AlixPartners

HOW CAN THE AEROSPACE INDUSTRY PREPARE FOR A PRODUCTION RAMP DOWN?

The AlixPartners A&D Minute

With air travel down to a minimum, and predictions on when it may go back to precrisis levels in uncertain territory, the aerospace industry will need to ramp down production for the foreseeable future. This is a startling scenario for a supply chain that has only seen business boom over the last couple of decades. Aided by flourishing demand from new markets such as China and a bounty of low-cost airlines launching in the US and Europe, the commercial aerospace industry grew 4 to 5% year-on-year over the last two decades. This led to a record number of aircraft deliveries – 1,606 aircraft in 2018 (figure 1) – with the entire supply chain having been set up to continuously ramp production up.

1,606 226 -65 to -75% -30% to -45% 1,243 580 253 700-840 330-430 2018 2019 2020 2021 Airbus WB Airbus NB NB = Narrowbody WB = Widebody Boeing WB Boeing NB

FIGURE 1: DELIVERY NUMBERS AND SCENARIOS FOR BOEING AND AIRBUS

Note: 737 MAX deliveries for 2020-2021 do not include the 400+ aircraft already delivered Source: AlixPartners analysis

Ramping down then, will come as a severe culture shock to the aerospace industry. This contrasts with the automotive sector, which had to deal with similar consequences in 2007-2009 and is thus familiar with the complicated process of reducing production levels quickly.

By even the most generous of predictions, commercial aerospace activity is not expected to recover for several years. This means that the reduction in production volumes will cascade from original equipment manufacturers (OEMs) to the rest of the value chain, including all supply chain tiers as well as service providers. All industry stakeholders must adapt their cost structures to the new environment to avoid bleeding unnecessary cash and risk going out of business.

This kind of companywide adaptation demands that senior management define realistic business scenarios to set topdown financial targets that then flow through to all business levels. Executive leadership must determine new cost structures and identify reduction levers for labor, material, and industrial footprint. Such a process will require a central project involving all company functions to drive

and drumbeat execution that is monitored through key performance metrics at individual team level and ultimately aligns with overall company targets.

In the short term, lowering production levels will require this sequential set of activities:

- 1. **Adapt the production system:** Refocus the company on streamlined production first, then resize the industrial environment and its support organization.
 - Remove duplicate lines on the shop floor, merging stations and rebalancing routings to find a new optimal work sequence and shift patterns. The goal is to free up surface, reduce inventory, and maintain production lead times to lower fixed manufacturing costs and preserve commercial capabilities.
 - No adaption of production lines should impact program fixed costs and inventory efficiencies.
- 2. Offload excess direct labor and increase workforce flexibility: Factory workers as well as corporate employees who focus on production-related activities must match the new workload and shop floor setup. This will lower recurring costs proportionately to the required production rate decrease.
 - Preserving competencies is essential to ensuring readiness for when production programs need to start ramping up again.
 - Human resource (HR) support is critical in retaining mandatory competencies and expertise as well
 as training staff for new competencies. HR will also be instrumental in setting up redeployment
 platforms and organizing and structuring all personnel moves and transfers.
- 3. Reduce the fixed costs base: Expenses related to workforce in central functions such as engineering or selling, general, and administrative support also need to be adjusted. A zero-based budget approach will help challenge and resize fixed costs in line with new activity levels.
 - Organizations must identify their sizing drivers and review sizing of resources for each activity. This
 includes revisiting central versus local allocation, consolidating program teams, and applying span
 and layer rules for a leaner structure.
 - Strong governance and discipline will be needed to stop or postpone improvement projects and drastically cut product modifications focusing on safety, airworthiness, and obsolescence. This is critical to resizing the engineering setup with exceptions to allow product development of highest value projects, hence preserving the future.

In the medium term, streamlining the industrial footprint and reshaping the supply base will be required. This will take more time to implement but needs to be initiated as part of the resizing plan. Reducing production rates is an opportunity to reshape the supply chain and manage transfer of work with minimal disruption. This may include site divestiture, consolidations, or closures. Such a plan enables consolidation as well as the reshaping of the target Tier 1 and Tier 2 supplier landscape.

Because lowering production levels is an unfamiliar situation for all stakeholders in the industry, this necessary approach must be planned carefully as well as decisively. Organizations need to adjust to the industry's new reality, while ensuring that critical resources are preserved and redeployed in preparation for an eventual recovery.

FOR A DEEPER DISCUSSION ABOUT PREPARING FOR A RAMP DOWN, CONTACT:

Eric Bernardini

Global Co-Lead, Aerospace, Defense, and Aviation +1 917 562 6607 ebernardini@alixpartners.com

Alain Guillot
Managing Director
+33 6 33 51 57 51
aquillot@alixpartners.com

CONTACT THE AUTHORS:

Nicolas Harmouche
Director
+33 6 74 61 10 83
nharmouche@alixpartners.com

Chris Martin
Director
+1 817 312 5041
csmartin@alixpartners.com

ABOUT US

For nearly forty years, AlixPartners has helped businesses around the world respond quickly and decisively to their most critical challenges – circumstances as diverse as urgent performance improvement, accelerated transformation, complex restructuring and risk mitigation.

These are the moments when everything is on the line – a sudden shift in the market, an unexpected performance decline, a time-sensitive deal, a fork-in-the-road decision. But it's not what we do that makes a difference, it's how we do it.

Tackling situations when time is of the essence is part of our DNA – so we adopt an action-oriented approach at all times. We work in small, highly qualified teams with specific industry and functional expertise, and we operate at pace, moving quickly from analysis to implementation. We stand shoulder to shoulder with our clients until the job is done, and only measure our success in terms of the results we deliver.

Our approach enables us to help our clients confront and overcome truly future-defining challenges. We partner with you to make the right decisions and take the right actions. And we are right by your side. When it really matters.

The opinions expressed are those of the authors and do not necessarily reflect the views of AlixPartners, LLP, its affiliates, or any of its or their respective other professionals or clients. This article regarding *How can the aerospace industry prepare for a ramp down?* ("Article") was prepared by AlixPartners, LLP ("AlixPartners") for general information and distribution on a strictly confidential and non-reliance basis. No one in possession of this Article may rely on any portion of this Article. This Article may be based, in whole or in part, on projections or forecasts of future events. A forecast, by its nature, is speculative and includes estimates and assumptions which may prove to be wrong. Actual results may, and frequently do, differ from those projected or forecast. The information in this Article reflects conditions and our views as of this date, all of which are subject to change. We undertake no obligation to update or provide any revisions to the Article. This article is the property of AlixPartners, and neither the article nor any of its contents may be copied, used, or distributed to any third party without the prior written consent of AlixPartners.

©2020 AlixPartners, LLP