

A Blast In Huizhou, Kwangdong Province, P.R.C. Closed An Open Sea Channel in 350 Milliseconds for the U.S. Panda Automotive Corporation 35,000-Ton-Ship Wharf Construction Through Smashing A Nearby Island And Reclamation of a section of the Sea Channel

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This blast engineering project was done May 25, 1990, based on the Ballistic theory design method for normal thrown-body which is developed by professor R.G. Yang, member of the S.E.E.

The top of Si-Ma-Ao Sandstone Island around the 0 14 94 Sea was 124 ft above sea level and is about a thousand feet away from the east coast. By both smashing the island and reclaiming from the sea channel to obtain a plot of 1.5 million square feet of land site, at least 10 million cubic feet of rock work was provided for filling the open sea channel.

The blast design, smashing the sandstone island and the opposite rock coast a thousand feet away, actually 65,000 cubic feet of coyote tunnel were excavated on both sides of the sea channel, in order that 1,286,000 pounds of explosives (ANFO) could be loaded into the coyote explosives chambers.

All the preparatory work started March 17, 1990 and with all the explosives completely loaded in place and well stemmed, May 24, 1990.

Upon the approval of the governor of KwangDong Province, the Vice-Mayor of Huizhou, Li Hung Zhung gave the order to close the electric circuit and the explosion took place sequentially within 350 milliseconds at 13:30 May 25, 1990. P.R.C. central T.V. station news, broadcast the scene throughout P.R.C. 1900 hours May 26, 1990.

As soon as the blasting cloud and smoke cleared, the sea channel is closed. Many observers walked across the filled sea channel which just a few minutes before the explosion was 12 feet deep by a thousand feet wide of water 12-30 feet deep, mixed silt, clay and sand in the bottom of the sea channel. It really cut short the construction period and saved lots of labor and equipment and the entire port investment.

The directional blast conditions meet with the design data as originally expected. Theory and practice in this case shows the new blasting technique in P.R.C. is no longer just experience of blast engineers, but is a new advancement of science and technology in blast engineers, but it is new advancement of science and technology in blast engineering recently developed by a member of the S.E.E. from Beijing.

The author welcomes comments from members of our Society.