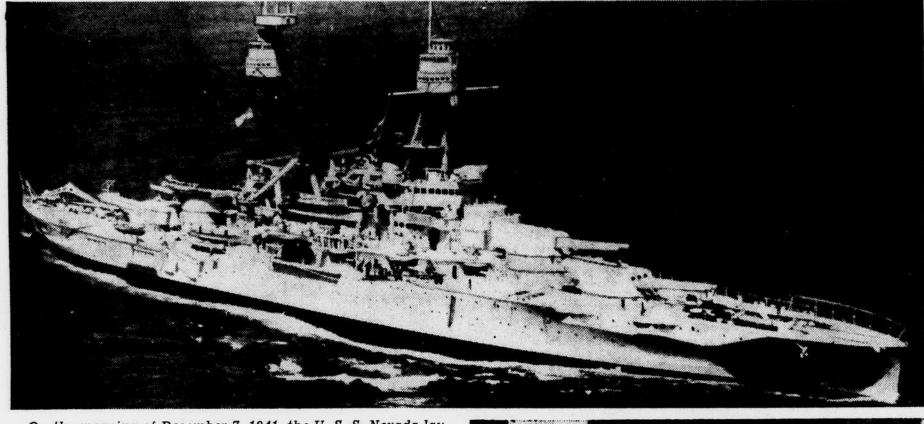
How a Dead War Fleet Came Back to Fight



On the morning of December 7, 1941, the U.S. S. Nevada lay quietly with other powerful ships of Uncle Sam's fleet alongside a quay at Pearl Harbor when the Japanese unleased their sneak blow. The Nevada was badly damaged. Slowly, she was restored to fighting trim. Since then she has participated in many battle actions. Here is a view of the Nevada taken in 1944.

> By Paul V. Cochrane, Associated Press Staff Writer.

Three and a half years have gone by since Japan wrecked a good part of the United States Battle Fleet at Pearl Harbor; only now is it possible to tell the detailed story of the salvage of that fleet.

With only two exceptions, every ship was restored to service in amazingly short time, not only repaired, but modernized so effectively that many of them

It was a job that was pushed through in the sternest sort of urgency. Had it failed an invasion of the West Coast easily might have followed, the change in the tide of war certainly would have been long delayed.

been told and retold. The story of how Americans worked in the days that fol-

lowed is equally heroic. It largely is the story of Rear Admiral (then captain) Claude Sexton Gillette, one of the most experienced naval engineers in the service. Now naval supervisor of shipbuilding at the Electric Boat Co. in Groton, Conn., he then was boss of the Industrial Department of the Pearl Harbor base, a post he had held since 1939.

When Gilletie went to Pearl Harbor the base was little more than a way station for the fleet, then based principally at San Pedro, Calif. It employed about 1,800 civilian workers-half the average in continental Navy yards. It had one large graving (dry) dock that never had overhauled a capital ship, and one small marine railway, plus some fairly well equipped shops and cranes.

As Congress made funds available, Gillette moved quickly to put them to use; stepped up his working forces rapidly. Two more capital ship dry docks were gotten under way. Still further dry docks and marine railway facilities were planned, and a big structural steel show was built.

In addition, a 17,000-ton floating dry dock was hauled all the way from New

Reconstruction Problem

Gillette recalls December 7, 1941, and the days which followed in terms of complex and heart-breaking engineering and reconstruction problems; but, above all, in terms of a huge sea of fuel oil that soaked everything and would not dissipate, and of ghastly smells that pervaded the air for miles around.

The battleships sunk were the California, Oklahoma, West Virginia and Arizona, and the Utah, once a battleship but no longer active. Damaged severely was the Nevada, which escaped from the inner of two lines of ships along the Ford Island quay only to go aground. Damaged slightly were the Maryland, Tennessee, and Pennsylvania. All but the Arizona and Utah

were salvaged. Other ships were battered that day

The story of how Americans fought in the inferno of December 7, 1941, has and were salvaged, too, but the real story is the story of the battleships. Even while the battle raged, the yard ordered its civilian employes to duty and tore into the business of clearing out the ships in the drydocks and those awaiting light repairs. That gave the

> Navy a nucleus of a fleet. First came work on the Pennsylvania, which had been caught while in drydock for minor repairs-although a thousand other jobs were pressed simultaneously.

Here was a lucky break, if anything connected with Pearl Harbor could be called lucky. The Pennsylvania was aft in her dock, on the harbor end, and the destroyers, Cassin and Downes, berthed with her, were forward, near-

Had their positions been reversed, the drydock would have been blocked hopelessly by the wreckage of the destroyers: The Cassin, with more than 170 punctures in her hull, was blown off her blocks on top of the Downes, which had more than 350 jagged holes in her, plus internal damage caused by a chance hit that detonated four torpedo war-

Repaired in 12 Days

As it was, the Pennsylvania was repaired completely in 12 days and moved out, permitting utilization of the dock by other capital ships.

Within two weeks, as a matter of fact, the Pennsylvania, Maryland, and Tennesee all were at sea again.

More slowly were the Nevada, the California and the West Virginia restored to fighting trim-one of these had taken six torpedo hits. Thousands of workers toiled day and night to fabricate elaborately calculated patches to seal up their holes. These patches, built to measurements made under water and constructed of concrete or impregnated canvas mounted on steel and wood frames, had to fit exactly when towed into place. And they had to last until the ship was drydocked and permanent patches could be made.

The job of unwatering the ships was tremendous in itself. Great pumps were rushed from the mainland and put

Here's a Farm for City Slickers

underwater repair work.

United States sailors shown at the side of the blazing USS West Virginia fighting the flames started by Japanese torpedoes and bombs on the battleship at Pearl Harbor. -A.P. Photo From U. S. Navy

To meet the situation in the docks,

Gillette's men rounded up all the old

steam boilers they could and, lined

the docks with steam and water pipe

and mixers and pumped scalding hot

salt water (taken from below to the

into operation. Massive turrets and guns were torn off ships' decks to lighten them. Then, as the vessels began to rise slowly in the water, new horrors confronted the salvage gangs.

Lethal gas generated within the ships from decaying vegetable and organic matter had been absorbed by water within the compartmented ships. As the compartments were opened, the surface) onto the docks and ships withpressure was released and the gas in them.

One officer and eight men died of it The great sea of oil remained outside and many were hospitalized before emergency steps could be devised to test compartments before opening them.

"It was a hellish stench," said the admiral, "and the broiling tropical sun made it worse. It was also treacherous stuff. When you could smell it you were safe. But in concentrated form it seemed to have the ability to anesthetize the nasal nerves and men dropped quickly."

While all this was going on, the surface oil was the biggest, most persistent headache. Thousands of tons of fuel had been released by the sinking ships and, since there is little tidal rise and fall in narrow mouthed Pearl Harbor, it stayed there.

It emulsified with the surface sea water and made a heavy viscous layer, one and a half to two inches thick, loaded down with harbor and salvage

Every time a drydock was opened, the filth swilled in and seeped into damaged ships, coated the side walls of drydocks and everything in them.

help protect the workmen. Every night As the oil was gathered in, big rotary and the sandwiches always were plen- vage work at Brest, France, in the the workmen stripped off these bags sweepers propelled it over screens, which tiful.

Outside in the basin the stuff clogged and a fleet of trucks carted them away sea suctions and interferred with all to a commandeered laundry. The oil was corrosive, too, and it ate away the worker's shoes with startling rapidity and produced serious skin irritations. Gillette's men tried spraying the oil blanket with sand, hoping that its weight would sink the oil. This idea had to be abandoned when the sunken mixture gummed up ships' condensers and other

This, however, was purely a stop-gap. Oil "Sweepers"

and every opening of the gates ad- be known as "juicy b

the battleship, when this photograph was made after the vessel had been beached at Hospital Point following the Jap attack on Pearl Harbor. And speaking of blackouts, the yard retained the harbor debris, while per-

Crewmen of the U.S.S. Nevada were still fighting flames on

from which it eventually was carried into vacuum tanks and later discharged to tanks on shore.

Interestingly enough, said the admiral, the oil now proved beneficial: It was used to drench down newly constructed

Time and again Gillette paused in his narrative to pay tribute to the naval and civilian forces under his command and to speak warmly of their courage and zeal.

He praised particularly the personnel of the Pacific Bridge Co., which had a large crew of underwater experts engaged in the drydock construction. Without their subsequent aid, Gillette said, "it would have been wholly impossible to handle successfully a salvage job of the magnitude which confronted the yard on December 8."

Twenty-Four Hour Shifts

The way the yard forces worked is a story in itself. For the first few days practically every one worked around the clock. Then it was two shifts:

The day shift from daylight to almost dark; the night shift the rest of the time. No third shift was possible because the stringent blackout made it impossible for transportation to move during the middle of the night.

So hundreds of men literally slept in on the job, aboard ships, wherever they

could snatch a brief respite. Feeding them was another problem. Gillette and his officers rounded up all the coffee urns they could find to install in the big repair shops which, it may now be said, were practically undamthe ton. They called upon several hunand manufactured denim coveralls to mers at the bow which swept up the oil. that the coffee urns never were empty Gillette of Iowa. He got his start in sal-

mitting the oil to filter into troughs force quickly perfected shaded blue portable lights which had practically no upward radiance to permit work on urgent outside jobs.

A complete recital of the individual projects would require a book. One of the new drydocks, for instance, lacked permanent pumping machinery and for a time all work had to be done with small portable pumps. Two days frequently were required to exhaust a dock that normally needed only two hours.

That phrase applied to the reconditioned ships-"as good as new"-doesn't begin to tell the story of Pearl Harbor salvage, in Admiral Gillette's opinion.

All Better Ships Now

"Good as new?" he says, "why practically every one of those ships is twice as good as it was. They've all been modernized, many have had their armor increased and all have had fire power tremendously improved."

"No one in his right senses would want another Pearl Harbor but the Japs must regret it as much as anyone now, because it put a major portion of the battle fleet in far better condition than before they struck." At the Electric Boat Co., biggest pri-

vate builder of submarines in the world. Gillette is naval supervisor of shipbuilding. It is his first active connection with submarines although, on the staff of the design division of the Bureau of Engineering here in Washington years ago, he became familiar with the problems of that branch of the service.

The admiral (he was advanced to that rank after his work at Pearl Harbor) went to Groton from Puget Sound Navy aged. Coffee and sugar were bought by Yard where he was industrial manager. A native of Cherokee, Iowa, where he Finally hit upon was what came to dred wives of naval enlisted men and, was born on February 1, 1886, Gillette is until the more formal commissary plan a graduate of Annapolis and a brother mitted more of it. The yard devised driven scows equipped with broad skim- could be organized, the girls saw to it of former United States Senator Guy

85,000 Miles Across War-Torn Seas on a Ship of Mercy

This is the Gripsholm, a ship of gleaming white that has sailed for years across the dark war seas, unmolested and un-

She has known romance, joy and tragedy. Diplomats, royalty, spies, wounded fighting men, refugees and just plain people caught in the vortex of war

She has sailed 85,000 miles on 13 voyages, given such places as Lourenco Marques and Mormugo their first taste of international fame, returned more than 14,000 persons to their native lands. Now she is off again, bound for Italy, Greece and Egypt, bearing 671 "unadmissable aliens" in the first mass deportation since the war began.

Sailed With Lights Ablaze

The wartime routes of the 18,134-ton Gripsholm were marked out for her, mile by mile, by the belligerent governments which granted her safe conduct passage. She traveled with lights ashine and with the blue and gold stripes of Sweden painted on her sides.

she is chartered to the American Government and operated by the American Export Lines. Her Swedish captain and crew have one main job: To keep her sailing on the pre-arranged routes. American Export loads and unloads

Because she is Swedish most people

think that Sweden operates her; actually

the ship, assigns passenger quarters, provisions and fuels the ship, and assists the State Department, the FBI and other governmental agencies in seeing that legitimate passengers are the only people allowed aboard.

The firm's veteran passenger agent, John Bailey, made four round trips to handle passengers and other details. The company surgeon, Dr. William Kenney, has made all the voyages.

All Nationalities

Commissary Officer M. C. Duguid has had probably the oddest feeding job in history because of the many nationalities carried. He has had to satisfy the gustatory likes of Japs, Thai, Germans, Italians, Poles, South Americans and almost any nationality you can name.

L. S. (Sam) Andrews, operating manager, bosses the whole thing from his office on pier F in Jersey City. Some of his problems include getting a crew of about 400 to sail the ship. Swedish crew members are not always available so Americans have to go along sometimes. That is how a Nazi spy, William C. Colepaugh, wangled his way aboard. Later, he deserted in Lisbon, fied to Germany and returned to America in a submarine.

To care for American, Canadian and British wounded soldiers, the Gripsholm carries about 50 male American nurses. There are four Swedish female nurses and on some trips American Red Cross social workers and nurses went along to help out.

Stories Are Many

Bailey brims with stories about his voyages. In Mormugao he supervised the embarkation of 1,500 passengers in 90 minutes. The Portuguese Colonial offistaring at the chicken incubator for a cials helped out by cleaning up the port long time, and finally turned around to in advance and diverting other shipping

> Some of Bailey's berthing problems are the segregation of passengers. The in-

By John A. Moroso, 3d, sane are put into special quarters. Peo- East Africa, with 1,090 Japanese and ple with contagious diseases are isolated.

Diplomats must have accommodations according to their rank. All nationalities receive the same treatment. The company carried huge

stores of rice, fish and chicken for the Japanese, then discovered that most of them preferred American food. The 553-foot Gripsholm was built at

Newcastle-on-Tyne, England, in 1924 and she was the first Diesel-engined passenger liner in Transatlantic trade. She was called "the smokeless ship" and her cruising speed was 17 knots-slow compared to present-day superliners. She was named for Gripsholm Castle, home of the Swedish kings, and made

known in the tourist trade between the United States, Sweden, Russia, Norway and South America. Her early career was marked by the rescue of a fishing boat crew in 1931 and a dining room fire in 1936. In 1938 she carried the Swedish royal family from

America to Sweden.

her maiden voyage to America in Au-

gust 1925. After that she became well-

The outbreak of the war caught the Gripsholm idling in Sweden. The United States State Department announced in April, 1942, that she had been chartered to exchange service with Japan, and neutral Switzerland was called upon to arrange for the exchange. It was a slow job with the Japanese stubborn and seemingly suspicious, but the Gripsholm finally sailed June 18, 1942,

bound for Lourenco Marques, Portuguese

Thai nationals aboard. Homesick and Hungry Americans were scheduled to leave Japan and the Philippines on the Asama Maru and the Italian liner Conte Verde about the same time.

At Rio De Janeiro the Gripsholm picked up 383 more Japanese, then Japanese Exchange headed around the Horn and arrived at Lourenco Marques July 21. American export line agents had reached that steaming port ahead of time and they minimum of trouble.

The Watch For Spies

En route home, 66 South Americans were dropped at Rio before the ship reached Jersey City August 25 with 1,453 Americans. These miserable peoplemany of them penniless-wildly cheered the Statue of Liberty before disembarking with 16,000 pieces of baggage that had to be minutely examined by customs guards.

On this trip the FBI had required passengers to fill out questionnaires at Lourenco and Rio and these were flown to Washington. When the ship reached New York, 400 special agents boarded her with 3,400 written reports on the background of the passengers.

America was taking no chance on spies filtering into the country under the cloak of refugee . . . a favorite Nazi The Gripsholm then laid up in the

Hudson River while diplomats arranged for another exchange. Not until more

than a year later, September 2, 1943, did she leave New York for Mormugao. Portuguese Indian port, with 1,346 worshippers of Hirohito. She also carried a huge cargo of food packages, medicines, clothing and vitamin pills for those still interned in Japan. At Rio she picked up 95 Japs and at Montevideo she took on 84.

The Teia Maru, meanwhile, left Japan with 1,500 American and Chileans. An American baby was born aboard as the ship sailed through waters watched by rushed through the exchange with a Allied submarines. The exchange went off at Mormugao without trouble and the Gripsholm came back to New York December 1 with 1,223 Americans, 217 Canadians and some South Americansa total of 1,494 passengers. On this 27,528-mile trip two persons died and one marriage took place. Since that Mormugao exchange the

> America and Europe. She made four round trips prior to V-E day, to Lisbon, Barcelona, Gothenburg, Sweden, and Marseilles, the last one ending in February, 1945. These voyages added 34,374 miles to

> Gripsholm's plyings have been between

her log. She returned 3,978 Europeans, mostly Germans, to their homelands and brought 3.915 passengers out of Europe. Many of these were wounded or ill soldiers. The closest call she ever had came

from an American submarine which sighted her through its periscope. The American lads were preparing to fire torpedoes when the sub skipper identified the Gripsholm.



Another peaceful mission is completed, and the liner Gripsholm proceeds up New York harbor toward its berth at Jersey City on March 15, 1944, carrying 663 American repatriates, some of m are shown lining the rails on the stern. The war-time routes of the Gripsholm were marked out for her, mile by mile, by the belligerent governments which granted her safe passage. She has sailed 85,000 miles on 13 voyages during the war.

On the wide open stretches of New York City's Bronx Zoo, there are five acres of real farm, where blase city folk see an authentic barn and barnyard where a donkey, mare, colt, goats, pigs and a couple of hundred chickens and ducks live happily. Every week, thousands of the city folk are packed into a hay wagon taxi and taken to the farm in the 200.

NEW YORK.-How are you gonna keep 'em down in the city, after they've seen the farm?

That's a problem in New York these warm days, now that the farm in the Bronx Zoo is open again for inspection. Every week, thousands of city folk are disgorged from subways, buses and trolley cars, packed into a hay wagon

-probably New York's only farm. They stare at Nelson Miller, 57-yearold farmer who lives on the premises, ply the two hired men with elementary queries on livestock and poultry, and explain to unbelieving offspring that that four-footed animal called a cow is where the milk really comes from.

taxi, and jounced to the farm-in-th-zoo

Real Farm Atmosphere Although it's only five acres, the zoo's

farm is completely authentic, even to the farmhouse bell, which is rung only in time of fire, flood, or other disaster.

By Arlene Wolf. Associated Press Staff Writer.

The atmosphere starts right at the entrance, where you walk through a real picket gate (the turnstile where you plank down your 8 cents admission and 2 cents tax is off to one side where it doesn't spoil the effect). At the gate, you can arm yourself, for 2 cents more, with a tiny farm dictionary that defines everything from "bull" to "whoa" in

simple city talk. Then you're ready to walk up a winding road past the dark red chicken house to the barn and barnyard, where a donkey, mare, colt, goats, pigs and a couple of hundred chickens and ducks live happily, completely unaffected by all the company.

Setting up a farm for urbanites to observe wasn't just a simple matter of finding some acreage, and borrowing enough livestock to make it look real-Actually Miller probably would reach istic. Zoo authorities understood that her girl friend. "What I can't under- from the port. for a phone—but it's the atmosphere many small things common to farm folk stand," she mused, "is how they know would be outlandish to New Yorkers. So when the chicken's hatched."

they combined the down-on-the-farm aspect with informative exhibits on farm matters—how milk gets from cow to consumer, the process of development of a chick embryo-and labels on everything. Even the fences bear signs: It's OK to sit on this fence and watch the

Fences to Sit On

"City people are so accustomed to being chased off fences," explains Dr. Leonard Goss, zoo veterinarian, "we felt we had to let them know these were

City folk have some pretty peculiar reactions to a farm, Nelson has found. One girl, for example, asked him to remilk the cow because she had missed the first performance.

And then there was the girl who stood