



RIMPAC Task Force Energy



Part of a greater U.S. Third Fleet strategy

Overview

Rim of the Pacific (RIMPAC) exercises – past, present and future:

- In 2012 we successfully demonstrated advanced biofuel blends in Navy surface ships and Navy aircraft.
- In 2014 we are demonstrating how renewable energy can be used to power forward operating positions for expeditionary missions. And we are showing how innovative technologies, strategies and tactics can save energy and save money for the Fleet.
- In 2016 we will integrate and synchronize successes to meet SECNAV energy goals, including sailing the Great Green Fleet.

RIMPAC 2014 Focus Areas

Ashore:

- Determine power generation and usage/application
- Operationalize energy resources to fill gaps in littoral capability

We demonstrated interoperability and self-sufficiency in setting up and using renewable energy to power a Forward Operating Position, integrating with Sea Ark expeditionary patrol boats to show a way forward with MK VI (Mark Six) logistics support. We were able to power the mission with less fuel, reduce noise, and mitigate the dangers and dependence on logistics – while providing clean energy and hotel services for 130 personnel.

At the humanitarian assistance and disaster relief (HA/DR) demonstration on Ford Island, our team used wind power, field tents with built-in solar, and other alternative energy options, along with a lot of smart ways to conserve. We deployed 11 different systems to generate 329 kilowatt hours per day, which significantly offset diesel fuel usage. Renewable energy sources were the sole source of power for the HA/DR Logistics Support Area (medical, galley, admin, berthing), and 100 percent of power requirements were met.

Afloat:

- Develop assessment process and metrics
- Map mission to energy use
- Influence tactical fuel conservation through new concepts of operations

Surface ships are conducting an experiment at sea to measure energy savings using incentives, fuel-efficient platforms and innovative strategies.

Some ships and aircraft consume excess fuel in certain “finding and targeting” missions while the use of new multi-mission capable P-8 aircraft and unmanned aerial vehicles can serve as the “eyes and ears” to optimize time and energy for the higher energy users to employ on the right side of the “kill chain.”

RIMPAC 2014 is demonstrating the effectiveness of conservation incentives and concepts for platforms to “perform the same mission with less burn,” achieving an estimated 15 percent fuel reduction while doing more events.



Our Task Force Energy and Environment, under Commander, U.S. Third Fleet’s command and control during RIMPAC 2014, is using new technologies and trying new concepts to achieve a “new normal.”

RIMPAC 2014 shows how we can move away from foreign/fossil fuels, minimize energy use and reduce risk – including vulnerabilities to the maritime supply chain.

This is a team effort with energy experts and warfighters. It includes not only stakeholders in other departments and branches of the military, but also partners and friends from other nations.

When our deployed ships, aircraft and forces are self-sustained, they are able to go farther, stay on station longer, and be more flexible, with more endurance.

RIMPAC helps demonstrate the potential of new platforms and capabilities like UAS, MPA and surface patrol craft with adaptive CONOPS and missions that improve readiness and save fuel.

Saving energy and using renewable energy saves money and, more importantly, saves lives. Energy security reduces greenhouse gases and is tied to environmental stewardship – important in building cooperation with other nations.