



Photo by PH2 Chad McNeeley

LEARNING A FLIGHT-DECK LESSON

By JO3 Megan Moline

It took only a glance for ABEAN Jorge Linarez to see something was wrong. This at-sea period was the first time USS *Ronald Reagan* (CVN-76) was landing and launching aircraft. While on watch and working on the port side of the ship, one deck below the flight deck, the airman did routine inspections. Moments later, smoke and metal shavings appeared from the fairlead sheave—an area that houses the wires used for landing aircraft. He alerted his supervisor, and all landings were stopped. Linarez's actions made sure that the malfunctioning gear injured no one.

Ltjg. Kyle Caldwell, *Reagan's* air boatswain, explained the sheave wasn't working right. "When an aircraft lands on the flight deck, the cable feeds out from the sheave. What happened here was the sheave wasn't turning," Caldwell said. "That made the cable saw into the hub. If it hadn't been noticed as soon as it was, the cable might have cut right through the hub and could have been severed. If a cable breaks on the flight deck, it's like a rubber band snapping, and the force can cut through almost anything."

The ship returned home to adjust the arresting-gear system, requiring all 58 sheaves to be removed. We removed, lubricated and then reassembled their seals—a job that takes about four hours per sheave, according to Caldwell. The ship was back at sea less than two days later to continue the certification process.

"Flight-Deck Certification went well. The rotation of the sheaves improved 80 percent," Caldwell said. "It was a lot of hard work."

After passing this critical milestone, the ship made several short trips out to sea to allow the new crew a

chance to recover aircraft. The sea time also gave new pilots a chance to gain experience landing and taking off on a moving ship.

While recovering aircraft during one of the underway periods, two sheaves seized due to corrosion build-up from the rain while sitting pierside, according to Caldwell.

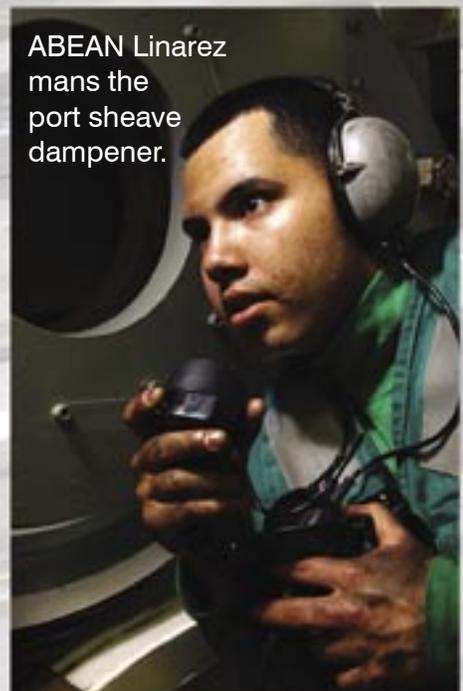
"During our first incident, the grease seal didn't allow the lubricant to escape while doing preventive maintenance (PMS), causing the sheave to seize," said Caldwell. "The corrosion attacked the sheaves because the grease seal had been removed. We took it off to correct one problem, not knowing it would cause another type of problem."

Caldwell explained the problem was corrected with minimal disruption to the ship's schedule, and training will be done on the proper maintenance of the arresting-gear system.

"We are incorporating new PMS standards that will change the type of grease we use for our new sheaves. We also will change how much grease we put into the sheaves," Caldwell said. "It's going to be pretty tough to get Sailors to use less grease when they've been trained that more is better."

The lessons learned on USS *Ronald Reagan* will help with the design and effectiveness of an improved flight deck on the future *Nimitz*-class carrier USS *George H. W. Bush* (CVN-77), and help us to meet the mishap-reduction goal.

Petty Officer Moline works in the public-affairs office aboard USS *Ronald Reagan* (CVN-76).



ABEAN Linarez mans the port sheave dampener.

Background photo by PH3 LaMon Bradford