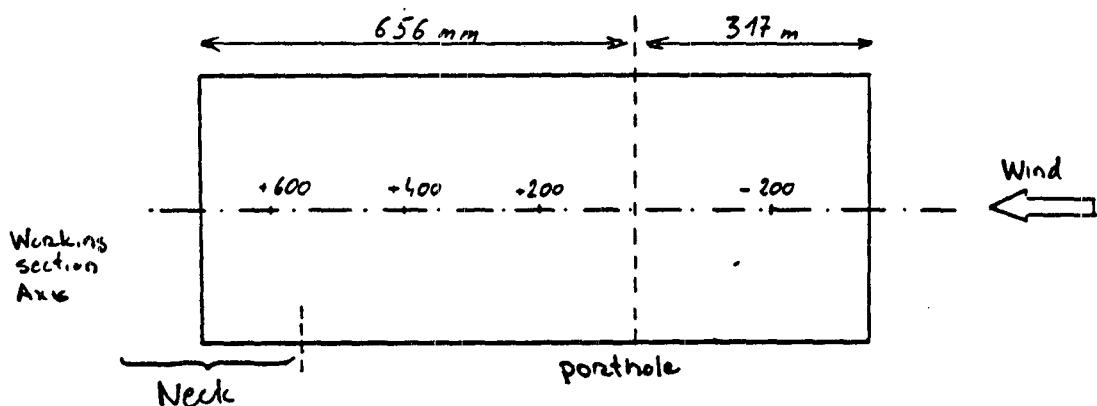
*slope differences*  
In the first case (<sup>slope</sup> figure 21), the gaps are moderate; they are more significant in the second case (figure 22). Observation of the <sup>slope</sup> direction of the walls leaving the <sup>contraction</sup> convergent (figure 21) shows that, effectively, the direction of the flow upstream is no longer horizontal in the "2-D" case, unlike the "3-D" case; the angular reference was given by the "non-adapted" case. The effect produced is <sup>incontestable</sup>, because we /17 previously demonstrated that rotation of the walls assembly modified the aerodynamic incidence of the model; however, this is not sufficient to prove that the 2-D case is <sup>in error</sup> erroneous, because the direction of the <sup>stream</sup> current lines in <sup>unlimited</sup> the <sup>unconfined</sup> flow atmosphere <sup>are</sup> not known. We note also the very different shapes of the walls downstream; they go downward for the "3-D" cases, which is logical allowing for the chosen <sup>semetrization</sup> representation (horseshoe vortex) and the calculation made (in the plane of symmetry). But once more, that does not prove that the shape obtained is optimum.

Finally, one can observe on the last figure (23) that the effect <sup>produced by</sup> modifying the shape of the walls is not constant across the wingspan. This was predictable due to the working section geometry itself, allowing for twist of the wing and for three-dimensional effects.

## 5.4 Visualizations

flow  
flow

For three configurations, oil visualizations were done on the left ~~side~~<sup>Sidewall</sup> of the working section, giving the direction of the ~~current~~<sup>stream</sup> lines 55.4 mm from the end of the wing. Reference marks were made, making it possible to locate the positions relative to the ~~current~~<sup>Stream</sup> lines and to measure their deviations.



The end of the wing is located between the abscissas 91.06 mm and 135.86 mm from the porthole (figure 6) and very near to the section axis (function of the incidence).

The maximum deviations noticed are located on the ~~test~~ section axis slightly behind the tip of the wing (figures 24, 25, and 26).

$M_0$	$\alpha$	Walls	$\delta_{\max}$
0,6	+2°	"Non-adapted" AD 4	(5°.....6°)
0,6	+2°	Adapted 2-D	(5°.....6°)
0,6	-2°	"Non-adapted" AD 4	~ 0,5°

Figure 24

Figure 25

Figure 26

The photos taken from behind clearly show the deviations of the ~~current~~<sup>stream</sup> lines.

/18

### 5 - SYSTEMATIC TESTS

For the 36 ~~tests~~<sup>tunnel runs</sup> that made up the systematic tests (paragraph 4 and figure 26a), the following information is given: wall shape (figures 27 and 28), Mach numbers of the three rows of recorders on the adaptable walls (figures 29, 30, 31, and 32), Mach numbers of the left lateral ~~wall~~<sup>sides</sup> (figures 33, 34, 35, and 36) following the horizontal axis or the three verticals, and finally spread of  $K_p$  on the AS 07 wing (figures 37 to 44).

Numerical values for these curves are given in the attached test listings. File numbers corresponding in chronological order to the experiments were kept in the interests of clarity.

Here will be found a systematic comparison of the three cases of adaptation--"Non/2-D/3-D"--and their influence on the ~~velocity~~<sup>speed</sup> distributions, whose principal characteristics <sup>of which</sup> were seen in paragraph 5.3.

Finally, integration of  $K_p$  for each section supplies local lift coefficient  $C_z$ . The values are tabulated in figure 45; they were traced along the wingspan of the various configurations tested (figures 46 and 47). It is observed that the internal wing changes less rapidly than the external wing with incidence (figure 46) or <sup>test</sup> Mach number upstream (figure 47).

On the other hand, the ~~difference~~<sup>difference</sup> between the "non-adapted" and adapted 3-D" cases increases with the lift.

Local  $C_z$ s were multiplied by the chord of the profile in the section considered; the product  $C_z \cdot C$  represents local contribution to wing lift. The values obtained were traced in this representation (figures 48 and 49); this weighting modifies the appearance of the curves ("elliptic" distribution plane), but the observed tendencies are the same. /19

Finally, integration of the curves in this last representation supplies the overall lift coefficient of the wing, which was reported as a function of incidence (figure 50). We have also reported the lift measured during the preceding series [1], performed straight between rectilinear walls for a Mach number upstream of 0.47. The effect of compressibility is felt more as supersonic zones develop on the wing.

#### - CONCLUSION

This series of tests on the AS 07 wing is registered as a study on three-dimensional adaptation of the T2 wind tunnel. It uses the two flexible walls to minimize residual corrections in the presence of a three-dimensional model. It implements the "E. Wedemeyer and L. Lamarche" method where schematization of the model by a distribution of singularities adequately represents an axisymmetrical body. Extrapolation of these methods in the case of a half-wing <sup>model mounted on the sidewall</sup> at the wall has no ultimate goal; it serves merely as a preliminary phase, to observe the influence of wall shape in various sections of the wing, to study the convergence of the method, and to make adjustments to rotation of walls, incidence, etc.).

On the other hand, these experiments can serve as a basis for calculating potential three-dimensional flow around the model. Then, a three-dimensional object placed in the <sup>top</sup> section <sub>model</sub>

theretically  
theoretically represented  
could be more elaborately schematicized; it would lead to development, as for axisymmetrical bodies, of a method of adaptation minimizing the influence of the walls on the model.

At present, it is difficult to know if the shape called "adapted 3-D" is nearer to the values of ~~unlimited atmosphere~~ <sup>boundary</sup> ~~unconfined flow~~ than the shape "adapted 2-D," but it is definitely not the optimum shape.

~~measurements~~ <sup>continue with</sup> The tests will next be completed by directional limit layer readings on the lateral <sup>side</sup> wall at the level of <sup>with</sup> the end of the wing tip. The direction of the <sup>stream</sup> current lines in this area will be an important element in the reality-calculation comparisons

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- ( $\alpha = +2^\circ$  Mo = 0.6) - Non  
- 2-D  
- 3-D 31

- ( $\alpha = 0^\circ$  Mo = 0.8) - Non  
- 2-D  
- 3-D 32

*side*

### 5.3 Lateral wall Mach no

- ( $\alpha = -2^\circ$  Mo = 0.6) - Non  
- 2-D  
- 3-D 33

- ( $\alpha = 0^\circ$  Mo = 0.6) - Non  
- 2-D  
- 3-D 34

- ( $\alpha = +2^\circ$  Mo = 0.6) - Non  
- 2-D  
- 3-D 35

- ( $\alpha = 0^\circ$  Mo = 0.8) - Non  
- 2-D  
- 3-D 36

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- ( $\alpha = -2^\circ$  Mo = 0.6) Non adaptable 37

- ( $\alpha = -2^\circ$  Mo = 0.6) - Non  
- 2-D  
- 3-D 38

- ( $\alpha = 0^\circ$  Mo = 0.6) Non adaptable 39

- ( $\alpha = 0^\circ$  Mo = 0.6) - Non  
- 2-D  
- 3-D 40

- ( $\alpha = +2^\circ$  Mo = 0.6) Non adaptable 41

- ( $\alpha = +2^\circ$  Mo = 0.6) - Non  
- 2-D  
- 3-D 42

- ( $\alpha = 0^\circ$  Mo = 0.8) Non adaptable 43

- ( $\alpha = 0^\circ$    Mo = 0.8)      - Non
- 2-D
- 3-D

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