

~~CONFIDENTIAL~~

The court, having thoroughly inquired into all the facts and circumstances connected with the allegations contained in the precept and having considered the evidence adduced, finds as follows:

FINDING OF FACTS

1. GENERAL FINDING: That explosions occurred at the U. S. Naval Magazine, Port Chicago, California, involving 429 tons of munitions (which contained 146 tons of high explosives and 10.75 tons of smokeless powder) on the ship pier, and 4,606 tons of munitions (which contained 1780 tons of high explosives and 199 tons of smokeless powder) on the S. S. E. A. BRYAN moored to the ship pier, at or about 2219, Pacific War Time, 17 July 1944, resulting in the total destruction of three vessels; namely, the S. S. E. A. BRYAN, valued at \$1,600,000; the S. S. QUINAULT VICTORY, valued at \$2,850,000; the U. S. Coast Guard fire barge No. 60014-F of the value of \$34,691.44; and the constructive total loss of the U. S. Y. P. MIAHELO II, of the value of \$6,000, all the property of the U. S. Government, and damage and destruction of other property of the U. S. Government in the amount of \$5,401,343.30; the total damage to U. S. Government property amounting to \$9,892,034.74; damage to the M. S. REDLINE owned by the Union Oil Company for which claim has been filed in the sum of \$221,121.25; damage to small craft for which claims have been filed in the sum of \$2,362.13, all of which original claims for damages to small craft have been delivered to the Board of Investigation for handling; the loss of 10 officers and 231 enlisted personnel of the U. S. Navy and U. S. Naval Reserve, of which the bodies of 7 officers and 34 enlisted men have been identified, and of which 3 officers and 197 enlisted personnel are missing; the death of one enlisted man of the U. S. Marine Corps Reserve, his body having been identified; the loss of 5 enlisted personnel of the U. S. Coast Guard and U. S. Coast Guard Reserve, of which the bodies of 2 have been identified and of which 3 are missing; the loss of 67 members of the U. S. Maritime Service, of which the bodies of 3 have been identified and 64 are missing; the loss of 3 civil service employees of the U. S. Navy, the body of one having been identified and 2 are missing; and the death of 3 civilians, their bodies having been identified; the total identified dead numbering 51 and the total missing numbering 269; and personal injuries to 4 officers and 233 enlisted men of the U. S. Navy and U. S. Naval Reserve, 6 enlisted personnel of the U. S. Marine Corps and U. S. Marine Corps Reserve, 4 enlisted personnel of the U. S. Coast Guard and U. S. Coast Guard Reserve, 5 members of the U. S. Maritime Service, 22 civil service employees of the U. S. Navy, and 3 civil service employees of the U. S. Army; and personal injuries, superficial and permanent, to 113 civilians, of whom 69 have filed claims, 54 of the latter having designated damages in the total sum of \$121,999.04, all of which claims for death and personal injuries have been delivered to the Board of Investigation for handling pursuant to instructions of the Convening Authority.

2. INTENT - FAULT - NEGLIGENCE: That the evidence does not show that there was any intent, fault, negligence, or inefficiency of any person or persons in the naval service or connected therewith, or any other person, which caused the explosions.

3. GENERAL FACTS CONCERNING NAVAL MAGAZINE: That the general facts concerning the Naval Magazine, Port Chicago, up to the time of the explosion were as follows:

a. HISTORY:

(1) The U. S. Naval Magazine, Port Chicago was formally established by an order of the Secretary of the Navy dated 27 June 1942, and was commissioned on 30 November 1942. It was designed for a particular function and in general layout conformed to latest accepted standards for this type of establishment.

(2) The facilities of Naval Ammunition Depot, Mare Island, had been expanded until the saturation point had been reached. Because of a physical lack of space, Naval Ammunition Depot, Mare Island, could not be further expanded. There were no other munitions handling facilities available.

(3) Construction of the Naval Magazine, Port Chicago, was authorized in June, 1942, and the Public Works Officer, Twelfth Naval District, was designated as officer in charge of construction. The location of Port Chicago was recommended by a board appointed by the Commandant, Twelfth Naval District, for that purpose. The site selected was well chosen. Port Chicago was remote from industrial activities, in a sparsely settled area, had deep tide water along the northern boundary, and was served by two transcontinental railways. There was room for further expansion.

(4) Originally the principal facilities contemplated were: a ship-loading pier; a barge loading pier; barricaded railway spurs for the storage of explosives; a railway system connected to the trunk line railroads; an administration building; and, a marine barracks. After construction was started a decision was made to do the work of loading with enlisted men, as an adequate force of commercial stevedores could not be guaranteed. The buildings provided were the minimum required for housing and feeding the men. The lack of officer messing facilities, recreation building for enlisted personnel, laundry, etc., coupled with the remoteness of the station and the lack of adequate personnel transportation facilities made the problem of morale a most difficult one.

(5) The constantly increasing need for transshipping of ammunition required repeated revisions of the estimated handling requirements. There is even now a program for increasing the capacity and for adding storage facilities. All increases of capacity required additional officers and men, which, in turn required additional collateral buildings for housing, recreation, messing, etc. Efforts were made by the commanding officer to build up an adequate and effective station. These efforts were severely handicapped from time to time by the lack of authorization for this collateral equipment which was vitally needed for the personnel assigned.

(6) The shiploading pier was built especially for handling explosives from railway cars directly into deep water ships. The original design was inadequate and was changed from time to time as a result of experience. The pier in its final state was completed in May, 1944, when two ships could be handled simultaneously. Additional facilities consisting of a marginal pier with two shiploading berths in tandem was nearly completed at the time of the explosion, and a third two-ship pier had been authorized.

~~CONFIDENTIAL~~

(7) Prior to the explosion, the number of ships assigned to load at Port Chicago was not sufficient to fully utilize the facilities available.

b. FUNCTION:

(1) The Naval Magazine, Port Chicago, was designed to receive munitions by rail and load them from the cars directly into seagoing vessels or barges. It was primarily a transfer activity. It was not intended as a storage, supply, manufacturing, inspection, or repair facility. The magazine's responsibility started with the receipt of loaded railway cars and ended when the cargo had been stowed in ships or barges.

c. ORGANIZATION:

(1) The Naval Magazine and the Naval Barracks, Port Chicago, were annexes of the Naval Ammunition Depot, Mare Island. The commanding officer, Naval Barracks, Port Chicago, was also the officer in charge of the Naval Magazine, Port Chicago. His immediate superior for both these activities was the Commanding Officer, Naval Ammunition Depot, Mare Island. The internal organization that was in fact in use on 17 July 1944, at the time of the explosion, is shown in the diagram on Page No. 1201: 7

~~CONFIDENTIAL~~

COMMANDING OFFICER
NAVAL AMMUNITION DEPOT
MARE ISLAND

MEDICAL
DEPARTMENT

OFFICER IN CHG.
NAVAL MAGAZINE AND
COMMANDING OFFICER
NAVAL BARRACKS

MILITARY PROT-
ECTION. U.S.M.C.
BARRACKS

COMMUNI-
CATION

NAVAL BARRACKS
EXECUTIVE OFFICER

SHIPLOADING
LOADING OFFICER

NAVAL MAGAZINE
EXECUTIVE OFFICER

PERSONNEL
SERVICE

LOADING PLANS

TRANSPORTATION

SUPPLY
DEPARTMENT

GEAR & DUNNAGE

SECURITY

PERSONNEL
ADMINISTRATION

SHORE TO DOCK
MOVEMENTS

STATION
MAINTENANCE

DIVISIONS

CARGO PLACEMENT

SHIPMENTS

BARRACKS
MAINTENANCE

CARGO RECORDS

SUPPLY
DEPARTMENT

TRAINING
PROGRAMS

ADMINISTRATIVE

PERSONNEL

PROVISION OF PERSONNEL

PROVISIONS OF MATERIAL

OBJECTIVE
LOADED SHIPS

BRF

MAF

1001

Policies were prescribed by the Commanding Officer, Naval Ammunition Depot, Mare Island, and executed by the Commanding Officer, Naval Barracks, and the Officer in Charge, Naval Magazine, Port Chicago.

d. OFFICER PERSONNEL:

(1) At the beginning of the national emergency, the Commanding Officer, Naval Ammunition Depot, recognized the need for additional trained officers. He made continued efforts to obtain trained officers and officer candidates with suitable background. The constantly expanding activities of the Naval Ammunition Depot and the commissioning of and subsequent constantly expanding activities at Port Chicago were hampered until very recently by a lack of trained officers. The most glaring deficiencies were the lack of officers qualified to train and administer the enlisted personnel, and of officers with explosive handling experience. Those officers who started operations at Port Chicago got all their experience at Naval Ammunition Depot, Mare Island. At the time of the explosion an adequate number of qualified officers were attached.

e. TRAINING OF OFFICERS:

(1) The original group of officers had little stevedoring experience, none with handling enlisted personnel, and none with explosives. They were trained by various means before the commissioning of Port Chicago, such as —

(a) Attending Port Director's school, which dealt primarily with office work in connection with shipping.

(b) Duty under instruction, observing the activities of the production division at Naval Ammunition Depot, Mare Island, for familiarization with details of ammunition.

(c) Working with experienced officers and ordnancemen at Naval Ammunition Depot, Mare Island, in actual shiploading.

(d) Visits to commercial shiploading points in the San Francisco Bay area and elsewhere.

(e) A course of instruction at Great Lakes in negro psychology.

(2) After undergoing phases of the above (it was not the same for all officers), they were sent to Port Chicago and started shiploading operations. There, all the officers had to further perfect themselves by actual experience.

(3) Later, as new officers became available, they were assigned as assistant division officers under instruction, and learned by practical experience. These officers were being trained to take charge of the new divisions formed as a result of expansion.

(4) A comprehensive course of instruction for all officers was conceived in recent months and was rounding into shape, but had not been put into effect at the time of the explosion.

f. ENLISTED PERSONNEL:

(1) The men comprising the ordnance battalions were supplied from other organizations and from the various training stations. The men received from the training stations were those remaining after the top 25 to 40 percent had been selected for other assignments. From time to time, Port Chicago was required to transfer drafts of men with clear records, thus further reducing the general level of those remaining.

(2) There was a continuing expansion of the work load and a necessity for training and absorbing additional green men. There is and has been a serious lack of petty officer material. The policy of taking out the best men at the training stations operated to deprive Port Chicago of the normal source of petty officer materials. The general classification test averaged 31.7, which placed the men comprising these ordnance battalions at Port Chicago in the lowest twelfth of the Navy.

(3) The handling of the enlisted personnel stationed at Port Chicago presented many problems. These enlisted personnel were unreliable, emotional, lacked capacity to understand or remember orders or instructions, were particularly susceptible to mass psychology and moods, lacked mechanical aptitude, were suspicious of strange officers, disliked receiving orders of any kind, particularly from white officers or petty officers, and were inclined to look for and make an issue of discrimination. For the most part, they were quite young and of limited education.

g. TRAINING OF ENLISTED PERSONNEL:

(1) Because of the level of intelligence and education of the enlisted personnel, it was impracticable to train them by any method other than by actual demonstration. Many of the men were incapable of reading and understanding the most simple directions. Division officers were responsible for the actual training of the men and they carried out their duties by personally instructing and demonstrating with the material being handled, the proper methods of procedure. The division officers attempted to impress on the men the need for care and safety, and the highly dangerous nature of material being handled.

(2) A training winch had been in operation since March, 1944. The winch men were trained on the training winch for one week and then given further training on the ships until their division officers pronounced them qualified.

(3) Lectures were given to one division each day on safety precautions and other phases of their work. There was in the course of preparation a regularly prescribed curriculum for the instruction of all men.

(4) Efforts were made by the officers to bring home to the men the necessity for care in the handling of explosives.

(5) The original divisions before being sent to Port Chicago had been instructed along with their officers by working with experienced ordnancemen at Naval Ammunition Depot, Mare Island, in actual ship-loading operations. A nucleus for any new divisions were drawn from these divisions. New drafts made up the vacancies in the old divisions left by withdrawing this nucleus, and also made up the remainder of the new division. Thus, new men were worked in with the older men.

h. CIVIL SERVICE PERSONNEL:

(1) Because of the isolation of Port Chicago, the lack of adequate housing and the keen competition for civil service and civilian workers of all categories in this area, it was not possible to secure an adequate number of competent civil service employees.

(2) Prior to starting operations at Port Chicago, the experienced civil service ordnancemen had assisted in the training of the officers and enlisted personnel of the ordnance battalions at Naval Ammunition Depot, Mare Island, California. This assistance was continued for a short time at Port Chicago when operations started there, until the services of these ordnancemen could no longer be spared and they were returned to the Naval Ammunition Depot, Mare Island. Additional trained, competent civil service personnel in the ratings required were not available.

i. POLICIES OR DOCTRINES IN EFFECT:

(1) The basic policy of the Naval Magazine, Port Chicago, required that the ships be loaded on schedule, using the safest means that could be devised.

(2) A tremendous problem was involved in handling safely the large quantities of ammunition and explosives. This problem was magnified by the character of enlisted personnel and the caliber of officer supervision available. The commanding officer, Naval Ammunition Depot, kept the Bureau of Ordnance and other bureaus advised of his difficulties and made repeated requests and recommendations concerning both officer and enlisted personnel and the necessary increases in facilities.

(3) He and his subordinates studied the various handling methods and gear in use by similar activities. They conducted experiments toward improving these methods and the gear used. From these studies and experiments a standard method of handling each item was evolved. In arriving at these standard methods, safety was given primary consideration. This program of study and experimentation was a continuing process.

(4) The Commanding Officer, Naval Ammunition Depot, Mare Island, required that ships be loaded expeditiously on a three-shift basis to meet the schedules of required ammunition shipments.

(5) The ordnance battalions were administered and trained in the same manner as are all other enlisted men in the Navy. There was no discrimination or any unusual treatment of these men.

(6) An order was in effect prohibiting the unnecessary accumulation of high explosives on the pier.

(7) Under special conditions the Commanding Officer, Naval Ammunition Depot, Mare Island, would permit vessels to take fuel while at the Port Chicago pier.

j. SECURITY:

[REDACTED]

(1) Security from unauthorized intrusion was provided by a marine sentry system. Security on the waterfront was provided at night by the Coast Guard patrol boats. Internal security was supplied by roving patrols within the station and by the placing of cars containing explosives under guard.

(2) Security from fires was provided by a fire watch in the barracks and a fire engine stationed in the barracks area, and a fire engine manned by the marines and stationed near the marine barracks in the explosive area, self-powered pumpers on the barge loading pier and on the shiploading pier and a Coast Guard fire barge secured at the end of the shiploading wharf.

(3) A system of passes, the escorting of visitors, and the inspection of packages were in force.

(4) There were no means provided at Port Chicago for defense against enemy attack.

(5) Smoking was prohibited, except in certain specified places.

(6) Automobiles and trucks were not permitted on the pier beyond the pier office.

(7) A manual fire alarm system was installed throughout the station.

4. OTHER ACTIVITIES: That other activities had duties pertaining to operations at Port Chicago as follows:

a. SERVICE FORCE SUBORDINATE COMMAND:

(1) Ammunition and explosive requirements emanated from the local office of the Service Force Subordinate Command which arranged with the Bureau of Ordnance for the arrival at Port Chicago of the desired cargo at a specified time. Close liaison was kept with the Port Director's office, which arranged for the necessary ships at the specified time.

b. PORT DIRECTOR:

(1) On request from the Service Force, the Port Director arranged for ships to be at Port Chicago in condition to receive cargo at specified times. This included inspection of ships for adequacy of gear, cleanliness, and general readiness for loading; however, some ships did arrive at Port Chicago not ready for loading.

(2) In collaboration with Port Chicago and Service Force, the Port Director drew up a loading plan for each ship and, as agents for the operators of the ship, submitted it to the Captain of the Port for loading permit.

(3) During loading, a representative of the Port Director observed details of stowage so that ships would leave Port Chicago in proper condition for further loading or for sea. In cases where deviations from the approved loading plan were necessary, he arranged for a waiver.

c. CAPTAIN OF THE PORT:

(1) The Captain of the Port issued permits for loading. His authority in the form of a waiver was required for deviations from the loading plan.

(2) The Captain of the Port inspected ships for fire and security hazards, poor equipment, foreign substance, personnel check, and as far as possible, the condition of winches, booms, and handling gear, and other factors in connection with general readiness for loading; however, some ships did arrive at Port Chicago not ready for loading.

(3) During loading, unless declined in writing by the commanding officer of a naval activity, the Captain of the Port provided a loading detail whose responsibility started when cargo was under the boom. This detail was a law-enforcement detail with veto powers -- could stop loading until any unsafe practices were corrected, or improper stowage rectified. This detail was responsible only to the Captain of the Port. The Commanding Officer, Naval Ammunition Depot, had declined such detail in writing and no detail was present at Port Chicago on 17 July 1944.

d. BUREAU OF ORDNANCE:

(1) The Naval Ammunition Depot, Mare Island, and the Naval Magazine, Port Chicago, were Bureau of Ordnance stations. Funds for them were allocated and their work was controlled by that bureau. The handling, processing, issue, and shipment of explosives was done in accordance with directives issued by that bureau. The policies and methods authorized by the Bureau of Ordnance were carried out at the Naval Magazine, Port Chicago.

5. OPERATION DETAILS: That the details of operations at Port Chicago were as follows:

a. RECEIPT AND STORAGE OF AMMUNITION:

(1) Ammunition and explosives were received at the Naval Magazine, Port Chicago, by rail in carload lots. These had been shipped in accordance with directives of the Bureau of Ordnance from various storage depots and filling plants. Normally, shipments were scheduled to arrive for loading in a particular ship. There were very limited facilities at Port Chicago for unloading explosive material and placing it in storage. This required a very nice adjustment of schedules. If the ships were late, more cars than could be handled in barricades would accumulate at Port Chicago. If rail deliveries were delayed, the shiploading would be delayed.

b. DETAILS OF MOVING AMMUNITION TO PIER:

(1) After the loading plan had been approved, the magazine planning officer issued a work sheet for each loading. This work sheet was used by the magazine transportation officer to work out a sequence of delivery of cars to the pier. The cars would actually be sent to the pier on the orders of the loading officer. Normally, these cars reached the pier sealed just as they had been received on the station. Occasionally some were opened just before proceeding to the pier and some of the dunnage and bracing removed.

~~CONFIDENTIAL~~

(2) The pier had three tracks, and at each edge a loading platform 18 feet wide of the height of the car floor. Cars were spotted opposite the holds into which the material was to be loaded. The center track was used for switching. Occasionally when one car was empty, in order to prevent disrupting the loading of all the hatches, cars were spotted opposite a hatch on the center track and material handled through the empty car adjacent to a hatch. The physical limitations of the pier prevented any unnecessary concentration of explosives on the pier. When loading two ships simultaneously, there was considerable crowding and congestion on the pier.

(3) Shifting of cars, that is, taking the empty cars away and bringing in full cars, resulted in a loss of loading time and insofar as possible was done during meal hours.

c. DETAILS OF LOADING INTO VESSELS:

(1) The material was taken out of the cars, placed under the ship's booms, hoisted on board, and stowed in the holds.

(2) The details of each of these operations depended on the material being loaded. The method used for each item was the result of careful study and consideration and was under the control of the loading officer.

(3) Instructions were in effect on 17 July 1944 that the "Regulations Governing Transportation of Military Explosives on Board Vessels during the Present Emergency", published by the U. S. Coast Guard (Nav.C.G.), dated 1 October 1943, were to be followed in principle and that those parts relating to the separation of various classes of explosives and stowage of explosives in merchant vessels must be followed in detail. Violations of some of these regulations occurred. These violations consisted of rolling depth charges, hoisting depth charges in nets, failure to use a mattress or thrum mat at times, and the wearing of shoes shod with uncovered nails.

(4) These violations were not haphazard or due to ignorance. Violations occurred either because it was not possible to comply and get the material loaded or because the method used was considered the safest. The methods used were in accordance with generally accepted naval practice.

(5) The general and primary safety requirement that all explosives must be handled carefully was insisted on.

(6) Pertinent available information required by officers at the Naval Magazine, Port Chicago, in the performance of their duties was disseminated.

(7) Careless and some unsafe acts by individuals have occurred in the past. (The Commanding Officer, Naval Ammunition Depot, Ware Island, recognized this and issued timely memoranda and orders that such practices be corrected.) Unsafe practices and speed at the expense of safety were not permitted by anyone in authority. Efforts were made to determine the safest way, to make that method standard, and to have the work done carefully.

~~CONFIDENTIAL~~

(8) In recent months, items of munitions damaged in handling at Port Chicago and returned to the Naval Ammunition Depot for repairs or disposition decreased materially.

(9) The placement of the material in the vessels was governed by the loading plan. The shoring was carefully and skillfully done.

(10) The Port Director had a representative aboard each ship, but not continuously. He inspected the placement and shoring. There is no evidence of any disagreement that was not reconciled on the spot between the representative of the Port Director and the loading officer.

(11) Many of the loading practices observed by witnesses at the various terminals were not used at Port Chicago, as responsible officers did not consider them suitable.

(12) The pier was well lighted and night loading presented no particular difficulties.

d. DETAILS OF PERSONNEL FOR CURRENT JOB:

(1) The ordnance battalions were divided into loading divisions of about 100 men. These divisions were further subdivided into platoons, five platoons to a division. Each platoon was designed to work one hatch. The platoons were further divided into squads, one squad under a petty officer or leading man on the pier to take the material from the car and put it in the gear being used for hoisting, and the other squad under a petty officer in the hold to receive the material and stow it. Each division provided its own checkers, winch men, hatch tenders, and carpenter's mates for dunnage. Unnecessary men were not permitted on the pier. Reliefs took place off the loading pier.

(2) Divisions were detailed as a unit to load a ship for eight hours with one hour off for meals. Divisions worked for three days, had a day barracks' duty, worked another three days and then had liberty from 4 p.m. to 7 a.m. of the second day following. Thus, they worked seven hours a day for six out of eight days.

e. DETAILS OF LOADING ORGANIZATION ON THE PIER:

(1) The senior loading officer was in charge of all loading. Neither he nor his senior assistant remained on the pier at all times. They made frequent inspection trips to the pier. One of the junior loading officers was on the pier at all times. All loading officers had been carefully selected and were considered qualified by the Officer in Charge. The division officers and their assistants were required to be with their divisions at all times when the division was engaged in loading operations, and exercised direct supervision over their men. The leading division petty officer ~~petty officer~~ had a roving detail and assisted the division officer.

(2) The planning officer, his assistant, the officer in charge, and the dunnage officer made frequent visits to the pier during loading operations.

(3) There was a record maintained and posted of the tonnage loaded

by each division. The Commanding Officer, Naval Ammunition Depot, considered 10 tons per hatch per hour as a desirable and attainable loading rate. Most division officers considered this too high.

(4) The rate of tonnage attained at Naval Magazine, Port Chicago, by the ordnance battalions in the months prior to the explosion was 8.2 tons per hatch per hour. Commercial stevedores at the Naval Ammunition Depot, Mare Island, averaged 8.7 tons per hatch per hour.

(5) The loading platforms were congested when mechanical equipment was being used or dunnage handled. The pier in general was congested when two ships were loading simultaneously.

6. FACTUAL DETAILS PRIOR TO EXPLOSION: That the pertinent details just prior to the explosion were as follows:

a. HISTORY OF THE QUINAULT VICTORY:

(1) The QUINAULT VICTORY was a new vessel of the Victory type, owned by the War Shipping Administration (U. S. Government) and operated by the United States Lines Company. The officers and crew were competent. No unusual difficulties had been experienced either with personnel or equipment from the time of her delivery by the builders on 11 July 1944 at Portland, Oregon, up to the time of the explosion:

(2) A loading permit had been requested and obtained in the routine manner.

(3) Just prior to the mooring at Port Chicago about 1800, 17 July 1944, a partial load of fuel was taken aboard at the Shell Oil Company's Martinez refinery, and the normal practice would involve sluicing of this oil to other tanks for the ensuing 24 hours. Some of the oil taken aboard was of a type that released light hydrocarbon gas on agitation, heating, or standing. This could have resulted in formation of an explosive mixture in the confined air space above the oil in the tanks.

(4) Prior to being sent to Martinez and Port Chicago, a pre-loading inspection was made by the Port Director's officers and the Captain of the Port's office, and no defects noted.

(5) Some difficulty was experienced in mooring at Port Chicago because of wind and tide. Just prior to the explosion the engine was turning over slowly.

(6) Just after arrival, the Port Chicago personnel had commenced rigging the ship for loading, and all hatches except No. 5 were about ready to load at the time of the explosion. This was the first time this vessel had been rigged for loading. Trouble was experienced with shackles and preventer guys as they were non-standard. Whips on some of the winches were on backwards and had to be corrected.

(7) Loading should have started by midnight. Dunnage and loaded cars were spotted on the pier for this purpose.

(8) On arrival at Port Chicago, both the loading officer and his assistants visited the ship, gave copies of pertinent magazine orders to the master, inspected some of the holds and saw the ship being properly rigged for loading. No. 5 hold was not being rigged as it was not to be loaded that night.

b. HISTORY OF THE E. A. BRYAN:

(1) The E. A. BRYAN was a new vessel of the Liberty type owned by the War Shipping Administration (U. S. Government) and operated by the Oliver J. Olson Company. There were no complaints against the officers or crew. The ship had been put in service in February 1944, had made one trans-Pacific trip, had undergone voyage repairs and had been inspected for readiness for loading by the operators, Port Director, and Captain of the Port prior to being sent to Port Chicago, and no defects noted.

(2) A full load of fuel oil was taken at Standard Oil Company's Richmond plant. This oil had passed Navy inspection and was gas free.

(3) A loading permit had been requested and obtained in the routine manner.

(4) The ship moored at Port Chicago about 0815, 13 July 1944, commenced loading at about 1000, and loaded continuously night and day until the explosion. On arrival, the usual boarding call was made and pertinent magazine orders delivered to the master.

(5) All aspects of loading were routine and normal up to the time of the explosion, with the exception of minor repairs to winches.

(6) At the time of the explosion, the following cargo was in or being loaded into the various holds:

Hold No.	Item (In order from bottom of hold)	Quantity	Being Loaded
1	5"/38 A.A.C. Projectiles	328 tons	M-7 Incendiary Clusters
	5"/38 Cartridges	320 tons	Wire sling
	M-7 Incendiary Clusters	(About) 46 tons	
		694 tons	
2	Mk 66 2000# bombs	522 tons	Mk 47 Aerial depth charges
	Mk 65 1000# bombs	247 tons	Wire net
	Mk 64 500# bombs	334 tons	
	Mk 47 350# depth bombs	(About) 100 tons	
		1167 tons	
3	Mk 65 1000# bombs	1049 tons	Tail Vanes
	Tail Vanes (inert) (not included in total)	20 tons	Wire net
		1049 tons	

<u>Hold No.</u>	<u>Item</u> (In order from bottom of hold)	<u>Quantity</u>	<u>Being Loaded</u>
4	Mk 64 500# bombs	475 tons	M-4 Fragmentation clusters
	Mk 54 350# bombs	315 Tons	
	M-4 100# fragmentation clusters	(About) 50 tons	Wire sling
		840 tons	
5	5"/38 A.A.C. Projectiles	166 tons	Boxed 40 mm
	3"/59 cartridges	260 tons	
	3 1/2" 40 mm	(About) 430 tons	Manila net with pie plate.
		856 tons	
	<u>4606 tons</u>		

(7) The 4606 tons of cargo contained 1780 tons of high explosives and 199 tons of smokeless powder.

c. CONDITIONS ON THE PIER:

(1) The night was dark (no moon), clear and cool. Wind was force 1 to 2 from the southwest. Tide had been flooding for one hour.

(2) The E. A. BRYAN was moored starboard side to, headed west at the inboard berth.

(3) The QUINAULT VICTORY was moored starboard side to, headed east at the outboard berth.

(4) The fire barge was moored at the outer end of the pier.

(5) There were 16 cars on the pier spotted and loaded as shown on Page No. 1212, Exhibit No. 74.

~~CONFIDENTIAL~~

A locomotive was on the pier. It was off the pier a few minutes before the explosion.

(6) Explosive cars spotted for the QUINault VICTORY contained the following:

Mk 33 1000# bombs	2 cars	106 tons
Mk 65 1000# bombs	2 cars	88 tons
5"/38 A.M.C. projectiles	1 car	59 tons
		<u>253 tons</u>

(7) Explosive cars spotted for the E. A. BRYAN contained the following:

M-7 Incendiary clusters	2 cars, 30 tons each, 1 about empty	30 tons
Mk 47 350# bombs	2 cars, 97 tons, half unloaded	51 tons
M-4 100# Fragmentation clusters	2 cars, 93 tons, half unloaded	43 tons
20 mm.	1 car	50 tons
40 mm.		2 tons
		<u>176 tons</u>

Total on pier - 429 tons.

(8) The 429 tons of cargo on the pier contained 146 tons of high explosives and 10.75 tons of smokeless powder.

(9) The pier was well lighted, and when the officer-in-charge, loading officer, and assistant loading officer were last on the pier, less than one-half hour before the explosion, operations were proceeding in a normal routine manner. The sergeant of the guard and the sentry patrol found the pier sentry alert and conditions normal about this time.

(10) An unusual noise described as a metallic sound and rending timbers, such as made by a falling boom, was heard coming from the direction of the pier immediately before the first flash.

d. Personnel Present on Ships and Pier:

(1) Ninety-eight enlisted men of the third division were engaged in loading the E. A. BRYAN, about half of the men in the ship and half on the dock.

(2) One hundred and two enlisted men of the sixth division were rigging the QUINault VICTORY for loading.

(3) With these divisions there were present two division officers, two assistant division officers, and two junior officers under instruction. In addition, in a watch status, there were the assistant loading officer and the dock and transportation officer, and on an inspection trip, the assistant planning officer.

(4) A part of the officers and crew of both vessels totalling 67, were on board.

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

(5) A part of the Armed Guard detail of both vessels, comprising one officer and 29 enlisted men, were on board.

(6) The Coast Guard crew of the fire barge, consisting of 5 enlisted men, were on or near the fire barge.

(7) A marine sentry was on post No. 5.

(8) A train crew of three civil service employees was working on the pier.

7. THE EXPLOSION: Because of the magnitude and intensity of the explosion, all persons who were in a position to observe the act or acts actually causing the initiation of the explosion were lost. All material evidence which might indicate the chain of circumstances in the initiating explosion were lost. That the general facts concerning the explosion are as follows:

a. The evidence of eyewitnesses varied with:

- (1) Their position relative to the explosion;
- (2) Their past experience and background;
- (3) Their ability to describe what they saw.

b. The lights were burning and normal operations were underway until the first explosion occurred.

c. There was an initial major explosion followed by minor explosions and burning for a period of from three to six seconds and culminating in a mass explosion. This final explosion was by far the greater; larger than any which preceded it.

d. The first explosion was accompanied by a very brilliant flash. This brilliance persisted for some time.

- (1) This first explosion appeared confined and went up as a column.
- (2) It was an ascending, boiling, billowing, mushrooming mass of burning gases.
- (3) The outside was darker than the inside.
- (4) There were flashes of orange and of various shades of orange and red as well as other colors in this ascending cloud.
- (5) There were independent explosions within this cloud.
- (6) Its brilliance persisted for some time and until the second explosion.
- (7) The color changed from a brilliant white through yellow to a reddish orange as the column went up.
- (8) The sound was very loud and distinct as compared with the second explosion which was deeper and poorly defined.

e. The second distinct explosion occurred a few seconds after the first explosion.

(1) It was not confined; it spread in all directions from the pier area as a center.

f. The smoke and gases from the explosions reached an altitude above 12,000 feet.

g. The interpretations of the recordings of the seismographs are not

conclusive. These records indicate that the explosions occurred between 2218:47 and 2218:54-1/2 Pacific War Time, 17 July 1944.

h. The locations of fragments indicate that the explosives in the E. A. BRYAN exploded as one large bomb.

i. The QUEMALT VICTORY was struck a tremendous blow which forced her clear of the pier, broke her in several sections, and substantially reversed her original heading.

j. The hull of the QUEMALT VICTORY absorbed the major part of the explosions in a northerly direction and shielded Roe Island Light.

k. The major blast effect as indicated by concentration of fragments lay in sectors abaft the port and starboard beams of the E. A. BRYAN.

8. SITUATION AFTER EXPLOSION: That the handling of the situation after the explosion was, as follows:

a. The situation following the explosion was well handled. There was no panic and a minimum of confusion.

b. Immediate steps were taken to care for the injured. First aid was administered promptly and the injured evacuated to hospitals.

c. The uninjured not immediately required for work on the station were evacuated very shortly after the explosion.

d. Prompt aid and assistance were offered by nearby governmental, municipal, and civilian activities and by numerous individuals. This assistance was utilized.

e. Many officers and enlisted men absent from the station at the time of the explosion returned promptly and reported for duty.

f. The security of the station was maintained by the uninterrupted performance of duty by the marine detachment.

9. CHARACTER OF DAMAGES TO INSTALLATIONS:

a. The general character of the damages to installations is, as follows:

(1) Many of the buildings were of flimsy temporary wartime construction with little cross bracing and were designed with load bearing side walls. This type of construction suffered the most damage.

(2) Long narrow buildings with their long axis parallel to the line of blast suffered less damage than those with their long axis at right angles to the blast.

(3) Buildings with large glazed areas suffered less structural damage than buildings with blank walls. Where glazed openings were blown in there was great damage to interior partitions and finish but the buildings remained structurally sound.

All redactions
are B-6

Armed Guard Officer SS E. A. BRYAN
(3) HARTMAN, Ralph B. Lieut. D-V (S) USNR

Enlisted Personnel:

U.S. Naval Barracks

(1) AKINS, James Cleo	S2c	V6 SV
(2) ALLEN, Clarence (n) Jr.	GM3c	V6
(3) ASAME, Leslie Koffic	S2c	V6 SV
(4) ASH, Isaiah (n) Jr.	S2c	V6
(5) BACON, David (n) Sr.	S1c	V6 SV
(6) BAKER, Leonard (n)	GM3c	V6
(7) BARNES, David (n) Jr.	S2c	V6 SV
(8) BATTLE, Joseph (n)	S2c	V6 SV
(9) BEASON, Raphael Orval	S2c	V6 SV
(10) BELL, Silas (n)	S2c	V6 SV
(11) BLACKWELL, David Edwin	S2c	V6 SV
(12) BLAYLOCK, Thimon (n)	S2c	V6 SV
(13) BORDERS, Johnnie C.	S1c	V6 SV
(14) BOYCE, Charles Louis	S2c	V6 SV
(15) BREWER, Alvin (n) Jr.	S2c	V6
(16) BRIDGES, James (n)	S2c	V6
(17) BROOKS, Walter Lee Jr.	S1c	V6
(18) BROOME, Johnnie Lee	F1c	V6
(19) BURNETT, Ernest Lee	S1c	V6 SV
(20) CALVIN, Wilbert (n)	S1c	V6
(21) CARLIN, Lawrence Louis	S2c	V6 SV
(22) CARTER, Robert Andrew	S2c	V6 SV
(23) CLARK, Eddie Lewis	S2c	V6 SV
(24) COLEMAN, Bill (n)	F1c	V6
(25) CONNOR, Arthur Alexander	S2c	V6 SV
(26) COOLEY, Frank (n)	S2c	V6 SV
(27) CRAIG, Norman Hamilton	S2c	V6 SV
(28) CROSS, Eddie Lee	S2c	V6 SV
(29) CRUMP, Jessie "V"	S2c	V6 SV
(30) CURTIS, Herman Lee	S1c	V6 SV
(31) DANIEL, Horace (n) Sr.	S2c	V6 SV
(32) DAMSBY, Hubby (n)	S2c	V6
(33) DAVIS, Floyd McKinley	S2c	V6 SV
(34) DAVIS, Henry Joseph	S2c	V6 SV
(35) DAVIS, Willie (n)	S2c	V6 SV
(36) DEVAUGHN, James Lloyd	S2c	V6 SV
(37) DIXSON, Nathaniel (n)	S2c	V6 SV
(38) DOYLE, Rayfield David	S2c	V6
(39) DUNBAR, Herman	S2c	V6 SV
(40) EBENEZER, Arther Lee	S2c	USN-I
(41) EDWARDS, Dunton Ives	F2c	V6
(42) EDWARDS, Herbert Lee	S1c	V6 SV
(43) ERVIN, Junios Calvin	S2c	V6 SV
(44) EUSERY, Luther (n)	S2c	V6 SV
(45) EVANS, Ananias (n) Sr.	S2c	V6 SV
(46) EVANS, Horace	S2c	V6
(47) EVANS, John Henry	S2c	V6 SV
(48) EVANS, William Lee	S2c	V6 SV
(49) FELISBRET, John Baptist Jr.	S2c	V6
(50) FERGUSON, Robert Lewis	S2c	V6
(51) FIELDS, Clarence Sinclair	GM3c	V6
(52) FINNEY, Jessie (n)	S2c	V6 SV

All redactions
all B-6

(53) FORKNER, Matthew (n) Jr.	S2c	V6
(54) FRANCIS, Joseph Robertson	S1c	V6 SV
(55) FRANKLIN, Ford Sumpter Jr.	S2c	V6
(56) FRAZIER, Artie James	S2c	V6 SV
(57) FROID, Elmer Bertle	CM1c	V6
(58) GAINES, Bennie Lanzie	S2c	V6 SV
(59) GANT, Elgar (n)	S2c	V6 SV
(60) GIBSON, John Samuel	S1c(CM)	V6
(61) GILBERT, Jethero (n)	S2c	V6 SV
(62) GLENN, Samuel (n) Jr.	S1c	V6
(63) COUDELOCK, Lewis Dennis	S1c	V6 SV
(64) GRHAM, Harry Lloyd (Misspelled in exhibit 114 as Graham Harold Lloys)	S2c	V6 SV
(65) GREEN, William Henry	S1c	V6
(66) GRILLAGE, Ross Eurl	S2c	V6 SV
(67) HAMILTON, Ernest Eugene	S2c	V6 SV
(68) HAIN, Emeral (n)	S2c	V6
(69) HAMBOND, George Russell	S2c	V6
(70) HANNAH, John Wesley Jr.	S2c	V6 SV
(71) HANDELY, Joe Henry	S2c	V6 SV
(72) HADDIC, John Lloyd	S2c	V6
(73) HARRIS, "B" "C"	S2c	V6 SV
(74) HARRIS, Roscoe Alexander	S2c	V6 SV
(75) HARVEY, Clifford (n) Jr.	S2c	V6 SV
(76) HAYES, George Washington	S1c	V6 SV
(77) HAYWOOD, "D" "C"	S2c	V6 SV
(78) HECTOR, Douglas Lee	S1c	V6
(79) HIGGINSBOTHAM, David Lee	S1c	V6
(80) HIGGS, Ibbie Richard	S1c	V6 SV
(81) HILLS, Joseph (n)	S2c	V6 SV
(82) HITE, Charles William	S2c	V6 SV
(83) HILDEY, Rudolph Valenteen	S2c(SC)	V6 SV
(84) HILLET, Stanford (n)	S2c	V6 SV
(85) HOLMES, Eldred Larue	CM3c(T)	V6
(86) HOWARD, Ernest Milton	S2c	V6 SV
(87) HOWARD, Frank James	S2c	V6 SV
(88) HUCHES, Theodore Lawrence	S2c	V6
(89) HUMPHREY, William (n) Jr.	S2c	V6
(90) HUNT, Wava	S2c	V6 SV
(91) HUNTER, Rudolph William	S2c	V6 SV
(92) HUGLIN, Leroy	CM3c(T)	V6
(93) JACKSON, "D" "C"	S1c	V6 SV
(94) JACKSON, James (n)	S2c	V6 SV
(95) JACKSON, James Edward Maso	CM2c	V6
(96) JACKSON, Paul Eugene	S2c	V6 SV
(97) JACKSON, Robert Albert Jr.	S2c	V6 SV
(98) JACKSON, Samuel (n) Jr.	CM3c	V6
(99) JAMISON, Daniel Lucas	S1c	V6
(100) JOHNSON, Earl Thomas	S2c	V6 SV
(101) JOHNSON, Harold (n)	S1c	V6 SV
(102) JOHNSON, Henry Lee	S2c	V6 SV
(103) JONES, Daniel Lancaster	S1c	V6
(104) JONES, Ivory Lee	S1c	V6

All redactions
are B6

(105) JOSEPH, Henry (n) Jr.	S1c	V6 SV
(106) HEARNEY, Samuel (n)	S1c	V6
(107) KING, Calvin (n)	c(SC)(B)	V6 SV
(108) KING, Clifton (n)	S2c	V6 SV
(109) LAND, Verna (n)	S2c	V6 SV
(110) LaPORTE, Sidney Joseph Jr. t	S1c	V6
(111) LAMSON, Cleo (n)	S2c	V6 SV
(112) LESLIE, Claudius William	S2c	V6 SV
(113) LEWIS, Aaron Augustus	S2c(SC)	V6 SV
(114) LEWIS, "P" "G"	S2c	V6 SV
(115) MARTINS, Beattie John	S2c	V6 SV
(116) LYONS, Robert (n)	S2c	V6
(117) MARTIN, Rossell Edward	S1c (GM)	V6 SV
(mis-copied in exhibit 114 a		
(118) MARTIN, Alonzo (n)	S2c (GM)	V6
(119) MASSIE, Daniel (n)	S1c	V6
(120) McClam, Mitchell (n)	S1c	V6 SV
(121) MELTON, Calvin (n)	S1c	V6
(122) MILLER, Ernest Charles	S1c	V6
(123) MILLER, Ira (n) Jr.	SM3c	V6
(124) MOORE, Marshall (n) Sr.	S2c	V6 SV
(125) MOORE, Thomas (n)	SM2c	V6
(126) MOORE, William Paul	S2c	V6 SV
(127) NEAL, Eddie Lue	S2c	V6 SV
(128) NIXON, James Henry	S1c	V6
(129) OTEY, William Houston Sr.	S2c	V6 SV
(130) PACKER, Auguster (n)	S2c	V6 SV
(131) PASCHAL, William Floyd	1c (SC)	V6 SV
(132) PEETE, Robert Fulton	S2c	V6 SV
(133) PERRY, Lester Lee	S2c	V6 SV
(134) PHILLIPS, Alfred (n)	S2c	V6 SV
(135) PICKETT, Charles (n)	GM3c	V6
(136) PORTER, Houston (n)	S2c	V6 SV
(137) PORTER, McCoy (n)	S2c	V6 SV
(138) POTTS, David William	S2c	V6 SV
(139) POWELL, Samuel Harry	SM3c (T)	V6
(140) PREWITT, Joe Clarence	GM2c	V6
(141) REID, Arthur (n) Jr.	S2c	V6 SV
(142) RHODES, James Elton	GM3c	V6
(143) RICHARDSON, Clyde Franklin	S2c	V6 SV
(144) ROBERTS, James Allen	S2c	V6 SV
(145) ROBERTS, Mango (n)	S1c	V6
(146) ROBINSON, Alphonse (n)	GM3c	V6
(147) ROBINSON, Fred (n) Jr.	S2c	V6 SV
(148) ROGERS, Eugene James	S1c	V6
(149) SCOTT, Carl Clifton	GM3c	V6
(150) SAUNDERS, Wesley (n)	S2c	V6 SV
(151) SHECKLES, Joseph Jackson	S1c	V6 SV
(152) SMITH, James Parker	S1c	V6
(153) TAYLOR, Ellis (n)	S1c	V6 SV

All reductions
are B6

(154) TOLSON, Joseph Marcella	S2c	V6
(155) TOWLES, Maxie Daniel	HA2c	V6 SV
(156) VAN DUNK, Norvin Lester	Slc (GM)	V6
(157) WADE, Isaiah (n)	Slc	V6
(158) WALKER, Charles (n) Jr.	S2c	V6
(159) WALKER, Woodrow Luther	S2c	V6
(160) WASHINGTON, Woodrow (n) Jr.	S2c	V6 SV
(161) WEST, Daniel (n)	GM3c	V6
(162) WHITE, Joseph Bailey	Slc	V6
(163) WHITMORE, Arthur (n)	S2c	V6
(164) WILSON, Maryland Eugene	S2c	V6
(165) WILSON, Oliver (n)	GM3c	V6
(166) WILSON, Samuel David	S2c	V6 SV
(167) WRIGHT, Walter Eugene	S2c	USN-I
(168) WYATT, Charles Edward	S2c	V6 SV

Armed Guard - SS JMWAVE VICTORY

(169) ALBIN, Jack L.	GM3c	V6
(170) BERGSTROM, Delbert P.	GM2c	V6
(171) BOLMAN, Jack P.	Slc (EL)	V6
(172) HALL, John Gibson	GM3c	USN
(173) HOWLAND, George D.	Slc	V6 SV
(174) NORRUM, Andy (n)	Slc	V6 SV
(175) MULRYAN, William H.	GM2c	USN
(176) MYERS, Henry J.	Slc	V6 SV
(177) RUFF, Woodrow A.	Slc	V6 SV
(178) RISENHOVER, Jacob D.	Slc	V6 SV
(179) ROBINSON, William R.	Slc	V6 SV
(180) ROXBELL, Charles E.	Slc	V6
(181) ROSE, Jay Jr.	Slc	V6
(182) ROSS, Otis Kyle	Slc	V6 SV
(183) SAIT, Woodrow A.	Slc	V6 SV
(184) SANDERS, Arnold T.	Slc	V6 SV
(185) SANG, Harold S.	Slc	V6 SV

Armed Guard - SS E. A. ERYAN

(186) CAUSEY, Wayland E.	Slc	V6 SV
(187) CEBELLA, Rudy J.	Slc	V6 SV
(188) CHASE, Robert E.	Slc	V6 SV
(189) CHASTAIN, Claude L.	Slc	V6 SV
(190) GEE, John Jefferson	SM3c	V6
(191) HOLLANDS WORTH, Clarence R.	Slc	V6 SV
(192) MUIRHEAD, Kenneth H.	Slc	V6 SV
(193) MULLIGAN, Jesse W.	Slc	V6 SV
(194) QUICK, Lloyd J.	Slc	V6 SV
(195) SETZER, Martin J.	Slc	V6
(196) SINGER, George H.	Slc	V6 SV
(197) SMALL, Listern L.	Slc	V6 SV

(Mis-copied in exhibit 48 06)

b. U. S. COAST GUARD AND U. S. COAST GUARD RESERVE

(1) BRODA, Peter G.	BM1c	USCG
(2) DE GRyce, William G.	MM1c	USCGR
(3) RILEY, Charles H.	Sea 1c	USCGR

c. U. S. CIVILIAN CIVIL SERVICE EMPLOYEES OF THE U. S. NAVY

(1) HURDICUTT, Raymond V. Brakeman Naval Magazine, P.C.
(2) MIDDLETON, Harry A. Engineman Naval Magazine, P.C.

d. U. S. MARITIME SERVICE

Crew Members of the SS QUINCY VICTORY

(1) BAILEY, Robert D. Utility Messman
(2) BATTLETT, Robert E. Messman
(3) BELL, John D. Jr. Asst. Purser
(4) BENTLEY, Frederick E. Able Seaman
(5) CHENEY, Donald H. Elect. (Jr. Engineer)
(6) CRAWFORD, Hugh E. Maintenance Man (Deck)
(7) CRIST, Floyd F. Ordinary Seaman
(8) DIEDE, Albert C. Messman
(9) DURLAND, Wallace M. Able Seaman
(10) EULPICK, Kenneth J. Able Seaman
(11) FALOR, Burke E. Utility Messman
(12) GIBRETT, Eugene I. Watertender & Fireman
(13) HEMBRICKSEN, Robert V. Able Seaman
(14) JUSTSEN, Johannes F. Steward
(15) KAMBERG, Walter F. 3rd Asst. Eng.
(16) KEIM, Robert E. 2nd Mate
(17) KOENIGER, Joseph B. Able Seaman
(18) LALLEY, Earl L. 1st Asst. Engr.
(19) McDONNELL, Lloyd K. Ordinary Seaman
(20) MOEN, Kenneth M. Jr. 3rd Mate
(21) MORRILL, Robert S. Oiler
(22) NARINSKY, Isadore E. Ordinary Seaman
(23) NELSON, Roy L. Carpenter
(24) PEARSONS, David R. 3rd Mate
(25) PEARSON, Mike Oiler
(26) PINGOY, Ellis B. Jr. 3rd Asst. Engr.
(27) POTTER, Richard V. Watertender & Fireman
(28) SANDBERG, Virgil R. 2nd Asst. Engineer
(29) SCOTT, Albert R. Chief Mate
(30) SKANCE, Lester S. Ordinary Seaman
(31) SULLIVAN, Howard J. Able Seaman
(32) SULLIVAN, Robert J. Master.
(33) WILLIAMS, John A. Chief Engineer

Crew Members of the SS E. A. BRYAN

(1) ANDRASCHKO, Elmer A. 2nd Cook
(2) ARSENIAN, Albert A. O.S. Sub. for A.B.
(3) BENHART, William C. Oiler
(4) CACIC, Martin M. O.S.
(5) DAVIS, Ray E. Wiper Sub. for FM/WT

All reactions
are B-6.

(Crew Members of the SS E.A. DRYAN (cont.))

(6) BROWN, Donald L.	Piper
(7) DORSEY, Thomas E.	O.S. Sub for A.B.
(8) FALK, George H.	Bos'n.
(9) FRANKLIN, Marcus J.	Jr. Engr. Sub. for 3rd Asst.
(10) GILBERT, Alfred D.	1st Asst. Engr.
(11) GILSTRAP, James R.	O.S.
(12) GRANGE, Joseph D. Jr.	Dk. Engr.
(13) HAYES, Fred	A.B.
(14) HUTCHINSON, Delbert E.	FM/MT
(15) JEPSEN, Peter C.	Chief Engr.
(16) JOHNSON, Charles A.	Utility
(17) JOHNSON, Clifford R.	Utility
(18) LANTZ, Ralph A.	A.B.
(19) LOUIS, John A.	Night Relief Engineer
(20) MALIZIA, Frank C.	Carpenter - W/T
(21) MANIACO, Edward	Messman
(22) NATHAN, Harry E.	O.S.
(23) POSTER, Jesse Sr.	Chief Cook
(24) ROBERSON, Richard D.	A.B.
(25) SANGSTER, Aaron C. Jr.	O.S. Sub. for A.B.
(26) SHAW, Ellsworth M.	Oiler
(27) SMITH, Howard A.	1st Mate
(28) CUCHAN, Andrew	FM/MT
(29) TOMSELD, Robert F.	2nd Mate
(30) WHITE, Harding E.	Messman
(31) WIT, George H.	Utility

12. PERSONAL INJURIES: That most of the superficial personal injuries were inflicted by glass from shattered windows. The known injured are, as follows:

a. Personal Injuries of those in Military Service:

(1) That the name, rank or rate, and serial or service number of each of the personnel of the U.S.Navy and U.S.Naval Reserve, U.S.Marine Corps and U.S.Marine Corps Reserve, U.S.Coast Guard and U.S.Coast Guard Reserve, injured as result of said explosions and the nature and extent of the injury or injuries suffered by each are, as follows:

U.S.Navy and U.S.Naval Reserve
Severely injured -

Officers: U.S.Naval Barracks Naval Magazine Port Chicago

(1) _____ Lt. (jg), SC-V(S), USNR,
White, DIAGNOSIS: _____, Hospitalized from
7-17-44 to 8-14-44.

(2) _____, Lt. D-V (S), USNR, _____
DIAGNOSIS: _____ hospitalized since _____

Enlisted Personnel U.S.Naval Barracks Naval Magazine

(3) _____, _____
DIAGNOSIS: _____

All redactions are B-6

Enlisted Personnel U.S. Naval Barracks, Naval Magazine, Port Chicago
(cont.)

(4) (n), MoM3c, V6, USNR, Negro.
DIAGNOSIS: hospitalized since 7-17-44.

(5) , S2c Sv6, USNR, Negro,
DIAGNOSIS: hospitalized from 7-17-44 to
8-16-44.

(6) Slc, SV6, USNR, Negro,
DIAGNOSIS: hospitalized since 7-17-44,

(7) , Slc, SV6, USNR, Negro,
DIAGNOSIS: hospitalized since 7-17-44.

(8) , Slc, Sv6, USNR, Negro,
DIAGNOSIS: hospitalized since 7-17-44.

Injured - no permanent disability expected
Officers:

(9) Lt. OV(S), White, hospitalized
from 7-17-44 to 8-1-44.

(10) Lt. DV(S), White, hospitalized
from 7-18-44 to 7-18-44.

Injured - no Permanent Disability Expected
Enlisted Personnel:

(11) ; S2c SV6; Negro; hospitalized, 7-17-44
to 7-21-44

(12) ; Slc Negro; hospitalized, 7-17-44
to 7-21-44

(13) ; S2c SV6; Negro; hospitalized,
7-17-44 to 7-21-44

(14) S2c SV6; Negro; hospitalized, 7-17-44
to 7-22-44

(15) S2c SV6; Negro; hospitalized, 7-17-44
to 7-21-44

(16) ; StMlc V6; Negro; hospitalized,
7-17-44

(17) ; V6; Negro; hospitalized,

All refection
w/c B-6

Injured - No Permanent Disability Expected
Enlisted Personnel (cont.)

- (18) ; Slc V6; Negro; hospitalized, 7-17-44
to 7-21-44
- (19) ; S2c SV6; Negro; hospitalized 7-17-44
to 7-21-44
- (20) ; Slc V6; ; Negro; hospitalized
7-17-44 to 7-21-44
- (21) ; S2c SV6; ; Negro; 7-17-44 to 7-21-44
hospitalized
- (22) ; S2c SV6; ; Negro; hospitalized 7-17-44
to 7-21-44
- (23) S2c SV6; ; Negro; hospitalized 7-17-44 to
7-21-44
- (24) ; S2c SV6; ; Negro; hospitalized
7-17-44 to 7-21-44.
- (25) ; S2c SV6; ; Negro; 7-17-44 to 7-21-44
hospitalized
- (26) Slc SV6; Negro; hospitalized 7-17-44
to 7-21-44.
- (27) S2c SV6; Negro; hospitalized 7-17-44
to 7-21-44.
- (28) S2c V6; ; Negro; hospitalized
7-17-44 to 7-21-44.
- (29) ; Slc SV6; ; Negro; hospitalized 7-17-44
to 7-21-44
- (30) S2c N-I; Negro; hospitalized 7-17-44
to 7-21-44
- (31) S2c SV6; Negro; Hospitalized,
7-17-44 to 7-21-44.
- (32) S2c SV6; Negro;
nospitalized, 7-17-44
to 7-21-44
- (33) ; W3c V6; Negro; hospitalized 7-17-44
to 7-21-44.
- (34) ; S2c SV6; Negro; hospitalized
7-17-44 to 7-21-44
- (35) ; S2c SV6; Negro; hospitalized
7-17-44 to 7-21-44

All refections
are B-6

~~CONFIDENTIAL~~

Injured - No Permanent Disability Expected
Enlisted Personnel (cont.)

- (36) ; S2c SV6; Negro; hospitalized, 7-17-44 to 7-21-44
- (37) S2c SV6; ; Negro; hospitalized, 7-17-44 to 7-21-44
- (38) Slc V6; ; Negro; hospitalized, 7-17-44 to 7-20-44
- (39) ; S2c V6; Negro; hospitalized, 7-17-44 to 8-6-44
- (40) S2c SV6; ; Negro; hospitalized, 7-17-44 to 7-21-44
- (41) ; Slc SV6; ; Negro; hospitalized 7-17-44 to 7-21-44
- (42) SV6; ; Negro; hospitalized, 7-17-44 to 7-21-44
- (43) Slc V6; ; Negro; hospitalized, 7-17-44 to 7-21-44
- (44) Slc SV6; Negro; hospitalized, 7-17-44 to 7-20-44
- (45) ; Slc SV6; Negro; hospitalized, 7-17-44 to 7-21-44
- (46) S2c SV6; Negro; hospitalized, 7-17-44 to 7-21-44
- (47) ; S2c SV6; ; Negro; hospitalized, 7-17-44 to 7-21-44
- (48) S2c V6; Negro; hospitalized, 7-17-44 to Unknown
- (49) S2c SV6; ; Negro; hospitalized 7-17-44 to 7-21-44
- (50) ; S2c N-I; Negro; hospitalized 7-17-44 to 7-22-44
- (51) S2c SV6; ; Negro; hospitalized 7-17-44 to 7-21-44
- (52) S2c SV6; Negro; hospitalized 7-17-44 to 7-21-44
- (53) S2c SV6; Negro; hospitalized 7-17-44 to 7-21-44
DIAGNOSIS UNDETERMINED

All redactions
are TBG.

~~CONFIDENTIAL~~

Injured - No Permanent Disability Expected
Enlisted Personnel (cont.)

- (54) ; S2c SV6; Negro; hospitalized,
7-17-44 to 7-26-44
- (55) S2c SV6; Negro; hospitalized, 7-17-44
to 7-21-44
- (56) S2c SV6; ; Negro; hospitalized,
7-17-44 to 7-29-44
- (57) S2c SV6; Negro; hospitalized, 7-17-44
to 7-21-44
- (58) ; S2c SV6; ; Negro; hospital-
ized, 7-17-44 to
7-21-44
- (59) ; S2c SV6; Negro; hospitalized,
7-17-44 to 7-21-44
- (60) S2c V6; Negro; hospitalized,
7-17-44 to 7-21-44
- (61) ; S2c V6; ; Negro; hospitalized,
7-17-44 to 7-21-44
- (62) S2c SV6; Negro; hospitalized,
7-17-44 to 7-21-44
- (63) Sp (M)lc V6; ; White; hospitalized,
7-17-44 to 7-21-44
- (64) SV6; Negro; hospitalized,
7-17-44 to 7-21-44
- (65) S2c SV6; ; Negro; hospitalized, 7-17-44 to
7-21-44
- (66) ; S2c SV6; Negro; hospitalized,
7-17-44 to 7-21-44
- (67) ; S2c SV6; Negro; hospitalized,
7-17-44 to 7-21-44
- (68) ; S2c SV6; Negro; hospitalized,
7-17-44 to 7-29-44
- (69) ; S2c SV6; Negro; hospitalized;
7-17-44 to 7-22-44
- (70) S2c SV6; Negro; hospitalized,
7-17-44 to 7-21-44
- (71) S2c SV6; Negro; hospitalized,
7-17-44 to 7-21-44

All redactions
are B-6.

Injured - No Permanent Disability Expected
Enlisted Personnel (cont.)

(72) ; S2c SV6; Negro; hospitalized,
7-17-44 to 7-18-44

(73) S1c V6; Negro; hospitalized,
7-17-44 to 7-21-44

(74) ; S2c SV6; Negro; hospitalized,
7-17-44 to 7-21-44

(75) S2c M-I; ; Negro; hospitalized,
7-17-44 - 7-22-44

(76) ; S2c V6; Negro; hospitalized,
7-17-44 to 7-21-44
NO DISEASE

(77) ; S1c V6; ; Negro; hospitalized,
7-17-44 to 7-21-44

(78) ; S2c V6; ; White; hospitalized,
7-17-44 to 7-20-44

(79) ; S2c SV6; ; Negro; hospitalized,
7-17-44 to 7-20-44

(80) ; S2c SV6; ; Negro; hospitalized,
7-17-44 to 7-20-44

(81) ; S1c SV6; ; Negro; hospitalized,
7-17-44 to 7-21-44

(82) S2c SV6; Negro; hospitalized,
7-17-44 to 7-21-44

(83) ; S2c V6; ; Negro; hospitalized,
7-17-44 to 7-21-44

(84) S1c SV6; Negro; hospitalized,
7-17-44 to 7-21-44

(85) S2c SV6; Negro; hospitalized,
7-17-44 to 7-24-44

(86) Ptr3c V6; Negro; hospitalized,
7-17-44 to 7-21-44

(87) Sp(A)3c V6; Negro; hospitalized,
7-17-44 to 7-21-44

(88) ; S2c SV6; Negro; hospitalized,
7-17-44 to 7-21-44

All redactions
are B-6

Injured - No permanent Disability Expected
Enlisted Personnel (cont.)

- (89) ; Slc SV6; ; Negro; hospitalized,
7-17-44 to 7-21-44
- (90) S2c SV6; Negro; hospitalized,
7-17-44 to 7-21-44
- (91) Slc SV6; Negro; hospitalized,
7-17-44 to 7-21-44
- (92) Slc SV6; Negro; hospitalized,
7-17-44 to 7-21-44
- (93) ; S2c V6; Negro; hospitalized;
7-17-44 to 7-24-44
- (94) Slc V6; Negro; hospitalized,
7-17-44 to 7-21-44
- (95) ; S2c SV6; Negro; hospitalized,
7-17-44 to 7-24-44
- (96) ; S2c V6; Negro; hospitalized,
7-17-44 to 7-21-44
- (97) ; S2c SV6; ; Negro; hospitalized,
7-17-44 to 7-24-44
- (98) HAlc SV6; White; hospitalized,
7-17-44 to 7-24-44
- (99) S2c SV6; Negro; hospitalized, 7-17-44
to 7-20-44
- (100) SC2c V6; Negro; hospitalized,
7-17-44 to 7-21-44
- (101) S2c V6; Negro; hospitalized,
7-17-44 to 7-21-44
- (102) ; S2c V6; Negro; hospitalized
7-17-44 to 8-5-44
- (103) S2c SV6; ; Negro; hospitalized,
7-17-44 to 7-21-44
- (104) SF2c V6; ; White; hospital-
ized, 7-17-44
7-21-44
- (105) SV6; White;

All redactions are
B-6

Injured - No Permanent Disability Expected
Enlisted Personnel (cont.)

(106)		; S2c SV6;	Negro; hospitalized, 7-17-44 to 7-21-44
(107)	NO DISEASE	; S2c SV6;	Negro; hospitalized, 7-17-44 to 7-21-44
(108)		; S2c SV6;	; Negro; hospitalized, 7-17-44 to 7-21-44
(109)		S2c SV6;	; Negro; hospitalized, 7-17-44 to 7-20-44
(110)		; S2c SV6;	; Negro; hospitalized, 7-17-44 to 7-21-44
(111)		; S2c SV6;	Negro; hospitalized, 7-17-44 to 7-21-44
(112)		S2c V6;	; Negro; hospitalized, 7-17-44 to 7-21-44
(113)		S1c V6;	Negro; hospitalized, 7-17-44 to 7-21-44
(114)		S2c SV6;	; Negro; hospitalized, 7-17-44 to 7-21-44
(115)		; S2c SV6;	Negro; hospitalized, 7-17-44 to 7-21-44
(116)		S2c SV6;	; Negro; hospitalized, 7-17-44 to 7-21-44
(117)		; S2c SV6;	; Negro; hospitalized, 7-17-44 to 7-21-44
(118)		; S1c SV6;	; Negro; hospitalized, 7-17-44 to 7-21-44
(119)		S2c SV6;	Negro; hospitalized, 7-17-44 to 7-20-44
(120)		S2c SV6;	; Negro; hospitalized, 7-17-44 to 7-21-44
(121)		S2c V6;	Negro; hospitalized, 7-17-44 to 7-21-44
(122)		S2c SV6;	Negro; hospitalized, 7-17-44 to 7-21-44

All reductions
acc B56

Injured - No Permanent Disability Expected
Enlisted Personnel (cont.)

(123) ; S2c V6; ; Negro; hospitalized,
7-17-44 to 7-21-44

(124) HA2c V6; White; 7-17-44 to
7-21-44, hospitalized.

(125) S2c SV6; ; Negro; hospitalized,
7-17-44 to 8-1-44

(126) S2c SV6; ; Negro; hospitalized,
7-17-44 to 7-20-44

(127) ; S2c V6NR; ; Negro; hospitalized,
7-17-44 to 7-20-44

(128) SK3c V6; Negro; hospitalized,
7-17-44 to 7-21-44

(129) S2c SV6; ; Negro; hospitalized, 7-17-44
to 7-21-44

(130) S1c V6; ; Negro; hospitalized,
7-17-44 to 7-21-44

(131) S2c SV6; ; Negro; hospitalized,
7-17-44 to 7-21-44

(132) S2c V6; ; Negro; hospitalized,
7-17-44 to 7-21-44

(133) SV6; ; Negro; hospitalized,
7-17-44 to 7-21-44

(134) SK3c SV6; Negro; hospitalized,
7-17-44 to 7-21-44

(135) S2c USN-I; ; Negro; hospitalized,
7-17-44 to 7-18-44

(136) NO DISEASE ; S2c V6; ; Negro; hospi-
talized 7-17-44 to
7-21-44

(137) S2c SV6; Negro; hospitalized,
7-17-44 to 7-21-44

(138) S1c V6; ; Negro; hospitalized,
7-17-44 to 7-21-44

(139) S2c V6;

(140) S2c V6;

All redactions
are TB6

~~CONFIDENTIAL~~

Enlisted Personnel (cont.)

- (141) ; Slc V6; ; Negro; hospitalized,
7-17-44 to 7-21-44
- (142)); S2c SV6; ; Negro; hospitalized,
7-17-44 to 7-21-44
- (143) S2c V6; Negro; hospitalized,
7-17-44 to 7-21-44
- (144) ; Slc SV6; ; Negro; hospitalized,
7-17-44 to 7-21-44
- (145) S2c SV6; ; Negro; hospitalized,
7-17-44 to 7-21-44
- (146) S2c SV6; ; Negro; hospitalized,
7-17-44 to 7-21-44
- (147) G3c V6; Negro; hospitalized,
7-17-44 to 7-21-44
- (148) ; S2c SV6; Negro; hospitalized,
7-17-44 to 7-21-44
- (149) Slc USN-I; Negro; hospitalized,
7-17-44 to 7-21-44
- (150) S2c SV6; ; Negro; hospitalized,
7-17-44 to 7-21-44
- (151) ; S2c V6; Negro; hospitalized,
7-17-44 to 7-21-44
- (152) S2c SV6; Negro; hospitalized,
7-17-44 to 7-21-44
- (153) ; S2c V6; Negro; hospitalized,
7-17-44 to 7-21-44
- (154) S2c SV6; Negro; hospitalized,
7-17-44 to 7-21-44
- (155) AS SV6; Negro; hospitalized,
7-17-44 to 7-21-44
- (156) S2c SV6; ; Negro; hospitalized,
7-17-44 to 7-21-44
- (157) ; Slc SV6; Negro; hospitalized,
7-17-44 to 7-21-44
- (158) S2c SV6; ; Negro; hospitalized,
7-17-44 to 7-21-44

All redactions
are TB6

~~SECRET~~

Enlisted Personnel (cont)

- | | | | |
|--------|--|----------------|---|
| (159) | | ; Slc V6; | ; Negro; hospitalized,
7-17-44 to 7-21-44 |
| (160) | | Slc SV6; | Negro; hospitalized,
7-17-44 to 7-21-44 |
| (161) | | S2c V6; | ; Negro; hospitalized,
7-17-44 to 7-21-44 |
| (162); | | S2c SV6; | Negro; hospitalized,
7-17-44 to 7-21-44 |
| (163) | | Slc V6; | Negro; hospitalized,
7-17-44 to 8-5-44 |
| (164) | | Slc V6; | Negro; hospitalized,
7-17-44 to 7-21-44 |
| (165) | | , Jr.; Slc V6; | Negro; hospitalized,
7-17-44 to 7-21-44 |
| (166) | | S2c SV6; | Negro; hospitalized,
7-17-44 to 7-21-44 |
| (167) | | ; S2c V6; | Negro; hospitalized,
7-17-44 to 7-21-44 |
| (168) | | S2c SV6; | Negro; hospitalized,
7-17-44 to 7-22-44 |
| (169) | | S2c V6; | Negro; hospitalized,
7-17-44 to 7-21-44 |
| (170) | | ; S2c V6; | Negro; hospitalized,
7-17-44 to 7-18-44 |
| (171) | | S2c V6; | Negro; hospitalized,
7-17-44 to 7-21-44 |
| (172) | | StM2c SV6; | Negro; hospitalized,
7-17-44 to 7-24-44 |
| (173) | | S2c V6; | Negro; hospitalized,
7-17-44 to 7-21-44 |
| (174) | | Bkr2c V6; | ; Negro; hospitalized,
7-17-44 to 7-21-44 |
| (175) | | StM3c SV6; | Negro;
hospitalized, 7-17-44
to 7-21-44 |
| (176) | | StM3c SV6; | Negro;
hospitalized, 7-17-44
to 7-21-44 |

All redactions are TB6.

Enlisted Personnel (cont.)

(177) ; S2c V6; ; Negro; hospitalized,
7-17-44 to 7-21-44

(178) ; S2c SV6; ; Negro; hospitalized,
7-17-44 to 7-24-44

(179) Slc V6; ; Negro; hospitalized,
7-17-44 to 7-21-44

(180) ; S2c SV6; Negro; hospitalized,
7-17-44 to 7-21-44

(181) ; S2c V6; ; Negro; hospitalized,
7-17-44 to 7-21-44

(182) ; S2c SV6; Negro; hospitalized,
7-17-44 to 7-21-44

(183) Slc V6; ; Negro; hospitalized,
7-17-44 to 7-21-44

(184) S2c SV6; Negro; hospitalized,
7-17-44 to 7-21-44

(185) S2c SV6; ; Negro; hospitalized,
7-17-44 to 7-21-44

(186)); S2c V6; Negro; hospitalized,
7-17-44 to 7-20-44

(187) S2c SV6; Negro; 7-17-44 to 7-21-44
hospitalized.

(188) S2c SV6; ; Negro; hospitalized,
7-17-44 to 7-21-44

(189) S2c V6; Negro; hospitalized,
7-17-44 to 7-21-44

(190) StM2c SV6; Negro; hospitalized,
7-17-44 to 7-21-44

(191) Slc V6; Negro; hospitalized,
7-17-44 to 7-21-44

(192) S2c SV6; Negro; hospitalized,
7-17-44 to 7-21-44

(193) Slc SV6; Negro; hospitalized,
7-17-44 to 7-21-44

(194) ; S2c V6; Negro; hospitalized,
7-17-44 to 7-21-44

All redactions
are TS-6

Enlisted Personnel (cont.)

(195)	S2c SV6;	; Negro; hospitalized, 7-17-44 to 7-21-44
(196)	S2c V6;	; Negro; hospitalized, 7-17-44 to 7-18-44
(197)	S2c SV6;	Negro; hospitalized, 7-17-44 to 7-21-44
(198)	; Slc V6;	; Negro; hospitalized, 7-17-44 to 7-21-44
(199)	; S2c SV6;	; Negro; hospitalized, 7-17-44 to 7-20-44
(200)	S2c V6;	Negro; hospitalized, 7-17-44 to 7-21-44
(201)	; S2c V6;	; Negro; hospitalized, 7-17-44 to 7-21-44
(202)	S2c SV6;	; Negro; hospitalized, 7-17-44 to 7-24-44
(203)	S2c V6;	; Negro; hospitalized, 7-17-44 to 7-21-44
(204)	S2c V6;	Negro; hospitalized, 7-17-44 to 7-21-44
(205)	; S2c SV6;	; Negro; hospitalized, 7-17-44 to 7-21-44
(206)	; Slc V6;	; Negro; hospitalized, 7-17-44 to 7-21-44
(207)	Slc V6;	Negro; hospitalized, 7-17-44 to 7-20-44
(208)	; S2c V6;	Negro; hospitalized, 7-17-44 to Unknown
(209)	S2c V6;	Negro; hospitalized, 7-17-44 to 7-21-44
(210)	CM3c V6;	Negro; hospitalized, 7-17-44 to 7-21-44
(211)	S2c SV6;	Negro; hospitalized, 7-17-44 to 7-21-44
(212)	S2c SV6;	Negro; hospitalized, 7-17-44 to 7-21-44

All redactions
are B-6

Enlisted Personnel (cont.)

(213) S2c SV6; ; Negro; hospitalized,
7-17-44 to 7-21-44

(214) Slc V6; ; Negro; hospitalized,
7-17-44 to 7-21-44

(215) Ekr3c SV6; Negro; hospitalized,
7-17-44 to 7-21-44

(216) ; S2c SV6; ; Negro; hospitalized,
7-17-44 to 7-21-44

(217) ; S2c SV6; Negro; hospitalized,
7-17-44 to 7-21-44

(218) ; S2c V6; Negro; hospitalized,
7-17-44 to 8-2-44

(219) S2c SV6; Negro; hospitalized,
7-17-44 to 8-2-44

(220) Sp(M)2-SV6; Negro; hospitalized,
7-17-44 to 7-21-44

(221) CH3c V6; Negro; hospitalized,
7-17-44 to 7-21-44

(222) ; Flc SV6; Negro; hospitalized,
7-17-44 to 7-21-44

(223) S2c V6; Negro; hospitalized,
7-17-44 to 7-21-44

(224) Slc SV6; Negro; hospitalized,
7-17-44 to 7-21-44

(225) S2c SV6; Negro; hospitalized,
7-17-44 to 7-20-44

(226) ; S2c V6; Negro; hospitalized,
7-17-44 to 7-21-44

(227) Slc V6; Negro; hospitalized,
7-17-44 to 7-20-44

(228) ; S2c SV6; Negro; hospitalized,
7-17-44 to 7-22-44

(229) ; S2c SV6; Negro; hospitalized,
7-17-44 to 7-22-44

All redactions
are B-6

Enlisted Personnel (cont.)

- (230) ; S1c V6; Negro; hospitalized,
7-17-44 to 7-18-44
- (231) ; S2c SV6; Negro; hospitalized,
7-17-44 to 7-21-44
- (232) Jr.; S1c V6; Negro; hospitalized,
7-17-44 to 7-21-44
- (233) ; MM1c SV6; Negro; hospitalized,
7-17-44 to 7-21-44
- (234) ; C13c V6; Negro; hospitalized,
7-17-44 to 8-12-44
DIAGNOSIS UNDETERMINED
- (235) ; S2c SV6; Negro; hospitalized,
7-17-44 to 7-21-44
- (236) S1c V6; Negro; hospitalized,
7-17-44 to 7-21-44
- (237) Y3c V6; Negro; hospitalized,
7-17-44 to 7-21-44

U.S. MARINE CORPS AND U.S. MARINE CORPS RESERVE

No permanent disability expected

Enlisted

- (1) ; Pvt. USMCR SS C1 III (b);
White; hospitalized,
7-17-44 to 8-19-44
- (2) Pfc. USMCR SS C1 III (b);
WHITE; hospitalized,
7-17-44 to 7-21-44
- (3) Pfc. USMC; White; hospitalized,
7-17-44 to 7-21-44
- (4) Cpl. USMCR C1 III(b); White,
hospitalized, 7-17-44
to 7-21-44
- (5) Pvt. USMCR SS C1 III (b);
- (6) A.CK. USMCR III(b); 360 420; White;
hospitalized, 7-17-44
to 8-5-44

All refractions
are TS-6.

~~CONFIDENTIAL~~

U.S. COAST GUARD AND U. S. COAST GUARD RESERVE

No permanent disability expected

Enlisted:

- (1) ; MoMM 2c USCGR
- (2) ; Cox. USCGR
- (3) ; MoMM2c USCG
- (4) ; Sea 1c USCG

b. Personal Injuries of Employees of U.S. Government:

(1) That the name, address, and occupation of each member of the U.S. Maritime Service, and each civil service employee of the U.S. Navy and U.S. Army, injured as result of said explosions, and the nature and extent of the injuries suffered by each are, as follows:

U.S. MARITIME SERVICE - ALL SUFFERED SUPERFICIAL INJURIES

No permanent disability expected

Crew Members of the SS QUINAULT VICTORY:

- (1) ;
- (2) ;
- (3) Messman;

Crew Members of the SS E. A. BRYAN

- (4) ;
- (5) ;

c. Personal Injuries to Civilians:

(1) That the name, address, and occupation, if any, of each civilian injured as result of said explosions, and the nature and extent of the injury or injuries suffered by each, if known, are, as follows:

CIVILIAN CIVIL SERVICE EMPLOYEES OF U.S. NAVY

Severely Injured - At least partial disability expected

- (1) ;
Electrician;

- (2) _____
Halper, General

All redactions
are B-6

CIVILIAN CIVIL SERVICE EMPLOYEES OF U.S. NAVY (cont.)

- (3) ;
Rigger;
- (4) ;
Brakeman;
- (5) ;
Joiner;
- (6) ;
Snapper Electrician;
- (7) ;
Auto Mechanic;
- (8) ;
Joiner;
- (9) ;
Engineer M&P;
- (10) ;
Joiner;
- (11) ;
Machine Operator;
- (12) ;
Machine Operator;
- (13) ;
Machine Operator; , California;
- (14) ;
Rigger, Min.;
- (15) ;
Brakeman;

All redactions are B-6

CIVILIAN CIVIL SERVICE EMPLOYEES OF U. S. NAVY (cont.)

- (16) ;
Welder;
- (17) ;
Machinist;
- (18) ;
Machinist;
- (19) ;
Auto Mechanic;
- (20) ;
Brakeman;
- (21) ;
Rigger;
- (22) ;
Helper, General;

CIVILIAN CIVIL SERVICE EMPLOYEES OF U.S. ARMY
No permanent disability expected

- (1) ; California;
Carpenter's Helper;
- (2) ;
Clerk in Stock, Control Division;
- (3) ;
Helper Mechanic;

CIVILIANS:

- (1) ;
Housewife;
- (2) ; Custodian of School ;
Nature of injuries -

All reductions
are B.6.

CIVILIANS

- (3) Housewife;
- (4) brakeman, Southern Pacific Company.
- (5) ;
- (6) Housewife;
- (7) Infant - (17 mos.) - not permanent
- (8) Associated Oil, Avon, California.
No permanent injury.
- (9) Stenciler, Shell Oil Company, Calif.
- (10) Permanente Lath & Corporation;
- (11) Child - 13 years;
- (12) Occupation - unknown;
Injuries unknown.
- (13) Housewife;
No injury permanent.
- (14) Not permanent.
- (15) U.S. Army, (Camp Stoneman, Post Exchange;

All redactions
are B-6.

CIVILIAN (cont.)

- (16) Occupation - unknown;
Injury - unknown.
- (17) S.P. Company, , Calif.
Injury - unknown.
- (18) Station Building, , California;
S.P. Company, Station Agent;
not permanent.
- (19) Richmond Shipyard #3,
- not permanent.
- (20) Bartender, Bank Club, California;
Injuries - unknown.
- (21) Yuba Manufacturing Company, California;
- (22) Bruxite Grinder, General Chemicals, California.
- (23) Infant - 13 mos.
- (24) Occupation - unknown;
- not permanent.
- (25) Occupation - unknown;
Injury - unknown.
- (26) Asst. Harfman, Tidewater Assoc. Oil Company, Calif.
- not permanent.
- (27) Lichti's Pharmacy, Calif.
- (28) Self-employed (not stated);
not permanent.
- (29) Pumper - Tidewater Assoc. Oil Company, Calif.
not permanent.

All redactions
are TSB

~~CONFIDENTIAL~~

CIVILIANS (cont.)

- (30) - (Mrs);
Camp Stoneman, Mess Hall #2
Not permanent.
- (31)
Homemaker;
- (32) -
Shipping Helper; Assoc. Oil Company, California;
not permanent.
- (33)
Occupation - unknown;
Injury - unknown.
- (34)
International Asso. of Mach., California.
- (35)
Self-employed;
- no permanent injury.
- (36)
Housewife;
- (37)
Office Assistant, Tidewater Asso. Oil Company, Calif.
- not permanent.
- (38)
Bartender, Bank Club, California;
- (39)
Associated Oil Co., California;
- (40)
Conductor, S.P. Company;
(Injuries not permanent).
- (41)
Occupation - unknown;
Injury - unknown.

All redactions are B-6.

~~NEW YORK~~

CIVILIANS (cont.)

- (42) (Mrs);
Housewife;
- (43) ;
Housewife;
no permanent injury.
- (44) ;
Millwright, Columbia Steel Corp., Pittsburg, Calif.
- (45) (Mrs.);
Occupation - unknown;
- (46) ;
Housewife;
- (47) ;
; California.
Wire-drawer, Columbia Steel Corp., Pittsburg, California.
; not permanent.
- (48) ;
General Chemical Company, California.
- (49) ;
Tidewater Asso. Co., California;
not permanent.
- (50) ;
Shift Supervisor, Physical Laboratory, Asso. Oil Company,
California;
- (51) ;
Child - 5 years;
- not permanent.
- (52) ;
Housewife;
- (53) ;
Housewife;
- (54) ;

All redactions
are B-6

CIVILIANS (Cont.)

- (54) (cont.)
Housewife;
- (55)
Southern Pacific Depot, , Calif.
Telegrapher, Southern Pacific Railroad Company;
- (56)
Southern Pacific Railroad Company, Car Body No. 2,
California;
housewife;
- (57)
Occupation - unknown;
Injury - unknown.
- (58)
Child - 4 years;
Injury to knee - not permanent.
- (59)
Housewife;
Minor injuries - not permanent.
- (60)
Ticket - 19 nos.
- (61)
Occupation - unknown;
Injury - unknown.
- (62)
Brakeman, S.P., , California;
(not permanent).
- (63)
Occupation - unknown;
- (64)
Housewife;
- (65)
Midwater Asso. Oil Co., California;

All redactions
are TS-6

CIVILIANS (cont.)

- (66) Occupation - unknown;
- (67) Operation Department, Asso. Oil Company;
- (68) Occupation - unknown; - not permanent.
- (69) Child - 7 years. minor - not permanent.
- (70) Housewife;
No injury will be permanent.
- (71) State Hospital, California;
Laborer - Spanton Bros. Animal Shows
- (72) Housewife;
- (73) Master Mech. M. F. Smith, Santa Fe RR, California;
- (74) Paul Collins Restaurant & Fountain, California.
not permanent.
- (75) Operator for Pacific Bell Telephone Company;
- (76) [redacted] Car Loader, Tidewater Associated Oil Co., [redacted] California.
Not permanent.
- (77) [redacted] Housewife;
[redacted]

All redactions
are B-6

~~CONFIDENTIAL~~

(CIVILIANS- Cont.)

- (78) Retired;
not permanent.
- (79) Brakeman, S.P. Co., 65 Market St., Calif.
- (80) Injury - unknown.
- (81) Controlman, Tidewater Asso. Oil Co., California.
- not permanent.
- (82) Self-employed;
- (83) Housekeeper;
- not permanent.
- (84) Shell Chemical Company;
- not permanent.
- (85) Housewife;
- (86) Occupation - unknown; , California.
Injury - unknown.
- (87) Cashier - Southern Pacific Company;
- (88) Trainmaster, S.P. Company;
- (89) [redacted];
Stenographer, Research Dept. Tidewater Asso. Oil Company,
California;
- (90) [redacted];
Housewife;

All redactions are B-6.

CIVILIANS (cont.)

(90) (cont.)

(91)

California;
Laborer, S. P. Company;

(92)

Contra Costa County - F.M.A. Recreation Project;

(93)

Child - 11-1/2 years.

Not permanent.

(94)

Merchant seaman - not employed at time.

(95)

(96)

Housewife;

(97)

Occupation - unknown;

(98)

;
Housewife;

(99)

Child - 5 years;

(100)

Housewife;

(101)

Secretary-Treasurer, C.I.O. Council;
- not permanent.

All redactions
are B6.

CIVILIANS (cont.)

- (102) Boilermaker, C.F. Braun Construction Company, Calif.
injury. No permanent
- (103) ;
Conductor, Southern Pacific Company;
- (104) General Chemical Co. Nichols (, Calif.)
- not permanent.
- (105) Occupation - unknown;
Injury - unknown.
- (106) Child - 9 years;
Injury - unknown.
- (107) California Hawaiian Sugar Refinery;
- injury not stated; not permanent.
- (108) -
- not permanent.
- (109) Occupation - unknown.
Injury - unknown.

CIVILIANS - SS REDLINE CREW

- (110) Captain, SS REDLINE, Union Oil Company;
not permanent.
- (111) 1st Mate, SS REDLINE, Union Oil Company;
- not permanent.
- (112) ; Chief Engineer, SS REDLINE,
Union Oil Company;
- not permanent.
- (113) Ordinary Seaman, SS REDLINE;
Union Oil Company;
not permanent.

13. DAMAGE TO U. S. GOVERNMENT PROPERTY: That the damage to U.S. Government owned property, in the total amount of \$9,892,034.47 comprised the following property destroyed or damaged:

I. U.S. Navy Property

	<u>Amount of Loss or Damage</u>	<u>Total</u>
A. <u>Naval Magazine, Port Chicago</u>		
1. Ship pier, buildings, tanks, fences, roads, railroads, power and water systems, telephone and collateral items	1,297,805.00	
2. Automotive equipment	6,637.35	
3. Railroad and rolling stock	30,566.78	
4. Machinery, tools and miscellaneous equipment	100,045.55	
5. Ammunition materiel on pier and loaded in SS <u>E.A. BRYAN</u>	3,293,626.02	
Total		4,728,680.70
B. <u>Naval Barracks, Port Chicago</u>		
1. Small Stores	293.45	
2. Ship's Service (\$1,947.17 covered by insurance)	2,447.17	
3. Recreation and other Navy property	12,222.15	
4. Medical Department property	252.55	
Total		15,215.32
C. <u>Armament and Spare Parts, ammunition; ready boxes and materiel installed aboard SS <u>QUINULT VICTORY</u>, assigned to Armed Guard Unit</u>	190,714.48	190,714.48
D. <u>Armament and Spare Parts, ammunition; ready boxes, generator equipment and materiel installed aboard SS <u>E.A. BRYAN</u>, assigned to Armed Guard Unit</u>	198,268.36	198,268.36
E. <u>Y.P. <u>MILHELO II</u></u>	6,000.00	6,000.00
F. <u>Navy Yard Mare Island -Miscellaneous Damage.</u>	3,600.00	3,600.00
TOTAL U.S. NAVY PROPERTY DAMAGED OR DESTROYED		5,134,041.86

II. War Shipping Administration Property Destroyed

A. (1) SS <u>QUINULT VICTORY</u> - total loss..	2,850,000.00	
(2) Fuel oil, consumable stores and supplies	21,995.17	
B. (1) SS <u>E. A. BRYAN</u> - total loss	1,600,000.00	
(2) Fuel Oil, consumable stores & sups.	36,032.62	
Total W.S.A. Property		4,508,027.79

	<u>Amount of Loss or Damage</u>	<u>Total</u>
III. <u>U. S. Coast Guard Property</u>		
A. Poe Island Light Station - Estimated cost of repairing damage	1,700.00	
B. Fire Barge CGB-60014F	34,563.44	
C. Skiff CGB-16287 (on board fire barge).....	<u>128.00</u>	
Total Coast Guard Property		36,391.44

IV. <u>U. S. Marine Corps Property</u>		
Miscellaneous	1,036.65	1,036.65

V. <u>U. S. Army Property</u>		
A. Benicia Arsenal, Benicia, California - Estimated cost of repairing structural damage	200,000.00	
B. Camp Stoneman, Pittsburg, California - Estimated cost of repairing structural damage	4,000.00	
C. Concord Air Base, Concord, California - Estimated cost of repairing structural damage	<u>100.00</u>	
Total, U.S. Army Property damaged	204,100.00	204,100.00

TOTAL VALUE OF ALL U. S. GOVERNMENT PROPERTY,
DAMAGED OR DESTROYED 9,892,034.74

14. DAMAGE TO VESSELS OWNED BY PRIVATE INTERESTS: That the names of the vessels owned by private corporations and individuals, the names and addresses of the owners of each vessel, the amount of damages claimed, and the amount of damage determined by survey made by a marine surveyor attached to the Twelfth Naval District Legal Office are, as follows:

<u>Name of Vessel</u>	<u>Name and Address of Owner</u>	<u>Amt. of Damage Claimed</u>	<u>Amount Determined By Survey</u>
1. M.S. REDLINE	Union Oil Company of California, San Francisco, Calif.	221,121.25	
2. 14' Sail Boat	B-6 EM2/c USCG U.S. Coast Guard, Crockett, California	75.00	75.00
3. Cabin Cruiser #280349	F. D. Harris, [REDACTED]		

All redactions are TSB.

<u>Name of Vessel</u>	<u>Name and Address of Owner</u>	<u>Amt. of Damage Claimed</u>	<u>Amount Determined By Survey</u>
4. Cruiser #28G885	Unknown - representative,	Not stated	55.00
5. Cruiser "Darlene" #28C267		Not stated	96.17
6. Launch "Mariana"		1,630.00	404.00
7. Motor Boat #28A307	Lt. USNR and Centerville, California	58.00	58.00
8. Motor Boat #206983 "Frank C"	Bay Point Wharf & Yacht Harbor Company, Ltd. Port Chicago, California	125.00	45.00
9. Motor Boat "Spee-Dora" #28G133	Unknown	Not stated	65.00
10. "Silver" #28A706		190.00	190.00
11. Motor Boat #28A880		184.13	138.27

TOTAL OF CLAIMS STATED..... 223,483.38

TOTAL OF DAMAGE TO SMALL CRAFT
DETERMINED BY SURVEY 1,151.44

RECAPITULATION:
 Damage Claimed to MS REDLINE..... \$221,121.25
 Damage Claimed to Small Craft... 2,362.13
 Total Damage Claimed \$223,483.38
 Damage to Small Craft as
 Determined by Survey

~~CONFIDENTIAL~~

15. All officers, enlisted and civil service personnel who had not been called as witnesses were given an opportunity to appear before this court if they so desired.

~~CONFIDENTIAL~~
105

OPINION

~~CONFIDENTIAL~~

1. That the Naval and Coast Guard personnel killed or injured in this explosion and listed in the Finding of Facts herein were killed or injured in line of duty and not as a result of their own misconduct.

2. That the civil personnel listed in the Finding of Facts herein as having been killed by the explosion were killed while performing their regularly assigned duties and in the service of their country.

3. That the loss of and damage to government property and privately-owned vessels caused by this explosion were incident to the prosecution of the war.

4. That the amount of damages caused to government-owned property is \$9,892,034.74.

5. That the amount of damage suffered by the M. S. REDLINE does not exceed the sum of \$136,840.00, the cost of repairs, and \$11,437.57, the expenses incident thereto, totaling \$149,277.57, which is greater than the sound value of the vessel, which did not exceed \$150,000.00, less the value of the vessel in her damaged condition.

6. No opinion is expressed as to the amount of damages suffered as the result of death, personal injuries or by small craft, as these claims have been delivered to the Board of Investigation for consideration.

7. That the establishment of a facility such as the U.S. Naval Magazine, Port Chicago, was necessary in this area and the location was well chosen.

8. That the development of the Naval Magazine, Port Chicago, to maximum efficiency and capacity as a loading facility was retarded by the following circumstances which were beyond the control of the Officer in Charge, Naval Magazine, Port Chicago, and the Commanding Officer, Naval Ammunition Depot, Mare Island, California:

a. A general failure to foresee and prepare for the tremendous increase in explosives shipments.

b. A failure to assemble and train the officers and crew for their specialized duties prior to the time they were required for actual loading.

c. A failure to provide initially the collateral equipment so necessary for morale.

d. A failure to provide an adequate number of competent petty officers or even personnel of petty officer caliber.

9. That the Commanding Officer, Naval Ammunition Depot, early realized the necessity for expansion, for trained officers and the importance of collateral equipment. He made every reasonable effort to obtain these.

10. That the operation of the Naval Magazine, Port Chicago, as an annex of the Naval Ammunition Depot, Mare Island, is sound and proper.

11. That the internal organization at Port Chicago is sound and proper.

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

12. That the training of the officers was the best possible under existing circumstances. That the dissemination of pertinent information required by the officers in the performance of their duties was adequate.

13. That the officers at Port Chicago have realized for a long time the necessity for great effort on their part because of the poor quality of the personnel with which they had to work. They worked loyally, conscientiously, intelligently, and effectively to make themselves competent officers and to solve the problem of loading ships safely with the men provided.

14. That the enlisted personnel comprising the ordnance battalions at Port Chicago were poor material for training in the handling and loading of munitions, and required an unusual amount of close supervision while actually engaged in this work.

15. That the training and supervision of these men was made even more difficult by the lack of petty officers or petty officer material.

16. That a very sustained and vigorous effort was made to train these men in the proper handling of munitions. Despite this, there was a considerable history of rough and careless handling by individuals. A marked and continuing improvement was discernible in recent months.

17. That the methods used in training these men were the most effective possible under the circumstances.

18. That in the months immediately preceding the explosion real progress had been made toward a better training program for officers and men. This work had been retarded by a lack of competent senior officers.

19. That the morale of the station was improving steadily as a result of the completion of the gymnasium and bachelor officers' quarters, and provision for additional transportation.

20. That the civil service personnel were about the average available for the ratings held and were in general of mediocre ability.

21. That the policies and doctrines followed were sound, well thought out, and aimed at generally getting essential war work done as safely as possible.

22. That the security measures in effect were adequate.

23. That the liaison between the officers of the Port Director, Captain of the Port, Service Force Subordinate Command, and the Naval Magazine, Port Chicago, was satisfactory.

24. That the pre-loading inspections made by representatives of the Captain of the Port and of the Port Director were not always thorough or well-timed in relation to feelings. This lack of thoroughness was not a contributing cause to the explosion under investigation.

25. That the pier was well laid out for the work to be done. A pier which allows tandem berthing would be preferable, since it results in a lesser concentration of explosives and personnel.

26. That the loading procedures and the gear used at Port Chicago were safe and in accordance with standard naval practice and did not violate naval safety precautions.

27. That the few practices listed in the Finding of Facts which were contrary to the Coast Guard shiploading regulations were not dangerous and did not increase the hazards.

28. That there exists no publication or instruction for naval establishments which adequately specified the methods to be used in handling high explosives. Regulations as they exist are negative in nature and prohibitory.

29. That the Coast Guard instructions are not practicable in their entirety in that a literal compliance with all requirements would so restrict operations that loading could not be accomplished at a reasonable rate.

30. That where any regulation cannot be followed, it should be changed rather than ignored.

31. That it is possible to draw up a practicable set of loading instructions with no sacrifice to safety.

32. That the details of loading procedure at Naval Magazine, Port Chicago, were as safe, and in most cases safer, than those in use at many other points.

33. That the Coast Guard detail under the conditions it was originally assigned at Naval Magazine, Port Chicago, did not contribute to the efficiency or safety of the loading operations.

34. That this Coast Guard detail could contribute to the efficiency of the operations provided: -

a. Their instructions were carefully reviewed and adapted to the special circumstances existing at a naval station, rather than arbitrarily using the same methods as when dealing with civilian stevedores at a commercial pier.

b. The methods of handling each item were agreed upon by competent representatives before loading started.

c. That only competent men especially trained in ammunition handling were assigned to such duty.

35. That the loading divisions were well organized for the work to be accomplished, insofar as the availability of petty officers permitted.

36. That the working hours and schedules were well planned and reasonable.

37. That the officer supervision during loading operations was adequate.

38. That the petty officer supervision was inadequate both in numbers and quality.

39. That the posting of the amounts loaded by each division did not operate to increase the hazards of loading.

~~CONFIDENTIAL~~

40. That a loading rate of 10 tons per hatch per hour with the personnel available was high but a goal that could be attained with proper training and supervision.

41. That the loading rate attained at Port Chicago was approximately that attained by commercial stevedores at Naval Ammunition Depot, Mare Island.

42. That the S. S. E. A. BRYAN was seaworthy and in a satisfactory condition to receive explosive cargo on arrival at the Naval Magazine, Port Chicago.

43. That the S. S. QUINAULT VICTORY was seaworthy and in a satisfactory condition to receive explosive cargo on arrival at the Naval Magazine, Port Chicago.

7.47. 44. That the loading of the S. S. E. A. BRYAN up to the time of the explosion was proceeding in a normal manner, using methods and gear that are considered safe and in accordance with good practice.

45. That the quantities of explosive vapors probably present, the absence of any evidence of fire or other igniting agent, the speed with which the explosion was transmitted indicate to the court that the explosive qualities of the oil in the S. S. QUINAULT VICTORY did not cause or contribute to the explosion.

46. That in an explosion of this magnitude where substantially all the possible initiating agents were destroyed and all eyewitnesses at the point of initiation were lost, it is impossible to determine positively the agent or act which caused the explosion.

47. That the following unusual circumstances existed just prior to the explosion, any one of which might have been a contributing cause:

a. The S. S. QUINAULT VICTORY, a ship that had been in service only one week, was being rigged for the first time by enlisted personnel of the ordnance battalions and some difficulty was experienced, which might have led to the dropping of a boom on one of the cars of explosives spotted alongside.

b. The propeller of the QUINAULT VICTORY was turning over, which might have caused a failure in the pier structure.

c. A diesel switch engine was in motion on the pier, entailing the possibility of collision and damage to explosives being handled.

d. An unusual noise was heard which could have been caused by the falling of the boom or the failure of the structure of a boxcar or the pier. A similar noise could have been caused by the possibilities outlined in a, b, and c above.

48. That the weather conditions in no way contributed to the explosions.

49. That there was no unnecessary concentration of explosives or personnel on the pier at the time of the explosion.

50. That the possibility exists that a supersensitive ammunition component, such as is defined below, was present and that such a component was detonated either in the ordinary course of loading operations or as a result of rough or careless handling by an individual or individuals.

The term "supersensitive component" as herein used is defined as:

a. One wherein a thin film of high explosives is present because of defects in the manufacture of the case or faulty filling of that particular component. (This condition could have occurred in the Mark 47 and the Mark 54 depth bombs.)

b. One which has become prematurely armed by reason of damage to the safety features either in transit to the magazine or in the handling after arrival. (This condition could have occurred in the M-7 incendiary bomb clusters.)

The term "rough or careless handling" as herein used is defined as handling which would subject a component or its container to a severe blow or cause deformation of the case or container by the application of a concentrated stress. Examples of this would be a bomb which is allowed to roll against and strike another bomb, a hoist which is allowed to swing against the ship's side or a hatch coaming, or a hoist which is dropped from a height or is allowed to strike the deck a hard blow in lowering, or the arrangement of the load in the net or sling which is such as to impose concentrated stress on one or more of the components of the load.

51. That the probable causes of the initial explosion listed in the order of probability are:

a. Presence of a supersensitive element which was detonated in the course of handling.

b. Rough handling by an individual or individuals. This may have occurred at any stage of the loading process from the breaking out of the cars to final stowage in the holds.

c. Failure of handling gear, such as the falling of a boom, failure of a block or hook, parting of a whip, etc.

d. Collision of the switch engine with an explosive loaded car, possibly in the process of unloading.

e. An accident incident to the carrying away of the mooring lines of the QUINAULT VICTORY or the bollards to which the QUINAULT VICTORY was moored, resulting in damage to an explosive component.

f. The result of an act of sabotage. Although there is no evidence to support a sabotage as a probable cause, it cannot be ignored as a possibility.

52. That the initial explosion occurred in the vicinity of the inboard end of the pier near the bow of the E. A. BRYAN, probably among components being handled on the pier or being loaded into No. 1 or 2 holds. The sharp distinct sound and the brilliant white flash lead to the belief that the initial detonation was that of an M-7 cluster or Mark 47 depth bomb which was, in turn immediately propagated to other explosives on the pier, producing the first explosion.

53. That the second and larger explosion consisted of the detonation — substantially simultaneously — of the ammunition in the holds of the E. A. BRYAN. That this was initiated by the detonation of a component or group of components, or by hot fragments from the first explosion which entered the holds either through the ship's side or through the open hatches.

~~CONFIDENTIAL~~

RECOMMENDATIONS

1. That concerning merchant vessels scheduled to load explosives;

a. A preliminary inspection be made as soon as a vessel arrives in port in order that any major faults may be corrected.

b. Final pre-loading inspections should be made after fueling and should be very thorough, with emphasis on the operating condition of the cargo handling equipment.

c. The inspections now made by representatives of the Captain of the Port and the Port Director be coordinated in order that they supplement and assist each other without needless duplication of work.

2. That in assigning personnel to duty in the ordnance battalions each draft should include an adequate number of men of petty officer caliber. Older and more mature men should be assigned this duty whenever possible.

3. That the feasibility of bringing some of the mature, experienced, reliable negro civil service personnel from the Naval Mine Depot, Yorktown, Virginia, and the civil service negro stevedores from the Supply Depot, Naval Operating Base, Norfolk, Virginia, should be investigated.

4. That the loading of explosives at commercial piers be restricted to an absolute minimum and that when such loading must take place, the amounts of explosives present on the pier be restricted to the minimum and in no case exceed the amounts permitted in the American Table of Distances, Article 14D18, Bureau of Ordnance Manual.

5. That the methods used by commercial stevedores in loading explosives be carefully reviewed by competent persons and only those methods meeting acceptable standards of safety be permitted.

6. That a loading manual setting forth acceptable methods for loading each type of explosive item, and to include the gear to be used, be drawn up and promulgated.

a. The board or committee to draw up such a manual should have representatives from the Navy thoroughly familiar with all components in use and their structural weaknesses, representatives of the Navy and possibly from stevedoring firms, thoroughly familiar with loading, stowing, and rigging, and representatives from the Coast Guard familiar with the laws governing such subjects.

b. This manual should not be so restrictive in nature as to prevent a facility from developing and improving operating methods so long as these new means conform to safety requirements.

c. As new items or types of ammunition are brought out, the agency producing them be required to supply pertinent information, especially hazards of handling in order that acceptable methods of handling may be incorporated in the manual.

7. That the present regulations and instructions relating to the handling of explosives be carefully reviewed and those not applicable or impracticable of attainment be eliminated.

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

8. That facilities loading ammunition and explosives should be given priority in the assignment of experienced officers and stevedores.

9. That an experienced officer or officers of suitable rank, acting directly under the Commandant of the District, make surprise inspections from time to time at all explosive loading operations carried on in this district.

10. That a reasonable number of officers over and above those required for actual loading operations and in an "under instruction" status be maintained at the Naval Ammunition Depot, Mare Island, or Naval Magazine, Port Chicago, in order to provide adequately trained officers to meet normal attrition and expansion.

11. That the loading of explosives should never be a matter of competition.

12. That the feasibility of placing barricades between loading piers and adjacent facilities be investigated.

13. That inasmuch as the Commanding Officer of a Naval activity is in fact responsible for everything at his station, all representatives of other activities visiting the station for any duty should be required to report to the Commanding Officer for the specific duty and to submit their reports through the Commanding Officer of the station visited.

14. That the present policy of allowing the Commanding Officer of a Naval activity to accept or decline a Coast Guard loading detail be continued. That where this detail is accepted the detail should report to the Commanding Officer of the station for this duty.

15. That only such fuel oil as meets Navy specifications be delivered to ships scheduled to load ammunition.

16. That the following recommendations covering specifications for magazine facilities made by the Public Works Officer, Navy Yard, Mare Island, be favorably considered:

a. Structures that are vital for operation of the station in time of disaster should be of permanent fireproof construction. This includes the administration building, marine barracks, fire station, fire pumping station, and central power plant.

b. All important structures not of permanent, fireproof construction should be of a substantial wood frame construction, well braced.

c. Flimsy, war-time construction should not be used except for minor buildings, the loss of which will not seriously interfere with station operations.

d. Where practicable, important buildings should be laid out and on rather than broadside ~~on~~ to probable line of blast.

e. Unless strongly reinforced and braced, walls of buildings, should have a considerable proportion of the area glazed to present a minimum obstruction to the blast.

f. Investigations should be undertaken by the Bureau of Standards.

relative to the use of a material for glazing other than glass, that will not splinter into small, sharp fragments under the impact of the blast.

g. Mechanical services:

(1) Mechanical services should be run underground wherever possible.

(2) Hangers for pipe lines should be arranged and secured to structures to allow some freedom of motion, yet definitely limit movement.

(3) BuDocks standard specification 2LYc should be modified to permit wider use of welded joint pipe and steel valves, flanges and fittings for steam, as well as other fluids in explosion hazard areas.

(4) Spring loaded pressure reducing valves should be used instead of dead weight loaded type.

17. That gas mains should not be permitted in an explosive area.

18. That the provisions for the protection of explosive ammunition components during shipment and handling, including the containers, be carefully reviewed as the present necessity of shipping large quantities of high explosives over long distances in commercial carriers, together with the lack of skilled personnel, has introduced many additional hazards.

19. The court recommends that no further proceedings be had in the matter.

All redactions
are B-6

Captain, U. S. Navy.

Captain, U. S. Navy.

Captain, U.S. Navy.

The record of proceedings of the fortieth day of the inquiry was read and approved, and the court having finished the inquiry, then at 1:30 p.m., on 30 October 1944, adjourned to await the action of the convening authority.

Captain, U.S. Navy,
President.

Lieutenant Commander, U.S. Naval Reserve,
Judge Advocate.

54. That the pattern of fragment distribution would appear to indicate that the point of initiation of the second explosion was in one of the forward holds of the E. A. BRYAN and that the explosives in the after holds suffered sympathetic detonation almost immediately so that the ship in effect constituted a large bomb.

55. That there was an initial major explosion followed by minor explosions and burning for a period of from three to six seconds and culminating in a mass explosion of the entire cargo of the E. A. BRYAN and all remaining explosives. This final explosion was by far the greater; larger than any which preceded it.

56. That from an examination of the damage to structures and facilities resulting from the explosion, certain specific requirements of standards of construction for such a facility are indicated as set forth under "Recommendations".

57. That the behavior of the officers and men after the explosion was exemplary and reflects credit on them and on their commanding officer.

58. That other U. S. Government agencies, the agencies of the State of California, the agencies of municipalities, civilian activities, and individual citizens in the area, were most prompt and helpful in their tenders of assistance.

59. That the explosions and the consequent destruction of property, death and personal injuries were not due to the fault, negligence or inefficiency of any person in the naval service or connected therewith or any other person.

60. That the explosions were not due to any fault, negligence or inefficiency of the interested party, Captain Nelson H. Goss, U. S. Navy (Retired).

61. That the explosions were not due to any fault, negligence or inefficiency of the interested party, Captain *3-6*, U. S. Naval Reserve.