## **Accidental Nuclear Weapon Explosion**

In July 1944 at a naval base near Concord, California, there occurred the most deadly U.S. home-front nuclear disaster in World War II. The Department of Defence claims the United States has never had an accidental nuclear weapon explosion. Is this claim accurate?

By Dean Babst

## **Explosion Description**

THE FOLLOWING SUMMARY of the explosion was developed from an extensive investigation and lengthy article by Peter Vogel. On July 17, 1944 at the Port Chicago Naval Base near Concord, California, a Liberty ship carrying ammunition exploded, creating an earthquake the shock of which registered 3.4 on the Richter article, scale. The shock was recorded up and down California and as far away as Pierce Ferry, Nevada.

In the explosion, a 7,212-ton ammunition ship called the Bryan, disappeared into the night. No single large piece of it was ever found, and the 320 men working on the ship and the pier were "sucked up into the writhing column of flame."

Docked on the opposite side of the pier was the 7,606-ton ship, the Quinalt, which disappeared into small pieces scattered over a distance of four miles. Not a single piece of a 12-ton diesel locomotive on the pier . was ever identified. Small boats 1/2-mile distant from the pier were swept by a 30-foot wall of water.

After the disaster, Navy divers found a crater in the river bottom created by a force exceeding that of 5,000 tons (five-kiloton) of high explosives. The force of the explosion greatly exceeded the combined potential explosive force of the 1,780 tons of TNT and torpex which were loaded on the Bryan. The Quinalt was unloaded.

According to eyewitness accounts, the explosion was a brilliant white flash and ball of fire which mushroomed out over the Suisun Bay to an observed altitude of 10,000 feet before its ascent was obscured by the dark of night. The white flash is associated with nuclear fission explosions rather than the yellow- to reddish-orange illumination produced by the explosion of conventional explosives, such as TNT and torpex.

At the time of the explosion, nuclear weapons were unknown to the public and no one was thinking of radiation dangers. However, Contra Costa county, where the explosion occurred, had an unusual cancer rate, according to a March 28, 1982 New York Times article. Also, the State of California showed a pronounced increase in the statistical incidence of characteristic post-fallout exposure illnesses in the prot area and downwind from it.

Unlike other ammunion ships which ave exploded, the Bryan exploded spontaneously, without an initial fire or other triggering incident. Most of the structural damage which occurred at Port Chicago was very nearly equal to structural damage reported at the same distance from ground zero as at Hiroshima.

A unique characteristic of a nuclear detonation over water is that is produces a "smoke ring" shaped cloud called the Wilson Condensation Cloud. Lieutenant Sidney Phillips, flying several miles away when the explosion occurred, described the Wilson Cloud as. "Well, there seemed to be a white flash and this flash had with it a large smoke ring that spread in all directions around Port Chicago. I estimate it, from the air, to be at least three miles wide."

## **Nuclear Bomb Capability**

The specifications and materials necessary to build an atomic bomb were available prior to the July 1944 explosion. Specification for the Hiroshima weapon were completed by mid-February 1944, according to *Manhattan District History*. Declassified Department of History data show there was sufficient U-235 by the end of 1943 to allow the detonation of several minimum critical mass devices. At the Los Alamos National Laboratory, there were 400 to 600 pages of declassified reports and memoranda Port Chicago explosion. If the Port Chicago explosion was a conventional explosion, where would such an extensive documentation and analysis of it be found at an atomic weapons laboratory? Shortly after the Port Chicago disaster, effective August 1, 1944, the Los Alamos laboratories were radically reorganized.

## Conclusions

A recent study of the world's nuclear navies by Greenepeace and the Institute for Policy Studies shows that "the world's navies have experienced at least 1,200 major accidents, which have reuslted in dozens of ship sinkings, hundreds of explosions and fires, costly repairs and loss of life. The accidents have occurred in shipyard and prots, in harbours and coastal waters and on the high seas throughout the world. They have left an astounding by-product: 50 nuclear warheads and nine nuclear reactors lying on the ocean floor."

The study says the four-decade record of near-disasters at sea underscores the length that nuclear navies will go to deceive both allies and domestic policies and raises significant questions about the public trust.3

If the Port Chicago naval base disaster was a nuclear explosion, it means the U.S. Department of Defense has been lying to the public for more than 40 years by claiming they have never had an accidental nuclear weapon explosion. Navy and Army installations generally do not cooperate in the development of emergency plans for nuclear weapons with local emergency preparedness offices or let them Imow if they are carrying nuclear weapons. Uncertain as to their security, countries and cities have been passing nuclear-free zones and ordinances.

The city of Oakland, near Concord, is being sued by the federal government ment because its nuclear-free ordinance is designed to keep nuclear weapons out of the city. Other cities, like Davis, California, are concerned about the possible large expense of being sued by the federal government for their nuclear-free ordinances. If federal security assurances are not accurate, is it fair for them to force citizens and cities to trust them blindly?

If the Department of Defense wants to establish credibility with other countries and its own citizens and cities, it needs to allow an independent panel of scientists to review old classified Port Chicago disaster records to determine whether the explosion was nuclear or not. In order to be convincing, the report needs to address the explosion details described in this article.

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- 1 U.S. General Accounting Office, *Nuclear Weapons: Emergency Preparedness: Planning for Accidents' Can Be Better Coordinated*, GAOINSIAD-87-15, Washington, D.C. Feb.1987, p.2.
- 2 Peter Vogel, "Last Wave From Port Chicago," *The Black Scholar*, Sp. 1982.
- 3 William M. Arkin and Joshua Handler, Naval Nuclear Accidents; The Secret History," *Greenpeace*, July/Aug. 1989.
- 4 U.S. Gen. Accounting Office, op. cit. p.3.
- 5 Lorena Natt, "A Nuke-Free Davis Would Cost Plenty," Sacramento Bee, 11 Oct.1989