

Monitoring Marine Mammals with UAV



Insitu Pacific, Australia, has concluded the second phase of a trial conducted in partnership with Murdoch University that aims to determine whether unmanned aircraft systems (UAS) are a cost-effective, capable alternative to manned assets for surveying marine mammals. During the two-week operation, Insitu Pacific's ScanEagle UAS captured up to 3,000 images of humpback whales daily. The trial also demonstrated ScanEagle's ability to operate effectively in Class G commercial airspace, a key step towards expanding civil airspace to incorporate unmanned systems more widely.

Insitu Pacific managing director Andrew Duggan says that flying for a long time, at a low altitude, well off the coast is a high-risk mission for a manned aircraft. Unmanned systems offer an alternative. He also finds that it is environmentally friendlier. ScanEagle can fly for more than 24 hours at a time on less than five quarts of fuel.

Suited for operation in remote locations, the runway-independent ScanEagle aircraft was launched, controlled and retrieved from North Stradbroke Island, off the coast of Queensland, Australia. A high-resolution digital still camera was fitted alongside a typical ScanEagle electro-optic payload. Previous field trials in October 2010 were conducted in Western Australia.

Because UAS offer a safe alternative to manned flight for high-risk missions like this, Insitu Pacific expects to see UAS used more frequently for purposes like this in the future.

Insitu Pacific, located in Queensland, Australia, has provided unmanned aircraft systems and services to defence, civil and commercial interests in the Asia-Pacific region since June 2009. It is a subsidiary of U.S.-based Insitu Inc.