

United States Air Force Case Study: Agile Transformation Program

605th TES, Hurlburt Field



CHALLENGE:

The United States Air Force Leadership has determined that Testing Involvement (both DT and OT) needs to happen much earlier than current DOD and USAF practices require. This outcome has been established to address the increasing Volatility, Uncertainty, Complexity and Ambiguity (VUCA) that defines the challenges that military organizations face in the digital age. Organizationally, the USAF is investing in Agile or Adaptive training practices to produce more accurate software products at the end of a development cycle and, therefore, can be released faster. Under Secretary of USAF for Acquisition, Dr Will Roper has emphasized that increasing Organizational Agility practices throughout the USAF is necessary to achieve this important outcome. Dr Roper recently stated the following:

“I think that ultimately warfighters are always the customer. It’s a shame that there are a lot of warfighters that have gotten accustomed to when they give feedback about a system, they’re giving feedback so that their successor or their successor’s successor can see the benefit.”

“The idea that an operator could ask for something and get it in weeks is mind blowing, but it shouldn’t be.”

— Airman Magazine, February 2019

“Time is of the Essence: Service Acquisition Executive believes failing and fielding fast are keys to building Air Force of the future”

Current State


USAF has many Agile projects underway. Many of these projects are run by teams with basic knowledge of Agile practices. Still, most of the projects are part of programs that operate in a waterfall approach, which is much more costly, inefficient, too slow and often in conflict with Agile/Adaptive practices. Agile terminology is applied differently. Agile Requirements, Test, and Development practices are applied inconsistently. Overall there is a significant need to increase “Agile Cohesion” in USAF Adaptive practices. It is often said that the military has the most advanced agile practices (ex: OODA loop training for Air Force Pilots) but also the most restrictive bureaucratic practices (DOD Regulatory practices) that significantly inhibit increasing organizational agility. Balancing these two conditions is the critical factor in developing Agile Practices acceptable to modern military organizations. The USAF is committed to mastering this balancing act, and Learning Tree International is a committed partner in this important goal. There are Test Squadrons in over 15 Air Force Bases that support Development Testing (DT)

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605th Test and Evaluation Squadron’s Agile Transformation

Leadership from the 605th Test and Evaluation Squadron at Hurlburt Field attended LTI’s Agile Fundamentals Introduction with senior squadron members. They found that LTI’s Agile course(s) supported their basic knowledge and cohesion requirements. Working together, we could create learning paths for the 605th team and offer a path towards certification by bringing course(s) in-house to their squadron as the test group. Additionally, we were able to tailor our agile courseware with more specific Air Force terminology, context and scenarios for relevancy in a military context.

The initial group from the 605th TES consisted of the Operations Testing Unit is made up of around 160 individuals (Military, Civilian and Contractors).

Continued on next page 

SOLUTION:

Initially, the priority of leadership was to get the team through the Agile Fundamentals training (Phase 1) so that everyone was able to start on the same foot, use the same terms the same way, and begin the conversation on how their requirements are currently being approached vs how others are doing things. Leadership found out from Phase 1 that just getting everyone in the same room to be able to discuss what challenges they face in their jobs, how others are doing things, and just starting the conversation broke down bureaucratic barriers. It allowed them to be open to this change – as there was internal resistance – but this allowed the 605th to move forward as a team.

Learning Tree worked with the leadership at 605th TES to develop a custom learning path for the initial group that consisted of the following:



*** (Phase 2) denotes the courses that were customized and streamlined into one-week course delivery that included specific Air Force jargon and terminology applying to specific Air Force applicable scenarios to make the training more applicable to the situations they encounter regularly.*

The combination of courses above resulted in the achievement of 3 ICAgile Certifications: ICAgile Certified Professional, ICAgile Certified Expert Delivery Management, and an ICAgile Certified Expert in Product Ownership.

FUTURE PLANS:

Phase 3 of this program will ultimately have the group branch out further into some of the other certification tracks involving more of the Agile Testing, DevOps and Business Agility Practices based on the each individual's specific role.

Since beginning this program for the 605th TES, both Eglin Air Force Base's 96th Test Wing and Edwards Air Force Base's 412th Test Wing have started to implement this training program. In addition, Maxwell Air Force Base, Nellis Air Force Base, and Joint Base San Antonio - Randolph are also in the beginning stages of this program for their test squadrons.