



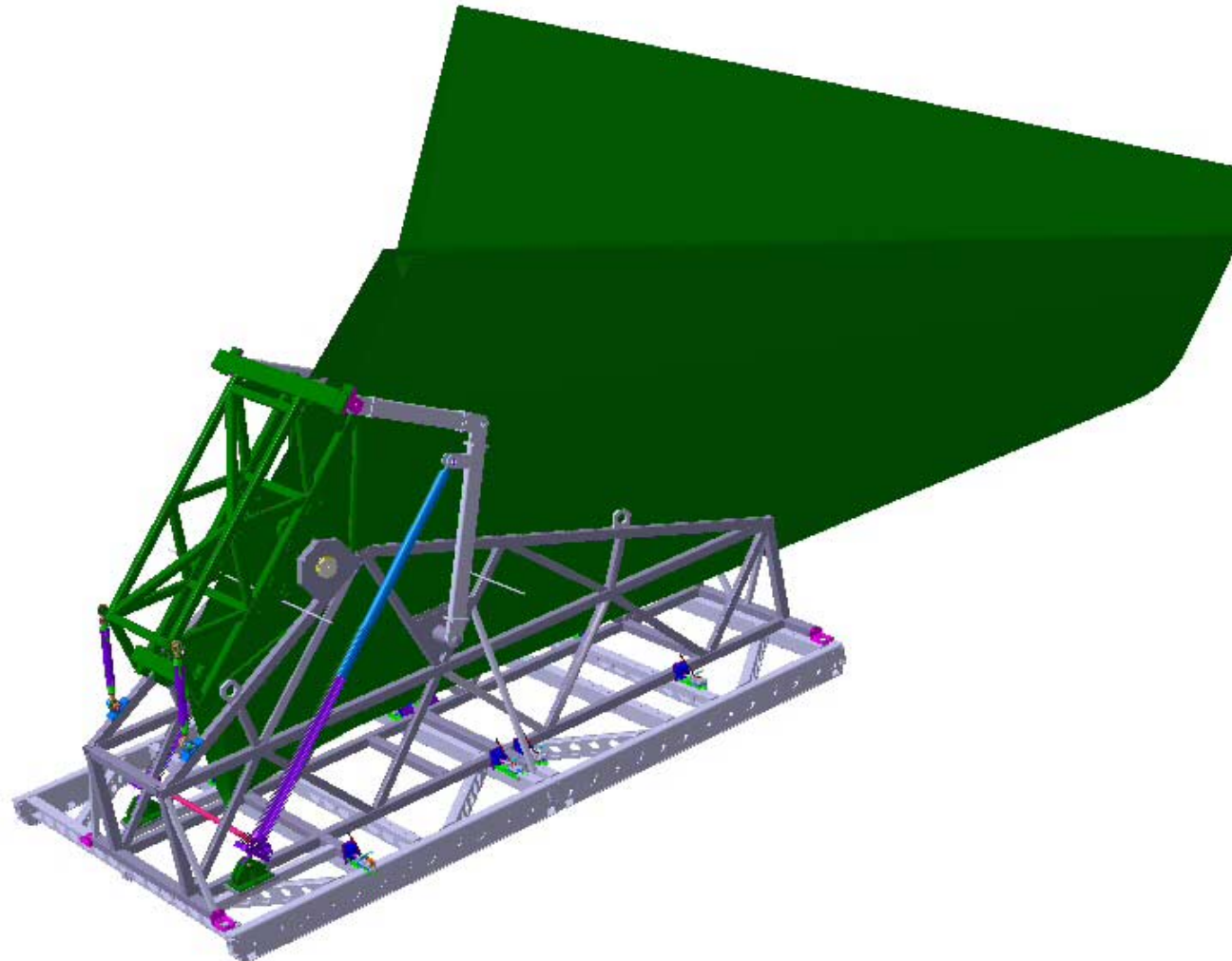
# Component Delivery Specification - A

Reference : **CDSA-TO-A340-31000-05-A0**

Title : **VERTICAL TAIL PLANE**

Aircraft type :

**A330-A340-A340 500/600**



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### 2. SIGNATURE SHEET

COMPANY: AIRBUS France (FAL TOULOUSE)		COMPANY: AIRBUS DEUTSCHLAND (STADE)	
PRODUCTION APPROVAL	QUALITY APPROVAL	PRODUCTION APPROVAL	QUALITY APPROVAL
Name: Lionel RENAUD	Name: Alain BOULESTIER	Name: Stefan SCHULZ	Name: Gerhard GARBERS
Date: 13/11/2006	Date: 20/11/2006	Date: 31.1.07	Date: 06.02.07
Signature 	Signature 	Signature 	Signature 
Prepared by: Lionel LAGACHE		Date: 15/09/2006	Issue: A0

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## 3. LIST OF EFFECTIVE PAGES

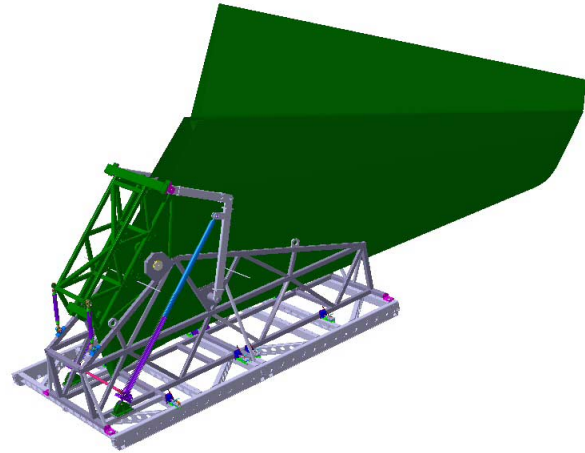
Page	Date	Issue	Page	Date	Issue	Page	Date	Issue	Page	Date	Issue
1	15/09/2006	A0									
2	15/09/2006	A0									
3	15/09/2006	A0									
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6	15/09/2006	A0									
7	15/09/2006	A0									
8	15/09/2006	A0									
9	15/09/2006	A0									
10	15/09/2006	A0									
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## 4. RECORD OF REVISION

Record of revision				Small view
Issue	Date	Modified Pages	Reason for Revision	
<b>A0</b>	15/09/2006		Mod. 55760 : Transfer of activity from AI-F to AI-G.	

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## 5. DISTRIBUTION LIST

A – F      Company:		A – D      Company:	
Name	Department	Name	Department
Pierre-Jean LE GALL	BLLBI	Stefan SCHULZE	TSL1
Lionel RENAUD	BLLBI11	Gerhard GARBERS	TSQ3
Alain BOULESTIER	BLLAQM	Jonas BROETJE	BLMIR
Thierry GENDRE	BLLA1	Kim DUNKHASE	TSL11
François LAVIGNE	BLLA1S		
Serge DARBAS	TLOI2		
Jean-Christophe REY	BLENT		
Serge HIEGEL	BLLDR1		

## 6. PURPOSE OF THE DOCUMENT

**Definition of the work package.**

**The scope and limits of the suppliers responsibility for the work package concerned**

The **Component Delivery Specification (CDS)** is divided into two parts: **CDS Part A** and **CDS Part B** in accordance with AP2100.

The purpose of **Part A** of this document is to define the context to which the manufacturer of the supply must comply and furthermore the responsibilities between the manufacturer and the receiving partner/participant of the components.

The condition of the components to be delivered is agreed in this document together with the transportation/loading responsibilities.

Based on the **Interface Lists** (IL) the interface responsibilities are described in more details.

The establishment of this part of the document is with the customer.

This is a contractual document and constitutes a commitment from each partner/participant. All amendments (either production development or design definition) to the **Component Delivery Specification** must be submitted to the originator who will, if necessary, call on the partners / participants concerned for agreement.

## 7. GENERAL DESCRIPTION OF COMPONENTS TO BE DELIVERED

The totality of the components to be delivered shall be in conformity with **Design drawings, interface/frontier drawings, the group GTR'S and the provisions specified** in this document.

Components to be delivered shall comprise the complete manufactured and equipped section, together with pre-fitted parts listed in chapter 8.1.5.

To achieve certification the principle accepted by all participants consists of supplying sections - completed and subjected to test inspections, including all required **GTRs**. The relevant **GTIs** related to the required **GTRs** are listed in the **Inspection Report** (AP2104).

Outstanding work shall be treated in accordance with the procedure defined in **A.I.Q.I.2.24.017.00** and **AP 21 04**. Such work shall be formalized by the outstanding work procedure **IQDA 08.04** and **MIM 405 14**.

All these documents shall be supplied 3 days before the beginning of the station in assembly inspection report loaded in PVCE database for the constituent assembly.

All non-conformities shall be treated in accordance with the procedure defined in **AP 20 06**.

Complete configuration status is managed and attested according to **AP 21 04** and **AP 26 53** (configuration conformity management and documentation process).



## 8. DETAILED CONDITIONS OF COMPONENTS TO BE DELIVERED

### 8.1. FAL TOULOUSE MANUFACTURING REQUIREMENTS.

- The supply shall comply with the design drawing set, including the specification drawn up by the first level supplier for each system, frontier drawing, list of GTR's group 7 ..... and with the condition stipulated with this document.
- The Vertical Tail Plane shall be delivered at FAL Toulouse, so as to supply a deliverable part number (PN).
- Before delivery to A-F Toulouse, the supplier shall protect the parts that constitute the Vertical Tail Plane with protective agent.
- The lubrications that must be performed in FAL Toulouse shall be specified on the FAL 45 assembly drawings.
- All specific fasteners (Part Number) shall be introduced in bill of material into the 45 assembly drawings.
- All specific fasteners (Part Number) shall be delivered separately at FAL Toulouse.
- All other fasteners (standard parts which is not in a box) shall be under the responsibility of A-F procurement and introduced in bill of material into the 45 assembly drawings.
- The need for the customer to have special tools shall be specified in the **SPECIAL RESERVES** paragraph 8.1.1.1. of the corresponding ATA .
- Tools shall be at the charge of the supplier and validated by the customer.
- Special tools for transportation and for securing parts to one another shall be under the supplier responsibility, and validated by the customer.
- The Fairings + Dorsal Fin shall be delivered with Vertical Tail Plane by the supplier.
- All equipped pins, all rods and plugs (hoisting points) of Vertical Tail Plane shall be delivered in specific box with Vertical Tail Plane.

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- The Rudder shall be installed on Vertical Tail Plane and **immobilized**.
- The transducer units FIN **22 CS** and **27 CS** shall be installed but his stub axle **will not be installed** (will be installed in FAL).
- Trailing edge doors of servo-actuators on rudder shall be delivered on with temporal fasteners, their final assembly will be after installation of servo-actuator on FAL Toulouse.
- Plastic removable plugs of hoisting points (VTP) shall be delivered, joined with the Vertical Tail Plane, The final installation will be done at FAL Toulouse.

## 8.1.1. SPECIAL RESERVES

### 8.1.1.1.1. ATA 29 / 85 HYDRAULICS

- Installation performed in accordance with the definition dossier.
- Plugs tightening following AIPS 03-06-015

### 8.1.1.1.2. ATA 55 STRUCTURE

- Installation performed in accordance with the definition dossier.
- All access doors of trailing edges left and right side, will be only pinned. (panels definitely closed)
- On leading edge n°1, the rib n°1 will be pinned.
- All other elements will be delivered according to the definitive assembly, the sealant achieved.

### 8.1.1.1.3. ATA 92 ELECTRICITY

- Installation performed in accordance with the definition dossier.
- VTP ATA 92 System Installation shall be fully completed prior to delivery to the FAL in accordance with the Electrical Frontier Drawing.
- Cables to be connected with S19 interface shall be coiled, protected and stowed in a safe area on the structure in order to not disturb VTP installation.

## 8.1.2. LIST OF REQUIREMENTS

### MANUFACTURING / SYSTEMS CONNECTIONS REQUIREMENTS / TESTS:

As a general rule, before delivery to FAL TO, any system - or part of it – installed on the Aircraft component, shall be attested and show evidence of its compliance with the following overall testing requirements.(ref. A3456-TN-L1GF-8212-AT Rev: D)

## 8.1.3. FLIGHT TEST

In case of installation IEV parts, all parts will be installed before delivering to FAL TO.

- IEV Tip (with telemetry antenna, with or without towed cone)
- Connection antenna
- Potentiometer installation between rudder and VTP box.

## 8.1.4. ADJUSTMENTS, TEST AND CHECKS

The list of following parts shall be adjusted, tested and checked at A-D:

- Rudder
- Leading edges
- Trailing edges : Doors and Panels

Before delivery to FAL TO, each system or sub system installed at section level have to be attested following general ground test requirements of the industrial test work-sharing note.

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### 8.1.5. LIST OF PRE-FITED ITEMS DELIVERED AT F.A.L TOULOUSE

These are components that have been trial-fitted on the V.T.P. then removed for transportation. They are therefore allocated to the V.T.P. and shall be delivered, identified with the aircraft number at the same time as the V.T.P..

Name of Parts	Quantity	Remarks
Dorsal fin	1	
Fairings	6	
Kit of fixation (Fitting assy-attach; transverse load joke; bolt; eccentric bolt; .....)	1	
Rudder sealing	1	

#### 8.1.5.1. TOLERANCES

Unless specified either on the drawings or on the following pages, the tolerances to be taken into account are those defined in document NSA 2110. In accordance with frontier drawings.

## 8.1.6. TRANSPORT AND TOOLING REQUIREMENTS

ref. : TRVV4-D00002131

## 8.1.7. SURFACE PROTECTION AND PAINTING

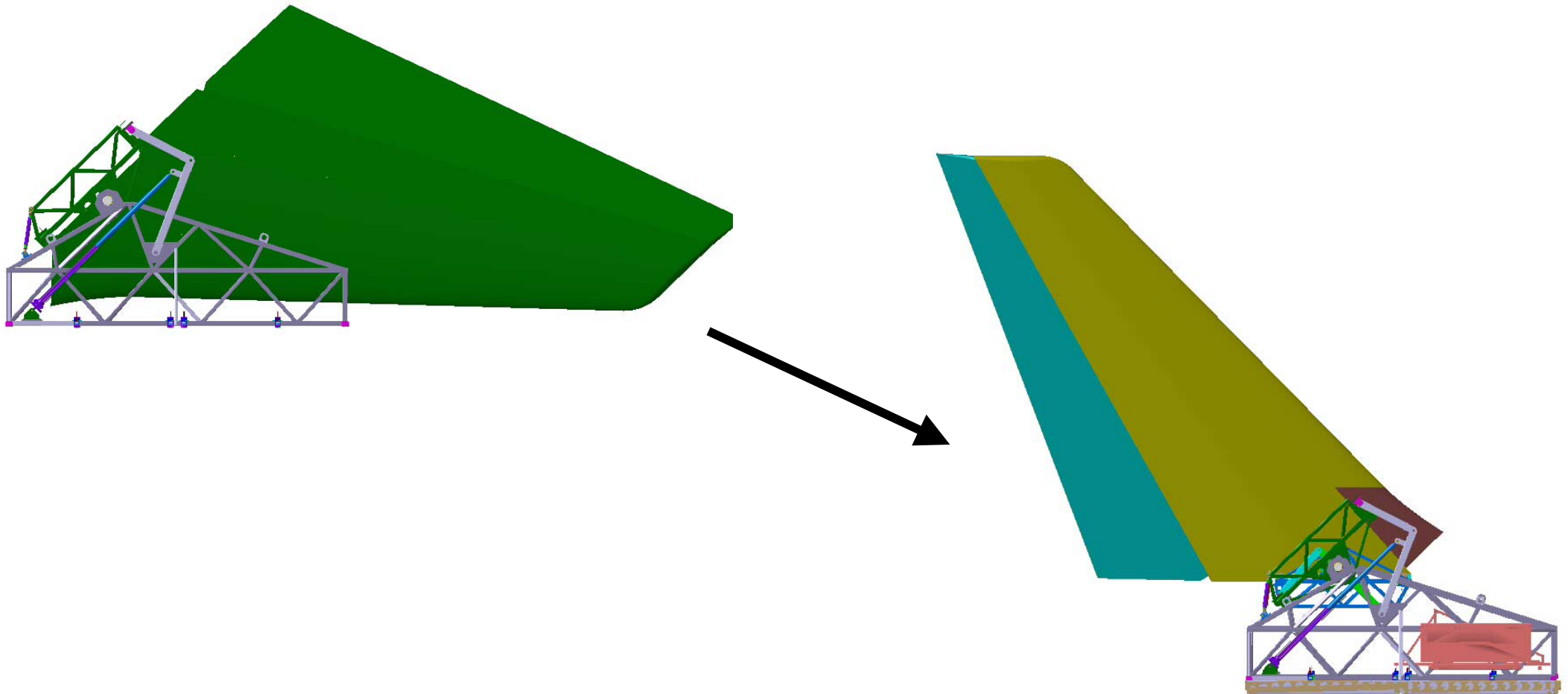
Unless specified otherwise, protection shall be performed according to the definition dossier.

All interfaces will be in accordance with requirement and frontier drawing: F110-16002

### Requirement Painting Toulouse:

A specific definition will be asked to the VTP supplier to open and close the access doors to servos-actuators, in phase of painting, to protect servos-actuators of painting vapors.

## STATUS DELIVERED AT FAL TOULOUSE



## 9. CONTRACTUAL INTERCHANGEABILITY

Contractual interchangeable parts are listed in chapter 20 and 70 of the Aircraft Standard Specification.

Responsibility for Contractual Interchangeability shall be in accordance with **ABD 0027** "Interchangeability Requirements " and **AP 21 49, AP 21 59** "Interchangeability Procedure".

Instability or interchangeability shall be ensured in conformance with:

- Work specification.
- Frontier drawing.
- Installation drawing.

All the means to be implemented, tooling cascades, means production programs, reference system choices, permitting instability to be guaranteed at interfaces, shall be defined in the work specification ( or interface specification).

The design and manufacturing of the tools shall be under the supplier responsibility.

Interchangeability demonstrations to be made to the customer shall be performed at the component stage. If it proves technically impossible to provide these demonstrations at this stage, they shall be performed in FAL under the responsibility of, in the presence of, and at the charge of the supplier.

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## 10. INTERFACE CONTRACTUAL DOCUMENTATION

Interface Description	Interface List	Work Specification	Interface/Frontier drawing / Model	ICY Drawing
45 DRW. PAINTING			F110-16002	



## 11. QUALITY ASSURANCE

The partner/participant is responsible for the component up to delivery of the aircraft to the customer. As such, he must draw up all technical inspection documents making it possible to guarantee the compliance of the assembly. Each component to be delivered shall be clearly identified in accordance with **A.I.Q.I. 2.24.003.00** "Identification and Markings" and accompanied by an Assembly Inspection Report in accordance with **AP2104** "Assembly Inspection Report requirements".

The partner/participant supplying the component shall affix an inspection label to certify all closed areas that are not to be opened by the partner/participant executing the final assembly in accordance with **A.I.Q.I.2.24.031.00 / A.I.Q.I.2.24.041.00**.

The manufacturer is responsible for correct performance of the tasks he has to carry out, up to delivery to the airline.

The manufacturer shall draw up all the technical inspection documents guaranteeing conformity of the assembly.

Each assembly delivered shall be identified in accordance with **A.I.Q.I. 2.24.003.00**

Assembled and finished components together with the pre-fitted parts shall be weighted in accordance with **A.I.Q.I. 2.20.001.00**

NOTE : the results of the dimensional and interchangeability checks and the functional adjustments required by the drawings and inspection memos(MC) shall be given in the inspection report.

### TEST:

Hydraulic system cleanliness shall be equal to or better than class 7 according to **ADET 0190**.

## 12. INSPECTION REPORT AND CONFIGURATION CONTROL

All these documents mentioned in a.m rules shall be supplied 3 days before the beginning of the station and Assembly Inspection Report loaded in PVCE database (transferred to I.R.S) for the constituent assemblies, procedure defined in **A.I.Q.I 2.24.054.00**.

The requirements for the Constituent Assembly Inspection Report will be realized according to **A.P. 2104**.

Complete configuration status is managed and attested according to **A.P. 2104** and with **A.P 2653** (Configuration Conformity Management and Documentation Process) keeping as a common target to achieve.

All V.T.P constituent assemblies will be registered in the complete report of delivered VTP on the FAL.

Inspection report to be delivered :      \* Inspection report of **FV000** contain :

<b>FV 210</b>	Fin box
<b>FV 220</b>	Vertical Stabilizer CFC Rudder
<b>FV 230</b>	Vertical Stabilizer Leading Edge 1
<b>FV 240</b>	Vertical Stabilizer Leading Edge 2
<b>FV 250</b>	Vertical Stabilizer Leading Edge 3
<b>FV 255</b>	Vertical Stabilizer Leading Edge 4
<b>FV 260</b>	Tip Vertical Stabilizer
<b>FV 290</b>	Centering Device

\* Inspection report of **FV 270** Dorsal Fin

## 13. TRANSPORTATION

### 13.1. TRANSPORTATION OF THE VERTICAL TAIL PLANE

The Vertical Tail Plane and their components shall be marked with the number of the constituent assembly and allocated to an aircraft MSN.

The aircraft MSN (written « MSN + number » e.g. MSN 001) shall be clearly written in big letters on the item to be delivered.

An adhesive label with the assigned A/C N° will be stucked on the part to be delivered in FAL Toulouse.

The Delivery address is:

**AIRBUS France**  
**316. Route de Bayonne**  
**Usine Clément ADER**  
**31060 Toulouse Cedex 03**  
**FRANCE**

### 13.2. TOOLS TO BE RETURNED

Only the tools quoted by the Vertical Tail Plane supplier in the component delivery specification (CDS part B) will be returned. They shall bear the mention « retour à / return to : ..... » and a tool number.

### 13.3. VERTICAL TAIL PLANE PACKAGING

The unattached parts shall be secured (stowed) for the transport (tyraps, etc...)

All unconnected hydraulic pipes shall be blanked.