Best Practice

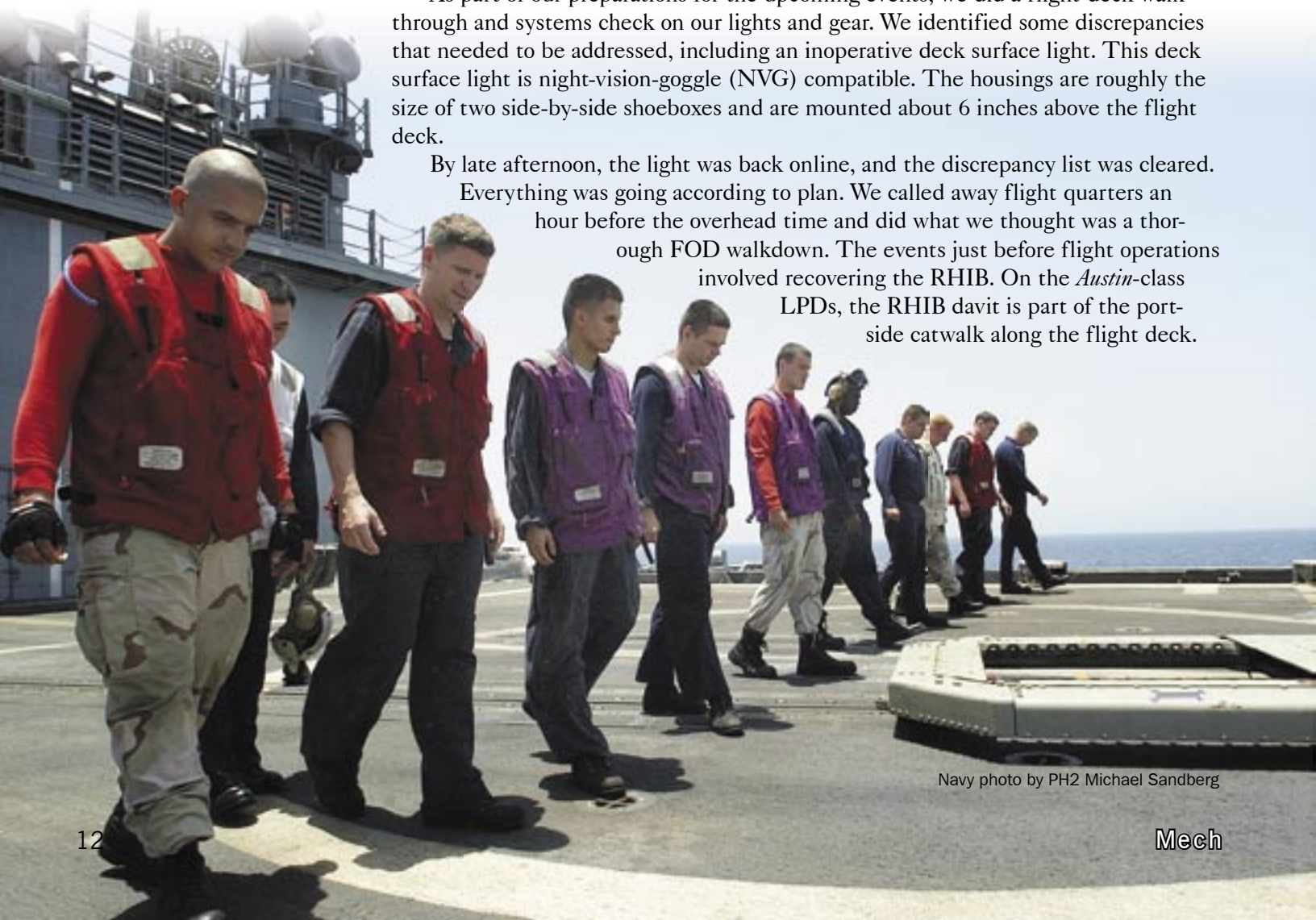
Preflight Your Flight Deck

By LCdr. Jeff Rogers

We were sailing with the expeditionary strike group off the coast of North Carolina, doing a series of operations with amphibious-assault vehicles, landing craft, small boats, and aircraft. The plan for the night was to work deck-landing quals (DLQs) with two Army MH-47E helicopters. It would turn into an interesting evening.

As part of our preparations for the upcoming events, we did a flight-deck walk-through and systems check on our lights and gear. We identified some discrepancies that needed to be addressed, including an inoperative deck surface light. This deck surface light is night-vision-goggle (NVG) compatible. The housings are roughly the size of two side-by-side shoeboxes and are mounted about 6 inches above the flight deck.

By late afternoon, the light was back online, and the discrepancy list was cleared. Everything was going according to plan. We called away flight quarters an hour before the overhead time and did what we thought was a thorough FOD walkdown. The events just before flight operations involved recovering the RHIB. On the *Austin*-class LPDs, the RHIB davit is part of the port-side catwalk along the flight deck.



Navy photo by PH2 Michael Sandberg

A FOD check should include security of gear on and around the deck. A close look shows the latch on this light housing can be critical.

After the RHIB was secured for sea, we spent extra time in the catwalks looking for loose gear that would blow around in the MH-47E's rotor downwash. We completed our FOD walkdown and finished our flight-quarters checklist soon afterward. The two MH-47E helicopters arrived overhead on time, and we took them individually to spot No. 2.

Although we were capable of taking both simultaneously, we did single landing-spot operations to mitigate the lack of experience with DLQs for the Army pilots and because of my crew's inexperience with the H-47 airframe. After the last of the two helicopters offloaded its passengers and launched, I noticed a light that had not been there earlier during the FOD walkdown. The suspicious light was seen through my night-vision goggles and appeared to be in the area of the deck surface light, which was the one repaired earlier that day.

I held off the two helicopters into the Delta holding pattern until my deck crew could investigate. They found that the unsecured light cover had been blown off by the H-47's rotor downwash during the initial landings. The missing cover allowed light to escape the housing and reflect off the deck coaming. Once the deck crew was able to secure the light cover and check the security of the other lights, we restarted the DLQs.

We did several things right: using ORM in the planning phase of the flight operations, doing an operational test of the flight gear before flight operations, and paying extra attention to the RHIB davit after boat-recovery operations. However, we did not notice the unsecured light cover. We knew maintenance on the light had been done, so we should have done an in-depth, post-maintenance check. The rotor wash easily could have blown the light cover into one of my crewmen or on-deck equipment.

We learned a cheap lesson that night because nobody was hurt and nothing was damaged. We since have added a security "pull" on these light covers as part of our FOD walkdown. This security step was adopted because the latches on the light covers may appear to be secured when they merely are resting in the down position. Therefore, a visual inspection is not enough, especially if the check is done in low-light conditions. Finally, I have relearned a lesson I was taught back in the FRS about preflighting an aircraft and applied it to the flight deck. I now will make sure a QA check is done on the gear and surrounding area whenever maintenance occurs. This simple step will help to ensure security and proper operation. It also will give me peace of mind that everything on deck is ready to go.

LCdr. Rogers was the air boss in USS Ponce *(LPD-15) when this story was written.*

We identified this FOD story as a Best Practice because FOD walkdowns often involve just looking for loose items on the deck. That step is important, but it is necessary to look at items that can cause FOD, like light covers, loose fasteners on SE gear, bearings on sliding doors or huffer hoses, and countless other equipment. This story also was interesting because it introduced a broader view of FOD: unsecured latch that allowed a foreign object—the bright light—to pose a safety problem. In this story, a simple tug would have ensured the light cover was secured and wouldn't have had the potential to blind the crew on deck or the aircrew in helicopters.—Ed.