

DIAMOND AIRCRAFT DA62 MPP SURVEY CONCEPT

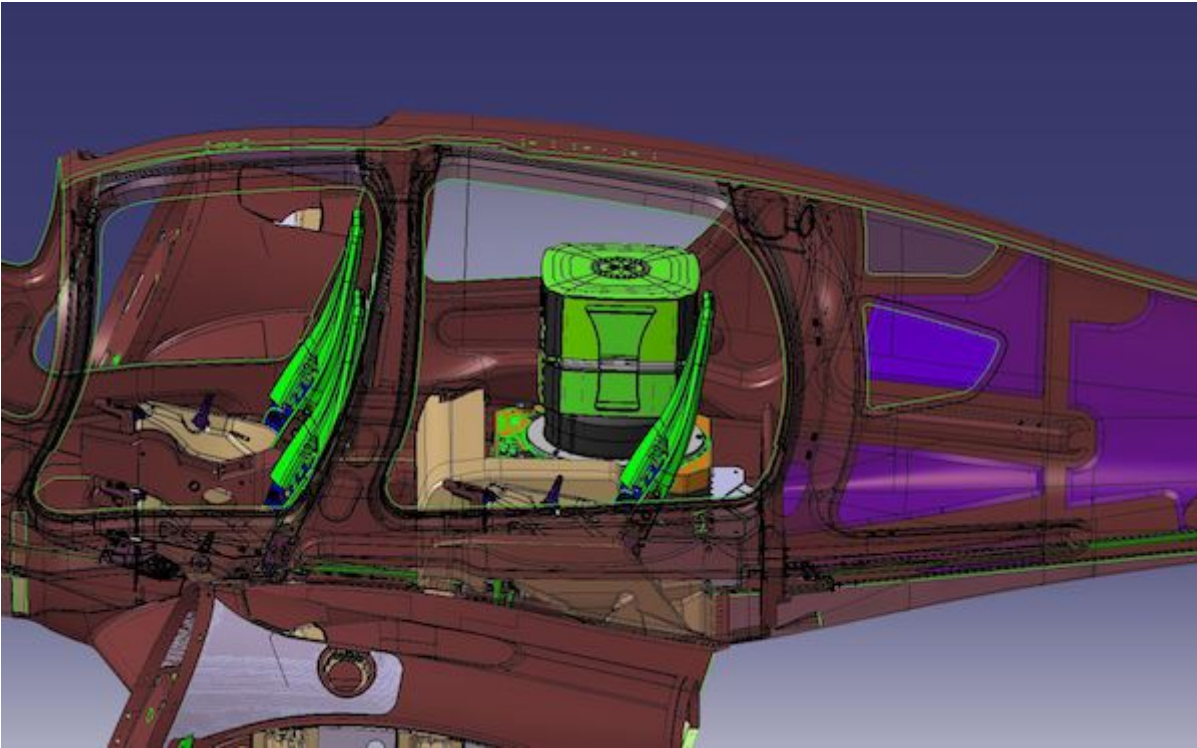
News / Manufacturer



Diamond Aircraft has introduced a new variant and concept based on the DA62 Special Mission Aircraft to attack the survey market where traditionally metal aircraft are established.

Diamond follows its successful tradition to bring in the high efficient diesel powered composite twin engine aircraft. The design team in Austria will have completed the strong combination, certified as Major Change STC, of the “single seat concept” and the “survey

hatch” by mid of next year.

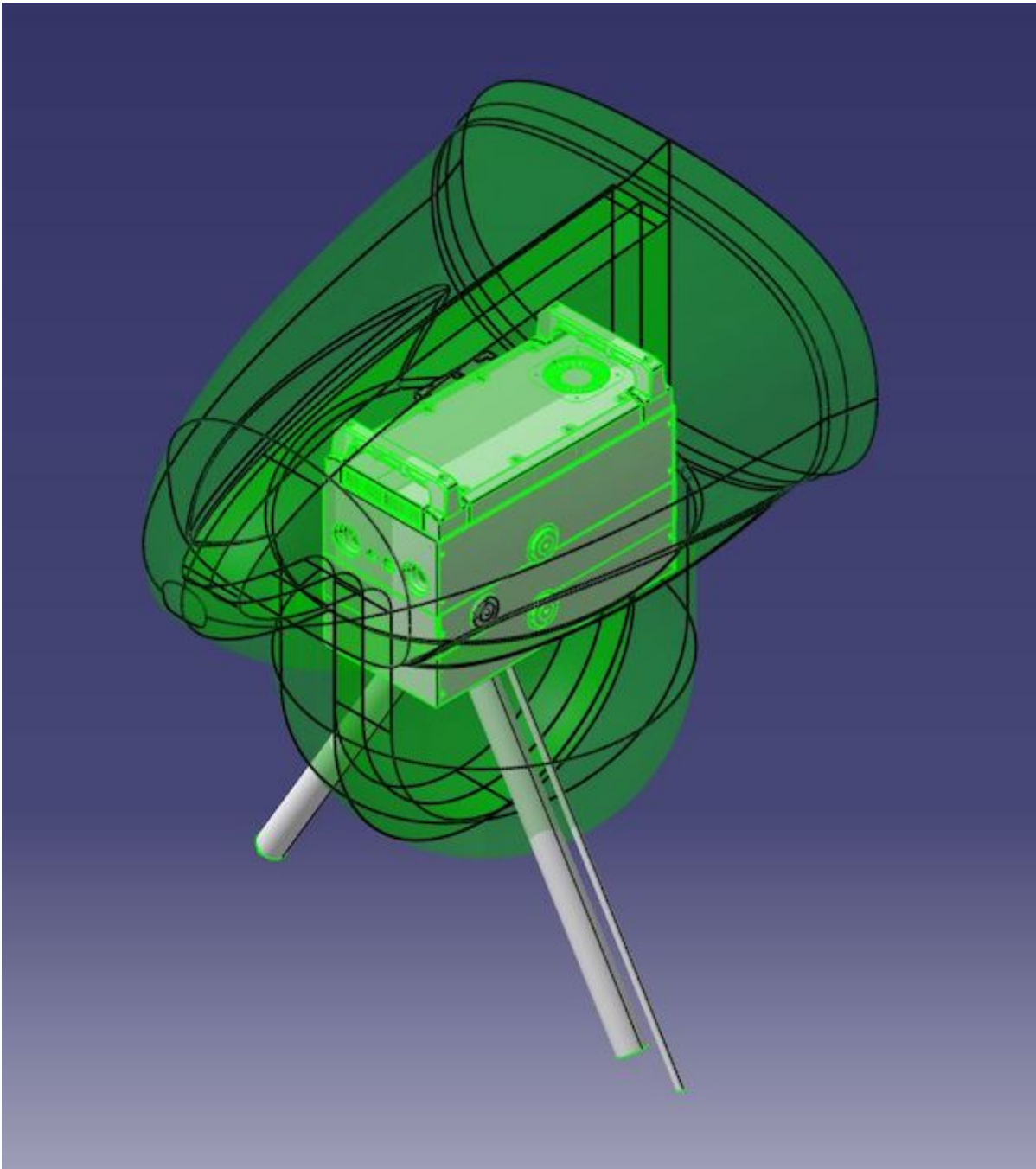


Single Seat concept

The standard available seat bench of the DA62 will be replaced by two individual DA62 pilot seats to significantly increase the comfort and generate more room for the operator. The seats will be repositioned backwards by 70 mm, there will be a console in the middle for standard Dzus units or other tailor-made applications as well as the opportunity to benefit from the adjustable backrest for the operators.

Survey Hatch concept

To have the most clean and aerodynamic shape, Diamond follows the idea to integrate survey cameras as well as the stabilization mount in the cabin by replacing the right-hand operator seat. The easy access to the large luggage compartment allows Diamond an easy installation of all additional mission equipment like data storage units, FMS and others. It will take about six months to complete phase one (Ø440mm/ 17”) and an additional eight months to have phase 2 (Ø508mm/ 20”) completed, which is the final stage of development.



DA42 MPP GeoSTAR concept transferred to the DA62 MPP Survey Config

In cooperation with our partners, Vexcel Imaging as well as RIEGL Laser Measurement Systems, Diamond will have a strong and modern European state-of-the-art Survey configuration. The extraordinary low noise signature of the aircraft, supported by the on-top exhaust systems, in combination with the low fuel burn fits perfectly to the idea to operate silently and environmentally friendly.

Typical future survey multi mission solution

A Vexcel UltraCAM Eagle (Phase 1) or Osprey (Phase 2) incl. Ultronav, a SOMAG GSM4000 stabilization mount install in the cabin in combination with RIEGL VQ-780 II airborne scanner in the Universal Nose.

Markus Fischer, Director Special Mission Aircraft: "This newly launched program is definitely one of the biggest product enhancements within the last years within the Special Mission Aircraft segment. The feedback during Intergeo was incredibly positive as it seems to be that the survey

industry is looking for the next generation aircraft, able to operate on low cost and a high environmental standard. The easy operation and low noise capabilities will allow to increase operational capabilities at night or over the weekend.”

Andrew Peczinka, Design Engineer, Diamond Special Mission Aircraft: “It is a pleasure to work with such a great team, designing the next generation platform for DA62 MPP sensor payloads. The single-seat operator configuration is a huge step forward in integrating larger, more capable sensors for our customers. This modification provides the opportunity to work with new and existing suppliers, and the ability to provide a wider selection of sensor applications that were once limited to only larger aircraft platforms. Being able to utilize such an economic and efficient aircraft, like the DA62 MPP, is a real game changer in the airborne sensing industry.”

Phase Alpha			
Survey Hatch	Manufacturer	Sensor	Gimbal
ø 440 (17")	Vexcel	Eagle	Somag GSM 4000
ø 440 (17")	Vexcel	Falcon	Somag GSM 4000
ø 440 (17")	Leica	DMC III	Leica PAV 100
ø 440 (17")	Leica	ADS100	Leica PAV 100
ø 440 (17")	Riegl	VQ-1560 II	Somag GSM 4000
ø 440 (17")	Riegl	VQ-780 II	N/A

PHASE Bravo			
Survey Hatch	Manufacturer	Sensor	Gimbal
ø 508 (20")	Vexcel	Osprey	Somag GSM 4000
ø 508 (20")	Vexcel	Condor	Somag GSM 4000
ø 508 (20")	VisionMap	A3 Edge	None

Alexander Wiechert, CEO Vexcel Imaging: “We have a long-standing partnership with Diamond Aircraft and are really excited about the DA62 MPP as it is now even easier to integrate all 3rd generation UltraCam systems into the new aircraft. Paired with greater operational efficiency, this offers a powerful aerial mapping solution for our customers worldwide.”

“We have ourselves been using a Diamond DA42 MPP, equipped with its nose pod, for more than 10 years for test and calibration flights of our ALS laser scanners and systems and can only report the best about this aircraft”, says Dr. Johannes Riegl, CEO, RIEGL Laser Measurement Systems GmbH. “It is extremely pleasing that the new, larger DA62 MPP will now enable even a modern dual-LiDAR airborne laser scanning system such as the RIEGL VQ-1560 II with fully integrated

medium format cameras and stabilization platform built into a hatch from inside the aircraft cabin to operate. Or, in case a large format camera is installed in the hatch, a modern RIEGL Single-LiDAR Airborne Scanner, like the VQ-780 II, can be additionally accommodated in the Nosepod, which underlines the flexibility of this new overall solution. We at RIEGL are eagerly waiting to test the DA62 MPP equipped with our high-performance surveying systems, and we wish Diamond Aircraft every success with this new, modern multi-sensor surveying aircraft.”

Sebastian Schreiber, CTO, SOMAG AG Jena: „We are convinced that Diamond Aircraft will set a new standard in the surveying industry with the DA62 MPP concept. As part of it, our Gyro Stabilization Mount GSM 4000 fits perfectly into the overall system. The versatility of the stabilization unit makes it a perfect add-on product for a large range of state-of-the-art sensors like cameras, LiDAR´s and other surveying equipment. It is a pleasure for us to work with Diamond Aircraft on this project and we are proud to see the flagship of our airborne product line in the new special mission aircraft.”

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