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(Second World War - American Military Mapping) [Archive of 3D Relief Maps and Documents Related to the Work of the U.S. Navy Terrain Model Workshop "Building 14" Compiled by Arthur Kenneth Yost.]

Stock#: 62531
Map Maker: Terrain Model Workshop, US Navy
Date: 1944
Place: v.p. (Norfolk, VA & Honolulu, HI)
Color: (See Description)
Condition: See Description
Size: Various sizes
Price: SOLD



Description:

A Highly Unusual and Important World War II Mapmaking Archive, Illustrating the Process and Products of the U.S. Navy's Terrain Model Workshop.

3D terrain modeling became a central focus of United States military mapmaking during the Second World War. The utility of these models in planning for bombing raids, ground assaults, and post-capture infrastructure development had been established by the British during World War I, and during the Second World War, they passed their know-how onto the United States. The U.S. military established several model-making workshops, first on the East Coast, then in Hawaii as the war in the Pacific became the focus. The production of the models was extremely time-consuming, with each one being meticulously hand-painted to match aerial photos. Many models were prepared for D-Day, the largest of which would have stretched an astounding 45 x 65 feet when pieced together.



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The present archive is composed of materials gathered by Arthur Kenneth Yost, Specialist (X) Second Class, during his tour of duty in the U.S. Navy during World War II. The archive includes three hand-finished rubber-and-foam maps of Angaur, one of which is completed and framed (19.5 x 25.5 inches), another example of the same map is partially finished and incompletely colored (representing an interesting mid-production snapshot), and the third Angaur map is a completely different model of the island (17.5 x 23.5 inches). The archive also includes a small foam map of a sea cliff (perhaps Normandy?) and a further, completely uncolored, foam map of an unidentified island location, showing a still-earlier part of the foam map production process.

The archive includes a memento booklet dedicated to those involved in the mapmaking project. The booklet, which is 8 x 10 inches, spiral-bound, and 22 leaves, includes headshots and short biographies of participants in the terrain modeling project. Seven of the booklet's pages are dedicated to photos of the production process for the foam maps, with four images per page.

A three-ring binder includes dozens of original photos of the map production process and those who were involved in it. Additionally, there are instructive cards with integral printed labels: "Putting the Finishing Touches on a Model Map of the Nazi Stronghold in Bavaria", "Removing a Pressing in Synthetic Rubber from a Master Model", "Applying Trees and Hedges with a Compressed Extrusion Gun", "Making Plaster Buildings for Model of Belgian Coast", "Pilots of the Fleet Air Arm, Royal Navy, Being Bried from a Model of Alten Fjord for THeir Raid on the *Tirpitz*", "Vertical View of Model of V-2 Experimental Station at Peenemunde." Another card includes instructions on handling the foam maps: "Care and Handling of Rubber Models", "For Carrying, Models May Be Rolled Loosley, Terrain Out." "Folding or Tight Rolling May Damage Map Detail." "For Handly with Terrain 'In', Hold Edges of Model." "Standard Panel Size of 3x5 Feet Fits Average Desk."

The archive includes two photos comprising one stereo photo of the variety that was used by the Navy mapmakers to help them construct the models.

There are further materials relating to Yost's service and discharge from the military, his interest in World War II mapping (hundreds of maps carefully clipped from Time Magazine and other sources), and additional ephemera showing his interest in 3D filming, among other things.

Angaur

Angaur is a tiny limestone island, just 3 mi (4.8 km) long, separated from Peleliu by a 7 mile strait, from which phosphate was mined. In mid-1944, the Japanese had 1,400 troops on the island, under the overall



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command of Palau Sector Group commander Lieutenant General Sadae Inoue and under the direct command of Major Goto who was stationed on the island.

The weak defenses of the Palaus and the potential for airfield construction made them attractive targets for the Americans after the capture of the Marshall Islands, but a shortage of landing craft meant that operations against the Palaus could not begin until the Mariana Islands were secure.

Airfields were being constructed as the battle was still being fought, but the delay in the start of the Palaus operation meant that the airfields were not ready in time for the start of the Philippines operations in October 1944. Admiral William F. Halsey, Jr. had argued before the invasion of the Palaus that the operation was unnecessary, and military historians have agreed with him, suggesting that the main benefit was the combat experience gained by the 81st Infantry Division.

Terrain Model Workshop

Production of 3D terrain models is given a good overview at the following website: <http://www.terrainmodels.com/war.html>

The terrain maps of Pacific Islands were taken aboard vessels that participated in invasions and were used to acquaint Marines, sailors, and airmen with their target.

Many of the models were partially made by pantograph and finished by hand. See the following link for more background information: <http://www.terrainmodels.com/pantograph.html>

World War II 3D Terrain Maps: Rarity

3D terrain model maps are very rare on the antiquarian market. We have traced only one example at auction, [sold at Bonham's in 2015 for \\$11,250](#). There is another [terrain model of Iwo Jima at the International Museum of World War II](#). A further map of Iwo Jima at the National Library of Australia.

Arthur Kenneth Yost

Arthur Kenneth ("A. K.") Yost, Specialist (X) 2nd Class, was born in Pennsylvania in 1911. He graduated from Carnegie Mellon University and received a doctorate from Columbia University. He was a "Specialist" during World War II, that is



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The Specialist rating was created in late 1941 to allow for new enlisted ratings that would be needed in wartime but didn't fall within the established navy structure. The first four specialists — A, I, S and P — were authorized in February 1942. Specialists could be appointed directly from civilian life to any petty officer grade depending upon their skill level.

The "X" class of Specialists included: Air Station Operations, Artist, ***Cartographer***, Intelligence, Key Punch Operator, Pigeon Trainer, Plastics Expert, Public Information, Special Projects, Strategic Services, Switchboard Operator, Topographic Draftsman, other specialists not otherwise classified.

Detailed Condition: