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Lockheed Awarded \$1.9B for One-Year F-35 Sustainment

The F-35 Joint Program Office awarded Lockheed Martin a \$1.9 billion contract on Jan. 6 to maintain the global Lightning II fleet, support training and expand capacity for producing spares and repairing components. The annual award to the F-35's prime contractor follows a \$1.4 billion contract in 2018 and \$1.15 billion contract in 2019 for global sustainment services. The amount fluctuates along with investments in repair depots and fleet growth.



"In 2020, we will continue to optimize and advance the sustainment system. We are confident F-35 sustainment costs will be equal to or less than legacy jets," says Greg Ulmer, Lockheed's vice president and general manager for the F-35 program.

Lockheed has committed to lowering the cost per flight hour of the F-35A to \$25,000 by 2025. The U.S. Air Force paid about \$44,000 per flight hour to operate the aircraft in 2018. Some defense officials, including the Pentagon's former head of cost evaluation, have said Lockheed's cost target is unrealistic. But others, including the commander of the Air Force's Life Cycle Management Center, do not rule out the possibility.

Lockheed's announcement calls the award an "annualized" contract. The company had proposed converting the sustainment program into a five-year, fixed-price contract, but it appears the government rejected the proposal. Lockheed has delivered 490 F-35s since 2009, including 134 in 2019, with the fleet surpassing more than 240,000 cumulative flight hours. *Source: Aviation Week*

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Join UPM at MD& M West

The world's largest medical design & manufacturing event returns to the Anaheim Convention Center next month. Scheduled for February 11-13 in Anaheim, CA, the event will bring together more than 20,000 professionals and over 1,900 suppliers.

MD&M West estimates by 2025 the global medical device manufacturing market is expected to exceed \$600 billion, driven by the aging population, increasing prevalence of chronic diseases, advancements in technology and other factors.

As medtech surges ahead, professionals in this dynamic industry need one place to cross paths annually to swap ideas, find inspiration, overcome challenges, and source products to keep their engineering projects humming. Enter Medical Design & Manufacturing (MD&M) West — the world's largest medical design and manufacturing event. MD&M West, now in its 35th year, is where engineers and executives from across the globe converge before going on to change the lives of patients. In addition to the three-day conference covering medtech, 3D printing, and smart manufacturing, the event offers the opportunity to meet suppliers and experts leading the charge to disrupt healthcare.



Join United Performance Metals in Booth #631 to learn more about the materials we supply for the medical implant and instrument market. UPM is certified ISO 13485:2016.

U.S. Issues Final Order on Duties on Certain Steel Products for Vietnam

The U.S. Commerce Department said on December 16 that it had issued a final order imposing duties of up to 456% on certain steel products from South Korea or Taiwan that are shipped to Vietnam for minor processing and then exported to the United States. The agency said in a statement that it had found corrosion-resistant steel products and cold-rolled steel produced in Vietnam using substrate of South Korean or Taiwanese origin had circumvented U.S. anti-dumping and anti-subsidy duties. *Source: Reuters, 12.16.19*

Airbus Plans to Hike Mobile A320 Production to 7-Monthly Rate

Airbus plans to boost A320neo production at its Mobile, Alabama site to seven aircraft monthly in 2021, an effort that comes amid a US-imposed import tax on European-made commercial aircraft. Airbus currently produces five A320neos monthly in Mobile, and plans to hit a six-monthly rate with a few weeks, the company says. Airbus does not attribute the Mobile expansion to US import tariffs. Instead, an Airbus media release says only that the expansion will help it reach a goal of bringing its global A320neo production to 63 aircraft monthly in 2021.

The increase at Mobile to seven aircraft monthly will take effect “by the beginning of next year”, Airbus says. “The increase, and continued recruiting for the A220 manufacturing team, will result in a further 275 jobs added at the Alabama-based facility over the next year”.

As part of those efforts, Airbus will spend \$40 million to build another support hangar in Mobile, bringing its total Mobile investment to more than \$1 billion, it adds. Airbus delivered its first Mobile-assembled A320 in 2016 and began building A220s there in 2019. It intends to produce four A220s in Mobile monthly by the mid-2020s, at which time the Mobile site's combined A220 and A320 production will hit 130 aircraft monthly, says the company. Airbus America chief executive Jeffrey Knittel attributes the Mobile expansion plan partly to support the company has received from the Mobile community and from state and local lawmakers, among them US Senator Richard Shelby.

Shelby and local officials have supported exemptions for aircraft components from tariffs imposed by the USA on some European imports last year. The US has imposed 10% import tariffs on aircraft produced in Europe, but not imports of components used to produce new aircraft. “That’s why they’re expanding” in Mobile, says Teal Group aerospace analyst Richard Aboulafia. *Source: FlightGlobal*

Hyundai Motor and Uber Announce Aerial Ridesharing Partnership, Release New Full-Scale Air Taxi Model at CES

Uber and Hyundai Motor Company are partnering to develop Uber Air Taxis for a future aerial rideshare network, with Hyundai being the first automotive company to join the Uber Elevate initiative, bringing automotive-scale manufacturing capability and a track record of mass-producing electric vehicles. The air vehicle concept Hyundai released today was created in part through Uber's open design process, a NASA-inspired approach that jump-starts innovation by publicly releasing vehicle design concepts so any company can use them to innovate their air taxi models and engineering technologies.

In this partnership, Hyundai will produce and deploy the air vehicles, and Uber will provide airspace support services, connections to ground transportation, and customer interfaces through an aerial ride share network. Both parties are collaborating on infrastructure concepts to support take-off and landing for this new class of vehicles.

"Our vision of Urban Air Mobility will transform the concept of urban transportation," said Jaiwon Shin, Executive Vice President and Head of Hyundai's Urban Air Mobility (UAM) Division. "We expect UAM to vitalize urban communities and provide more quality time to people. We are confident that Uber Elevate is the right partner to make this innovative product readily available to as many customers as possible."

"Hyundai is our first vehicle partner with experience of manufacturing passenger cars on a global scale. We believe Hyundai has the potential to build Uber Air vehicles at rates unseen in the current aerospace industry, producing high quality, reliable aircraft at high volumes to drive down passenger costs per trip. Combining Hyundai's manufacturing muscle with Uber's technology platform represents a giant leap forward for launching a vibrant air taxi network in the coming years," said Eric Allison, head of Uber Elevate.

In preparation for this announcement, Hyundai has worked with Uber Elevate to develop a PAV (Personal Air Vehicle) model, S-A1 that utilizes innovative design processes to optimize electric vertical take-off and landing (eVTOL) aircraft for aerial ridesharing purposes. The Elevate initiative based this process on NASA's historical approach of putting design concepts out publicly to inspire innovation amongst multiple companies, spurring the development of common research models to investigate novel aerodynamic concepts and catalyzing industry progress in wing design, noise, aerodynamics, and simulation verification. Read more on this story from [Airframer](#) Photo: Hyundai



Baker Hughes Announces December 2019 Rig Counts



Baker Hughes (NYSE: BKR) announced today that the Baker Hughes international rig count for December 2019 was 1,104, up 8 from the 1,096 counted in November 2019, and up 79 from the 1,025 counted in December 2018. The international offshore rig count for December 2019 was 257, up 10 from the 247 counted in November 2019, and up 23 from the 234 counted in December 2018.

The average U.S. rig count for December 2019 was 804, down 6 from the 810 counted in November 2019, and down 274 from the 1,078 counted in December 2018. The average Canadian rig count for December 2019 was 135, down 1 from

the 136 counted in November 2019, and down 6 from the 141 counted in December 2018.

The worldwide rig count for December 2019 was 2,043, up 1 from the 2,042 counted in November 2019, and down 201 from the 2,244 counted in December 2018. Source: Oil & Gas 360° Image: Flickr

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Surcharge Totals October 2019 - March 2020

| | Oct | Nov | Dec | Jan | Feb | Mar |
|--------------|---------|---------|--------|--------|--------|--------|
| 15-5 | 0.5231 | 0.5117 | 0.4942 | 0.4561 | * | * |
| 15-7 | 0.8535 | 0.8339 | 0.7395 | 0.6608 | * | * |
| 17-4 | 0.5015 | 0.4897 | 0.4763 | 0.4443 | * | * |
| 17-7 | 0.7106 | 0.7036 | 0.6553 | 0.5711 | * | * |
| 201 | 0.5365 | 0.5250 | 0.4921 | 0.4374 | * | * |
| 301 7.0% | 0.6989 | 0.6918 | 0.6449 | 0.5630 | * | * |
| 302/304/304L | 0.7759 | 0.7699 | 0.7153 | 0.6214 | * | * |
| 304-8.5% | 0.8106 | 0.8052 | 0.7467 | 0.6469 | * | * |
| 305 | 1.0576 | 1.0559 | 0.9703 | 0.8288 | * | * |
| 309 | 1.0839 | 1.0829 | 0.9970 | 0.8544 | * | * |
| 310 | 1.5853 | 1.5918 | 1.4518 | 1.2256 | * | * |
| 316/316L | 1.1117 | 1.0960 | 0.9745 | 0.8537 | * | * |
| 316LS/316LVM | 1.6200 | 1.5100 | 1.3100 | 1.1900 | * | * |
| 317L | 1.3022 | 1.2821 | 1.1269 | 0.9920 | * | * |
| 321 | 0.8377 | 0.8327 | 0.7704 | 0.6647 | * | * |
| 347 | 1.1476 | 1.1426 | 1.0803 | 0.9745 | * | * |
| 409/409 Mod | 0.1655 | 0.1500 | 0.1577 | 0.1606 | * | * |
| 410/410S | 0.1713 | 0.1559 | 0.1636 | 0.1663 | * | * |
| 430 | 0.2050 | 0.1904 | 0.1977 | 0.1993 | * | * |
| 434 | 0.2844 | 0.2655 | 0.2535 | 0.2538 | * | * |
| 439 | 0.2124 | 0.1980 | 0.2052 | 0.2064 | * | * |
| 440A | 0.2050 | 0.1904 | 0.1977 | 0.1993 | * | * |
| 2205 | 0.9384 | 0.9128 | 0.8005 | 0.7317 | * | * |
| 263 | 4.9046 | 4.8125 | 5.7479 | 6.8100 | 6.6353 | 5.8912 |
| 276 | 5.1636 | 5.5403 | 6.2513 | 6.8100 | 6.4227 | 5.5170 |
| A286 | 1.2892 | 1.4758 | 1.7724 | 2.0100 | 1.9110 | 1.6451 |
| 330 | 1.5670 | 1.8453 | 2.2659 | 2.6200 | 2.5054 | 2.1497 |
| 400 | 2.8496 | 3.3721 | 4.0981 | 4.7800 | 4.5835 | 3.9451 |
| 455 | 0.9100 | 0.8600 | 0.7900 | 0.7200 | * | * |
| 465 | 1.1500 | 1.0800 | 0.9500 | 0.8700 | * | * |
| 600 | 3.0577 | 3.6423 | 4.5129 | 5.2800 | 5.0575 | 4.3080 |
| 601 | 2.6601 | 3.1387 | 3.8529 | 4.4700 | 4.2918 | 3.6784 |
| 617 | 4.7931 | 4.9728 | 5.8546 | 6.7400 | 6.4867 | 5.6610 |
| 625 | 5.3503 | 5.7753 | 6.4882 | 7.0900 | 6.8049 | 6.0346 |
| 718 | 5.1290 | 5.5170 | 6.1274 | 6.6500 | 6.4507 | 5.8690 |
| X-750 | 3.6326 | 4.2008 | 5.0473 | 5.7900 | 5.5760 | 4.8474 |
| 825 | 2.2047 | 2.4954 | 2.9598 | 3.3500 | 3.1856 | 2.7310 |
| HX | 3.2225 | 3.5368 | 4.1138 | 4.6000 | 4.3452 | 3.6989 |
| 188 | 8.6600 | 8.4200 | 7.7500 | 6.7800 | * | * |
| CCM | 10.5000 | 10.4300 | 9.7000 | 8.3400 | * | * |
| L-605 | 9.6900 | 9.4600 | 8.8100 | 7.6700 | * | * |

*Surcharge currently not available