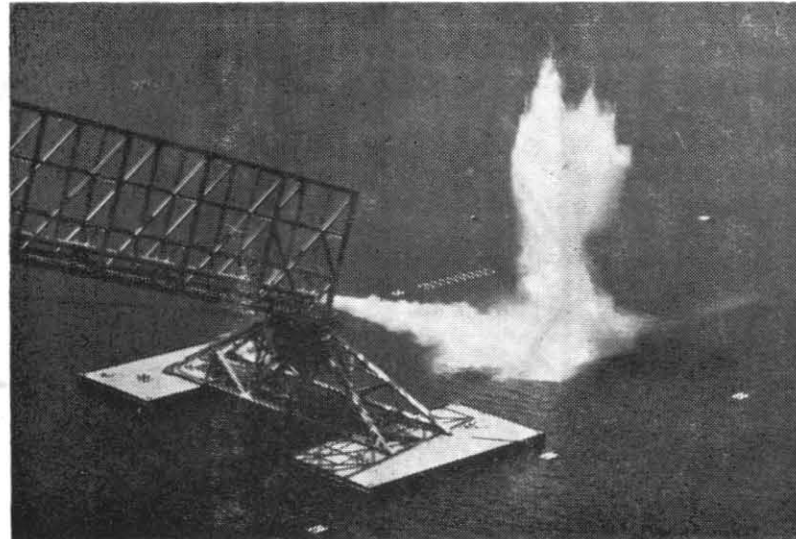


Pasadena Develops Underwater Weapons



THE VARIABLE-ANGLE LAUNCHER simulates the release of projectiles from aircraft at controllable velocities and angles of attack and is adjustable to any vertical angle up to 40 degrees. One end of the 300-foot all-welded launching bridge rests on a bridge connecting two floating barges. The other is moved up and down a concrete ramp balanced on a counterweight car. Compressed air propels missiles out of the launching tube. A battery of high-speed motion picture cameras record the performance of projectiles as they enter the water.



A NAVY DIVER descends into the tank for a demonstration before a group of visitors at last year's open house on Armed Forces Day. Navy divers have many duties, but chief among them at the Morris Dam Test Range is the retrieving of missiles fired from the Variable-Angle Launcher. Missiles launched at Morris Dam are "static." They do not explode, since the object of testing here is to study water-entry performance. Divers retrieve the missiles, which are launched again and again for the purposes of these studies.

What We Do at Pasadena Annex

The principal objective of the Pasadena Annex of the Naval Ordnance Test Station is to provide underwater weapons for the Fleet through a program of research, development, and testing.

Located on the same peninsula at Morris Dam as the Variable-Angle Launcher, are the shops, test pits, and laboratories for the underwater propulsion applied research groups.

There, test stands for model performance studies provide facilities for final engineering and design work on new engines and engine components.

Sea Ranges

Underwater and air-to-water rockets are also tested in extensive deep-water facilities at San Clemente Island, sixty miles off the California coast, and on a sea range operated from a base located at the U.S. Naval Station, Long Beach.

Foothill Headquarters

At 3202 E. Foothill Boulevard in Pasadena are the headquarters of Pasadena Annex. Here also are located the Hydroballistics Laboratory, the Structures Laboratory, the Hydrodynamic Simulator (designed to subject torpedoes mechanically to the same conditions they would encounter in sea runs), the headquarters of the Underwater Ordnance Department, and divisions of the Engineering, Public Works, Supply and Fiscal, and Personnel Departments, as well as the Command Administration division for Pasadena Annex.



BOAT RIDES on the lake at Morris Dam are a popular feature of the Armed Forces Day open house. Normally, this water transportation is for the Navy divers who use it to reach the location of missiles which they retrieve for relaunching. Pictured above are two boat loads of visitors on a tour of the lake at last year's open house. The Variable-Angle Launcher is in the left background. Passengers pass a small-caliber-test range also located at Morris Dam.

Welcome Aboard

On behalf of all of us of the NOTS Pasadena team, I extend a welcome to each of you who are observing Armed Forces Day by visiting our Morris Dam Test Range. We hope you will enjoy your experience.

In addition to the guided tours of various work areas, you may watch the firing of torpedoes from the Variable-Angle Launcher and see the Navy divers in action, and we invite you to tour the lake in Navy launches.

We trust your visit to the Morris Dam Test Range will be an enjoyable one, and that it will give you a good idea of the results of the teamwork here between the Navy and its civilian scientists, engineers, and technicians.

W. T. GRONER
Captain, USN

Rocketeer



Armed Forces Day

SOUVENIR EDITION

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