Section 1

Alenia Aeronautica Company Profile
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1 COMPANY INTRODUCTION

1.1 FINMECCANICA S.P.A.

Alenia Aeronautica S.p.A is a company of Finmeccanica, the largest Italian high tech group active in design, manufacturing and support of military and commercial aircraft, satellites, helicopters, radars, air traffic management and control systems, missile systems, power stations, train, automation systems for manufacturing, etc.

Finmeccanica is a holding company providing industrial and strategic control with over 46,000 employees in Italy, other EU countries, the Americas, Asia and Australia.

Finmeccanica is today Italy’s leading manufacturer and among the largest world wide in the sectors in which it operates: Aeronautics (through Alenia Aeronautica S.p.A., Aermacchi S.p.A. and Officine Aeronavali), Helicopters (through AgustaWestland), Space (Alcatel Alenia Space and Telespazio), Defence Electronics (through SELEX Sistemi Integrati, SELEX Communications and SELEX Sensors and Airborne Systems Energy) Defence Systems (via joint venture MDBA, and via Oto Melara and WASS) Transportations (through AnsaldoBreda, Ansaldo Trasporti Sistemi Ferroviari and Ansaldo Signal N.V.), Automation (through Elsag).
1.2 ALENIA AERONAUTICA S.p.A.

Alenia Aeronautica S.p.A. (Alenia), is the Italian industrial leader in fixed wing aircraft which operates in a fully integrated way through the design, manufacturing and support of military and civil aircraft. Being one of the most advanced aeronautical entities in the world, Alenia Aeronautica entertains and develops strong and fruitful relationship with the most outstanding players worldwide, such as Boeing and Airbus. Since 1912, the Division and its predecessors have built and delivered to 50 Nations more than 12,000 aircraft, mostly of original design. Alenia, with its long standing traditions and outstanding accomplishments is recognized world-wide for its high-tech know-how, experience and production capabilities in aerospace.

Through completely integrated systems and significant investments in research and development, the Company designs and builds high performance combat aircraft, civil aviation and military aircraft and advanced systems for civil aviation.

Alenia Aeronautica plants in Italy and relevant skills.
1.2.1 ALENIA MAIN CONTROLLED AND PARTICIPATED COMPANIES

Alenia Aeronautica

- Officine Aeronavali
- Aermacchi
- Società Italiana Avionica
- Quadrics

- Alenia North America Inc.
- GMAS-Global Military Aircraft Systems
- Global Aeronautica
- ATR Integrated

- Eurofighter GmbH
- Panavia aircraft GmbH
- Alenia Hellas

Through its subsidiary Officine Aeronavali, the Company also offers advanced transformation and maintenance services.

Alenia holds a significant share in Aermacchi, an international leader in the design and production of flight training aircraft.

The Aermacchi activities complement in an ideal and synergic way with of those Alenia Aeronautica:

- Trainer aircraft product line completes the presence of Alenia Aeronautica that already operates in the medium and heavy class of combat aircraft;
- Aermacchi specialization in nacelle integrates with the solid Alenia Aeronautica presence in aerostructure business

SIA is System Engineering Company based in Turin with a workforce of 300, with a highly qualified technical staff.

- The Company provides services in the aerospace and defence field for the design and
development of electronic systems, inclusive of logistic engineering and application and simulation software.

- Since 1979 the company has been part of the Tornado programme, it has been participating in space, helicopter and naval programmes and it has recently enlarged its operations to civilian and industrial programmes, in particular on information technology and safety fields.

**Quadrics** is a UK based company which is focused on design, development and manufacture of interconnect technology for the High Performance Computing market (HPC). Its high performance computing are:

- Computer systems designed to solve complex mathematical and analytical problems
- Predominantly implemented in academia and other research environments (e.g. national labs), industry (e.g. commercial CFD) and governmental agencies
- Typical applications are simulations such as fluid dynamics, weather modelling, high energy physics simulations
- Quadrics focuses on the technical side of HPC (HPTC)

### 1.2.2 ALENIA 2004 MAIN HIGHLIGHTS

<table>
<thead>
<tr>
<th></th>
<th>Value of production</th>
<th>Backlog</th>
<th>Orders</th>
<th>R &amp; D</th>
<th>EBITA</th>
<th>Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,480</td>
<td></td>
<td>5,187</td>
<td>2,985</td>
<td>266</td>
<td>127</td>
<td>8,806</td>
</tr>
</tbody>
</table>

**Alenia Aeronautica S.p.A.:**

- Engineering 20%
- Management and Administration 13%
- Manufacturing and Product Support 67%

**Subsidiaries**

- Officine Aeronavali Venezia 1520
- SIA * 294

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1.2.3 ALENIA MAIN INDUSTRIAL LINKS

2 MAIN BUSINESS LINES

Alenia Aeronautica activities fall under four main Business Lines:
- Military Aircraft (combat, transport, special missions);
- Modifications/Overhaul through the 100% controlled company Officine Aeronavali di Venezia.
- Logistic Support;
- Commercial Aircraft (Regional, Aerostructures);

2.1 MILITARY AIRCRAFT

The company is active in the military aircraft field, designing, producing and supporting widely known aircraft such as: Eurofighter Typhoon, AMX, Tornado, Harrier AV8B II Plus, G222, C-27J, which are held in the international market as outstanding examples in their respective categories.

2.1.1 EUROFIGHTER TYPHOON

Single and two-seater, twin turbofan engine, supersonic fighter, optimized for air superiority with air to ground capability. The aircraft is characterized by artificial stability for agile manoeuvrability, carefree handling, and low frontal radar cross-section.

Alenia is financially and industrially committed to a share around 21% of the Eurofighter Typhoon Program. Out of 620 aircraft to be ordered by Italy, Germany, Great Britain and Spain, 121 will be the Italian offtake. Eurofighter has also been selected by Austria and Greece.
2.1.2 AMX

Single and two-seater, single turbofan engine, dedicated ground attack fighter, reconnaissance and advanced trainer. High survivability and low vulnerability in hostile environment, maximum operational availability, optimum nav/attack accuracy and highest flexibility assure the best mission effectiveness.

Alenia controls the majority of the AMX Program, a tactical support and reconnaissance aircraft, a joint programme undertaken in collaboration with the Brazilian Embraer and the Italian Aermacchi. A total of 192 A/C (155 single seat and 37 twin seat) have been produced.

2.1.3 TORNADO

Two-seater, twin engine, supersonic multirole fighter with variable geometry wing to optimize aircraft performance in air-to-ground and air-to-air missions.

The Tornado multi-role combat aircraft is the result of an Italian/British/German partnership. Alenia Aeronautica controls 15% of the program. Nearly 1000 planes in different versions have been built. Alenia has assembled all the 100 aircraft of the Italian Air Force.

2.1.4 AV-8B HARRIER II PLUS

The AV-8B Harrier II Plus is the radar-equipped version of Boeing and British Aerospace’s short/vertical take-off landing fighter, entirely assembled by Alenia for Italian Navy. Alenia has manufactured under licence 13 AV-8B Harrier, which operate from the aircraft carrier Garibaldi.

2.1.5 ETAP PROGRAM

Alenia Aeronautica together with the other major European Aerospace Companies (BAE Systems, Dassault, EADS, SAAB) will carry out joint project identified by their Governments aimed at the development of technologies and competencies to meet the evolving military demands of a European combat air system capability.
2.1.6 SKY – X: UAV UCAV TECHNOLOGY DEMONSTRATOR

Alenia Aeronautica is active in the unmanned aerial vehicles segment through its participation in several national and international research programs.

The company has recently decided to engage autonomously a challenging program: the development of an Unmanned Aerial Vehicle platform for research and demonstration purposes. The experimental aircraft Sky-X, with a 1000 kg weight and with performances similar to a fighter.

2.1.7 NEURON

This program brings together and concentrates the best of the brainpower and the aerospace know-how of the main European Industries, in order to develop the tools of tomorrow's “cost effective” stealth combat aircraft.

The French Dassault is the program lead company and Alenia Aeronautica is the major partner. The industrial agreement includes also EADS-CASA, HAI, RUAG, SAAB, SABCA.

Alenia responsibilities are related to aircraft systems, stealth and combat capability.

2.1.8 JOINT STRIKE FIGHTER(JSF) PROGRAM

Alenia Aeronautica, as national leader for the F35/JSF airframe according to a MoU signed with Lockheed Martin, is participating to the development and will build the wing box of this advanced combat aircraft.

Moreover, Alenia Aeronautica is candidate in Italy for the final assembly line of the Italian JSFs, and for the creation of an integrated support center.
2.1.9 C-27J PROGRAM

On the military transport side, Alenia has produced in the framework of an international partnership with Lockheed Martin, the new C-27J Spartan which represents the ultimate answer to tactical military transport requirements.

2.1.10 G222 PROGRAM

Forerunner of the C-27J was the G222. Wide body, twin turbo-prop, medium tactical military transport aircraft with rear ramp. Specially designed to provide airlift of troops, vehicles and equipment into remote locations with unpaved strips, giving a very high volume/payload ratio and optimum range in the most severe conditions and rough operations. More than 100 G222s have been produced.

2.1.11 SPECIAL MISSIONS

2.1.11.1 ATR 42 MP

Alenia is one of the world leading companies in the Special Missions aircraft field thanks to the development of the ATR-42 MP (Maritime Patrol) Surveyor and the ATR-72 ASWMS (Anti Submarine Warfare Mission System).

Alenia is also responsible of maintenance of the Atlantic I Maritime Patrol for the Italian Navy.

2.1.11.2 ATR 72 ASW

This program is fully owned by Alenia Aeronautica, and it has been conceived to perform dedicated missions such as: ASW (Anti Submarine Warfare), ASuW (Anti Surface Vessel Warfare), SAR (Search and Rescue), Maritime and coastal surveillance.

The ART72 ASW has recently won the Turkish Navy Meltem 3 program. The ASW Mission System will be provided by Thales.
2.2 MODIFICATIONS AND OVERHAUL

In the Modifications and Overhaul field Alenia has reached a leading position through Officine Aeronavali Venezia.

It operates on most commercial and military aircraft, having full capability of design, production, installation and tests, of complex parts and systems.

2.3 LOGISTIC SUPPORT

Another important line of business of Alenia is represented by the Logistic Support. This line of business is developed through an ad-hoc industrial organisation responsible for the logistic support of military aircraft, spanning from engineering activities to material procurement.

Alenia Aeronautica has established a specific Business Unit fully dedicated to guarantee integrated customer support (in key centers) worldwide. Our product support concept has been developed to satisfy the customer requirements using an integrated logistic support approach.

Product support is organized along the following package lines:

• Initial provision
  o Initial spares
  o Training and simulation
  o Airborne and ground equipment
  o Technical publications
  o Field service

• Follow-on support
  o Technical assistance
  o Material support
  o Maintenance & overhaul

• Turn key service
  o Full contractor logistic support
  o Guaranteed flight hours
  o Power by hour
2.4 COMMERCIAL AIRCRAFT

Twin turboprop regional transport aircraft designed and manufactured by the Company in a 50/50 joint venture with EADS. ATR42 (42-50 seats) and ATR72 (64-74 seats) are greatly appreciated by passengers and airlines for their high-standard comfort, low operating costs and easy maintenance. ATR42-500 and ATR72-500 are the most recent evolution of the family offering improved performance and quieter cabin. More than 100 customers in 65 countries worldwide (678 aircraft in service today).

Commercial aircraft business includes also collaborations with Airbus, Boeing, and Dassault, for the design and supply of aero structures; namely for the A300, A310, A321, A380, B717, B7E7, B757, B767, B777, Falcon 2000, 900 EX, 2000 EX.

Boeing 787 Dreamliner

Alenia Aeronautica has been selected as “Small Prime” with a share of about 14% of airframe. A 50/50 JVCO (called Global Aeronautica) has been established with Vought in Charleston, SC for carrying out the Pre-Integration of Central and Rear Fuselage. Alenia Aeronautica and Vought will be responsible for over 60% of the fuselage.

Airbus A380 Program

Alenia Aeronautica signed in December 2001 an agreement for the development and supply of centre fuselage to the A380 aircraft program, the high capacity (550 seater) and long range advanced Airbus commercial transport aircraft.
3 KNOW-HOW, EXPERIENCES AND TECHNOLOGIES BROUGHT INTO C-27J SPARTAN

<table>
<thead>
<tr>
<th>Program/Product</th>
<th>Know-how, experiences and technologies brought into the C-27J Spartan and relevant program management</th>
</tr>
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<tbody>
<tr>
<td>MILITARY AIRCRAFT</td>
<td></td>
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<tr>
<td>AMX</td>
<td>Military Communication System, Navigation, self protection, operations in real war environment</td>
</tr>
<tr>
<td>Tornado</td>
<td>Military Communication System, Navigation, self protection, experience of operations in real war environment</td>
</tr>
<tr>
<td>AV-8B Harrier II Plus</td>
<td>Partnership with US companies and Customer</td>
</tr>
<tr>
<td>ETAP Program</td>
<td>Leading-edge Aeronautical Technology</td>
</tr>
<tr>
<td>Sky-X UAV/UCAV</td>
<td>Management of multinational cooperation.</td>
</tr>
<tr>
<td>G-222</td>
<td>Robust structure, high manoeuvrability design. (See dedicated chapter). decades of worldwide tactical operation in hostile environments</td>
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<tr>
<td>SPECIAL MISSIONS</td>
<td></td>
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<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>MODIFICATIONS/OVERHAUL</td>
<td>Provision for future versions and upgrading</td>
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<tr>
<td>COMMERCIAL AIRCRAFT</td>
<td></td>
</tr>
<tr>
<td>ATR-42 – ATR-72</td>
<td>Turboprop operations. Cost-effectiveness in ILS (commercial approach). Worldwide customer support. Spares pool system. Achievement of Civil Certification (JAA) and Military Type Certification. (Italian DGA)</td>
</tr>
<tr>
<td>B-787</td>
<td>Program management of complex program</td>
</tr>
<tr>
<td>A-380</td>
<td>Sophisticated ILS concepts. Risk management.</td>
</tr>
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