# Innovation Challenge: Optimizing Operational Energy



#### **Airmen Powered by Innovation**

Do you have an idea on how to **optimize aviation fuel use** and **improve combat capability** for the Air Force?

Whether it's an innovative technology that reduces aircraft drag or weight, a sustainment process to improve engine performance, a more streamlined flight plan, a solution to help mitigate risk to our fuel supply network, or anything in between, we want to hear about it!

Submit your well-researched idea through the Air Force Ideation Platform (CAC Enabled). All ideas will be reviewed and carefully considered to determine possibility of Air Force buy-in and implementation. Please be prepared to answer follow-up questions and present your idea to stakeholders.

Air Force Operational Energy (SAF/IEN) has partnered with AFWERX to facilitate and help implement your **innovative energy ideas**.





#### **Process for Submitting Ideas**

- 1. Think of an innovative concept on how to optimize USAF aviation fuel use! (See examples.) Make sure it is well-researched and not already being executed.
- Submit your idea through the API Ideation Platform at https://usaf.ideascalegov.com
   (CAC-enabled). Select Command and Wing, and look for the OE campaign tile.
- 3. We carefully review your submission and reach out to you for any clarification or additional information.
- 4. If your idea is viable for the Air Force, we work with AFWERX to source funding and develop an execution plan. You play a key role throughout implementation.

#### **Submission Ideas**

- Energy and logistics risk mitigation
- Drag reduction devices on aircraft
- Lighter weight aircraft parts
- Streamlined flight plans during training
- 21<sup>st</sup> century technologies
- Engine sustainment processes
- Optimized fuel loads
- Efficient flight formations
- Education and training for USAF culture change

www.safie.hq.af.mil/ APIChallenge



#### **OUR MISSION**

To enhance combat capability and mitigate operational risk to the warfighter through energy-informed solutions.

#### **OUR VISION**

To create an energy optimized Air Force that maximizes combat capability for the warfighter.

# OPTIMIZING OPERATIONAL ENERGY LEADS TO:



INCREASED
Combat Capability



INCREASED
Aircraft Lifespan



LOWER
Aircraft Maintenance Costs



**MORE**Training Opportunities

## \$5-7 BILLION

is spent on Air Force aviation fuel **ANNUALLY** 

**81%** of the Air Force

ENERGY BUDGET is spent on aviation fuel

### 2 BILLION

GALLONS of aviation fuel used by the Air Force ANNUALLY

8,000

additional sorties fueled from a 1% EFFICIENCY INCREASE

**#FUELMOREFIGHT** 

