

Light Attack Aircraft (LAA) Program

Executive Summary

- The Air Force is leveraging the rapid acquisition authorities granted by Section 804 of the FY16 National Defense Authorization Act (NDAA) to fill the need for a low-cost, multirole aircraft in its future fleet of attack aircraft. It is evaluating non-developmental aircraft candidates to provide a cost effective Light Attack Aircraft (LAA) requiring minimal design modification.
- The Air Force intends to procure 359 aircraft for 8 operational squadrons and 3 Flying Training Units (FTUs).
- Informed by Phase I of the Light Attack Experiment (LAE) completed in August 2017, the A-29 Super Tucano and the AT-6 Wolverine were further evaluated in Phase II.
- The Air Force completed Phase II of the LAE in August 2018 after ending the flight portion in June due to an aircraft mishap.



System

- Both the A-29 Super Tucano and the AT-6 Wolverine LAA candidates are single-engine turboprop aircraft, with armaments including free-fall and laser-guided weapons, machine guns, and an electro-optical/infrared sensor operated by two aircrew members.
- The Air Force intends to procure 359 aircraft for 8 operational squadrons, and 3 FTUs using the rapid acquisition authorities granted by Section 804 of the FY16 National Defense Authorization Act (NDAA).

Mission

- Commanders intend to employ units equipped with the LAA to provide close air support, strike coordination and reconnaissance, armed reconnaissance, forward air controller airborne, and air interdiction in a permissive threat

environment thereby reducing the demand for 4th and 5th generation fighters. The Air Force also expects the LAA to be used for combat search and rescue and maritime air support.

- The LAA is intended to provide a survivable, sustainable platform capable of operating with light logistical support and will be interoperable with partner nations.

Major Contractors

- Sierra Nevada Corporation and Embraer Defense and Security (A-29 Super Tucano) – Jacksonville, Florida
- Textron Aviation Defense LLC (AT-6 Wolverine) – Wichita, Kansas

Activity

- The Air Force is leveraging the rapid acquisition authorities granted by Section 804 of the FY16 NDAA to fill the need for a low-cost, multirole aircraft in its future fleet of attack aircraft. Program of Record declaration under Section 804 occurred on June 23, 2018.
- The Office of Strategic Development Planning and Experimentation (SDPE), Air Force Materiel Command, Wright Patterson AFB, Ohio, developed and conducted Phase I of an LAE campaign during August 2017. LAE Phase I included four LAA candidates.
- After Phase I of the LAE was complete, DOT&E assigned the LAA program to oversight in April 2018.
- The Air Force further evaluated the A-29 Super Tucano and the AT-6 Wolverine informed by Phase I of the

- two-phased LAE. LAE Phase II was a repurposed combat demonstration of suitable LAA that completed in August 2018. The operational flying portion of the LAE Phase II was terminated in June due to an aircraft mishap. Most critical objectives had been met by that time.
- As a limited participating test organization, the Air Force Operational Test and Evaluation Center developed measures of suitability, assisted in writing measures of effectiveness, created an integrated maintenance database system, trained data collectors, provided data management, collected data, made suitability observations, and computed metrics from collected data.
 - The Air Force is pursuing an LFT&E waiver to full-up, system-level testing in accordance with section 2366,

FY18 AIR FORCE PROGRAMS

title 10, U.S. Code. The Air Force proposed a series of component-level live fire testing, combined with modeling and simulation, and design analyses of both candidate aircraft as the Alternative LFT&E Strategy. The test results will inform the future contract award scheduled for September 2019.

- The Air Force has a plan and resourcing to perform the initial analysis for developmental cybersecurity test and evaluation of both aircraft in accordance with DOD policy in 2019 before contract award.
- The Air Force is planning operational cybersecurity test and evaluation in accordance with DOD policy to occur after the contract award decision in 2020 on the selected aircraft.

Assessment

- SDPE provided the LAE Phase I and II reports for each candidate aircraft and analysis is ongoing.

- Source selection to a single contractor is expected by September 2019.
- The Air Force has required funding in place for Program Office stand up, risk reduction activities, and other efforts leading to contract award in FY19.
- DOT&E will release an Early Fielding Report in summer 2019, which will provide an independent appraisal of capabilities, limitations, program risks, and recommendations. The nature of the LAE precludes DOT&E from formally assessing effectiveness and suitability due to the data limitations.

Recommendations

None.