



I AM AIR FORCE ENERGY:

Your Role in Sustaining an Assured Energy Advantage in Air, Space and Cyberspace

Power the Force. Fuel the Fight.



Why is energy critical to Combat Air Force (CAF)?

- Future conflicts have the potential to limit our fuel due to cost, availability or adversary interdiction.
- Limited energy supplies will not change the required effects to be achieved.
- Energy security equals national security and every Airmen has a role to play.
- The smart use of energy means flying our aircraft farther, transporting more cargo, and accomplishing our mission in a more efficient and effective way.

What is the Air Force Doing?

- Investing in high fidelity simulators that allow pilots to get the experience they need in a realistic environment while consuming less fuel.
- Investing in avionics, weapons and countermeasures that make current generation aircraft more lethal and survivable, increasing legacy platform effectiveness.
- Developing 5th generation systems that are effective and survivable within an A2/AD environment.
- Placing integrated sensors and information sharing datalinks on the F-35 and future strike aircraft. Some current C2ISR support aircraft would not be required, allowing fewer aircraft to achieve the same effects while reducing the resources required to achieve those effects.
- Certifying all CAF platforms to use alternative fuels. These can be utilized when supplies of fossil fuels are constrained or alternative fuels are more cost effective.

AIRMEN IN ENERGY



Energy Analysis Task Force (EATF)

- 301st Fighter Wing (FW) at JRB Fort Worth partnered with EATF to test fuel efficient descents in F-16s.
- All pilots were briefed to consult the mission computer for the maximum endurance Angle of Attack (AoA) and fly that AoA whenever possible.
- Flight trials demonstrated pilots could save 0.53% of fuel per sortie using the maximum endurance AoA during transition to and from training ranges.
- Incorporation across the F-16 fleet could save more than 900,000 gal. of fuel and \$3.3M per annually.

AIRMEN ACCOMPLISHMENTS



Thunderbirds Fly on Biofuels:

- On May 20, 2011, the Thunderbirds performed a full flight demonstration at Joint Base Andrews, Maryland on a 50/50 blend of JP 8 and biofuel derived from plant oil.
- As the first aerial demonstration team that used biofuels, the aircraft showed no difference in performance from traditional petroleum fuel.
- The Thunderbirds flight demonstration was one of many "firsts" accomplished by Air Force in its testing and demonstration of the capabilities of alternative fuels. Other milestones included the first transcontinental flight, the first supersonic flight and the first aerial refueling using alternative fuel blends.

“The smart use of energy means flying our aircraft farther, transporting more cargo, and accomplishing our mission in a more efficient and effective way.”

— Acting Secretary Eric Fanning; Letter to Airmen October 1, 2013

DO YOUR PART



Optimize your mission profiles to allow maximum time over target or in the range.



Train close to home when able—Utilize the closest range that will support your training.



Train Joint—When possible, train with sister Services to maximize joint training and interoperability.



Use minimal weight/drag configurations consistent with mission requirements.



Plan, coordinate and execute air refueling requirements to minimize excess fuel carried by the tanker.



Maximize use of the simulators available to you.



Land when training is complete. Do not fly just because you have fuel remaining.