Port Chicago, California, USA – 17 Jul 1944

MSIAC
Munitions Safety Information Analysis Center

On the 17th July 1944 at US Naval Magazine, Port Chicago, California, ammunition, bombs, and smokeless powder was being loaded from railroad cars into the hold of the SS E. A. Bryan to support the Pacific Theatre of Operations. A second vessel – the SS Quinault Victory – was lying empty on the opposite side of the loading pier. The E. A. Bryan contained roughly 1.8 million kg of explosives at the time of the incident, with a further 142,000 kg on the pier.

At 2000 hrs an explosion occurred on the pier and a fire started. About seven seconds later a more powerful explosion occurred as the majority of the ordnance within and near the ship detonated in a fireball seen for several kilometres.

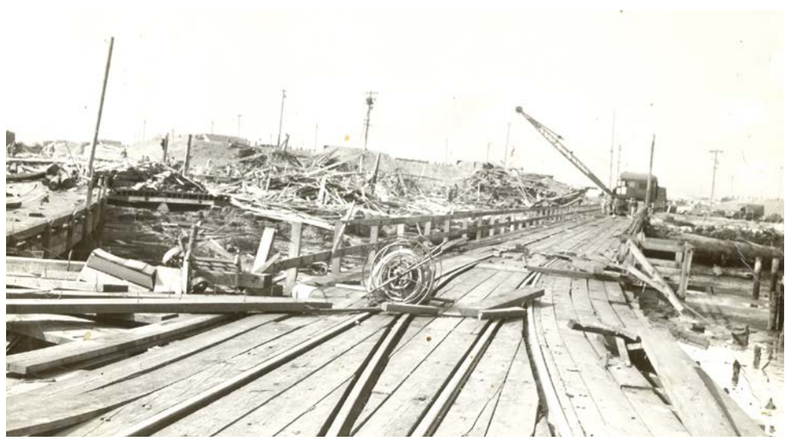
Both ships, as well as the pier, were blown apart, the Quinault Victory was blown out of the water, torn into sections and thrown in several directions; the stern landed upside down in the water 150 m away. The explosion created a 10 m wave in the bay and destroyed most buildings on the Naval Magazine. An Army Air Forces pilot flying in the area reported that the fireball was 5 km in diameter and chunks of glowing hot metal and burning ordnance were flung over 3.5 km into the air.

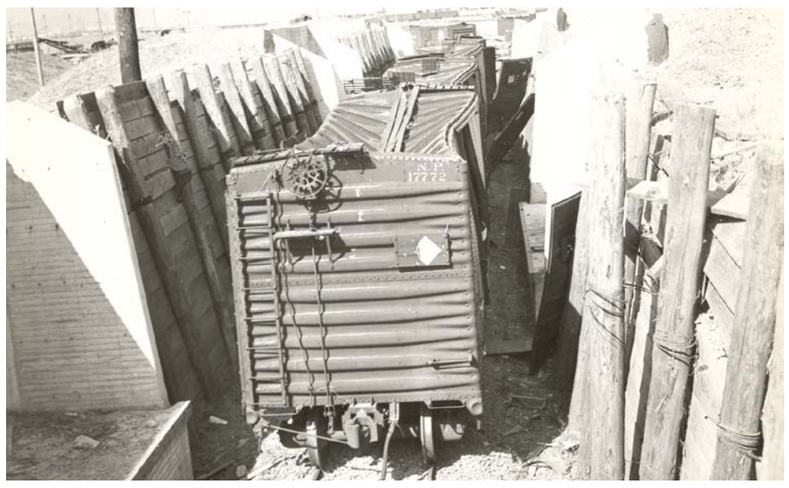
In total 320 sailors and civilians were killed and 390 others injured. The total damage was estimated to be about US$10 million.

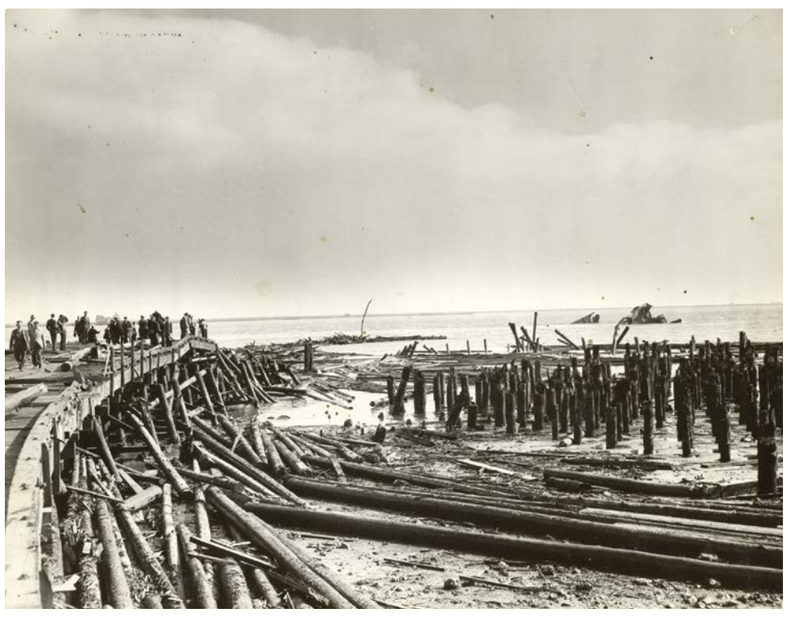
A number of warning signs preceded the accident:

- Despite being trained as sailors, enlisted men were being employed as stevedores and had little training in the handling of explosives.
- The facility commander had no training in the loading of munitions and very little experience in handling them. Loading officers serving underneath him had not been trained in supervising enlisted personnel or in handling munitions prior to this assignment.
- The loading officers had been pushing the enlisted men to load the explosive cargoes very quickly and a chalkboard tallied each crew's average tonnage per hour. In addition the junior officers placed bets with each other in support of their own 100-man crews and coaxed their crews to load more than the others.

The subsequent investigations into this accident contributed towards the further development of quantity-distance criteria for explosive handling operations.







320 Fatalities **390 Injuries** **US$10 Million Damages (1944)**

With thanks to the Australian Directorate of Ordnance Safety