THE AETC IDEA-TO-INNOVATION PROCESS

1. This document provides a high-level description of the process by which AETC will deliberately translate ideas into sustainable innovations that improve mission capabilities.

2. Within this context, an idea is a potential change, service, or product that will improve mission capability by mitigating/resolving a problem or exploiting an opportunity. In short, an idea is a change in the way we think about a problem, process, capability, or opportunity. An innovation, in contrast, is a fully implemented and sustained change to standard operating procedures that improves the organization's mission capability (or value proposition). In other words, an innovation is a change in the way we act.

3. The AETC idea-to-innovation (I2I) process provides a deliberate and highly agile mechanism to capture, assess, select and support development of ideas that hold the most promise to advance AETC mission capability or outcomes. HQ AETC/A2/9, as Director of Intelligence, Analysis, and Innovation, is the process owner for the I2I process. The Innovation Advancement Division (HQ AETC/A9A) serves as the implementation arm overseeing and supporting participants within this process. The AETC Commander (or designate) will chair all innovation boards and retains all decision-making authority.

4. The I2I process includes six distinct steps (detailed below) that encapsulate three discrete phases: IDEATION ➔ INCUBATION ➔ INNOVATION.

The AETC Idea-to-Innovation Process

a. Step 1 – Discover Idea (Ideation phase):

(1) The purpose of this step is to share knowledge and put the idea onto the most effective path toward resourcing, incubation, and implementation.

(2) HQ AETC/A9A will monitor the central location (Ideascale) where Airmen innovators can post/submit ideas for consideration. AETC will use Ideascale, which is an AF-provided commercial, web-based software service and ideation platform (currently) available to all Airmen.

(3) HQ AETC/A9A will review ideas submitted to HQ AETC and work with the innovator (Airmen generating the idea) and champion (the senior leader who provides or advocates for resources to support the innovator) to route the idea to the most appropriate
development path (e.g., Spark Cell, Airmen Powered by Innovation, AETC Innovation Council, etc.)

(4) HQ AETC/A9A will analyze idea submissions to identify common themes, objectives, and activities between the submitted idea and idea/incubation/innovation efforts already underway. In order to maximize collaboration and minimize duplication, A9A will strive to connect individuals who are working on similar or complementary ideas.

(5) Ideas can/should be funded first through Squadron Innovation Funds (SIF) or Commander’s Readiness Funds (CRF). However, for ideas best suited for review and potential funding from HQ AETC/CC funds, A9A will work with the innovator to prepare, schedule, and deliver a short proposal for review/consideration by the AETC Innovation Council.

(6) Target timeline to complete this step: 7 calendar days

b. Step 2 – Assess the Idea (Ideation phase):

(1) The purpose of this step is to decide whether to allocate resources to transition the idea to the incubation step. In the incubate/incubation step, the innovator and his/her team execute a time-constrained project designed to test a hypothesis, produce a pilot capability (as appropriate), and provide sufficient information upon which to make an implementation decision; e.g., to implement (innovate), conduct further experiments, or defer the idea.

(2) The AETC Innovation Council will base their decisions solely on the personal judgement and experience of the Council members. In short, this is a “gut check” assessment of the idea based on the following criteria:
   • Does the idea align with the AETC strategy?
   • Does the idea have potential to move the organization closer to the AETC strategy and/or the AF Design Blueprint?
   • Is the idea feasible and acceptable?

(3) If the Innovation Council decides the idea will transition to the incubate step, the Council may designate a set amount of AETC/CC funds to support the transition and identify, in coordination with the innovator and champion, a Project Manager to direct the incubation team’s activities.

(4) Target timeline to complete this step: 15 minutes during an Innovation Council meeting.

c. Step 3 – Plan the Experiment (Ideation-Incubation transition):

(1) The purpose of this step is to develop an executable incubation plan.

(2) In this stage, HQ AETC/A9A connects the innovator and Project Manager to the appropriate incubator organization (AFWerX, ATID, local Spark Cell, or external incubator or accelerator). An incubator is a resource (physical space, mentors, coaches, subject matter experts) designed to help innovators establish relationships and gain knowledge to develop their ideas into executable proposals, experiments, and full-scale (implemented) innovations. An
accelerator is a formal academic program designed to help innovators develop ideas into actionable experiment plans.

(3) The incubator will help the innovator and Project Manager create an incubation team with the right participants to maximize the chance of success. For example, HQ AETC/JA, HQ AETC/FM, and AFICA/KT (contracting) representatives will assist in developing an acquisition strategy and in determining the appropriate color of money (appropriation). The AETC Studies and Analysis Squadron (SAS) will also be a critical participant, as they will help the innovator develop measures and assessment mechanisms to ascertain the value of the project and its outcomes. The incubation team’s deliverable is a complete and executable incubation plan.

(4) This step will conclude with the first incubation “In-Progress Review” (IPR #1). In IPR #1, the Innovation Council reviews the incubation plan, with particular emphasis on clearly defined outcome assessment criteria, timelines, milestones, funding execution strategies, compliance, and acquisition strategies. The Council will decide whether or not to authorize execution of the allocated resources to continue the experiment. Note: The Innovation Council may decide during Step 2 to waive IPR #1 and allow the innovator to execute the incubation plan at their discretion.

(5) Target timeline to complete this step: 30 calendar days.

d. Step 4 – Incubate the Idea (Incubation phase).

(1) The purpose of this step is to incubate the idea using the minimum time, effort, and investment necessary to generate useful feedback and evolve the idea. The goal of this step, like the goal of prototyping (according to CEO Tim Brown, writing in the Harvard Business Review) “isn’t to finish. It is to learn about the strengths and weaknesses of the idea and to identify new directions that further prototypes might take.”

(2) Conduct IPR #2, roughly at the mid-point of the planned incubation period. In IPR #2, the innovator briefs the Innovation Council on the project progress, knowledge gained to date, and future actions. The Innovation Council may decide to (a) continue incubating the idea, (b) defer or kill the idea, or (c) tweak/revector the plan. Note: The Innovation Council may decide during Step 2 to waive IPR #2.

(3) Target timeline to complete this step will be unique to each idea/project. However, given that incubation projects should be designed to provide useful feedback with the minimum investment of time, effort, and resources, the duration should be relatively short (less than 12 months).

e. Step 5 – Evaluate Outcomes (Incubation phase).

(1) The purpose of this step is to decide whether or not to transition the idea into a full-scale innovation implementation.

(2) Conduct IPR #3. In the final IPR, the Innovation Council reviews the incubation project outcomes report, which includes qualitative and quantitative data gathered during the experiment, as well as subjective SME assessments of the experiment outcomes. Based on that
information and their own judgment, with HQ AETC/JA, KT, and FM advice as required, the Innovation Council decides whether the incubation project outcomes warrant transition to a full-scale innovation implementation.

(3) The output of Step 5 is the completed incubation project outcomes report, along with the Innovation Council decision memo.

(4) Target timeline to complete this step: no more than 1 hour in an Innovation Council meeting.

f. **Step #6 – Implement the Innovation (Innovation phase).**

(1) The purpose of this step is to create and process a formal requirement to implement and sustain the innovation. All actions in this step rest with the Innovator and Champion, who must decide (unless directed otherwise) whether or not to submit the idea, now supported by data and knowledge gleaned during the incubation project, to the AETC capability requirements process.

(2) If the Innovator and Champion decide (or are directed) to move the idea forward as a formal requirement, this step represents the handoff from the innovation process to the AETC capability requirements process defined in AETCI 10-602, *AETC Capability Requirements Development* (OPR: HQ AETC/A5/8). Within that process, the “idea” becomes a requirement; the “innovator” becomes the Requirement Owner; and the idea “Champion” becomes the Requirement Champion.

(3) Success in this step is a fully implemented innovation that (a) represents a clear and beneficial change to the organization’s standard operating procedures and/or capability, and (b) is fully supported by the POM and all elements of doctrine, organization, training, materiel, leadership, personnel, facilities, and policy (DOTMLPF-P).

g. **Throughout the Process – Knowledge Sharing and Feedback to the Innovator.**

(1) Feedback to the Innovator. HQ AETC/A9A will ensure the innovator is fully informed of all actions related to the idea.

(2) Knowledge transparency. HQ AETC/A9A will ensure maximum transparency of all information related to the idea/incubation project/innovation.

(3) HQ AETC Public Affairs will participate throughout the process to publicize innovative activities, as appropriate, to support AETC strategic communications.
Definitions

- **Accelerator**: a formal academic program resource to help innovators quickly develop ideas into actionable experiment plans. For example, AFWERX-Vegas has a formal accelerator program. AETC does not currently have an organic accelerator program.

- **Champion**: the senior leader (Sq/CC, O-6, GS-15 or above) who serves as the investor (provides resources) or advocate (if requesting HHQ funds) to support the innovator (synonyms: engaged leadership; sponsor)

- **Incubate/Incubation**: execute a time-constrained project designed to test a hypothesis, produce a pilot capability (as appropriate), and provide sufficient information upon which to make an implementation decision

- **Incubator**: a resource (physical space, mentors, coaches, SMEs) designed to help innovators establish relationships and gain knowledge to develop their ideas into executable proposals, experiments, and full-scale (implemented) innovations. For example, Spark Cells (wing level), AFWerX-Austin, or the AETC Technology Integration Detachment (ATID)

- **Idea**: a potential change, service, or product that will improve mission capability by mitigating/resolving a problem, exploiting an opportunity, or mitigating a threat

- **IdeaScale**: AF-procured idea management platform that uses crowdsourcing to help find and develop ideas. Users create a profile becoming members of the AF community. They then can submit ideas and comment/vote on other ideas.

- **Innovation**: a change to the organization’s standard operating procedures by implementing a new process, product, service, or capability that improves the organization's mission capability (or value proposition) (synonym: innovate)

- **Innovator**: the individual who generates an idea, then leads the effort to develop it into an experiment and, if warranted, a full scale (implemented/sustained) innovation (synonyms: intrapenuer, start-up)

- **Innovation Council**: the decision making body that allocates or recommends allocation of AETC resources to support the transition of ideas to experiments and, as warranted, fully implemented innovations. The Innovation Council is chaired by the HQ AETC/CC (unless delegated), with one representative each from HQ AETC/A2/9, HQ AETC/A3/6, HQ AETC/A5/8, Air University, AF Recruiting Service, 2 AF, and 19 AF. HQ AETC/CCX, HQ AETC/FM, HQ AETC/IA, and the AETC Technology Integration Detachment/CC will serve as permanent advisors to the Innovation Council. Other staff elements are invited to participate in or advise the Council as needed.

- **Project Manager**: The person identified by the Innovation Council, in coordination with the innovator and champion, to direct the incubation team’s activities.