

Will Drill Hole Deep Into Ocean

By ALTON BLAKESLEE

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NEW YORK (AP)—Tests will begin in March of the audacious plan to drill a hole deep into the earth from a ship at sea.

This plan is the Mohole—the first hole ever to penetrate all through the earth's crust to learn what mysteries lie in and below it. It is "one of the most important scientific undertakings of modern times," Dr. Delley Broni, president of the National Academy of Sciences, National Academy of Sciences Council, declared Saturday. The actual Mohole would be drilled from atop water perhaps 3½ miles deep, with special drills then biting 3 miles through the ocean floor to go below the earth's crust or outer skin for the first time.

Experimental drilling to test all the difficult techniques will start in March near Guadalupe Island off the western coast of Mexico, the National Science Foundation and Academy-Research Council announced Saturday.

There the sea is 12,000 feet deep—2.3 miles. Holes looking for offshore oil have never been drilled before in water deeper than a few hundred feet.

Several test holes to various depths are planned. A rotary drill working from a specially-fitted ship will be used. Digging the Mohole itself may come in a few years.

Mohole gets its name from the Mohorovicic discontinuity—Moho for short. The Moho is a boundary between the earth's thin crust and the underlying rock, the mantle, of unknown composition which extends 3,000 miles deep to the earth's core. (The core is presumably composed of nickel and iron.)

The Mohole—Moho hole—can be drilled only at sea. For the earth's crust under the oceans is as little as 2½ to 3 miles thick, as against 15 to 20 miles on land masses. And the deepest oil well ever dug on land is only 4.7 miles.

The Mohole will try to bring up samples of the mantle, and to study the curious Moho boundary layer.

The drilling also could produce a rich history of life, evolution and climate changes on earth.

This can be done by bringing up and analyzing the sediment building up to 500 to 1,000 feet thickness over millions of years.

Organisms that lived in the sea sink to the bottom to form sediments, leaving fossil records. The types of life varied with climatic changes.

A \$735,750 contract for test drilling was awarded to Global Marine Exploration Co., Los Angeles, by the science foundation. This company's 260-foot drilling ship, CUSC I, will be modified and used.

Many difficulties are anticipated, but if the plan succeeds, "we shall acquire fundamental information regarding the structure, composition and history of the earth on which we live," Dr. Broni said.

Project Mohole is guided by the AMSOC committee of the Academy-Research Council. AMSOC stands for American Miscellaneous Society—an idea formed by a group of scientists to propose and carry out projects not fitting in with usual specialties or disciplines of science.

One idea was the Mohole—but on analysis it appeared so worthwhile it has been seriously encouraged and now is getting government support. The Mohole itself will cost millions of dollars.

One objective in March is to test a system for controlling the location of the un-anchored drilling ship. It will use four diesel steering motors mounted at corners of the ship to keep it at a precise location guided by special buoys.

Other problems and objectives of the Mohole project were described Saturday at sessions of the American Association for the Advancement of Science.

The AMSOC committee thinks most of the problems in the tests can be conquered, said Gordon G. Lill of the Office of Naval Research, Washington. He is chairman of AMSOC, and Willard Bascom of the National Research Council is directing the project.

Scientists are not worried, incidentally, that there's a huge hole somewhere in the earth—so that suddenly all the ocean waters would go "slurp" down the hole.

GRANGE NEWS

BLY — Teenagers of Bly and Beatty honored Mrs. Basil Hall, master of Bly Grange, with a surprise Christmas party Dec. 23. The grange hall was decorated for the occasion with boughs, soft lights and a Christmas tree. The evening was spent singing Christmas carols and dancing. The group presented Mrs. Hall with a wall clock. They signed cards at the end of the party. Fifty teenagers were present.

