



# The Naval Aviation Enterprise

# AIR PLAN

...One Vision, One Team



# 6

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"What the Navy and Marine Corps are doing now is great, but I am here to encourage us to go farther – to dream what might be rather than to simply accept what is.... Bold steps are in our nature as Americans and what make us a great nation; no one has ever gotten anything big done by being timid. I'm here to commit the Navy and Marine Corps to meet bold and ambitious goals in energy." - The Honorable Ray Mabus, Secretary of the Navy

## Naval Task Force Energy and Aviation Working Group

**Task Force Energy (TFE):** The Department of the Navy (DoN) energy strategy will emphasize energy security, energy efficiency and environmental stewardship, and will require a sense of ownership of Navy energy usage from every Sailor and Marine. The Navy will invest in energy initiatives and develop policies and doctrine to accelerate the President's quest for energy security. The CNO has further stated that our overarching energy strategy will help the Navy to conserve energy, develop alternative energy options, and secure energy distribution while maintaining or increasing combat capability.

**Naval Energy Forum 14-15 Oct:** Highlighting TFE efforts to date, the Office of Naval Research and the TFE co-hosted the first Naval Energy Forum, 14-15 October in McLean, VA, to discuss the emerging DoN energy strategy. During the Forum, SECNAV announced five energy targets:

- The lifecycle energy cost of platforms, weapons systems or buildings, the fully-burdened cost of powering them and contractor energy footprint, will be mandatory evaluation factors used when awarding contracts.
- The Navy will demonstrate a Green Strike Group of nuclear vessels and ships using biofuel in local operations by 2012. By 2016, we will sail a "Great Green Fleet" composed of nuclear ships, surface combatants with hybrid electric power systems using biofuel, and aircraft flying only on biofuels.
- By 2015, DoN will reduce petroleum use in the commercial fleet of 50,000 vehicles by 50% by phasing in a composite fleet of flex fuel, hybrid electric, and neighborhood electric vehicles.
- By 2020, DoN will produce at least half of shore-based energy requirements from alternative sources.
- By 2020, half the department's total energy consumption will come from alternative sources.

**TFE Aviation Working Group (AWG):** In support of SECNAV Energy goals, the AWG, under OPNAV N88 and NAVAIR, is engaging in efforts to conserve energy and promote alternate energy options:

- The AWG will meet SECNAV objectives and maintain current readiness levels and combat capability.
- Major initiatives of the AWG: The advancement of simulator use and improvements to training and readiness via simulator upgrades; F414 engine efficiency improvements; incentivized Fleet fuel savings initiative; aircraft Energy conservation R&D and S&T efforts.

### Key Messages

- The DoN's emerging energy strategy centers on energy security, efficiency and environmental stewardship while remaining the pre-eminent maritime power.
- Energy security is critical to mission success. Energy security safeguards our energy infrastructure and shields the Navy and Marine Corps from a volatile energy supply.
- Energy efficiency increases mission effectiveness. Efficiency improvements minimize operational risks, saving time, money and lives.
- Environmental stewardship protects mission capabilities. Investment in environmentally-responsible technologies afloat and ashore reduces green house gas emissions and lessens dependence on fossil fuels.

### Facts and Figures

- Naval Aviation in 2008 consumed more than 15 million barrels of fuel, or 40% of total DoN fuel consumption.
- The DoN is the 2<sup>nd</sup> largest fuel user in DoD, consuming about 100,000 barrels per day. The Air Force uses about 200,000, and the Army uses about 30,000.
- The AWG has to date promoted a nearly 13% annual fuel reduction by 2020, equating to nearly 2 million barrels per annum of fuel savings. We will see results as R&D efforts transition to application.
- 75% of the Department of the Navy's energy consumption is tactical. 25% of consumption is ashore.
- An F-404 Hornet engine ran on biofuel Oct. 13 in the Aircraft T&E Facility Patuxent River, MD. This successful test was an important step toward the first flight of the "Green" Hornet, scheduled for Spring 2010.