



The White House Closing the Circle Awards
 2007 Nominations
Deadline: January 31, 2007

REGISTRATION PROCESS: Step 1: Complete ---> Step 2: Review ---> Step 3: Print

Instructions: This is the first of three steps. For **Step 1:** Complete the nomination form below. Once completed, click "Review Nomination" (**Please note: Completing this page and clicking "Review Nomination" does not complete your registration.** You must review the nomination and submit it in Step 2.)

Please note: for your assistance, sample entries appear to the right of each field.
Warning: do not use your Return key to jump between fields (this action will cause your application to be submitted). Use your Tab key to jump to the next field.

Agency

Department of Defense

* **U.S. Postal Service Nominees: Please [Link Here](#) to Submit Your Data.**

Field Activity

Name:	Air Force	US Camp Swampy
Location:	Pentagon	Nowhere, AZ

Point of Contact (used to contact winner)

Name:	Maj Craig Mays	Mr. John Smith
Address:	54 Willow Street	123 Anywhere Street
	Wing B	Suite 100
City:	Langley AFB	Nowhere
State:	VA	AZ
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Email:	craig.mays@langley.af.mil	jsmith@nowhere.com

Media Contact (agency public affairs representative)

Name:	Maj Wade Lawrence	Ms. Jane Johnson
Address:	1421 Jefferson Davis Hwy	555 Anyroad Dr.
	Suite 820 (Crystal City)	Suite 555
City:	Arlington	Nowhere

State:	<input type="text" value="VA"/>	AZ
ZIP:	<input type="text" value="22202"/>	99887-6655
Phone:	<input type="text" value="703-602-0767"/>	123-555-5487
Fax:	<input type="text"/>	123-555-4567
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Award Category (choose only one)

- Waste/Pollution Prevention
- Recycling
- Green Purchasing
- Environmental Management Systems
- Sustainable Design/Green Buildings
- Alternative Fuel and Fuel Conservation in Transportation
- Electronics Stewardship

Nominee

- Team Nomination
- Individual Nomination

Team/Individual:

Individual: Mr. Stephen Jones
Team: Camp Swampy P2 Team

Complete name as it would appear on the award certificate.
For Team: Indicate only the name of the team (not individuals) not to exceed 6 words in length.

Address:	<input type="text" value="54 Willow Street"/>	555 Street Road
	<input type="text" value="Wing B"/>	Apartment 111
City:	<input type="text" value="Langley AFB"/>	Nowhere
State:	<input type="text" value="VA"/>	AZ
ZIP:	<input type="text" value="23665-2081"/>	12345-4455
Phone:	<input type="text" value="757-764-4410"/>	123-445-6655
Fax:	<input type="text" value="757-764-4415"/>	123-445-9988
Email:	<input type="text" value="craig.mays@langley.af.mil"/>	sjones@nowhere.com

Title of Nomination (i.e. "Closed-Loop Used Oil Recycling")

Note: Complete title as it would appear on the award certificate. Title must not exceed 6 words in length.

Nomination Description

Please include your "Nomination Narrative Document".

File Requirements

- Allowable file types:
 - MS Word Document (.doc)
 - Rich Text File (.rtf)
- Size: not to exceed 4 pages and 1 Megabyte (including any embedded TIFF, GIF, or JPG images)
- Font: size 12 Times New Roman or equivalent font.

Important note: Before uploading the Nomination Narrative Document please include a copy of this application page in the document. On your browsers EDIT menu, SELECT ALL, then “copy and paste” this completed Nomination Form on the first page of your Nomination document. The application page will not count against the 4-page limit in the submission.



Nomination Narrative Document

File name should not contain the following characters:
pound (#), ampersand (&), exclamation point (!), arrows (< >), or parentheses ().

Continue to Step 2 - Review Nomination

Each applicant will be subject to a review of background information on their environmental compliance status and enforcement history. This process will include consideration of information in the Environmental Protection Agency's, Online Tracking Information System (OTIS) which is available online at: www.epa.gov/idea/otis as well as other available compliance and enforcement information. Applicants should review their compliance status and history prior to submission and may provide information for consideration in the compliance screen where they believe the OTIS data is incorrect. In general, chronic non-compliance and/or recent or ongoing criminal or certain civil enforcement activity will be considered a basis for disqualification.

Please click Review Nomination to Proceed to Step 2

Review Nomination	Start Over
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Alternative Fuel and Fuel Conservation in Transportation

In the past twelve months, the Air Force has taken an aggressive stance to integrating conservation and alternative energy use into every facet of our activities including making energy a consideration in every aspect of operations and acquisition. Taking a leading position, the Air Force has pursued an aggressive energy conservation strategy and is committed to meeting and surpassing the energy goals mandated by Executive Order (EO) 13149, *Greening the Government Through Federal Fleet and Transportation Efficiency*, and the Energy Policy Act (EPAAct) of 1992/2005 and now EO 13423, *Strengthening Federal Environment, Energy, and Transportation Management*.

The cornerstone our efforts is the Air Force's Energy Strategy that was developed in 2006 and our focus revolves around two tenants of supply side assurance and demand side conservation:

Make energy a consideration in all Air Force actions by promoting culture where Airmen conserve energy

Supply Side Assurance through accelerating development and use of "Alternative" fuels

Synthetic Fuel for Aviation
Renewable Energy for Installations

Demand Side Conservation by enhancing energy efficiency--aviation and infrastructure

These tenants set the foundation for aggressive fuel conservation and alternative fuel use. However, we have taken additional steps and developed two supporting policy documents to strengthen our energy conservation stance. The first is the Low Speed Vehicle (LSV) Policy, the first of kind in the Department of Defense and the second is the Aviation Fuel Conservation policy, an unprecedented step to fuel conservation in the aviation sector. In addition, AF leadership has taken several positive actions to ensure an energy conservation culture is promoted: the Secretary of the Air Force published a Letter to Airmen on Energy Conservation and the Vice Chief of Staff of the Air Force declared October 2006 as Energy Awareness Month.

Supply Side Initiatives

The Air Force has actively championed supply side alternative fuels initiatives in 2006. The most prominent ones include the potential use of synthetic fuel in aircraft through a B-52 synthetic fuel flight demonstration and the increased consumption of E85 by 20% from FY05 as well as sustained a 164% increased level in B20 consumption achieved from 2003 to 2005.

B-52 Flight Test

The Department of Defense is the largest consumer of energy in the Federal Government and the Department of the Air Force is the largest user of aviation fuel. With this in mind, the Secretary of

Defense called on all the services to explore alternative fuel sources and the Secretary of the Air Force challenged the Air Force to fly a manned aircraft on synthetic fuel by the end of FY06. The Air Force rose to the challenge by choosing to fly a B-52 on a blend of 50% JP8 aviation kerosene and 50% Fischer-Tropsch (FT) synthetic fuel. The Air Force purchased 100,000 gallons of synthetic fuel from a Tulsa Oklahoma firm to meet this challenge. The demonstration involves the following eight test phases: preliminary analysis; small scale demonstrations on Air Force Research Laboratory (AFRL) engine test rig; off-aircraft 50-hour engine test at Tinker Air Force Base (AFB), OK (received, blended, additized, and delivered 29K gallons of FT fuel to the test cell); on-aircraft 2- and 8-engine ground and flight tests at Edwards AFB, CA (received, blended, and additized 30K gallons of FT fuel for test); detailed aircraft engine inspection with final report; test flight with all eight B-52 engines using FT; and cold weather testing at Minot AFB, ND (focused on the ability of the B-52 to start its engines using the FT blend under cold weather conditions, simulating the real world operational environment). The first seven phases of the demonstration were completed successfully in 2006, with the eighth phase scheduled for completion in early 2007. The B-52 synthetic fuel flight demonstration promoted a national objective by successfully demonstrating progress toward developing greater energy independence and security by using assured domestic supplies for aviation purposes. The potential adoption of synthetic fuels for use by the entire military and commercial aviation community would have a huge impact on reducing our dependency on foreign fossil fuels.

Ground Vehicle Bio-based Fuel Use

As for the use of alternative fuels in our vehicle fleet, the Air Force has led the way for all other military services, as well as other federal agencies, in the procurement and use of E85, a blend containing 85% ethanol and 15% gasoline, and B20, a blend containing 20% long chain fatty acids derived from vegetable oils and 80% low sulfur diesel fuel in support of EO 13149. In FY06, Air Force vehicles consumed 73K gallons of E85 and 3.7M gallons of B20. The E85 totals represent a 20% increase from FY05 consumption and the B20 totals sustained the 164% increased level in consumption achieved from 2003 to 2005. Our E85 and B20 consumption replaced 820K gallons of petroleum-based product, which represents 2,000 barrels of independence from foreign oil. By FY06, 56 Air Force locations were dispensing B20 and 18 were dispensing E85. In FY06, eight new alternative fuels infrastructure projects totaling \$3.1M were accepted for funding by the Defense Energy Support Center (DESC).

Finally, the Air Force tested oxygenated diesel fuel at Nellis AFB, NV, to demonstrate that the addition of ethyl alcohol in diesel products creating oxygenated diesels will dramatically reduce pollution while reducing our dependence on traditional petroleum diesel. The testing has been successful to date and will be completed in 2009. The Air Force supported an additional test involving an R-11 mobile refueling unit demonstration, which successfully demonstrated that an R-11 could operate effectively on alternative fuel (50/50 blend of JP8 and FT).

Vehicle Demand Side Initiatives

Air Force efforts to increase the purchasing of Alternative Fuel Vehicles (AFV) continued in 2006, as the Air Force earned AFV acquisition credits amounting to 117% of its covered vehicle acquisitions, which is 42 percentage points higher than the 75% AFV acquisition requirement mandated by EAct 1992/2005. In short, in FY06 the Air Force acquired 1,375 EAct-covered

light-duty vehicles (LDV). Of these, 1,085 or 78.9% were AFVs. The Air Force received an additional 520 credits through the acquisition of dedicated medium-duty AFVs and the use of B20, earning a total of 1,605 credits or 117% of covered acquisitions.

Toward the petroleum reduction goal set forth in EO 13149, the EO calls for each agency to increase the fuel economy of its LDV acquisitions (excluding AFVs). Each year since 1999, the Air Force has increased the average fuel economy of its light duty non-AFVs and achieved a 4.1mpg improvement in 2006.

We reviewed our vehicle replacement strategy and refined it to aid fleet managers. They are now able to determine the type of vehicle that best meets the customer needs and support the overall energy strategy on reducing dependency on foreign oil and decreasing air emissions. The prime factors for determining a vehicle authorization are mission requirements and operations tempo, availability of alternative fuel infrastructure and historical or estimated annual miles driven. With this in mind, we reduced 824 vehicle authorizations and right-sized 891 vehicle authorizations. In addition, we increased our focus on LSV, AFV or hybrid vehicles.

Fleet managers are now looking to see if LSV, AFV and hybrid will first meet the customer's needs. If these types of conveyances will not meet the customer's needs, then a diesel engine-powered vehicle (if B20 is available locally) will be the next choice with a conventional gasoline vehicle as the last choice for a specific vehicle authorization. Because of the enormous benefit of using LSVs in terms of reducing overall vehicle inventories and fossil fuel consumption, the Air Force set a goal to replace 30% of our light duty fleet with LSVs by FY10. We have programmed \$5.5M to procure 588 LSVs for FY07 and purchased 11 LSVs with FY06 money. The initiative to aggressively replace conventional vehicle authorizations with LSVs is receiving a great deal of senior Air Force leadership emphasis and oversight. The LSV mpg ratings are about twice that of conventional vehicles and can operate exclusively within the parameters of a military installation.

Alternative Fuel Standardization Initiatives

The Air Force was involved in several initiatives to promote alternative fuels within International Standardization Organizations. The Air Force worked on making a standard, accepted specification for Biodiesel fuel, resulting in American Society for Testing and Materials (ASTM) D6751, "Standard Specification for Biodiesel Fuel Blend Stock (B100) for Middle Distillate Fuels." This is a robust specification to be used as blend material in petroleum diesel fuel. The Air Force also participated in creation of a B20 Biodiesel specification and is leading a test program for a filtration and cleanliness method for biodiesel B100 and biodiesel blends. Finally, the Air Force is coordinating in acceptance of semi synthetic fuel into ASTM D 1655, "Standard Specification for Aviation Turbine Fuels," (Jet A and Jet A1) and contributed to development of proposed "Standard for Ethanol-Emulsified Automotive Diesel Fuel (O2 Diesel)."

Advance Power Technology Initiatives

The Air Force took a leading position to test new AFV vehicles during 2006. Several advanced power initiatives have evolved with the most promising being the partnership between the Air Force and the State of Hawaii Center for Advanced Transportation Technologies (HCATT). The focus area is the use and handling of hydrogen as the fuel of the future for ground vehicles.

One of the Air Force/HCATT partnership efforts is a modular deployable hydrogen production and refueling station built at Hickam AFB. This station is the first of its kind in the DOD and serves as a model for other Air Force installations. This capability enables Hickam to produce up to 50kg of hydrogen per day and refuel their current and future fleet of vehicles.



A fleet of fuel cell powered vehicles is being developed and demonstrated to validate their use in Air Force ground vehicle fleets, support equipment, and Basic Expeditionary Airfield Resources (BEAR) through the Air Force/HCATT partnership. The first of these vehicles is the battery dominant fuel cell hybrid bus project, which provided an opportunity to evaluate fuel cell technology, using a low risk approach. In addition to this bus, the Air Force is operating a battery dominant step van and MB-4 aircraft tow vehicle.



The Air Force also partnered with Mack Truck, Inc. Through this collaboration we focused on creating alternative hybrid heavy duty ground support equipment with distributive power capabilities the following technologies are now being tested/validate for real world use.

The Air Force/Mack Truck, Inc. partnership developed 2 dump trucks and 2 refuse collections vehicles to demonstrate/validate hybrid electric technology in Class 8 heavy-duty industrial type vehicles in both real world military and civilian applications. The project provides the Air Force with operational capability and reduced dependence on fossil fuels.



Just the Start

This narrative hits the highlights of the Air Force's efforts in 2006 to provide leadership in energy conservation and alternative fuel usage, to promote a cleaner environment while enabling the military to conduct day-to-day operations all the while being less dependent on foreign oil. While the improvements in alternative fuel consumption and increased purchasing of AFVs were significant accomplishments in and of themselves, the potential benefits which may be gained from the work the Air Force did and continues to do in testing synthetic fuel in aircraft and testing new potential vehicle power sources are so enormous the future implications can only be guessed at. The Air Force was the leader in the alternative fuel and fuel conservation area for 2006 and plans to continue to lead the way in this area for the foreseeable future.