

OF BOEING AND MORE

Key Takeaways

"Those who have knowledge, don't predict. Those who predict, don't have knowledge."
Lao Tzu

This week's notables:

Boeing suggests that the Chinese market will represent \$1.1 trillion and 7,240 aircraft in the next 20 years. AIR estimates that this will represent roughly 45 percent for Airbus, 38 percent for Boeing 13 percent for COMAC and Bombardier at 4 percent.

Dassault Aviation is testing an original approach against its Rafale F3R direct competitor, the Lockheed Martin F-35. Instead of responding directly to the Belgium air force RFP, which is deemed "biased" towards the F-35, Dassault has elected to propose a government to government deal including industrial, operational and training partnerships. This approach will be a small, but interesting test for the future direction of the EU defence industry integration.

A350, United finally says more. The US carrier has converted its initial order for 35 A350-1000 for 45 A350-900 with an option for another 45.

2017 Commercial Deliveries as of end of August (unless noted)

Airbus: 399

Boeing: 476

Bombardier: 35 (June data)

Embraer: 53 (June data)

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Summer 2017 will go down as some of the most chaotic few months in recent years. In addition to Heads of State losing control of their IRBMs and tweeter accounts, we have witnessed a new phase of the tumultuous relationship between aircraft OEMs and their key suppliers. UTC's not-so-sudden move for Rockwell Collins should come as no surprise to many observers, it is however the roots and ramifications of this move that could profoundly shape the market ahead. We won't expand yet on the topic, we prefer to wait for the ruling concerning the Boeing-Bombardier dispute which remains in our opinion a clear turf protection exercise whose merits clearly seem to be a matter of opinion at this juncture.

Boeing's Information & Analytics: Keystone to Services Success

This year's Paris Airshow featured a meeting with Ted Colbert, Boeing's Chief Information Officer and SVP Information and Analytics. While we've had the opportunity to previously experience first-hand the 787 complex operations and visualize the volume of data generated by the aircraft in a prior meeting with Mike Fleming (now part of the Global Services organization), this meeting with Ted Colbert provided us with an opportunity to listen to Boeing's approach and identified initiatives in the information and analytics domain.

Boeing's current focus is about "leveraging the pivot" provided by the ongoing industrial transformation and supported by mobile and cloud technologies. The current data capabilities of Boeing's in-service aircraft solutions are fragmented from the limited (767) to the more advanced (787). The goal is to bring all of the Boeing company under one umbrella by defining standards, priorities and applicable technologies, "The amount of data created today is unprecedented. But it's not about the data on its own, it's what you do with it", said Colbert.

Boeing's objectives for its services division are somewhat moving in sync with what airlines are currently doing suggests Colbert, "this is an existing ecosystem where we are looking at partnering with airlines, and complement the data already being collected and used at their level". One of the key area of application will be the optimization of aircraft maintenance programmes. New tools will deliver optimal aircraft maintenance with a goal to lower ownership costs by at least 20 percent.

Another discussed application domain is to better understand and predict supply chain events. Boeing will expand its work with industry and government to "help improve supply chain resiliency". This ranges from information security postures, monitoring the performance of the manufacturing environment and keep track of the overall tooling apparatus.

Boeing is sitting on a gigantic pile of data generated daily by suppliers, customers and its own manufacturing and research operations. Colbert's methodical & rational approach to addressing multiple challenges and identifying opportunities will serve as the foundation for future BGS revenue opportunities, eventually likely strengthening the company's footprint and helping smooth commercial, space and defense revenues cyclicity.

WTO: Poisoned favorable ruling

WTO, or the gift that keeps on giving, primarily for the legal profession that is. Boeing has scored a major win with the overturning of the 2013 extension of State of Washington tax incentives to the 777X assembly line in Everett. The WTO has ruled that this incentive did not include prohibited subsidies, however the preliminary conclusion has determined these subsidies to be "actionable", a lesser form of subsidy. Nevertheless, it migrates the entire case into calmer waters for Boeing. Poisoned ruling? Yes, for Boeing it is a major victory, but for the State of Washington, this could translate into a last hurrah. By ruling that such subsidies are not prohibited, the WTO sets a precedent that could help Boeing look at other states for similar financial support in the very near future. It's clear sailing from now on for BCA.

China's growth as an exporter of defence articles to grow over the next decade

Our latest research looks at the [combat aircraft market to 2030](#) (future research will address trainers, special mission and airlift). One picture has emerged from the forecast besides the predictable F-35 imposed market dominance, China is moving from a domestic supply stance to one of exporter of TACAIR solutions. The Chinese suppliers' share of total market production will grow from 16% from 2008-2015 to 21% from 2016-2030. Of that total production, exports should represent roughly over 20 percent of the Chinese industry output. With the recent growth of exports of unmanned aircraft solutions to markets in areas where MTCR (Missile Technology Control Regime restrictions) prevents the export of weaponized systems, China is beginning to carve a solid niche that will likely reshape the relationships that US and European suppliers had established over the past decades.

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