RESEARCH VESSEL

KNORR

The WHOI ship that helped discover the RMS Titanic and hydrothermal vents
The **Evolution of Knorr**

**1967**
Keel for the U.S. Navy’s newest Auxiliary General-purpose Oceanographic Research vessel (AGOR-15) is laid at Deves Shipbuilding in Bay City, Michigan.

**1968**
The hull of the ship is christened the R/V *Knorr*, after Ernest R. Knorr, a nineteenth-century Navy cartographer, and launched.

**1970**
*Knorr* arrives in Woods Hole.

**1972-74**
Scientists with Geochemical Ocean Sections Study (GEOSECS) on *Knorr* and other vessels complete the first global, three-dimensional survey of the distribution of chemical, isotopic, and radiochemical tracers in the ocean.

**1973**
*Knorr* hosts a reception for members and representatives of the United Nations Seabed Committee during a port call in New York City.

**1974**
*Knorr* helps deploy the submersible *Alvin* on Project FAMOUS (French-American Mid-Ocean Undersea Study), a 3-year effort to explore the mid-Atlantic Ridge that helps establish *Alvin*’s usefulness as a research submersible.

**1977**
*Knorr* makes its northernmost journey, to 80°14’ N, while tracking atmospheric pollution in the Arctic.

**1979-81**
From 1990 to 2002, scientists use *Knorr* to collect samples from more WOCE (World Ocean Circulation Experiment) locations in the Atlantic, Pacific, Southern, and Indian Oceans than any other U.S. research vessel.

**1981**
Working a zigzag track across the North Atlantic, scientists occupy *Knorr* for seven months as part of the Transient Tracers in the Ocean (TTO) project.

**1982**
*Knorr* hosts a reception for members and representatives of the United Nations Seabed Committee during a port call in New York City.

**1985**
On September 1, scientists working on *Knorr* take the first photographs of the wreck of RMS *Titanic* more than 12,400 feet beneath the surface.

**1987**
*Knorr* upgrades its propulsion system and migrates from Woods Hole to Seattle.

**1990**
*Knorr* braves frigid weather in the Labrador Sea to help scientists make the first mid-winter studies of one of the few places where cold, dense surface water sinks to the deep ocean.

**1994**
*Knorr* makes its northernmost journey, to 80°14’ N, while tracking atmospheric pollution in the Arctic.

**1997**
*Knorr* hosts a reception for members and representatives of the United Nations Seabed Committee during a port call in New York City.

**1999**
*Knorr* revisits the wreck of RMS *Titanic*.

**2000**
*Knorr* hosts a reception for members and representatives of the United Nations Seabed Committee during a port call in New York City.

**2005**
*Knorr* surpasses the million-mile mark.

**2008**
*Knorr* makes its northernmost journey, to 80°14’ N, while tracking atmospheric pollution in the Arctic.
The Research Vessel *Knorr* is owned by the U.S. Navy and operated by the Woods Hole Oceanographic Institution (WHOI) for the benefit of the ocean research community. Launched in 1968 and delivered to WHOI in 1970, R/V *Knorr* has traveled more than one million miles in support of research on the biology, chemistry, geology, geophysics, and physics of the ocean, as well as on instrument and vehicle development and ocean engineering.

The ship is named in honor of Ernest R. Knorr, a distinguished hydrographic engineer and cartographer, who was appointed senior civilian and Chief Engineer Cartographer of the U.S. Navy Hydrographic Office in 1860. Mr. Knorr was largely responsible for the success of the Navy’s first systematic charting and surveying effort from 1860 to 1885.

**Knorr specifications**

- **Length:** 279 feet (85m)
- **Draft:** 16.5 feet (5m); Bow thruster lowered: 23 ft (7m)
- **Beam:** 46 feet (14m)
- **Gross weight:** 2,518 tons
- **Range:** 12,000 nautical miles
- **Speed:** 11.0 knots cruising
- **Endurance:** 60 days
- **Fuel Capacity:** 160,500 gallons
- **Propulsion:** 2 Lips diesel-electric stern thrusters (1500 SHP each)
- **Bow Thruster:** Lips retractable azimuthing (900 SHP)
- **Laboratory space:** 2,756 sq. feet
- **Crew:** 22
- **Technicians:** 2
- **Science party:** 32