Photo by PHAN Lindsay R. Mintum

AG3 Keith Phillips from San Antonio, Texas, prepares to launch a weather balloon. Weather balloons rise to a height of 20,000 feet and provide important weather data for the Kitty Hawk battle group. USS Kitty Hawk (CV 63) is providing a forward presence in the Asia/Pacific region, conducting training and exercises with regional allies. Kitty Hawk is the Navy's only permanently forward deployed aircraft carrier and is homeported in Yokosuka, Japan.

Meteorological Oceanography is in the Navy's forecast

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PEARL HARBOR, Hawaii – During RIMPAC, few naval organizations played as an important role to the 40 ships and 18,000 Sailors as did the Meteorological and Oceanographic Center (METOC).

Planes, ships, submarines and land-based exercises alike all had a stake in the information they received. With the navies of seven allied nations participating in the exercises, receiving accurate weather forecasts were a necessity. For both METOC's active duty and Reserve Sailors, the stakes were justifiably significant.

For three Reservists, from Naval Air Station Joint Reserve Base Ft. Worth, Texas, RIMPAC 2004 has provided an ideal opportunity to test their weather forecasting skills. Over the course of the month long exercise, they worked at the METOC headquarters. They pored over programs, watching time looped satellite photography and communicated with weather observers, all with one goal in mind: analyzing weather patterns before they (and their active duty counterparts) disseminated the information to ships and planes of the fleet.

"The information we provide goes beyond just weather forecasting," said AGC John Brotherman. "It is also tactical; if the seas are too rough, amphibious missions are subject to change, cloud cover affects our patrol and recon flights and although most people do not realize it, weather even affects our submarines."

"It is imperative that we provide on scene-timely weather predictions and updates for the Third Fleet," said AGCS David Trevino.

Trevino, a Reserve Sailor from Dallas, participated in the RIMPAC exercises, in part, to supervise junior Reservists. "While here, we have worked with active duty Sailors daily. We're all responsible for giving the fleet as much accurate information as possible."

Tucked away in a remote corner of Commander, U.S. Pacific Fleet (COMPACFLT), far from other offices, is the weather detection facilities.
Outside stands a satellite dish aimed skyward. The facilities modern look gives hint to the importance to the work performed inside.

Upon entering the nerve center of METOC, an observer might feel like they had just stepped into NASA's Space Control Center in Houston. Lining the large room 50-inch plasma screen monitors

RIMPAC 2004

Rim of the Pacific

hang from ceiling mounts, each displaying weather maps of various regions of the world.

For METOC's staff, focusing on the Pacific Ocean, especially the waters surrounding Hawaii was the business of the day.

"We are on the watch bill and we have been working closely with active duty Sailors," said Trevino. "Once we arrived here for RIMPAC we immediately began to file our Sailors into positions working the various shifts. While we worked separately from active duty, we received the same information; we performed the same kind of tasks."

One aspect of their job that remains unchanged is the need for accurate weather forecasts. State of the art equipment provides the staff and personnel with immediate access to weather data, thus making it possible to forecast adverse weather conditions more quickly.

"Weather affects everything," said AG2 David Hunter, a Reservist from Krum, Texas. "We monitor everything knowing that the safety of any fleet operation may depend upon our forecasts."

The long hours of RIMPAC provided the Reservists unique training opportunities they wouldn't have had at their reserve centers.

"Training exercises like this keep us current," said Brotherman. "With all the changes I have seen through the years, we are much quicker, we have more data models to use. Old time satellite pictures could take us an hour to study before making any forecasts."

"We worked on various simulations and made our own predictions," said Brotherman. "When we arrived at our own conclusions, we compared notes with the other AG's. If our predictions matched, we were permitted to present our information to the fleet."

Like its counterpart the National Weather Bureau, METOC operates 24 hours a day, seven days a week. Some people take the weather for granted, however, for Navy operations that is not an option. With weather always affecting sea states, ships operations must adapt quickly.

"In essence, our primary focus is safety," Trevino said. "The information we forecast can determine the safety of our ships, planes and our Sailors."

METOC provided all weather information for the RIMPAC exercise. However, during sea operations, a ship would not rely totally on land-based forecasts alone. Ship-stationed aviation aerographers provide timely weather information, to the larger ships of the fleet, especially those of a carrier strike group.

"We are regularly stationed aboard ships, we also lend out our personnel to CAOCs. We can make a significant impact on aviation operations," said Brotherman. "We report information that goes up the chain of command that helps make command decisions."

As RIMPAC proceeded towards its conclusion, the active duty and Reserve Sailors shared thousands of pieces of weather-related information to all of the ships, including the other participating nations. When the combat teams assaulted the beach at Bellows Air Force Station, the combat commanders knew far in advance what weather conditions to expect. Such information may prove vital to the success of any exercise.

"It was a good exercise for us," said Trevino. "We integrated well with the active duty Sailors. The accuracy of our forecasts can only come from experiences such as these (RIMPAC)."

Photo by PHAN Janice Kreischer

AG3 Steve Hatchett, of Haltom City, Texas, measures the wind speed and direction, on the signal bridge aboard USS George Washington (CVN 73). The Norfolk, Va., based nuclear powered aircraft carrier is on a regularly scheduled deployment in support of Operation *Iraqi Freedom*.