Global Meeting of the A400M Suppliers

Industrial aspects and Global Supply Chain of the A400M Programme

Present and future of the A400M Programme (Round table No. 1)
Seville May 23rd.

Presented by
Alberto Gutierrez / COO - Airbus Military
Content

• Programme Organisation overview
• Industrial work-share
• FAL Build process & status
• Programme Achievements
• Supply Chain
• The A400M Programme Challenge
A400M Programme Organisation overview
174 aircraft contracted by 7 European Launch Nations and 1 export customer:

<table>
<thead>
<tr>
<th>Country</th>
<th>Quantity</th>
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<tbody>
<tr>
<td>Belgium (7)</td>
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<td>France (50)</td>
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<td>Germany (53)</td>
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<td>Luxembourg (1)</td>
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<td>Spain (27)</td>
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<td>Turkey (10)</td>
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<td>UK (22)</td>
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<td>Malaysia (4)</td>
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A440M Programme Organization

DEFENCE MINISTRIES

GERMANY
FRANCE
UK
SPAIN
TURKEY
BELGIUM / LUX

GOVERNMENT

OCCAR*

INDUSTRY

AIRBUS MILITARY

Airbus S.A.S
EADS CASA
TAI
FLABEL

PARTNER COMPANIES

EXPORT CUSTOMERS

* Organisation Conjointe de Coopération en Matière d’Armement
A400M Industrial Work-share
A400M Worksharing

FAL & A/C DELIVERY in Airbus Military San Pablo (Seville)

<table>
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<td>3</td>
<td>AF Saint Eloi</td>
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<td>4</td>
<td>AUK Filton</td>
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<td>5</td>
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<td>AF Nantes</td>
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<td>16</td>
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<td>TAI</td>
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Programme Main Locations in Europe

- **Wing**
  - FILTON

- **NF & CWB**
  - Nantes & St Nz

- **Systems**
  - TOULOUSE

- **Design O. & Powerplant**
  - MADRID

- **HTP**
  - SEVILLE

- **FAL & Delivery Centre**
  - SEVILLE

- **IFA Fuselage and Empennage**
  - BREMEN & STADE

- **Central Programme Organisation**
  - TOULOUSE

- **Military Systems**
  - ULM

- **ANKARA**
  - TAI

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Industrie Supply Chain / Transportation Plan (Beluga)

A400M added three new Beluga ports to AI network: Ankara, Filton and Seville

- Wings
- St. Nazaire
- Filton
- Hamburgo
- Bremen
- VTP
- Tail cone and barrel top skin
- Aileron and Spoilers
- Paratrooper doors
- Central and Frontal Fuselage
- Ankara
- Sevilla (Final Assembly Line)
- Together with
Major components to FAL (with supplier)
A400M FAL Build process & status
A400M Assembly Concept

- Integration and Fuselage Tests
- Integration and Wing Tests
- Integration and Empennage Tests
- Integration and Aircraft Tests
- Engines
- Finishing and Ready to Fly
A400M FAL Build Process

STA 60 FUSELAGE JOIN-UP

STA 72 WING JOIN-UP

STA 70 WING EQUIPPING & TESTING

STA 35/30 GROUND TESTS

STA 20 PwP INSTALLATION & FURNISHING COMPLETION

STA 15 FLIGHT LINE

STA 10 PAINTING

STA 50 EMPENAGE JOIN-UP

STA 40 AIRCRAFT INTEGRATION

STA 30/35 ENGWERKS WERKSTAD POWERPLANT EQUIPPING

STA 20 PwP INSTALLATION & FURNISHING COMPLETION
A400M FAL general arrangement & Lay out
Current Location of A/C at FAL

- MSN 8
  - PATM at STA15

- MSN 9
  - STA 20

- MSN 10
  - STA 35A

- MSN 11
  - STA 40

- MSN 12
  - STA 60 (DC)

- MSN 12
  - STA 50

- MSN 12
  - STA 50
A400M Programme Achievements
FACTS: 5 development A/C delivered to Flight Test Campaigns

- FLIGHT HOURS 5015
- NUMBER OF FLIGHTS 1720
A400M Industrial Status: **MSN7**

**MSN7** first A/C to be delivered to the First Customer (**France**) progressing on track for **delivery** to the Customer **mid/end June**.

- **First Flight achieved** on 6th March.
- **Handover to Delivery Centre completed** on 22nd April;
- **Customer Acceptance**, currently on-going since early May.
**MSN8** – second serial a/c and second to be delivered to France (in August’13):

- Aircraft in Production Acceptance Tests.
- **First Flight** end May;
- Entering **Delivery Center** early July.
A400M Industrial Status: **MSN9**

**MSN9** – first a/c to be delivered to Turkey (in September’13):

- Aircraft in Flight Clearance Tests,
- **First Flight** expected by end June;
- Entering **Delivery Center** end August.
• 5 aircraft in FAL: MSN8 to MSN12 + MSN7 in Delivery Center
• 17 aircraft in various stages of Production / Assembly: MSN13 to MSN29
• 4 aircraft in Long Lead Items procurement process: MSN30 to MSN33

Long Lead Items

Components manufacturing and assembly

Final Assembly Line

Engine Availability in Seville

OWB/CWB delivery to FAL

PwP delivery to FAL

IFA start station 900

CWB start assembly

IFA delivery to FAL

IFA start part manufacturing

CWB start Panel manufacturing

First Export available slot

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A400M Supply Chain
A Supply Chain that will grow with the export market

(number of suppliers per country)
A400M supply chain zoom in Spain

**“Buy” packages distribution per Province**

- **Sevilla**: 60.9%
- **Ciudad Real**: 7.4%
- **Madrid**: 25.7%
- **Álava**: 5.2%
- **Toledo**: 0.8%

**“Buy” packages: distribution per Province**

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<tr>
<th>Province</th>
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**“Buy” packages: distribution per commodity %**

- Systems & Equipments: 31.0%
- Composites: 9.6%
- Machining: 26.1%
- Welding & Pipes: 9.6%
- Assembly: 2.9%
- Sheet metal: 0.1%

**“Buy” packages: distribution per supplier %**

- Alettis: 27.2%
- INDRA: 20.4%
- Sevilla Control: 14.8%
- Airgrup: 9.6%
- UMI: 7.9%
- TECNOBIT: 5.9%
- CESA: 9.2%
- GAZC: 2.1%
- Others: 2.9%
The A400M Programme CHALLENGE
A400M Industrial: Ramp-up is a reality...

- **Q1-2013**: Aircraft Deliveries
  - MSN11

- **Q2-2013**: Aircraft Deliveries
  - MSN21 (France)

- **Q3-2013**: Aircraft Deliveries
  - MSN21 (Turkey)

- **Q4-2013**: Aircraft Deliveries
  - MSN21 (France)
We expect from A400M Supply Chain

- Competitiveness and continuous improvement
- Operational flexibility (i.e. FAL support)
- Intolerance against OT and OQ deviations
- Attention to military specifics
- Support to export sales (commercial and offsets)
- Adequate programme and production management
A400M Industrial: Ramp-up is a reality...

The A400M Programme needs a strong **Supply chain** for this challenge and therefore, your commitment and performances are fundamental for the A400M success.
Many thanks for your attention!