

# Seaquakes: Shakers of Ships

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The Navy communications research ship BELMONT left Callao, Peru, at 1300 GMT on October 17, 1966, proceeding at 5 kt. in good weather. Sometime later, shortly before 2143 GMT, the captain ordered a course change and the speed increased to 10 kt. Suddenly, the vessel began to shake.

The BELMONT has a critical speed of 9 kt. and at first the skipper, Cdr. Scappini, thought the vibration was due to the ship's passing through this speed. But the vibration continued and became worse. The ship's mast whipped and so did her many antennas. Down on the mess deck crockery was smashed. Everything that wasn't tied down came adrift. After an estimated 12 to 18 sec. the vibration ended, just as suddenly as it had begun.

Cdr. Scappini ordered the engines stopped and general quarters sounded. "I knew we weren't aground," he later reported. "The Exec said we had 52 fathoms beneath the keel." After it was determined that there was no damage or fouling, the engines were

again started and a speed of 10 kt. ordered. Only a slight shudder was felt when the critical speed of 9 kt. was reached -- as normally expected.

The BELMONT had experienced a seaquake. "I don't think there was a man aboard who wasn't scared," Cdr. Scappini commented. "I've been caught in typhoons and even the eye of a hurricane, but I've never before gone through anything like this, and I hope never to again."

On vessels at sea, earthquake shocks produce effects which vary but little, except in intensity. A rumbling sound is first heard, quickly followed by a series of shocks under which the ship either trembles or is so suddenly arrested in its course that it produces the impression of grounding upon a rock. A number of such shock series may be received in succession, after which the ship appears to slide over the "shoal" and continue its course as before. The intensity of shipboard seismic effects varies greatly, but an a-



Fig. 7 The USS BELMONT, a converted Victory, experienced a severe seaquake off the coast of Peru on October 17, 1966.