Majors aerospace companies are bidding for a stake in the growing commercial unmanned aircraft market, but rather than developing new vehicles they are targeting the business of providing services to large customers.

Airbus has formed a U.S.-based company called Airbus Aerial to bring together commercial satellite and unmanned-aircraft remote-sensing capabilities to provide data collection and image-processing services to large and global enterprises.

A year after forming a commercial business unit, Boeing’s subsidiary Insitu has unveiled a revamped suite of products and services aimed at large customers that includes the parent company’s satellite-imaging and unmanned surface and subsurface vehicle capabilities.

Lockheed Martin is developing an inspection services business built around a commercial version of the Stalker XE small military unmanned aircraft system (UAS) and focused on linear inspection of pipelines, power lines and rail tracks as well as environmental monitoring.

General Atomics Aeronautics Systems, meanwhile, is assessing the commercial market as it develops a type-certifiable version of the Predator B medium-altitude, long-endurance UAS called the SkyGuardian. Small military UAS producer AeroVironment will begin selling a small commercial drone, Quantix, and data analytics to the agricultural market later this year. Large UAS maker Northrop Grumman, meanwhile, says it has no interest in the commercial market.

Airbus is seeking to gain traction in an unmanned-aircraft market where it has struggled to establish a foothold because of a fragmented European defense market. The others are looking for a way to expand out of a defense market that has slowed in the U.S. as industry waits for the Pentagon to launch development of the next generation of military UAS.

Airbus, Insitu and Lockheed all say they are targeting a commercial market where large customers are seeing consistently safe and high-quality data services, often globally. AeroVironment is starting in the U.S. but plans to sell its Quantix drone and analytics tools internationally.

While there are already many competing providers of either satellite imagery or UAS services, Airbus Aerial’s mission “is to bring all the different layers together,” says Jesse Kallman, president of the new Atlanta-based company.

With bases both in the U.S. and Europe, Airbus Aerial’s initial focus is on developing new imagery services using information provided by drones, satellites, high-altitude aircraft and other sources. These could include Airbus’s Zephyr high-altitude, long-endurance “pseudo-satellite” UAS.

Insitu’s Inexa Solutions brings together the company’s ScanEagle and Integrator small long-endurance UAS, its Inexa Control commercial ground control station, the Vi- tar maritime surface-search payload developed by Hood Technologies and Sentient Vision Systems, and Logos Technologies’ Redkite wide-area motion-imagery sensor, plus software tools for video processing, exploitation and dissemination.

When Insitu formed its commercial division a year ago, “we didn’t really know” what the business was going to be, says Jon Damush, vice president and general manager of Insitu Commercial. “What we did know was we had a capa-

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"UNMANNED AVIATION"

Drone Play

Airbus, Boeing and Lockheed push to break into the commercial unmanned-aircraft market

Graham Warwick Dallas

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“And they are of the scale that makes sense for a company like Boeing and Insitu.”

Large customers are welcoming the major aerospace companies entering the market because they are looking for “a professional product and a professional service,” says John Sheehan, general manager for commercial aviation inspection at Lockheed’s Skunk Works. Several of the customers Lockheed is working with have tried unsuccessfully to operate their own UAS or use service providers, he says. “For larger customers, globally, it’s about doing it professionally.”

There are a lot of smaller players in a small commercial UAS industry that is “migrating toward services and data,” says Kallman. “For most people, drones are a means to an end, a way to collect data. Airbus has the structure and technology to allow it to do that for them.” Kallman has 12 years’ experience in the UAS industry and joined Airbus in February from Airware, a San Francisco-based startup that develops cloud software to manage drone operations and data collection.

Aerial has been established by Airbus Defense and Space, but “is more a startup than a division,” Kallman says. The new company will work across Airbus to bring together services for large customers. “Airbus is a unique player,” he says. “It has an industry-leading satellite business, both the constellation and the data management, and it can get the data off the satellite and turn it into something impactful.” Airbus already has a service in France, called FarmStar, which provides imagery data to large farms and agricultural companies. “Now we can put that together with data from drones,” he says.

“The pieces exist. It is a matter of adding layers that will be impactful for large commercial customers such as the global insurance companies,” Kallman says. Other target markets include utilities and state and local governments that need information urgently to respond to severe weather events. “This is not a multiyear effort. We will get into the market and begin supporting customers this year,” he says.

Lockheed is working with “a couple of pilot customers” and developing the analytical tools to deliver tailored data to different customers within key markets, says Sheehan. The company plans to launch inspection services with the commercial LM-XE UAS by early 2018.

Insitu Pacific, based in Sydney, is performing most of the Boeing subsidiary’s operations for large commercial customers. “What we have learned, particularly in Australia, is that large enterprises we are beginning to work with are looking for more than data collection or flying UAS,” says Vince Vidal, director of commercial solutions. “As a result, Insitu has reorganized its commercial division to position ourselves to provide end-to-end solutions to our customers.”

“There are a lot of players in the different layers of what we are doing, but the drone-specific companies focus on drones, and small companies address regional issues,” says Kallman. “We want to take the technology a step beyond the aircraft. Large customers want data around the globe, on demand.” As well as consistency and quality, safety is key.

“We are still dealing with aviation, and assets that fly over people and critical infrastructure,” he says.