Ghostrider Gains and

Air Force Special Operations Command's next generation gunship, the AC-130J Ghostrider, has had a turbulent year of testing but is nonetheless making steady progress toward initial operational testing and evaluation this fall.

AFSOC plans to purchase and convert 37 C-130 airframes to the AC-130J configuration as part of its \$2.4 billion program to replace its legacy AC-130U/W gunship fleets. The aircraft will allow AFSOC and the Air Force to continue to address evolving operational needs.

The first Ghostrider prototype was delivered to Eglin AFB, Fla., last year to conduct developmental testing. As of early August, the aircraft had been grounded at Eglin since April while a mishap investigation took place. Meanwhile, a second aircraft is busy spinning up for IOT&E at neighboring Hurlburt Field.

In February 2014, less than a month after its first postmodification flight, the first airframe "departed controlled flight" during handling trials and "exceeded some speed and load limits" in the recovery maneuver, the Director of Operational Test and Evaluation revealed in a report released earlier this year.

The same aircraft was grounded following a second in-flight mishap on April 21, but "returned to base and safely landed

without further incident or any injuries to the crew," Air Force Materiel Command officials said in a statement. After a preliminary investigation, the accident was raised from a Class C to a Class A mishap after "structural analysis suggested damage greater than the \$2 million monetary threshold for a Class A incident," AFMC said in the statement.

In July, AFSOC stood up the 1st Special Operations Group, Det. 2, tasked with AC-130J operational testing at Hurlburt. The unit received its first airframe—the second prototype—on July 29, detachment commander Lt. Col. Brett DeAngelis told *Air Force Magazine*.



The new AC-130J gunship should head to

Staff photo by Aaron M. U. Church

Pains

By Aaron M. U. Church, Associate Editor

While the developmental prototype was still grounded, the second prototype was cleared to fly to validate several design changes based on lessons learned during developmental testing and to train flight and maintenance crews.

The Air Force handpicked a team of 60 aircrew and maintainers with experience on legacy gunships and the C-130J airlifter the new platform is based on. Schedule delays began during the second prototype's modification process, and having only one flightworthy airframe makes the window for training crews ahead of IOT&E in October very tight.

Nevertheless, the crews "will be training on the airplane, getting all the gualifications and hands-on experience we need to be able to perform operational testing in order to give an exact picture of how this plane will operate in a real-world environment," maintenance superintendent MSgt. Michael Ezell stated in a release.

"Putting it through these tests will allow us to wring out the AC-130J in a simulated combat environment, instead of the

more rigid flight profiles in formal developmental testing" conducted at Eglin, DeAngelis added.

Testers plan to complete the initial operational test phase in spring 2016.

The first two aircraft represent the early AC-130J configuration, designed to carry the precision strike package—including a 30 mm cannon and the ability to launch Griffin missiles and drop Small Diameter Bombs. New mission equipment includes all-weather synthetic aperture radar and dual electro-optical/ infrared sensors.

AFSOC plans to add a 105 mm gun and a ninth crewman to the third prototype, which will more closely resemble the gunship's final production configuration. This third prototype will primarily support follow-on operational test and evaluation, largely focused on the new gun, according to the FY 2014 Director of Operational Test and Evaluation's report released this year.

Long-term plans even call for the eventual integration of laser and directed energy weapons, according to AFSOC leadership.



An AC-130J Ghostrider prototype No. 12-5753 at Eglin AFB, Fla. The aircraft is grounded pending the results of a mishap investigation.