





Focus on MRO

NGAP Summit in Shenzhen Contribution to panel 6





French Aerospace, Defence & Security Industry

A dual industry (76% Civil / 24% Defense) covering all sectors: aircraft, helicopters, engines, equipment, missiles, UAVs, launch vehicles, satellites and defence & security systems.

- 400 members, prime contractors, equipment manufacturers and SMEs.
- **€ 64 billion** revenues (2017).
- € 68,2 billion orders (2017).
- R&D investment: 12% of revenues.
- 190,000 jobs located in France, 12,000 recruitments in 2017.





Employment situation

Balance sheet 2017

- **190 000 employees** 2 000 jobs created
- 12 000 recruitments (+ 20 % / 2016) among which 72% of permanent contracts
 - 25 % of young graduates, 25 % of women
 - 42 % engineers and managers, 29 % skilled workers
- 7000 young work-study students trained at the end of 2017 (+ 6% / 2016)

2018: 12 000 planned recruitments

Companies and in particular SMEs have difficulties to attract motivated young people with a qualification in MRO, manufacturing,...

→ Attractiveness is a global concern



NGAP IN MRO





Quantity

Sharp increase forecasted

+670 000 new technicians worldwide between 2018 and 2037

Challenges to increase the number of trained technicians:

- Training is highly regulated (Part 147).
- Lack of available instructors
- Lack of attractiveness

Possible solutions

- Develop attractive and modern training centers
- More young women
- Promote critical jobs.



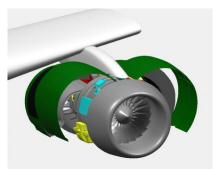


Adapt to changes

- Future aircraft with new technologies on board (more electrical aircraft, thermoplastic composite,...)
- Older generation still in service
- Digitalization and new technologies (Al, big data, blockchain,...) - new services to the customers
- → New jobs / evolution of existing jobs
- → Adapt training and qualification











LOCAL ACTIONS Some examples



Career plane at Paris Air Show Avion des métiers

- A dedicated hall for jobs, skills, training and education.
- 55000 visitors in 2017, 60% of students,
- 65 exhibitors: companies and educational organizations.
- 6000 jobs and internships offers.

Objectives:

- Create vocations.
- Recruit candidates
- Communicate to political actors and medias,







Rocketry Challenge



- Contest for 12-18 years old kids
- Throughout the year, clubs, college classes, ... prepare their rockets.
- A national contest at the end of the school year in 4 countries (Fr, J, UK, US).
- The national winning teams participate to the international final alternately at Paris Air Show or Farnborough Air Show.

Objectives:

- Create technical and scientifical vocations,
- Teach the value of team spirit,
- Attract young students to the aerospace industry,
- Expose to the international dimension of our industry.









GIFAS, organizes the Paris Air Show

through its subsidiary SIAE (Salon International de l'Aéronautique et de l'Espace)

The International Paris Air Show

The world's premier aerospace event, founded in 1909

Key figures for the 2017 Air Show:

- 2,381 exhibitors from 48 countries
- 131,500 sqm
- 330 chalet units
- 290 official foreign delegations
- 142,000 trade visitors
- 180,000 general public visitors
- 3,450 journalists
- 140 aircraft



Next Paris Air Show, 17th to 23rd June 2019.



Find out more about GIFAS activities and industry news

