



The UPM Market Informer

China Backs UTC Aerospace Deal Now Expected to Close Within Days

China’s regulators on Friday approved the \$30 billion acquisition of aerospace manufacturer Rockwell Collins Inc. by United Technologies Corp., clearing the way for the Connecticut conglomerate to close on the deal and stake its claim as a dominant player in the aerospace industry.

In its anti-monopoly review, China's State Administration for Market Regulation attached conditions that UTC and Rockwell Collins must divest certain assets. Investors cheered the fall of the last regulatory hurdle, sending Rockwell Collins shares up 9.2 percent, to close at \$141.63. UTC rose 2.7 percent, ending the day at \$129.04. UTC, which won approval in October from the U.S. Department of Justice, said it now expects to close on the acquisition by next week.

The Farmington-based manufacturer of jet engines, airline and aviation components, elevators and heating and cooling equipment announced the deal in September 2017. The acquisition makes UTC a major player in aerospace. In 2012, it paid \$18 billion for Goodrich Corp., a North Carolina-based aviation manufacturer that gave UTC a significant presence in the making of landing gear, brakes and other components.

With the Rockwell Collins deal, UTC is now a manufacturer of cockpit and cabin equipment and avionics that gather and interpret flight data. The new unit, known as Collins Aerospace, will be formed by merging the Cedar Rapids, Iowa-based Rockwell Collins and UTC Aerospace Systems, UTC’s aviation parts manufacturer. Collins Aerospace will employ nearly 20,000 engineers, David Gitlin, president of UTC Aerospace Systems, said in March.

UTC is taking advantage of a rapidly growing aerospace market as the number of passengers grows in Europe and North America and India and China develop a middle class and business community that increasingly rely on air travel. Chinese approval did not come quickly, prompting analysts to question if the deal got caught up in disputes over tariffs, trade and international politics.

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Delta Orders 10 Additional Airbus A330-900s



Delta Air Lines has ordered 10 additional Airbus A330-900 widebody aircraft, expanding their A330neo order book from 25 to 35 aircraft. This latest order supports Delta's international growth strategy in the near to medium term.

Simultaneously, Delta and Airbus have agreed to defer 10 previously ordered A350 XWBs to 2025-26 in order to accommodate the airline's long-term growth strategy. Delta currently operates 11 A350-900 aircraft and expects a further four in 2019-2020. Delta's A330 fleet stands today at 42

widebody aircraft. "The A330-900 is going to be an important addition to Delta's fleet," said Delta Chief Executive Officer Ed Bastian. "Airbus has infused this next generation of the successful A330 family with new technology and features providing advanced levels of comfort for our passengers and significant operating cost reductions that will make our airline stronger in the decades to come."

"Operational efficiency and an exceptional passenger experience are core to Delta's successful recipe, and it speaks volumes that they have chosen the A330-900," said Christian Scherer, Airbus Chief Commercial Officer. "Delta has been endorsing the Airbus wide-body family from the outset by committing to both the A330 and the A350. We are listening to our customers and proud to be in the position to flexibly respond to their fleet requirements for more A330s and equally appreciate the ongoing commitment for more A350s as part of their long-term growth strategy."

Scherer added: "This reconfirmed endorsement by one of the world's largest and most respected airlines validates the economic credentials of our versatile Airbus widebody family in the most advanced and competitive environments." *Source: Aviation Tribune*

GE's First Engine Test 747 is Now a Museum Piece

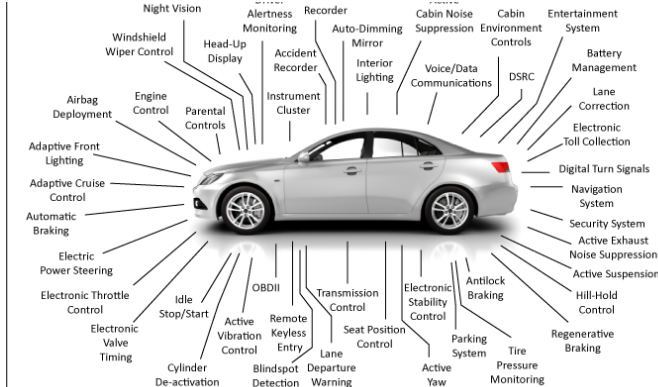
After 24 years serving as a flying engine testbed, GE Aviation's original Boeing 747 made its final flight last week, from the company's flight-test operation in Victorville, California, to Arizona's Pima Air & Space Museum, where it will be retired. The four-engine jumbo jet was the oldest 747 in active service, having rolled off the assembly line on October 17, 1969. It made its first flight with Pan American World Airlines the following March. Pan Am flew the aircraft, named Clipper Ocean Spray, for the next 21 years, logging 90,000 hours and nearly 20,000 cycles.

Once acquired by GE in 1992, the aircraft underwent significant modifications to prepare it for its new test career. Passenger seats were removed and the airframe was strengthened for flight testing and the installation of data systems. During its GE service, the 747 provided flight data on more than 11 distinct engine models, ranging from widebody powerplants including the GE90, GENx, and the Engine Alliance GP7200; to the narrow body CFM56 and Leap; to the CF34 for regional jets, and most recently, the Passport on the newly certified Bombardier Global 7500. The aircraft made its last test flight in January 2017.



In 2010, GE purchased a newer 747, from Japan Airlines and converted it into the Propulsion Test Platform. With its improved capabilities, it has supported the Leap and GE9X programs. *Source: AIN News Curt Epstien*

Automotive Remains Hot Market for Chips



Automotive electronics systems are projected to grow the fastest of the six major end markets for semiconductors through 2021, as technology advancements continue to increase the electronic content of vehicles, according to a forecast by market research firm IC Insights.

Sales of automotive electronic systems are forecast to grow 7% this year, reaching \$152 billion, before growing an additional 6.3% next year to reach \$162 billion, according to the Scottsdale, Arizona-based market watcher. The firm projects that automotive electronic systems sales will increase at a compound

annual growth rate of 6.4% from 2017 to 2021, topping all other major electronic systems categories. The latest IC Insights forecast calls for the global electronic systems market to be worth \$1.62 trillion this year. The firm expects automotive electronics systems to account for 9.4% of that total, up slightly from 9.1% last year.

While it is expected to grow fastest, the automotive electronics systems market remains relatively small compared to other major electronics systems markets, including communications, computers, industrial/medical and consumer, according to IC Insights.

In recent years, electronics content in vehicles has been growing rapidly as new technologies such as ADAS, communications, infotainment and others crowd the cockpit of cars. IC Insights said other technologies focused on autonomous vehicles, vehicle-to-vehicle communications, on-board safety, convenience and environmental features will continue to lift the market for autonomous systems in cars.

Increasingly, new advancements are available in mid-range and entry-level cars as aftermarket products, which has further raised automotive systems growth in recent years, IC Insights said.

Automotive electronic systems growth is good news for makers of MCUs, analog ICs and sensors in particular, IC Insights said. The firm said that the market for special purpose logic chips for automotive is expected to increase by 29% this year while application-specific analog IC sales for automotive are projected to grow by 14% this year as backup cameras, blind-spot detectors and other systems are added to more vehicles. The firm added that DRAM and flash memory are increasingly playing a more critical role in the development of new automotive system solutions used in vehicles.

Source: EE Times Image Credit: Clemson.edu

UTC Aerospace Deal continued from page 1:

Gregory Hayes, chief executive officer of UTC, assured industry analysts that the Rockwell Collins deal was not snagged in unrelated disputes with President Donald Trump over trade and tariffs. He initially told analysts on Sept. 14 that the deal would close by Sept. 30. On Oct. 23, Hayes said he expected it to be approved in two to six weeks.

Following the closing of the Rockwell Collins deal, UTC will turn its full attention to the makeup of its portfolio of businesses. With a major presence in aerospace, UTC is under pressure from investors to break apart its mix of businesses. A focus on aviation is expected to deliver greater value to shareholders by jettisoning UTC's Otis Elevator, Carrier heating and cooling and building security businesses.

One possibility is to break into three businesses: aerospace, which includes jet engine manufacturer Pratt & Whitney and Collins Aerospace; UTC Climate, Controls & Security, which includes Carrier heating and cooling equipment and building securities systems; and Otis elevator. A decision on the future of UTC's businesses is expected before the end of the year. Source: Hartford Courant



Surcharge Totals September 2018 - February 2019

Updates from the Metals Service Center Institute

According to the Metals Service Center Institute's Metals Activity Report, U.S. service center steel shipments in October 2018 increased 6.8 percent from October 2017. Shipments of aluminum products increased by 8.5 percent from the same month in 2017. Canadian service center steel shipments in October 2018 increased 0.7 percent from October 2017. Shipments of aluminum products increased 0.8 percent from the same month in 2017.

According to the Federal Reserve, industrial production in the United States increased 0.1 percent in October. Manufacturing output rose 0.3 percent for its fifth consecutive monthly increase, while the indexes for mining and for utilities declined 0.3 percent and 0.5 percent, respectively.

In other economic news: the U.S. Consumer Price Index increased 0.3 percent from September 2018 and October 2018 and 2.5 percent from October 2017 and October 2018; U.S. import prices increased 0.5 percent from September to October while export prices advanced 0.4 percent.

	Sep	Oct	Nov	Dec	Jan	Feb
15-5	0.5682	0.5229	0.5286	0.5139	*	*
15-7	0.8372	0.7808	0.7753	0.7487	*	*
17-4	0.5617	0.5165	0.5231	0.5107	*	*
17-7	0.6843	0.6219	0.6197	0.5873	*	*
201	0.5672	0.5178	0.5169	0.4968	*	*
301 7.0%	0.6780	0.6159	0.6139	0.5825	*	*
302/304/304L	0.7376	0.6700	0.6666	0.6303	*	*
304-8.5%	0.7618	0.6922	0.6883	0.6494	*	*
305	0.9368	0.8523	0.8447	0.7884	*	*
309	0.9760	0.8864	0.8781	0.8215	*	*
310	1.3372	1.2164	1.2002	1.1087	*	*
316/316L	1.0291	0.9556	0.9460	0.9018	*	*
316LS/316LVM	1.3500	1.2400	1.2200	*	*	*
317L	1.2084	1.1275	1.1142	1.0660	*	*
321	0.7744	0.7043	0.7001	0.6588	*	*
347	1.0840	1.0139	1.0097	0.9684	*	*
409/409 Mod	0.2689	0.2443	0.2508	0.2547	*	*
410/410S	0.2775	0.2519	0.2582	0.2621	*	*
430	0.3280	0.2957	0.3011	0.3047	*	*
434	0.4094	0.3768	0.3805	0.3849	*	*
439	0.3387	0.3050	0.3102	0.3138	*	*
440A	0.3280	0.2957	0.3011	0.3047	*	*
2205	0.9802	0.9167	0.9083	0.8882	*	*
263	11.8171	11.6936	10.8405	9.7101	9.0419	9.0396
276	5.8395	6.0286	5.6411	5.6731	5.3623	5.2863
A286	1.6528	1.7822	1.6116	1.5740	1.4268	1.4048
330	2.0861	2.2611	2.0116	1.9460	1.7418	1.7080
400	3.7841	4.1032	3.5365	3.3883	3.0746	3.0360
455	0.7600	0.6900	0.6800	*	*	*
465	0.9300	0.8500	0.8300	*	*	*
600	4.0371	4.3656	3.8412	3.7080	3.3263	3.2486
601	3.5110	3.7825	3.3532	3.2436	2.9116	2.8487
617	8.8389	8.8917	8.2215	7.6141	7.0881	7.0476
625	6.1228	6.3487	5.9410	5.9070	5.5805	5.5100
718	5.8290	6.0499	5.6919	5.6263	5.3430	5.2874
X-750	4.5901	4.9101	4.4003	4.2708	3.8974	3.8219
825	2.7645	2.9375	2.6616	2.6159	2.3896	2.3497
HX	4.0024	4.1715	3.8391	3.7980	3.5220	3.4674
188	16.5100	16.1600	16.3800	*	*	*
CCM	24.8300	25.1000	25.5700	*	*	*
L-605	19.8700	19.5400	19.8400	*	*	*

*Surcharge currently not available