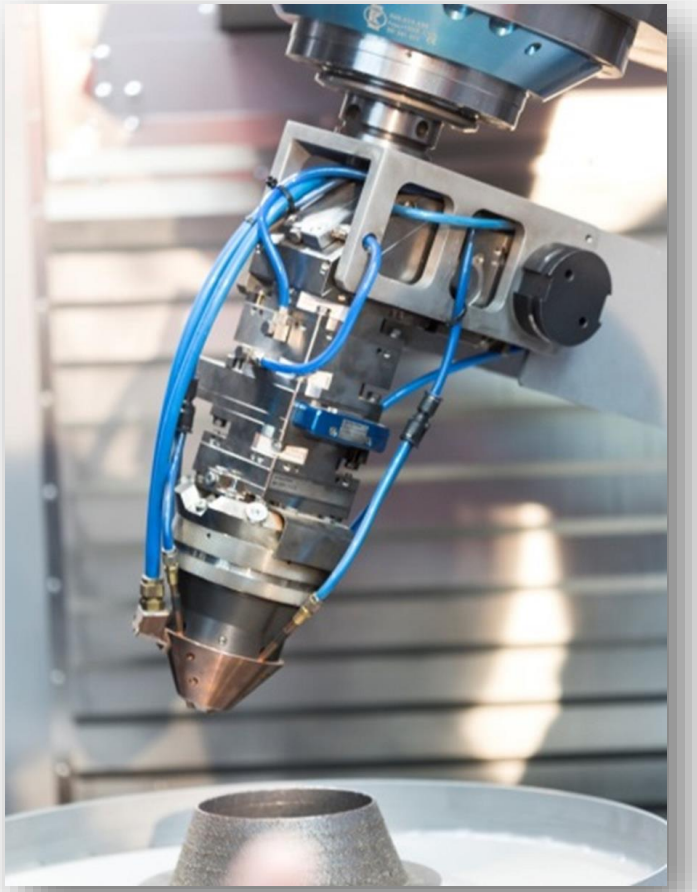
Insourcing vs. Outsourcing in the Post-COVID-19 Downturn

SpeedNews CONFERENCES

Tactical vs. Strategic

Both relevant for aircraft OEMs; current crisis once in a generation - gives the opportunity for a reset

- Tactical; how to manage the current downturn and then recovery
- Strategic; a chance to reshape the supply chain to maximise:
  - Resilience
  - Cost competitiveness
  - Innovation
  - Strategic sourcing



COUNTERPOINT

Examples from the past

OEM insourcing to fill under-utilised facilities – has been a feature of past downturns – particularly aerostructures and other metal parts.

Recent examples include:

- Boeing St. Louis; late-2014, began construction of a new facility to build parts for the Boeing 777X
  - Wing and empennage parts – previously outsourced on 777
  - Boeing St. Louis had been facing the end of F-18 and F-15 production
- Boeing Commercial Airplanes Fabrication Division, Portland
  - Feb 2017, insourcing flap actuation systems for the 737NG, 737 MAX and 777
  - Previously outsourced to Curtiss Wright
  - Partnering for Success programme initiative

Examples from the past

OEM insourcing protecting the ability to deliver programmes

Some examples of aircraft OEMs acquiring suppliers:

- Boeing South Carolina; the largest such transactions to date
  - March 2008; Boeing acquired Vought's interest in Global Aeronautica, for $55 million
  - July 2009; Boeing acquired the Vought plant for $1 billion
  - December 2009; Boeing acquired Alenia's interest in Global Aeronautica, terms undisclosed – SC operations now 100% Boeing-owned
- Airbus
  - In 2014, Airbus acquired a 62% stake in Alestis, an important Tier-1 aerostructures supplier
  - In 2011, Airbus acquired PFW Aerospace (precision tubes and components) to prevent insolvency

Examples from the past

OEM insourcing to relieve suppliers of unprofitable contracts (and secure production).

Some recent examples:

- Gulfstream
  - April 2019; Triumph agreed to transfer G280 wing manufacture to IAI
  - September 2018; Nordam agreed to sell its PW800 nacelle program to Gulfstream
  - April 2018; Gulfstream agreed with Triumph to transfer G650 wing assembly from Nashville and Tulsa, to Gulfstream in Savannah.
- Bombardier
  - January 2019; Bombardier acquired Triumph's Global 7500 wing manufacturing operations and assets

Where we are now

The current situation is completely different

- Production falling
- Airlines do not need new aircraft
- Surplus inventory in the supply chain
- OEMs need to conserve cash

COUNTERPOINT

Where we are now

The supply chain cannot expect to be bailed out by the aircraft OEMs

- However
  - Still substantial oversight
  - Some limited support
  - Encourage consolidation to forestall company failures
- But
  - Any significant supply chain acquisitions by aircraft OEMs very unlikely
  - Aerostructures in-sourcing unlikely - requires up-front investment in tooling and learning etc.

Impact of Covid-19 on the supply chain

This crisis will have long-term effects on the shape of the supply chain, both OE and aftermarket. The process is likely to occur in three phases.

Phase 1; measures to preserve liquidity to buy time

- this is the phase we are currently in and it is likely to last until the end of this year
- Priority to ensure that supply chains maintain the capability to deliver what is needed
- conserving cash is key e.g. Airbus cancelled PW1100G nacelle insourcing
- Governments are providing short-term support e.g.
  - Furlough support
  - Loan guarantees

Impact of Covid-19 on the supply chain

Phase 2; Restructuring

- Both internal e.g. rationalising facilities, and external e.g. acquisitions/disposals
- Internal restructuring has already started
- External restructuring likely to commence in 2021 – valuations are very difficult now
  - But some deals are already happening e.g. this month Gogo agreed to sell its Commercial Aviation business to Intelsat for $400m
  - Private equity/financial buyers are likely to be significant players on both sides of the Atlantic particularly at Tier 2 and below.
  - Large financially stronger Tier 1s are also likely to be significant players
  - Aircraft OEM outsourcing/insourcing decisions could be part of this

Impact of Covid-19 on the supply chain

Phase 3; Creating value

Once a recovery starts commercial aerospace will be a good growth story

- Aircraft production rates could climb rapidly
- A slimmed down, more rationally structured supply chain should handle growth better
- However, some PE buyers may find the margins too low (particularly aerostructures)
- The large diversified Super Tier-1s should prosper e.g.
  - Collins Aerospace (Raytheon Technologies)
  - Safran

Role of OEM insourcing/outsourcing in supply chain restructuring

Outsourcing is more likely than insourcing

We think OEM disposal of non-core activities could happen

- Tactical; to generate cash for core activities
  - upgrades
  - new programmes
  - research e.g. new fuels, new aircraft configurations
- Strategic; as part of a strategic re-evaluation of the supply chain

Role of OEM insourcing/outsourcing in supply chain restructuring

Possible non-core activities

- Interiors
  - Boeing; IRCs in Everett and Charleston – monuments, luggage bins, ceilings, sidewalls
  - Boeing; Adient Aerospace - seating
  - Airbus; KID-Systeme - in-seat power supply systems, on-board connectivity
  - Airbus; STELIA seats, but difficult to separate?
  - Embraer Aero Seating Technologies; business jet seats

Role of OEM insourcing/outsourcing in supply chain restructuring

Possible non-core activities

- Aerostructures – trend had been to insource more but now?
  - Boeing; Commercial Airplanes Fabrication Division – some sites not core?
  - Airbus; Premium Aerotec
  - Airbus; STELIA Aerospace Composites in Salaunes, STELIA Aerospace North America Inc in Nova Scotia
  - Embraer; Portuguese operations including OGMA
- Services – has been a growth area but may now include non-core activities?
  - Boeing; had a very aggressive $50 billion growth target
  - Some acquisitions primarily growth-motivated? E.g. KLX (parts distribution)
  - Boeing; Jeppesen (although acquired in 2000)

Longer term - supply chain change driven by new programmes

No new programme launches until demand returns

- Boeing likely to be first with all-new single aisle
  - Likely to be accompanied by supply chain change, including insourcing/outsourcing
- Airbus – derivatives rather than all-new
  - A220-500
  - A350neo
  - Composite wing A320neo (to respond to Boeing NSA)
  - Supply chain changes likely to be limited

Conclusions

- The supply chain cannot expect to be bailed out by the aircraft OEMs
  - Insourcing work from the supply chain
  - Acquiring distressed suppliers
- As part of the expected supply chain restructuring, we expect aircraft OEMs to outsource more
  - Disposal of non-core facilities/businesses
  - To free up resources for core business
  - Huge development expenses for the next generation of green aircraft

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