

CPO 39 Aircraft Automation

Project Summary

SOFWERX, in partnership with the United States Special Operations Command (USSOCOM) Program Executive Office Fixed Wing (FW) executed Phase 3 of a seven-phase project to identify, modify, and operate a legacy, multiengine aircraft as an autonomous gunship. Under Phase 3, Apollo Autonomy leased a DHC-6 Twin Otter aircraft, installed an autonomous flight system into the aircraft, and conducted a ground operations demonstration. Lessons learned throughout each of the seven phases will inform ongoing AC/MC-130 automation efforts.

Resources Consumed

Total Cost: \$0



Project Timeline

Project Kickoff: 10 December 2020
Hardware Design Complete: 13 August 2021
Equipment Install Complete: 04 November 2021
Final Demonstration: 18 November 2021



Project Results

Hardware and software were developed, tested, and implemented onto the surrogate DHC-6 aircraft, based on the simulation data created during the previous phase. The aircraft was fitted with the bolt-on, autonomous system and successfully demonstrated during ground testing at the conclusion of the project.

