Ofek Captures Orthophoto & Oblique Imagery with VisionMap A3

For over 20 years, Ofek Aerial Photography and Mapping has been a dominant player in the field of geographic applications, both in Israel and in other countries around the world, offering various services and products.

With a fleet of four airplanes, state-of-the art technology and a highly professional team, Ofek has successfully completed many projects in Israel, Greece, Cyprus, Romania, Honduras and Ethiopia, in addition to several international mapping projects funded by the World Bank.

The Challenge

Ofek was required to provide a customer with orthophoto and oblique imagery of 6,000 sq. km. in central Israel, with 10 cm GSD. The region is comprised of an urban area with small scattered towns as well as open mountainous areas. The oblique imagery had to be at 34-45 degree angles from four directions, with wide overlap.

The challenge of this project was to cover and process this wide area - fifty flight lines north-south and ninety flight lines east-west - in three months.
The Solution

Ofek chose VisionMap’s A3 Digital Mapping System to meet the project’s requirements for two main reasons. First, A3 could be flown at high altitudes without compromising on resolution. With 60,000 pixels across flight track, A3 presented the largest footprint available on the market. As a result, the entire acquisition was completed in only 15 days – roughly a third of the time it would have taken with another camera. Secondly, A3 is the only aerial mapping camera that could provide high resolution orthophoto and oblique imagery from the same flight.

A3 LightSpeed automatically processed and solved the oblique imagery captured by the A3 Camera. LightSpeed fully-automatic processing system required minimal manpower - only one operator, and Ofek was able to see LightSpeed’s final products within a week of the flight.

Ofek used their MultiVision technology to automatically display and analyze spatially registered oblique aerial photographs based on the orthophoto produced by A3 LightSpeed. Ofek’s MultiVision enables precise measurements of the length, width and height of any photographed object.

Ofek’s Conclusion

“We are extremely pleased with the A3 Camera’s coverage capability, and like that in every flight line it can provide oblique coverage from two directions, said David Peretz, Ofek CEO.” “With regards to the processing system, the results justify the name - LightSpeed created both the orthophoto and high quality oblique products for us quickly and efficiently.”

Furthermore Ofek noted, “VisionMap’s excellent support is unmatched. We received prompt response to all of our needs throughout the project, and this made the entire process of working with A3 a positive one.”