

# Standard Replenishment: Navies Help Each Other at 'Speed of Combat'



Capt. Bobby Summers, master of USNS Ericsson (T-AO 194), supervises a replenishment at sea with the Japan Maritime Self-Defense Force's, helicopter destroyer JS Ise (DDH 182). Ericsson provides critical supplies to U.S. Navy and partner nations' ships operating in the Indo-Pacific Region. *MILITARY SEALIFT COMMAND FAR EAST / Jeyh Janik*

Navies that operate frigate-sized ships and larger will generally need to provide for a replenishment-at-sea capability, but many of those navies do not have large replenishment ships that can operate on extended missions to sustain their ships while deployed, or one may not be present where their warships are operating.

They can, however, be supported by oilers and replenishment ships from other navies, as long as both the combatants and logistics ships are built and operated to the international standard. When navies that follow that standard, there is a much large force of replenishment vessels for everyone.

According to Cmdr. J.H. "Han" van Huizen, NATO Maritime Command Branch head for Logistic Operations & Exercises, both NATO and the nations have collective responsibility for the logistic support of alliance operations and missions (AOM).

"The nations are responsible for ensuring that maritime units and formations assigned to NATO are properly supported by an effective and efficient tailored logistics structure for AOM, including a proportional contribution to theater-level support capabilities," he said.

"From the NATO perspective, logistics is a national

responsibility, but the nations and NATO authorities have a collective responsibility for logistic support of NATO's multinational operations. Logistics support must be sufficient to sustain maritime operations and is required in theater to support forward deployed maritime forces," van Huizen said. "When operating in a task group, for example, the ships will coordinate efforts like replenishment at sea [RAS] with designated fleet logistic coordinators and a group logistic coordinator. Cooperation among the nations and NATO authorities is essential."

Interoperability is achieved because the navies have agreed-upon standards. They use the same rigs, procedures, terminology and documentation. Interoperability starts with design standards and includes the concepts of operations and operational procedures. NATO and partner nations can do this because they have agreed to follow the same standards and the same manual.

The U.S. Navy's manual for underway replenishment is essentially the same as the NATO manual, which provides conceptual interoperability from the start.

"ATP-16 is the NATO document that has the parts to procedures on how things are going to happen. This is the document to make sure all those countries that are listed in the manual can interact easily with each other," said Richard Hadley, an underway replenishment (UNREP) engineer with Naval Surface Warfare Center Port Hueneme Division in California.

To achieve interoperability, the visual signals have to be the same on both the delivering and receiving ships. The sound-powered phones have to connect the same way. Emergency breakaway procedures have to be the same.

Interoperability has to be designed in from the beginning, not done as an afterthought. "There's a device on a cargo receiving station called the NATO Long Link, and the pelican

hook on all of the delivering ships will connect with that. It's the same on all of the ships," Hadley said.

"We're the engineers who design and support the UNREP system, not the people who are out there every day conducting these evolutions, but we take our work very seriously," Hadley said. "It has to be safe. It has to be effective and reliable. You don't want the fleet to have logistics problems, because your system goes down. If the system doesn't work, the fleet won't be able to do what they need to do. We always have to be aware of that."

Singapore-based Commander, Logistics Group Western Pacific (COMLOG WESTPAC)/Task Force 73 (CTF 73), is the U.S. 7th Fleet's provider of combat-ready logistics, operating government owned and contracted ships to keep those ships armed, fueled and fed.

"Reliable and responsive sustainment enable ships to remain at sea – ships at sea are key to the global presence that underpins regional security and stability," said Cmdr. Rob Paul, deputy assistant chief of staff for Logistics, COMLOG WESTPAC/CTF 73. "Replenishments at sea are one way we enhance our interchangeability with friends, partners and allies in the region. This is true whether we are resupplying other nations, or they are resupplying us, because our partners and allies are able to supply us with fresh food, stores and fuel, and we can do the same for them. We can sustain nearly any partner or ally in this region and vice versa. That is at the core of interchangeability and interoperability."

According to Paul, the U.S. has conducted replenishment operations with Australia, France, India, Japan, Republic of Korea and Singapore. The U.S. has received cargo and/or fuel from Australia, Japan and Republic of Korea in the past year.



The U.S. Navy's fleet replenishment oiler USNS Big Horn (T-AO 198), left, conducts an underway replenishment with the French

Navy's amphibious assault ship FS Tonnerre (L 9014), while the French frigate FS Surcouf (F711) follows. *FRENCH NAVY*

## **Safety First**

Because replenishments and refueling at sea are inherently dangerous, Paul said the most important attribute allied and partner navies share are basic safety features.

"Prior coordination before any RAS helps ensure safe and efficient operations. While there are standard operating guidelines we publish in an unclassified manual, before each replenishment operation we transmit an official message that reiterates agreed upon procedures and guidance regarding many factors from ship speed to acceptable weather," he said.

After safety, it becomes a matter of efficiency, such as the standard NATO fittings that can provide the optimal fuel transfer rates.

"It's also important to ensure you are delivering the right cargo," Paul said. "We coordinate that at the fleet logistics level. Our CLF fleet replenishment oilers and dry goods and ammunition ships can receive cargo, stow it and transfer it using the same general process as any partner or allied cargo vessel."

The U.S. and allied and partner navies follow the same protocols or procedures to seamlessly deliver or receive fuel, ammunition and stores at sea.

Paul said great advances are being made in the areas of authorities and legal considerations as well. "We are making strides is at higher levels of engagement, specifically, navigating through the complex accounting process," he said. "Both we and our partners are committed to strengthening and simplifying these channels to ensure the comprehensive process – from ordering, scheduling, paying and delivery – moves at the speed of combat."

“At the tactical level, we routinely prove that our procedures really are very similar,” Paul said. “What’s important is that we continue working and exercising together, because through those exchanges we continue building a shared confidence in our interchangeability and interoperability during the sustainment process.”

One example of enhanced interoperability is the Japanese Maritime Self-Defense Force (JMSDF) assigning an officer to the CTF 73 staff to serve as a liaison regarding replenishment at sea with their respective ships. The liaison officer works with the CTF 73 logistics officer in planning and executing combined replenishment operations to ensure the efficiency of combined logistics operations between the JMSDF, U.S. Navy and Military Sealift Command.



Japanese Maritime Self Defense Force Towada-class replenishment ship JS Towada (AOE 422) sails connected to U.S. Navy Arleigh Burke-class guided missile destroyer USS Barry (DDG 52) during an underway replenishment during routine operations in the East China Sea. *U.S. NAVY / Lt. j.g. Samuel Hardgrove*

### **Tactical Edge**

U.S., Japanese and French ships demonstrated the ability for allied and partner navies to successfully replenish each other’s ships this in May in the Philippine Sea when fleet replenishment oiler USNS Big Horn (T-AO 198) conducted a replenishment-at-sea with the French navy amphibious assault ship FS Tonnerre (L 9014), and JMSDF Replenishment Ship JS Masyuu (AOE 425) replenished the French Navy frigate FS Surcouf (F 711).

“Replenishment-at-sea is a maneuver of special interest for our Navy assets operating in the Indo-Pacific,” said French navy Rear Adm. Jean-Mathieu Rey, joint commander of French armed forces, in Asia-Pacific. “First, it highlights the excellent level of tactical interoperability between partners,

as RAS is a complex maritime operation, requiring perfect seamanship training and technical coordination. Then, it allows our respective naval forces to operate durably at sea without the constraint of replenishment port visits. Today, in the specific context of the current pandemic, whereas access to some harbor is denied to our navy ship, this capacity is of first importance.”

Because of the interoperability and standard procedures, crewmembers involved with underway replenishment, either the delivering or receiving ship, know what to expect from the ship alongside.

“Coordinating operations throughout 7th fleet with our allies and partners ashore and afloat is made simple through the use of standardized publications and instructions and operations are conducted safely and professionally IAW standardized procedures,” said Ryan Snow, a cargo mate aboard USNS Charles Drew (T-AKE 10), currently operating in the Indo-Pacific AOR.

“We apply common skills, together with a number of international navies in support of operations at sea,” said Charles Drew’s 2nd Officer Brian Knudson. It is by these common procedures and safety protocols, that we are able to sustain joint operations.”

While it may appear to become routine, it isn’t.

Underway replenishment “happens all the time, every day, somewhere in the world, but it’s inherently dangerous,” said Hadley. “All sorts of bad things can happen if you don’t have professionals that know what they’re doing.”