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INSIDER'S PERSPECTIVE

Inducting newcomers: the delicate balance between skills development and production ramp-up in the aerospace/defense industry

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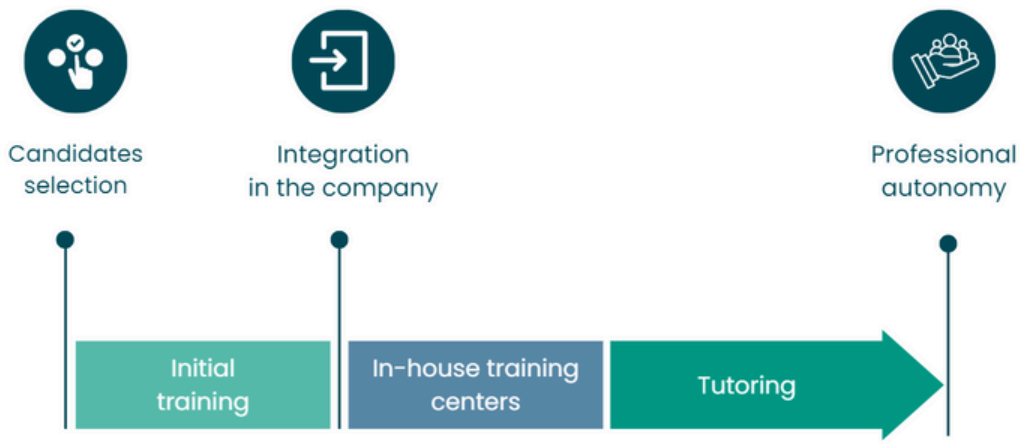
While recruitments continue massively to support the production ramp-up, the aerospace and defense sector is now facing the challenge of upskilling its newcomers.
The decreasing availability of traditional recruitment pools through industrial study programs has driven the sector to open up to new profiles, often less experienced, for example, people undergoing career change. The decline in the level of candidates at entry, coupled with a high volume of newcomers, has put the entire training pathway under pressure, resulting in longer and very variable training lead time as well as overloading the training centers.

At the same time, production teams have to deal with increasingly ambitious operational objectives: speeding up production rates while maintaining the level of quality. These two challenges rely on qualified operators, on the front line to transfer their knowledge and know-how while delivering the expected level of productivity.

Should the aerospace and defense industry prioritize the training of newcomers, at the risk of slowing down production? Or should it focus on operations, and run the risk of having a future population of operators with lower skills? How can we reconcile skills upgrading without slowing down the pace of production particularly when, more than ever, the aerospace and defense sector is under scrutiny for the quality of its products?

Our experience supporting clients on these issues allowed us to identify
3 levers to overcome these challenges:

1/ Improve the skills of newcomers
2/ Reconcile training path with operational needs
3/ Optimize knowledge transfer from experienced operators to newcomers (tutoring)



1/ Improve the skills of newcomers

The recruitment of new staff members may vary from country to country, but generally, their upskilling begins with an “initial training”, which precedes their actual integration into the company. In France, for example, this training is provided via CQPMs, in apprenticeship centers partnered with the Union des Industries et Métiers de la Métallurgie (UIMM), before an internship of several weeks within the production teams.

At the end of this training, only 60% of candidates will be hired: dropping out, failing to obtain their diploma or company’s decline to hire them following their internship are the three main reasons explaining this low conversion rate.

We have identified 3 levers to improve it:

- **Maintain high standards when selecting candidates** by implementing a time-limited practical test based on a real production work order, using tools and saftey equipment, and supervized by a production manager. An evaluation grid with eliminatory criteria, in particular interpersonal skills and motivation, enables the company to calibrate its requirements and recruiters to objectify their decisions.

- **Work in cooperation with initial training organizations** to tailor programs to operational needs, detailing as requirements the list of operations to be mastered at the end of the program for each profile.

- **Set up a feedback loop between training organizations and temporary employment agencies** to discuss the level of the candidates and identify areas for improvement, in order to initiate a continuous improvement loop.

2/ Reconcile training paths with operational needs

Once the profile is approved by the company, the candidate starts an internal training program, specific to the job they will operate in.

This training program must be aligned with the operational needs. In a context of production ramp-up, the challenges are to simplify the trainings, maximize learning outside the production teams, and quickly ensure mastery of key skills to limit operational disruptions due to their arrival at the position.

We believe 3 approaches should be explored to achieve this objective:

/ **Rationalize the training catalog:** identify and remove training courses that are obsolete due to changes in techniques or standards and clarify the mandatory training path for each profile.

/ **Invest in in-house training centers:**

- By creating an environment representative of real production conditions, with practical exercises, simulations of production teams' daily routines and production rates (e.g. day/night shifts).
- By defining a high level of proficiency upon completion of training program: an hour spent in training is an hour saved in production teams. In this respect, extending training periods in centers is a profitable investment.

/ **Set up a governance to monitor operators' skills development** appoint managers responsible for supervising and coordinating training activities to meet operational needs, implement routines and tools to monitor operators' upskilling and address blocking points.

3/ Optimize knowledge transfer from experienced operators to newcomers (tutoring)

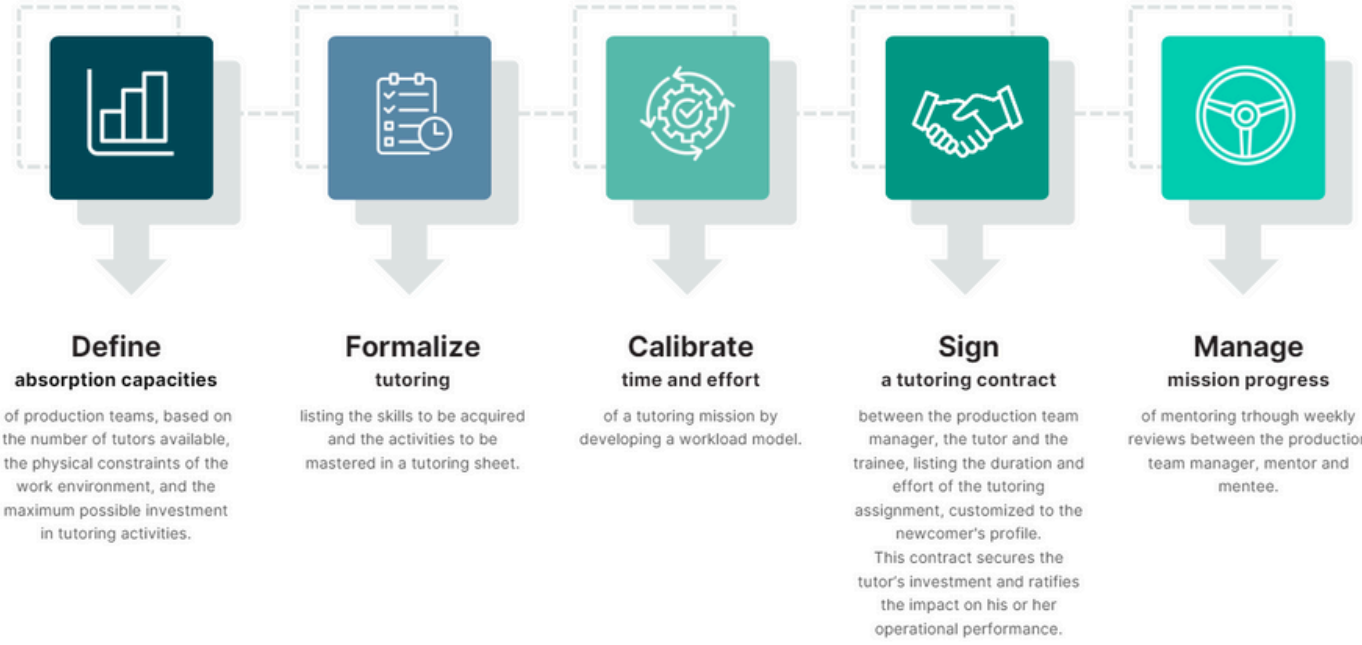
The tutoring format ensures effective and sustainable knowledge transfer. Immersing the newcomer in real-life conditions allows them to grasp the complexity of their environment, assimilate the operational pace and ensure that their knowledge is deeply anchored by practicing on the product, under the supervision of a tutor who will support them until professional autonomy.

Tutor selection is of paramount importance. The best technician is not necessarily the best teacher. Tutors need to be patient, empathetic and flexible, adapting their approach to the newcomer's profile. In this respect, the production team manager is in the best position to identify profiles that combine technical and teaching skills.

> Tutoring also promotes the transfer of soft skills, company culture, and facilitates the integration of the newcomers within the teams

The role of tutor is an evolution of career that broadens the scope of operators' skills and requires its own learning path, including practical training to learn teaching methods, how to provide feedback, customize the approach based on the trainee’s profile, and ensure the progress of the tutoring is monitored with management.

A tutoring mission is an investment that impacts the operational performance of the tutors. To calibrate and manage it, five steps are necessary:



Alongside a system rewarding tutoring, to be defined according to the company's culture, the creation of a community of tutors will encourage the exchange on issues, mutual support and the emergence of ideas for improvement.

Impact examples

on missions led by CYLAD

30% absorption of a massive volume of newcomers over a year, representing more than 30% of the company's operational workforce, with better predictability of training times and newcomers' volume

+10% of the conversion rate of newcomers into qualified operators (from 60% to 70%)

X2 of the number of certifying qualifications obtained by operators in certain sectors, reflecting an acceleration in skills upgrading

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About CYLAD

Independent consulting firm, CYLAD advises executives from industries and associated services to overcome performance, transformation and growth challenges. The firm combines Consulting Methodology with Senior Experts' experience for sustainable results for its clients of all sizes, offering a comprehensive range of services. CYLAD supports companies, especially in the Aerospace & Defence, Pharmaceutical/Health, Energy, Electronics and Transportation sectors.

CYLAD currently has 150 employees and 20 Partners across eight offices: Paris and Toulouse in France, Hamburg and Munich in Germany, Zurich (Pfäffikon SZ) and Geneva in Switzerland, Adelaide in Australia and Montreal in Canada.

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