

A photograph of a ship's bridge, showing the horizon and the sea through the window. The title 'The Blue North' is written in large white letters across the center of the image. The background is a dark, moody scene of the sea and sky, with some ship equipment visible in the foreground.

# The Blue North

By LCdr. Steve Ryan

**W**e were two months into a Standing Naval Forces Atlantic (SNFL) deployment and heading north from Lisbon, Portugal, to participate in Exercise Strong Resolve 02 off the coast of Norway. We left the temperate, southern European, winter weather for the cold Norwegian Sea. I had 3,200 hours in three different aircraft in a variety of environments. Four of the seven ships I had deployed on were frigates. I had been an OinC on three ships before USS *Samuel B. Roberts*, so I felt comfortable in my role as OinC, but that changed when we hit the great blue north in late February.

To prepare for the winter conditions, I had my detachment review cold-weather-operations procedures from NATOPS, MIMs and NWP. We briefed maintenance requirements, flight limitations, flight-deck safety, and required



clothing for cold weather. Three days before pulling into Trondheim, Norway, for presail briefs, we felt ready to handle anything—we were wrong.

We flew our first cold-weather flight off the southern coast of Norway the day before pulling into port. We wore dry suits, with the water temperatures in the 40s, air temperature in the 20s, clear skies, smooth seas, and scattered snow showers. The morning was beautiful. We landed aboard the *Sammy B* just before lunch, after a 3.5-hour SSC hop.

Because the RAST had problems, we didn't straighten the aircraft until 1430—when Old Man Winter arrived. At landing, the deck was pitch two, roll five. Our NATOPS day limit for free-deck landings is pitch three, roll eight. By the time we were able to straighten, the deck was pitching to seven and rolling 20, with

an occasional roll to 30 degrees. The conditions were way out of limits to safely straighten the aircraft, and it was getting worse by the minute. We double-chained the tail and high points, tied down the blades, and watched. We even left the nets down because of the risk of losing a man overboard.

I'm not a person who worries much, but I was up most of the night watching my helicopter in the hangar. We saw it all, a 47-degree roll and numerous pitches that exceeded 10 degrees. Green water splashed over the bow, spraying the bridge 40 feet up. Waves from following seas rolled onto the flight deck. Fortunately, green water didn't hit the aircraft, and the rain, with the temperature now 30 degrees, rinsed the saltwater spray off the helicopter. After a tense night, we survived with no damage to the aircraft. However, this close call was the first of many.

Every aircraft move for the next two weeks required a khaki present, as a safety observer. We decided many times to leave the aircraft in the hangar, because there was a higher risk of the rotor blades hitting the hangar face during the traversing. When we did traverse the aircraft, it took a thorough brief and exact timing of the pitch and roll of the ship.

Even raising or lowering the nets was a challenge. Frigate flight-deck nets, like most ships, only lock in place in the up position. When they are in the down or flight-quarters position, during high winds and rough seas, they don't stay down. The heavy seas and high winds continually raised the nets, only to have them slam back down. The abuse to the nets was so bad one day we thought we would lose some of them. We outfitted four people in rain gear, float coats and safety harnesses. We had them work in two-man teams, hooked into pad-eyes, methodically working down the side of the flight deck, raising the nets and securing them in place.

Another challenge for us was spreading and folding the rotor blades. The blade spread fold limit in the SH-60B NATOPS, is 40 knots. After a post-phase FCF, we safely landed the helicopter with a 20-knot true wind. Not a big deal, right? Thirty minutes later, the true wind was 65 knots. Fortunately, the aircraft was straightened, and the seas still were relatively calm.

We wondered how to safely fold the blade as the weather got worse. I talked to all the experts, and then I briefed the captain. Our team of 10, on the deck, would walk each blade around, with one person guarding the blade while a second person spotted him near the edge of the deck. Once the blade was in the fold position, we immediately would put a crutch on it. It was not the fastest fold evolution we ever had, but it was the safest, considering the weather.

We quickly learned to think outside the box to determine hazards. We gave extra attention to FOD walkdowns on the O2 level, the deck above the hangar. Water got underneath the nonskid and froze, breaking large sections—up to a foot square—of nonskid. A chunk of nonskid in the rotor arc would

have been a disaster. We inspected the ship's antennas and mast for melting ice that might become FOD. In those two weeks, we went through our entire deployment allotment of alcohol to remove ice from the flight deck and aircraft. Every maintenance procedure was reviewed thoroughly to see how the unfamiliar environment would affect its outcome.

For the two weeks of Strong Resolve, my detachment only flew 32 hours. It was the most intense ORM training I ever have experienced. Here are a few things I learned over those two weeks:

- Waiting will not kill you, but pushing the limit may.
- Let your people know anyone can speak up and say, "This is stupid," or, "I don't think this is safe," without fear of retribution.
- Watch the weather, it will change. It is tough to forecast weather in open water and tougher in cold-winter climates. Train your bridge crews to keep you informed.
- ORM works. Use it! It may take time, but it will save lives.
- Know the books. Until this exercise, I did not know NWP 3-59.4, U.S. Navy Cold Weather Procedures for Surface Ships, existed. It was indispensable.
- If you're the person who makes the calls, make sure your people thoroughly brief you, and you thoroughly brief your boss. Some decisions you usually make during normal operation should be deferred up the chain of command in extreme environments.

• Every NATOPS has a clause allowing actions to prevent damage to personnel and their aircraft. A thoroughly briefed, well-thought-out plan is a must when going against the book. In any case, it is preferable to damage an aircraft than to injure your people.

These lessons may seem like common sense. That is what ORM is, a process to instill common sense, to make sure the safest outcome while enhancing operational readiness. The first step in the ORM process, identify hazards, may be the most difficult. Think outside the box. You never know what the next few minutes may bring. 

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