

THE PROPELLER



The propeller hangs from the air bag that lifted it off the bottom.

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Based on information supplied by:

Aruba Esso News
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Lago Colony web site
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&

THE DIVE TEAM IN ARUBA

All the proceeds from the sale of this book will be donated to the SS Oranjestad Memorial Committee, which is overseeing the construction of a monument in Aruba. This monument will incorporate the propeller taken from the lake tanker *SS Esso Oranjestad* and is to be dedicated to those civilians who lived and worked in Aruba and were connected with the production of vital gasoline needed for the war effort or the defense of the island and lost their lives as a result of enemy action during World War II. It is hoped that with this monument, those people and the tragedy of war will be remembered.

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The Dive Team

The Dive Team in Aruba that retrieved the propeller consists of the following persons:

Percy Sweetnam, Team Leader
Dick de Bruin
Rigo Hoencamp
Toine van der Klooster
Andre Loonstra
Paulus Martijn

Special Thanks

Special thanks to the following persons: Dufi Kock, for his help before and throughout this book, as well as his efforts toward a monument; Lad Mingus for suggestions; Toni Wilkinson for much needed editing; my dear wife Mary B. (BeBe); the helpful people at Lloyds in London; Anne Cowne, Jean Moreno and Kevin Norster for help with research on the *SS Esso Oranjestad* and the propeller's Lloyds Test stamp; my son Paul Jensen, for doing the cover design and my daughter Lise Bessant for reading over the manuscript before printing.

Of course, the Dive Team in Aruba. Had they not found and retrieved the propeller, this book and the monument would never have happened.

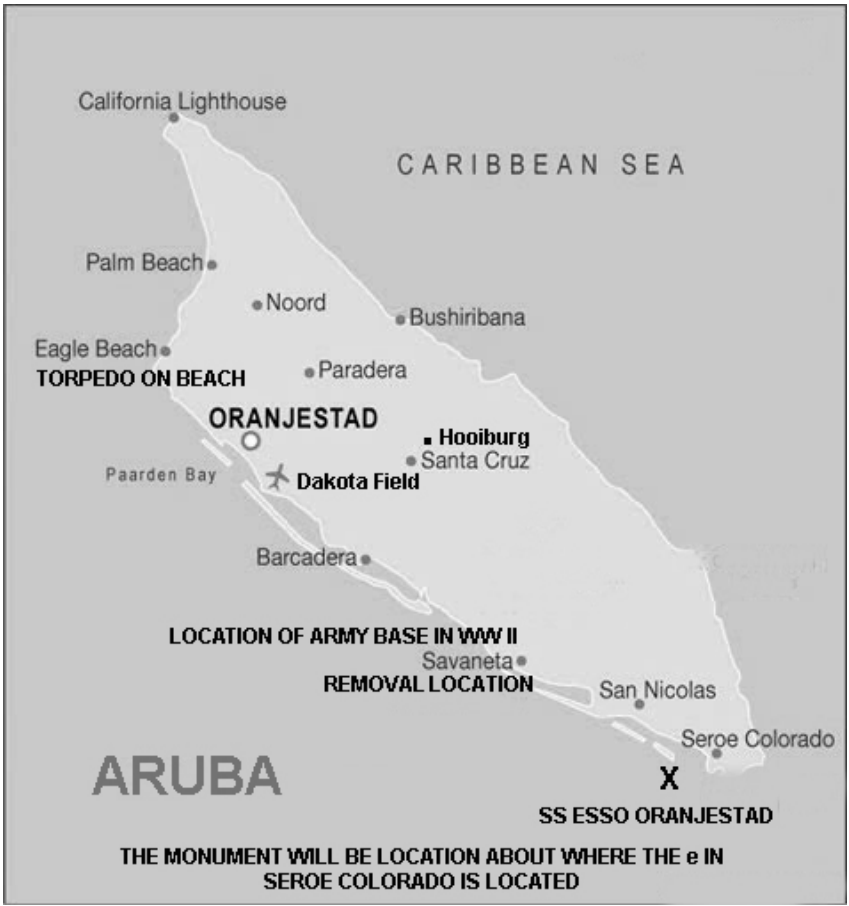
Photographs of the recovery have three sources, Dick de Bruin, Dufi Kock and Andre Loonstra. Other pictures came from my web site, www.lago-colony.com, to all those who contributed, thanks.

Dan Jensen

Warning About Deep Dives

To salvage this propeller, the dive team, all of whom were more than just sport divers, had to work in 225 feet of water. This is not considered a safe diving depth and should not be undertaken without special equipment and training. To learn more about the dangers of deep diving, see the article; "A Few Things Your Sport Diving Instructor May Not Have Told You about Deeper Diving" by Larry "Harris" Taylor, Ph.D., Diving Safety Coordinator, University of Michigan, Ann Arbor, Michigan. A reprint of his article is found at the back of this booklet. It has been reprinted with the permission of the author.

Map of Aruba



Shows the location of the *SS Esso Oranjestad*, where the propeller was removed, the Army base location in WW II, the location of where the un-exploded torpedo went on the beach, the intended location of the memorial and the airfield used by the Douglas A-20A aircraft. Hooiborg which was used as a reference point by the German submarine is also show.

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MISC. PHOTO: Conference on the dock. The air bag used for the lift can be seen rolled up on the dock to the left.



MISC. PHOTO: Percy on the dock

Introduction

The first time I heard about the plans to salvage one of the propellers from the *SS Esso Oranjestad* was sometime early in February 2009, when an email arrived from a man in Aruba whom I did not know. It turned out to be Dick de Bruin. This is his email, in part.

Hi, I'm Dick de Bruin, I live with my wife and two children on Aruba and have work on the marine base SAVANETA since July 2007. In my spare time, I'm a dive instructor and dive a lot every where around Aruba. After several dives on the PEDERNALES (what is left of it) and the ANTILLA, my interest for the World War 2 on Aruba awakened. I was searching for a diver on Aruba, who had dived on the lake tanker "SS ORANJESTAD".

That could have been difficult, because the wreck lies in 225 ft deep water, but after 6 months I found a retired Aruban international commercial diver named Percy Sweetnam. He told me that he is the only man that had really dived on the "SS ORANJESTAD"

After surfing the web it brought me to your website. Percy and our dive team (Paul, Toine, Rigo and Dick) have dived several times now on the wreck of the torpedoed "ORANJESTAD" (February and March '09). Percy shot the first film ever of the wreck with Paul last week and it is awe-inspiring to see it is still in good condition after 67 years.

We all ready contacted Dufi Kock and "Mr. Lago" Henri Coffi on Aruba. We did not know them, but read about them on your website. You wrote in newsletter 12, that Dufi Kock was lobbying for a statue of memorial for all of the seaman and other persons who died during the World War II serving the war effort...

We are going to try to bring one of the two propellers to the surface this month and bring it to the harbor. We want to give it to the people of Aruba for using it as a memorial. Dufi Kock was very excited about the idea and will contact other people about it, who can mean something for our idea. On the next dives we will shoot some more films and do our job to bring the propeller to the surface. We hope that the sea will cooperate and that everything will be happening this month.

So it seemed Dick and others had already made the dive to the *SS Esso Oranjestad* and this group, made up of Arubans and Dutchmen under the leadership of Percy Sweetnam, was planning to attempt to retrieve one of the propellers from the ship. Dick pointed out that the ship was about a quarter mile off the reef, in what we used to refer to as the second drop off, and lying in 225 feet of water. I understood that

Percy Sweetnam was a commercial professional diver and I assumed that the other team members were not professional divers, but sport divers planning to do this on their own. I felt Percy Sweetnam had the professional skill to lead the team, but a group of non-professionals was another matter. I also wondered how, without a backer to pay for a lot of sophisticated equipment, they would manage. The undertaking was very dangerous. It was not until later that I learned that the other members of the team had extensive experience in deep dives. Even with their prior experience, it seemed to me to be a very risky and dangerous adventure.

The next I heard about the adventure was when I received photos from Dufi Kock in Aruba showing the team suiting up, loading equipment on a boat named *Torpedo*, and going out to raise the propeller. There were also photos of the team after they returned, as well as a photo of the propeller sitting on a sandy bottom in forty feet of water. The next day, Dufi sent me a link to YouTube; the Team had released a video of their first dive on the SS *Esso Oranjestad*, before attempting the lift. Things were beginning to happen very rapidly. Over the following week the propeller was moved from forty feet of water to the bay at Savaneta (about four miles down the coast) and put into position to be lifted onto land. The final lift was scheduled for the following Saturday, April 18, 2009 at 11 a.m., a week after the initial lift. A press release was issued in Aruba, announcing the lift and at the advertised time a crowd gathered to witness the historical event, including a brother of a crew member who was lost the night of the attack.

After getting the story and first photos from Dufi, I began to document the recovery on my web site: www.lago-colony.com. When the video of the actual lift was released on YouTube, I added links to the video from my web site.

Subsequent to the propeller being placed at Percy's house, I began to think about doing this book. This is the result of that thought process, a document in which I have tried to bring together all the pieces that make up the story. Older people who were in Aruba before and during World War II know the first part of the story; others, the ones who watched the propeller come ashore, know the middle, I hope with the sale of copies of this book there will be an end; the monument will be built and the story will be complete.

I start with the background and specifications on the SS *Esso Oranjestad*, the ship from which the propeller came. I move to the design specifications, size and armament of the German U-boat that the enemy sent to Aruba to destroy the refinery, sink ships and, under

those orders from German High Command, fired the torpedo that sank the SS *Esso Oranjestad*. There is also information about the U-boat's sole surviving crew member who, by sheer coincidence, brought the story to light after the war. Incorporated into the book is the state of readiness -- rather, I should say, the lack of readiness -- with regards to the defense of Aruba on the night of the attack. Woven into all this are the unbelievable events that unfolded on the night of the attack that saved the refinery. There is also a section with photos on the salvage team's efforts to bring the propeller to the surface as well as the backgrounds on all the members of the dive team; how the team managed the dive and, working on a shoestring, funding the venture out of their own pockets without the aid of financial backers, using standard SCUBA equipment, not special deep diving equipment, they managed to get the propeller ashore.

It is a story of situations which tip the balance of war and, on the part of the courageous dive team, a tale of determination, daring, planning and hard work, as well as some very good luck.

Finally, I touch on the proposed use of the propeller and the desire on behalf of the dive team and many others to make the propeller a lasting monument to those who died because of the events told here.

If you have purchased this book, you have helped make that monument a reality and we all thank you. If you have borrowed the book from a friend and wish to make a donation, there are addresses at the end of the book where you can send your check.

Because there was considerable risk in this venture and others may decide to dive the *Oranjestad* after reading this account, I have included an article at the end of the book written by Larry "Harris" Taylor, Ph.D. about diving deeper than 130 feet, entitled: "A Few Things Your Sport Diving Instructor May Not Have Told You about Deeper Diving". This is included to forewarn those sport divers who may attempt a dive on the SS *Esso Oranjestad*. This is not a sport dive and is very dangerous.

On behalf of myself and all those who are involved in this project I thank you and hope you enjoy the story.

PS: In the way of clarification Lago refinery in Aruba was owned by Standard Oil of New Jersey, known as Esso at that time, and Lago Colony was the foreign staff community. It was built, operated, manned and maintained by the Company. The community consisted of

bachelor quarters, dining hall, family houses, accredited American elementary, middle and high schools, commissary, bowling alley, tennis courts and ball fields; membership clubs—small airplanes, golf, skeet, shooting range, yachts—boat and swimming docks and a large Esso Club, with movies, restaurants, dancing, bars, library and liquor sales. Services provided in the community consisted of barber shop, beauty shop, full service gas station, post office, hospital, dental office and police protection. There was also an American Legion Club for veterans after the war, a Junior Esso Club and a Youth Canteen as well as summer recreational programs for children. Lago Colony went into decline as refinery downsized. During this period the Name Lago Colony was dropped and the local name, Seroe Colorado replaced it.



MISC. PHOTO: Andre Loonstra sitting in the boat

The Ship's & Boat's Background

The *SS Oranjestad* was a twin-screw, shallow-draft, steam-driven oil tanker, also known as a lake tanker because she was designed and built for that specific purpose, to carry crude oil from the oil fields of Lake Maracaibo in Venezuela to the refinery in Aruba. This type of tanker drew 13 feet when fully loaded in order to allow it to pass over the shallow, continually shifting sandbars that blocked the entrance to the lake. This particular ship was built by Harland & Wolff, Ltd., shipbuilders, in their Belfast shipyard in Ireland and was launched in September 1927. She was manned by a crew of 26, a gross weight of 2,396 tons, 305.7 feet in length and a beam of 50.2 feet. She would carry 2,396 tons of crude oil or about 17,565 barrels, equal to 737,632 gallons.

As with all the original lake tankers, the *SS Oranjestad* was owned and operated by Lago Shipping Co., a subsidiary of Andrew Weir and Co. Ltd. of London, operating under a contract with Lago Oil and Transport Co. Ltd., a subsidiary of Standard Oil of New Jersey, to haul crude oil from Lake Maracaibo to Aruba. All officers on these early lake tankers were British Merchant Marine, primarily from Ireland and Scotland. The crew was made up of native West Indians recruited from the various islands. A large proportion of these crewmen were from Curacao, Bonaire, Saba and the British Caribbean islands. After being launched in 1927, *SS Oranjestad* crossed the Atlantic and began making the run between Venezuela and Aruba, carrying crude on each trip from Lake Maracaibo and returning under ballast for another load. She made approximately two trips a week depending on weather and availability of dock space. Each lake tanker took a little less than four days to make a round trip between Aruba and Lake Maracaibo. The actual trip from San Nicholaas harbor to the entrance of the lake took fifteen hours, but ships could not enter Lake Maracaibo after dark because, in those days, there were no navigational lights marking the entrance. When they returned to Aruba, they could not enter San Nicholaas harbor after dark because, again, there were no lights in this harbor to aid navigation.

To get an idea of the challenge facing these early lake tanker captains, I reprint a description of going into and out of Lake Maracaibo across the bar, written by Lake Tanker Captain F. C. Alexander.

"The Fairway Buoy to the seaward side of the bar was the only lighted one. When a master got his ship to its vicinity in the small hours of the morning, he usually had to maneuver around, invariably in a N.E. gale with a heavy sea running and with his ship in ballast, waiting for the first glimmer of dawn and

sight of the leading mark poles set up on the sandy shore to guide him over the outer bar. It was a weird and nerve-wracking experience going over the outer bar at the break of dawn until one got used to it. With a heavy following sea in the shallow water the breakers stretched for miles, and were as high sometimes as the rollers in a Western Ocean gale. In going over the bar it was nothing less than full speed, heading for the beach with a heavy surf just a matter of four or five hundred yards away and trying to hold the ship on mark. If the master got off the mark, he "had it".

"With a depth of water of only about 12 feet, in a heavy sea, the bumps were frequent and pooping was not uncommon. (For you landlubbers; pooping is a nautical term, that means: To take seas over the stern of the ship) On a rough morning it was not infrequent for most of the crew to be on deck and I can remember one morning when we pooped a big sea to hear wild yells from aft and glimpsed an avalanche of water coming through the port and starboard alleyways aft in which were submerged, men, dogs, deck chairs, pots and pans and ship's gear."

"A right angle turn to the east was made just before the ship hit the beach, which brought her into the buoyed channel, where one had to contend with traffic rolling and abnormal leeway with a weather beach just a ship's length away. Coming out with a loaded ship was a nightmare, for the maximum loaded draft then was 9 feet. Never was tide tables studied so carefully or height of tide problems so studiously worked out to the inch. It was usual to allow for 18 inches under the keel, an extra inch in draft represented a few more barrels of oil out of the lake, and this despite the fact that heavy seas might be encountered going out over the outer bar. The vessels just bumped their way out with never any apparent bottom damage. If a ship ran ashore, the pilots, splendid chaps all, invariably gave up in disgust and let it to the master to get the ship afloat again as quickly as possible. If he took a couple of hours to do this he would lose the high tide at the outer bar and be hours late in arriving in San Nicholaas, a little matter Captain Rodger did not appreciate if it happened too often." (Captain Rodger was the man in charge of the lake tanker fleet)

When the *Oranjestad* began her service, Aruba did not have a refinery. In those days crude was transported to the island, placed in storage tanks and then transshipped in larger tankers to refineries, primarily in the United States, where it was refined into asphalt, Bunker C, heating oil, kerosene, diesel fuel, and grades of gasoline in use at that time. It was not until 1928 that construction on the Aruba refinery started and over a year later before production began with very small runs. As the refinery expanded, so did production and by 1932, throughput increased to 100,000 barrels/day and by 1942, 228,000 barrels/day. This required a lot of additional lake tankers to feed the refinery.

The primary reason for Lago's refinery expansion arose in the mid 1930's when Standard Oil and Great Britain signed a contract for Esso to supply the British Air Force with high-octane gasoline for their new fighters with high-compression engines. The contract specified that this gasoline could not be produced in the United States because Churchill realized the isolationist U.S. could place an embargo on gasoline in the event of war. Thus, Aruba became the location to produce the high octane gasoline.

As the refinery expanded to fulfill this contract the fleet of lake tankers grew and were still built, owned and operated by Andrew Weir and Co. Ltd of London. However, in 1938, Esso decided to purchase the fleet from Weir and operate the ships themselves. With the transfer of ships to Esso, officers were placed on the dollar payroll and crewmen on the local Aruba payroll which used the Dutch Guilder. The ships were British registry; they were re-registered in Panama and repainted to the Esso colors, a white superstructure, black hull and Esso logo on the smokestack. The names used by Andrew Weir for the ships remained the same except preceded by Esso. Thus, the SS *Oranjestad* became the SS *Esso Oranjestad*. Although the names were officially changed, the officers, crew and general public continued to refer to the ships by their Weir names.

Lake Tanker SS *Esso Oranjestad* continued in this service until 1942 when, in the early hours of February 16, while the little ships lay at anchor off the coast of Aruba, they were attacked by a German U-boat. First SS *Esso Pedernales*, under the command of Captain Herbert McCall, was torpedoed and then within minutes SS *Esso Oranjestad* was also hit by a torpedo fired by the same U-boat. The SS *Esso Pedernales* burned and some of the 26 men who made up the lake tanker's crew lost their lives, but she did not sink. Such was not the fate of the *Oranjestad*. After being torpedoed, she burned for about an hour and then sank in 225 feet of water 400 yards off the reef where she was anchored. This is the same reef that protected the lagoon east of the refinery. Fourteen of her crew lost their lives that night.

The U-boat's log shows that the attack occurred on February 16, 1942 at 01:22 hours, Aruba time; while most of the crew members were asleep in their bunks. (You will note that the U-156 log at the end of this story was kept in Greenwich Mean Time.)

When the *Pedernales* burst into flames, the second officer of the *Oranjestad*, who was on watch, informed Captain Herbert Morgan that the *Pedernales* was burning. Captain Morgan gave the order to weigh

anchor and get under way; he then proceeded to get dressed and don his life vest. Two minutes later and before the *Oranjestad* could make way, she was hit by a torpedo and, being loaded with crude oil, burst into flames. The torpedo hit between mid-ship and the aft separating the officers, who were housed mid-ship, from the crew, housed aft. The torpedo rocked the ship and threw men to the deck, breaking bones and causing other injuries. Despite the flames burning their skin and their broken bones, officers and some crew were able to reach the bow of the ship; others made it aft where they waited, all helpless to save the ship. As the ship sank beneath the surface, all hands on deck were washed into the sea. All were wearing life vests except the second mate; he did not have time to don his vest. He was washed overboard with the others, but in the dark, men were separated and he was lost. Fourteen members of the crew lost their lives. By daybreak Dutch patrol boats were out looking for survivors and ten were found floating in the oily water and taken back to Aruba; many had burns and other injuries that required they be taken to the Lago Hospital.

Captain Morgan had joined Lago Shipping sometime in the early 1930's and served as the First Mate aboard the *SS Invercaibo*, one of the original lake tankers to bring crude to Aruba. In 1935 he was sent to Kiel, Germany, where the *SS Andino*, another lake tanker ordered by Lago, was being built. He was present for the launch and commission of that lake tanker and was part of the crew that put the ship through her shake-down cruise before taking her to Aruba. By the time the *SS Andino* was built, the Nazis had come to power in Germany and the swastika was flying from all the flagpoles in the dockyard. Now, as the skipper of the *SS Esso Oranjestad*, he was being attacked by a submarine flying that same swastika.

This attack had been planned in Germany with the intention of destroying the refinery and the small, shallow draft tankers that fed it. Germany realized that without tankers, the refinery would have no raw material to process, nor could the raw material be transported to other operational refineries. They also realized that the high-octane gasoline produced in Aruba was critical to the air war fought over England. Because this gasoline was a higher octane than the Germans produced, Spitfires and other planes of the Royal Air Force were defeating the much larger Luftwaffe. This high-octane gasoline, which gave the British aircraft more power and speed, was allowing Britain to rule the skies. Germany wanted to stop the flow of this "super" gasoline and thus turn tables on the British. With this objective, Operation Neuland, a U-boat task force, was assembled and sent to the Caribbean for the sole purpose of destroying refineries and disrupting crude delivery. U-Boats were outfitted with special deck cannons in

order to shell and destroy refineries. The plan was that when the refineries were destroyed, submarines would submerge and torpedo the ships that supplied refineries. The German High Command based these orders knowing the lake tankers carried no armament with which to strike back against the subs while they shelled the refineries.

U-156 was part of Operation Neuland and assigned to Aruba.

A.G. Weser of Bremen, Germany, started building U-156 on October 11, 1940 and launched her on May 21, 1941. On September 4, 1941 under the command of Captain Werner Hartenstein she was commissioned. A type ISC Long Range Attack Boat that carried a crew of 53, she was 252 feet long, with a beam of 22 feet and drew 15 feet of water when running on the surface. From keel to the top of her conning tower the distance was 31 feet. Her top speed on the surface was 18.3 knots, powered by a 4,400-horsepower diesel engine. Submerged she had a top speed of 7.3 knots using a 1,000-horsepower electric motor. Range was 11,000 nautical miles at 12 knots on the surface and submerged she could run 63 nautical miles at 4 knots before having to surface to charge her lead batteries. For armament she carried 25 torpedoes. Six of these were carried in the U-boat's tubes ready for firing. Nine were stowed under bunks, and ten were in watertight compartments available only from deck when the boat was on the surface. In addition to the torpedoes, the boat had a 105-mm deck cannon that fired 51-pound projectiles. These were high explosive and/or armor piercing. This cannon was loaded by hand and thus could fire as fast as the crew could load. The range the projectile could be fired was 16,787 yards or 9.5 miles. In addition to the deck cannon the boat carried a 37-mm cannon on deck which fired a 1.6 pound round with a high-explosive head. It fired automatically at a rate of 50 shots per minute. The range was about the same as the 105-mm cannon. In addition to the two cannons, the boat was fitted with a 20-mm anti-aircraft gun which fired a projectile only .71 of a pound in weight at a rate of between 220 and 480 rounds per minute. The range of these small projectiles was 13,500 yards or 7.6 miles.

Prior to her patrol to Aruba U-156 was in the sub pens in Lorient, France, where she was loaded with torpedoes, fuel, food and tropical uniforms to make ready for the Atlantic crossing. On January 19, 1942, the boat left its French harbor and headed east and south; only the captain knew they were to attack and shell the Lago refinery. On February 13, three days before reaching Aruba, Captain Hartenstein received a coded radio message from German High Command rescinding the first orders he had received at sailing. The new orders read:

The principal assignment is to first attack shipping targets. If attacks on shipping were successful, the U-Boat should commence an artillery attack against the refinery.

Under these new orders, Captain Hartenstein brought the war to Aruba. After torpedoing two lake tankers, the *SS Esso Pedernales* and *SS Esso Oranjestad*, U-156 surfaced three quarters of a mile off the coast, directly in front of the Lago refinery. The refinery was operating under normal conditions; no one suspected a German U-boat attack. (The following day Aruba began to observe total blackout and did so for the remainder of the war.) The captain, officers and crew of U-156 were ecstatic; they had made two successful kills with torpedoes and now, thanks to the powerful 105-mm deck cannon and its well-trained gun crew, the refinery would soon be in flames.

The submarine broke the surface of the calm Caribbean and with decks still awash, hatches were opened and excited Gunnery Officer Lt. Dietrich von dem Borne and his willing crew scrambled to load the cannon. Lt. Dietrich von dem Borne gave the order to FIRE!

As soon as the gunner pulled the cord to activate the firing mechanism, the cannon exploded, killing the gunner and throwing Lt. von dem Borne against the conning tower, his foot and ankle shredded by shrapnel. In its excitement to shell the refinery, the gun crew had failed to remove the plug from the end of the cannon's muzzle. This plug was a watertight fitting that prevented seawater from entering the bore when the sub submerged. When struck by the 51 pound exploding shell, the shell detonated, blowing apart the end of the heavy steel barrel. Without a deck cannon, there could be no refinery attack. The sub did fire some 20-mm anti-aircraft shells at the refinery but they bounced off storage tanks, doing little damage. One 20-mm shell hit a bachelor quarter but no one was hurt. Some landed in the yards of people living behind the refinery, but again no one was hit and no damage done. The dead gunner and wounded officer were taken below, the submarine submerged and continued to the west end of the island. There they found an empty tanker, the *Arkansas*, tied up to the Shell refinery pier. They fired four torpedoes; two went out to sea, one struck the *Arkansas*, causing little damage to the empty ship and the fourth torpedo strayed onto Eagle Beach. The following day, Dutch Marines tried to disarm the live torpedo, but it exploded, killing the four men.

The captain felt they had done enough damage for one night; he was worried about a counterattack and he had a wounded officer in need of medical attention. The pharmacist's mate managed to stop the bleeding, but there was nothing else he could do. Captain Hartenstein

radioed Germany for permission to take the wounded man to Martinique, then under the control of the Vichy French. Permission given, U-156 left the area and traveled northeast. On February 21, Lt. von dem Borne was placed in a French naval hospital in Martinique where his foot was amputated. The submarine left Martinique for a return trip to Germany, most of its torpedoes having been fired and the deck gun thought to be useless until the captain examined the cannon and decided to have the ruined portion of the muzzle removed. Using only a hacksaw the cannon was shortened and with this modified weapon U-156 attacked a British ship on the 27th of February. The cannon functioned and U-156 was able to sink the 2,498-ton British vessel, *Macgregor*. As for Lt. Von dem Borne, he recovered and remained in Martinique for the duration of the war. Repatriated at war's end, he found work in an Esso service station as an attendant.

When U-156 reached home, the boat's log was turned over to the German Naval Authorities, repairs made and again loaded with torpedoes, fuel and supplies she returned to the Caribbean. In her short career the sub managed to complete a total of five patrols, sinking 20 ships, for a total of 97,504 tons, including the SS *Oranjestad*. She damaged three ships with a total of 18,811 tons and damaged one warship of 1,190 tons. On her last patrol, on March 8, 1943, she was running on the surface just east of Barbados when sighted by a US Catalina flying boat (VP-53/P-1). The flying boat dropped three depth charges. Two were direct hits. The boat broke in half and sank. All 53 hands were lost.

Another interesting aspect regarding the day of the attack was the state of readiness for the defense of Aruba. On that particular day Aruba was defenseless. Three days prior the Scots had left, the Americans arrived and as yet no gun emplacements had been built.

Aruba was a Dutch island and at the outbreak of World War II law and order was maintained by a police force made up of Dutchmen from Holland; there was only a small military presence on the island. On May 10, 1940, Holland was invaded by Germany and the Dutch Queen, Wilhelmina, managed to escape to England, where she set up a government in exile in London. With the Germans occupying Holland, the English began to worry about the possibility of Germany invading Aruba and cutting off their supply of high-octane gasoline from the Lago refinery. The British, with the approval of Queen Wilhelmina, decided to send British troops to defend Aruba. On September 3, 1940, troops of the 4th Battalion, The Queen's Own Cameron Highlanders, arrived in Aruba to defend the island although they lacked any armament other than rifles. They set up camp in Savaneta and stayed

in Aruba until the United States entered the war in 1941. With the U. S. entry, it was decided that America, after they had trained troops, would take over defense of the island and the Cameron Highlanders would return home. The training of new troops took time and details of the rotation had to be negotiated, so it was not until February 13, 1942 that the 252nd and the 498th Coastal Artillery, consisting of 40 officers and some 800 men, arrived in Aruba. They moved into the camp at Saveneta vacated by the departing Scots. In addition the 12th Bombardment Squadron and the 32nd Fighter Squadron were assigned to the island. The SS *Florida*, the troop transport that carried the Americans to the island, carried the Cameron Highlanders off the island for their trip back to Britain, via New York.

When the troop transport brought the men it was accompanied by an American military supply ship, the *Major General Henry Gibbons*, bringing equipment, supplies, heavy armament and 3,000 tons of ammunition for the American troops. The transport ship left with the Scottish troops the same day it arrived, but the supply ship was still in San Nicholaas harbor as she had only just been unloaded. Most of the munitions were still on the dock the morning of the U-boat attack. The Americans had three Douglas A-20A light bombers stationed on the island at the time of the attack and these planes were the only defenses available. The A-20A's were not submarine hunters and not equipped for anti-submarine warfare; they carried no depth charges and were not fitted with radar. Furthermore, the Dakota airfield was gravel and there were no lights. Nonetheless, about an hour after the attack, one of the A-20A's managed to take off, followed by the other two in one-hour intervals. One of the planes dropped a flare in the vicinity of where they thought the submarine may have been.

Since they were not long-range aircraft they could not remain airborne until daylight and were thus forced to land in Venezuela. The landing of military aircraft on Venezuelan soil caused some political turmoil between the United States and Venezuela as Venezuela was neutral and required twenty-four hours notice of any military airplane's arrival. There had not been sufficient time to honor that protocol.

As there was no attack on the refinery by the submarine, the Army credited the A-20A aircraft with scaring off the submarine.

After the attack there was much speculation in Aruba about what prompted the attack. The general feeling was the Germans had been told of the Americans' arrival and the submarine's intended mission had been to torpedo the troop transport; but because they were misinformed about the arrival date, the submarine arrived three days

late. Realizing they had missed the troop transport, they torpedoed the lake tankers and left. This speculation caused rumors to circulate about German spies being present in Aruba. This remained the reason given for the attack until long after the war was over.

After the war an employee of Lago refinery was on vacation in Holland. His car had been loaded onboard the tanker that took him and his family to Holland. While in Holland, the family drove into Germany and in a German gas station, an attendant saw the Aruba license plate and remarked, "Aruba, that is where I lost my foot." Hearing this, the Lago employee questioned the attendant, who turned out to be Lt. von dem Borne who told his story of the exploding cannon, being dropped off at Martinique, having his foot amputated and spending the remainder of the war there. The mystery about the attack was solved!

When the employee returned to Aruba and related the story to Lago's management, they in turn had Esso management in New York contact the British Admiralty, as they had taken possession of captured German U-boat logs after the war. The log of the patrol to Aruba was found and the story told by von dem Borne confirmed.

At the time of the attack on Aruba, other U-boats were engaged in attacks on other lake tankers and ships in the area. That same night, Lago tankers *San Nicholaas* and *Tia Juana* were both attacked off the coast of Venezuela and sent to the bottom of the sea with loss of life.

This sinking of four lake tankers caused the Lago refinery to cut production, a decrease of 125,000 barrels of crude a day. This loss of production continued for the rest of 1942 until new lake tankers could be built. By 1943, seven new lake tankers had been built in the United States and were put in service in Aruba. With these new ships, production was again up to 225,000 barrels/day and by 1945 production reached 300,000 barrels/day. During the entire war years, 1940 to 1945, Lago continued to operate around the clock; vacations were suspended and the refinery operated without the benefit of any downtime for maintenance on any of the units.

During World War II the Lago refinery produced 26 percent of the total oil production for Standard Oil of New Jersey. The shipping tonnage out of San Nicholaas harbor was greater than the wartime tonnage shipped out of New York harbor. But unlike the New York harbor, which shipped all and every type of material, the San Nicholaas harbor shipped only finished petroleum products.

Based on Lago's wartime production and its significant contribution to the war effort, had U-156 been completely successful and carried out all the orders to destroy the Aruba refinery, the outcome of World War II may well have been different.

The Germans may not have destroyed the Lago refinery, but the war did. In order to keep crude flowing at a maximum during the war, Standard Oil and the Venezuelan government reached an agreement that doomed the Aruba refinery. Venezuela would continue to provide crude oil for the refinery, at peak capacity for the duration of the war, but after the war, Standard Oil agreed to build new refineries in Venezuela in order to provide much-needed employment for the Venezuelan population. The Lago refinery continued to operate after 1945, but over the years production fell as new refineries were built in Venezuela and less crude was exported to Aruba for refining.

In 1985 Standard Oil closed the Lago refinery; there was a glut of refining capacity in the world and the refinery was no longer profitable. The refinery remained closed for about eight years and then was purchased by Coastal Petroleum. Coastal has since sold the refinery and it is now owned and operated by Valero Energy Corporation, headquartered in San Antonio, Texas. This refinery, located on the south shore of the east end of the island and away from the tourist area, is not nearly as large as it was during World War II.

During all this time, the *SS Esso Oranjestad* sat on the bottom of the sea, a forgotten relic of a bygone time.



MISC. PHOTO: Captain Herbert McCall, in command of the *Pedernales* the night she was torpedoed. He also commanded the ship on her trip to Baltimore, Maryland for repair.

The Retrieval of the Propeller

Now the story jumps forward to the year 2009.

The position where the *Oranjestad* sank was well documented, both by the skipper of the German U-boat as well as the captain of the *Oranjestad*. It was 12.25N, 69.55W, so finding the ship was not a problem; however the depth of the water, the strong current and normally choppy seas, was.

Over the years, Percy Sweetnam, a professional and certified diver, dove to that depth and had seen the *Oranjestad*. When persons who frequented Andre Loonstra's dive shop began talking about diving on the *Oranjestad*, they sought out Percy because he had made the descent in the past. On the first dive, Percy, who was appointed team leader, took the team consisting of Dick de Bruin, Rigo Hoenkamp, Toine van den Klooster, Andre Loonstra and Paulus Martijn, to the ship. On this dive it was Dick de Bruin who noticed that the propeller was broken free from the shaft on the port (left) side and no longer attached to the shaft. How this had happened was anyone's guess at this point, but because it was free, it could possibly be lifted off the bottom.

After that dive the group met in Andre Loonstra's shop, and Dick mentioned that he thought the propeller had broken free of the shaft. This turned the discussion to how they could possibly recover the propeller and bring it ashore. This brought up the problems they would encounter and how they could be overcome. This was to be no easy task and they all knew it. They were not professional divers; they did not have sophisticated equipment at their disposal, unlimited resources or a sponsor. What they did have was a lot of determination. As they discussed the feasibility of raising the propeller, it seemed they found more and more problems that had to be overcome. But with time and ingenuity, they solved them all.

The questions included: What would they use to lift the propeller? How long, at that great depth, without special equipment, would they be able to remain on the bottom? How long would they need to decompress in order to safely return to the surface? These and numerous other unknowns had to be answered before they could undertake the task.

It was decided that air bags were the only feasible means to raise the propeller. Then the question was how many would be needed and what size? How much did the propeller weigh? No one knew for sure.

Where could these air bags be obtained and how much would they cost? And who would pay for the air bags? In the end, the entire expense of lifting the propeller was absorbed by the members of the dive group. Some of the material and equipment used in the recovery was donated, but most was supplied by the team members themselves.

As all these questions were being asked, someone asked; "What do we do with the propeller when we get it ashore?"

That question prompted them to think about a monument to all the men who had died on the SS *Esso Oranjestad*, which brought up all the other persons who had died bringing crude oil to Aruba during World War II as well as those who had died defending the island. They decided that the propeller should be the focus for a monument. A monument to: "*Those who died serving in Aruba in World War II.*"

Andre Loonstra, one of the members of the dive team, had something to say about the dive. He was answering a question asked by another SCUBA diver, someone who lives in the U.S. and had emailed Andre with questions about the dive. Here is what Andre wrote:

I am the guy that emailed you earlier about the salvage. I will try to answer your questions. First of all, the prop was already loose. If you look closely at the video you can see it leaning against the end of the shaft. We first assumed it broke off when the ship hit the bottom, but when you look at the video you can see that the shaft and support struts are not bent, so I believe someone cut it off, and never did the actual salvage. Lucky for us. Once we have the prop on land we will examine the break to see what happened. Percy dived the wreck many times over the years, but it was Dick who noticed the propeller was not attached to the shaft. Percy, Dick and I were talking about the dive at my dive shop when Dick mentioned it. It was at that point that we came up with the idea to bring the prop up and donate it for a memorial. As for the diving, the team did a total of 14 dives on air using regular scuba equipment with redundant setups. (Double tanks and regulators with safety bottles at 20 feet.) Most of the dives were 15-18 minutes from beginning of descent to beginning of ascent. With an average total deco times of 75 minutes, I actually only went on one dive on the wreck to 200 ft for 15 minutes and decompressed as per my dive computers recommendations for 2 minutes at 40 ft, 4 minutes at 30 ft, 8 minutes at 20 ft and 24 minutes at 10 feet for a total dive time of 58 minutes when you add the ascent times. I actually could have come up much faster because I used a 50% Nitrox mix for decompressing, but I still used the air deco times for a big safety factor. The new dive computers are great, because they figure all the stops out for you, but at those depths we still had the dive plan on a slate in case the computer fails. The dives were

extremely demanding, with high danger factors. We are very proud to have pulled this off with no incidents. The team barely knew each other before the project; we ended up working together like a well oiled machine, and are now good friends with a special bond. This was one of these things that you do on a lark but it was a once in a lifetime adventure that you never forget.”

After the propeller was on land Andre again wrote to the fellow SCUBA diver in the States saying this about the broken shaft:

“We took a quick look at the shaft piece inside the prop, and it looks like it broke, or corroded off. It actually looks like the shaft might have been made of steel with a cover or layer of Stainless steel. I took some pictures (of the shaft) that I have tried to attach, but it won't let me send them (too big). I will try to have my wife send them from her computer.”

Now that the propeller is on land, additional funding, selecting a site for the monument, and obtaining government approval will begin. Then design and construction of the monument can commence. There are challenges facing the team, but as they have shown already that they are resourceful and determined.

It will probably be some time before there is an unveiling of the monument. In the first phase of this operation (the raising of the propeller) they had only themselves to deal with. Now they have to involve many others and this may slow the schedule. I am convinced they will take the project to completion and one day when you drive to Baby Beach you will see the propeller incorporated into a beautiful monument dedicated to those who sacrificed all during World War II.



Douglas A 20A Light Bomber



Scottish Troops



Remains of *Pedernales* mid-section

Dick de Bruin's Dive Diary

This is Dick de Bruin's diary which he kept on the dives made in preparation for the retrieval of the propeller. This is his introduction and day-by-day account of what happened:

In 2008 I met colleague Rigo Hoencamp on my work at Marine Barracks Savaneta. We were both divers and after talking with Rigo we found we were both unshakable in our determination to find and dive to the SS Oranjestad.

I found a boat and a captain, but when he found out how deep we would make our dives and he was afraid that he would be responsible for a dive accident, so we had to search for another captain with a boat.

At 26-01-09 I was diving with two of my dive students from Baby Beach to Rodgers Beach. At the dive exit point at Rodgers Beach I met Paulus Martijn for the first time, where he was coming back from a fishing trip with the "Torpedo". I asked him if it was possible to go with his boat to a wreck just in front of the refinery and he was surprised because he had no idea that there was a shipwreck out there. We made an appointment to go on Sunday 02-02-09 @07.00 hrs.

When we (I, Rigo Hoencamp and Toine van der Klooster) left Rodgers Beach by boat we had not the exact coordinates of SS Oranjestad. We went out to the 225 foot depth and didn't see anything that looks like a shipwreck!

A little disappointed we left and later that week I spoke with Andre Loonstra. He told me to call commercial diver Percy Sweetnam, Andre felt he could help us to find the wreck, because he had dived 6 times on SS Oranjestad a few years ago. I couldn't believe my ears, when Andre told me that Percy's age is 67 years old, smoking cigarettes and still doing deep dives with heavy double tanks! We called Percy on his mobile number. What all happened after that unforgettable conversation is history now!

DICK'S DIVE DIARY

Dive 1

Date: 08-02-09

Divers: Percy Sweetnam, Joubert Sweetnam, (family to Percy Sweetnam) Rigo Hoencamp, Dick de Bruin and Toine van der Klooster were on the trip but missed the dive to the ship.

? a.m. – ? a.m.

Details:

Dive time 15
Total dive time 75
Depth 225 feet /69 meters

Because of an extreme strong current Dick missed the anchor line 2 times. Dive Buddy Toine ascended to the surface, because he can't descent without Dick. Percy and Rigo were on the wreck and came separately to the surface. Only Percy Sweetnam, Rigo Hoencamp & Joubert Sweetnam logged this dive.

Dive 2

Date: 10-02-09

*Divers: Percy Sweetnam, Toine van der Klooster, Dick de Bruin
10.57 a.m. - 12.16 p.m.*

Details:

Dive time 15
Total dive time 79
Depth 223 feet / 68 meters

We were lucky this time, because there was almost no current. After the big disappointment of the first try to reach the SS Oranjestad Toine and Dick made an appointment with Paulus and Percy to dive again as soon as possible. When we came at the wreck we saw a big bull shark swimming fast away. Toine and Dick were very happy, because we saw the whole wreck in one single dive. Dick noticed that the port side propeller was broken off its shaft. Later during the dive Percy caught his meal for the lunch: A giant spiny lobster. In the next dive the team hopes to confirm that what Dick saw was correctly, because it could have be an imagination caused by a nitrogen narcosis.

Dive 3

Date: 15-02-09

*Divers: Percy Sweetnam, Toine van der Klooster, Rigo Hoencamp, Dick de Bruin
09.55 a.m. - 11.07 a.m.*

Details:

Dive time 15
Total dive time 72
Depth 225 feet / 69 meters

Extremely strong current, with a very high risk of danger! It wasn't possible

to hold our face in the direction of the current, because it pushed the push button of the regulator and started to free flow continuously. After a slow descent to the stern of the shipwreck we went to the propeller and all noticed it together, Dick was not hallucinating on the last dive, it had broken off from the shaft. We also estimated the possibility of salvaging of the propeller. What was scary was, that during the decompression stops, the anchor line released from the wreck. In spite of what happened everybody completed the rest of their decompression stops.

Dive 4

Date: 18-03-09

Divers: Percy Sweetnam, Toine van der Klooster, and Dick de Bruin

08.02 a.m. - 09.33 a.m.

Details:

Dive time 16

Total dive time 91

Depth 225 feet / 69 meters

Strong current! They measured the size of the propeller to estimate the propellers approximate weight. All three divers together were trying to get a movement of the propeller. This was a mission impossible, because of the weight and one of the four blades was stuck in the sand.

Notes: We need to know the suspected weight of the propeller, so Dick e-mailed the shipyard Harland & Wolff in Belfast, the builder of the SS Oranjestad. Nice to know is that this shipyard was the builder of the TITANIC. They could not help us, but a phone call of Percy was successful. He called a seller of propellers in the USA. When Percy gave him the diameter, we got the answer. Our propeller weighs approximately 1,500 to 1,600 kilograms. So Andre Loonstra ordered a 4,000 pounds lifting airbag (SUBSALVE) in the USA.

Note: The propeller weight was 1,500 to 1,600 kilograms but the broken piece of shaft added some weigh which we did not calculate when we ordered the air bag. In the end we concluded the total weight was approximately 1,600 to 1,700 kilograms.

Dive 5

Date: 19-03-09

Divers: Percy Sweetnam, Paulus Martijn

?? a.m. - ?? a.m.

Details:

Dive time ?
Total dive time ?
Depth 225 feet / 69 meters

Percy dived with Paulus and made the first film shots of the SS Oranjestad ever. Also they measured the size of the propeller again and the distance from the propeller to the deck.

Dive 6

Date: 26-03-09

Divers: Percy Sweetnam, Toine van der Klooster, Marco Schouten, Dick de Bruin

11.10 a.m. - 12.20 p.m.

Details:

Dive time 16
Total dive time 70
Depth 225 feet / 69 meter

Placed chains on the starboard stern, were we fastened a line to place a surface sea buoy. We were very lucky that dive, because there was a little to no current this day. Unfortunately the buoy disappeared after a few days, when the strong current came back.

Dive 7

Date: 28-03-09

Divers: Percy Sweetnam, Toine van der Klooster, Paulus Martijn, Dick de Bruin

08.57 a.m. - 10.10 a.m.

Details:

Dive time 15
Total dive time 73
Depth 225 feet / 69 meters

Very strong current! Placed 2 steel slings at the propeller. These were extended with lifting links above the stern deck and held in position by a small airbag. Percy placed a big rope round a bollard of the SS Oranjestad to stop

the lift of a bigger airbag in the future. We noticed that the rope was just a few feet to short.

Dive 8

Date: 06-04-09

Divers: Percy Sweetnam, Dick de Bruin

09.23 a.m. - 10.31 a.m.

Details:

*Dive time 15
Total dive time 68
Depth 225 feet / 69 meters*

Strong current. We changed the position of the 2 steel slings at the propeller blades. We took a small anchor which we had lost from our boat "Torpedo" to the surface by using a small airbag.

Dive 9

Date: 07-04-09

Divers: Percy Sweetnam, Dick de Bruin

09.30 a.m. - 10.40 a.m.

Details:

*Dive time 11
Total dive time 70
Depth 225 feet / 69 meters*

Very strong current! We took a big 4,000 lbs airbag to the wreck and placed it on the lifting links. The airbag came in position with 2,400 liters of air. Checked the 2 steel slings at the propeller blades for the last time.

Dive 10

Date: 08-04-09

Divers: Percy Sweetnam, Dick de Bruin, Toine van der Klooster, and Andre Loonstra

15.52 p.m. - 17.09 p.m.

Details:

Dive time 16

Total dive time 77
Depth 225 feet / 69 meter

Strong current. Extended the big rope we placed on 28-03-09 round a bollard of the SS Oranjestad to stop the lift of the big airbag. We changed the connection between the big airbag and the lifting links. First we made the airbag empty, and then we blew 4 bottles (80 cu. Ft.) 9600 liters of air in the airbag. There was still no lift. We checked all the lifting gear before returning to the surface.

Note: The shaft in the propeller hub which had not been calculated for with the original lift bag was the cause.

Dive 11

Date: 09-04-09

Divers: Percy Sweetnam, Dick de Bruin

15.43 p.m. - 16.54 p.m.

Details:

Dive time 15
Total dive time 71
Depth 225 feet / 69 meters

Strong current. Tried to place an extra lifting link, but it was unsuccessful; it was 4 inches to short. We put 1 bottle (80 Cu. Ft.) 2400 liters of air in the lifting bag. YES, the propeller blade drawn out the sand and left the shaft. Even at 225 feet, we screamed together from the discharge of joy! Percy escaped some air out of the airbag and when he did so the propeller settled and landed next to the SS Oranjestad (portside).

Dive 12

Date: 11-04-09

Divers: Percy Sweetnam, Dick de Bruin

09.53 a.m. - 11.02 a.m.

Details:

Dive time 11
Total dive time 69
Depth 225 feet / 69 meters

Strong current again today. We checked the stop rope again with a test lift.

Put 2 bottles (80 cu. ft.) 4,800 liters in the airbag. We also took an old anchor line from the stern with us to the surface.

Dive 13

Date: **13-04-09**

Divers: Percy Sweetnam, Dick de Bruin, Rigo Hoenkamp, Toine van der Klooster

Percy & Rigo ??:?? a.m. - ??:?? a.m.

Dick & Toine 10.21 a.m. - 11.23 a.m.

Andre & Melvin ??:?? a.m. - ??:?? a.m.

Details:

Dive time 11

Total dive time 62

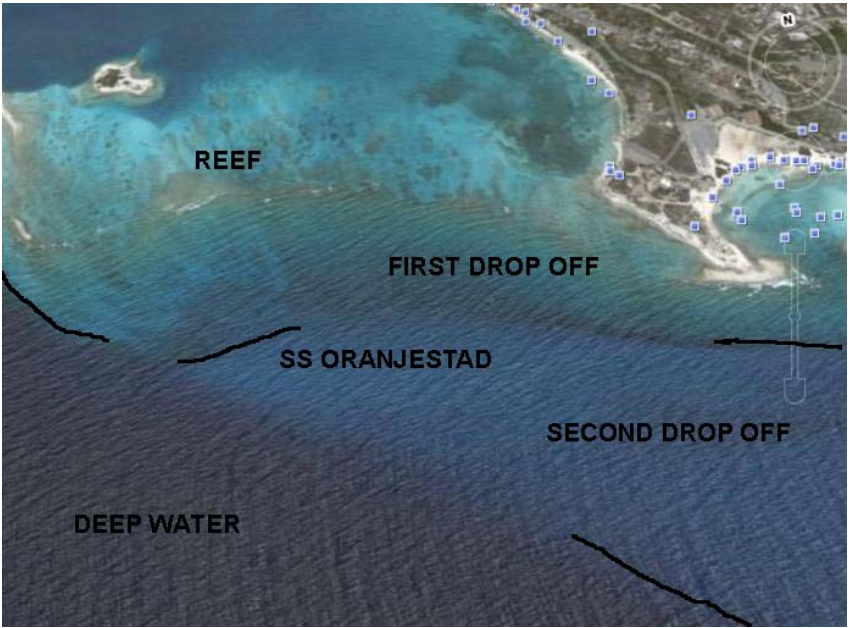
Depth 225 feet / 69 meters

Very strong current! This day was really a historic day, like 18 April when the propeller was hoisted up by crane out of the sea. A TV camera crew from Tele Aruba was on the location in our boat the "Torpedo". Andre Loonstra filmed the lift of the airbag under water. Also Historian Dufi Kock appeared on the pier to explain, what happened 67 years ago with the SS Oranjestad. Andre Loonstra filmed the final lift of the propeller on a depth of 40 to 60 feet. The safety diver Melvin Theuvenet was with Andre.

Percy and Rigo placed an extra lifting bag beside the main lifting bag and put 1 bottle (80 cu. ft.) 2,400 liters air in it. Dick filled the extra airbag with 1 bottle (80 cu. ft.) 2,400 liters air and Toine cut the stop rope with his dive knife. Dick swam away as fast as possible, because the propeller started to ascent very quickly.

Note: The smaller extra lift bag was added to compensate for the stub section of shaft in the propeller hub. The rest of the project was already on the web site www.lago-colony.com. On 17-04-09 took the shallow water transportation place, when the propeller was moved from where we had left it in 40 feet of water to in front of Percy's house. Percy and Dick worked another full day to transport the propeller from Percy's house to the exit point, between Brisas del mar and Zeerovers.

To do this Percy and Dick placed the big airbag on the propeller and also 4 barrels: one on each propeller blade and fill them with air so it was floating. Now that we have done the transportation to the exit point, everything was ready now for the lifting by a crane the next day; 18-04-09.



MISC. PHOTO: This Google map of the area shows the reef, first drop off and the second drop off, before reaching deep water. The lake tankers anchored in the area of the second drop off as they waited for daylight and a birth at a pier. The transition between the drop offs is more a cliff, as can be seen by the sudden change in the color of the water, it is not a gradual descent, as might be expected.



MISC. PHOTO: Propeller in 40 feet of water with lifting rig still attached and air bag out of photo.

Q & A With Dick de Bruin via Email

Before publishing this book I sent an email to Dick de Bruin with the following seven questions about making the dive on *Oranjestad*.

1) At what depth can you make out the *Oranjestad*?

With visibility conditions good and the sea clear you can begin to see Oranjestad after you go deeper than 120 feet. Above 120 feet you only see the deep clear blue of the sea.

2) Is the light at that depth enough so you can see the entire ship?

Yes, as I said if the visibility conditions are good you can see the entire ship off in the distance sitting peacefully on the bottom.

3) Were you able to take any photos of the entire ship?

I would have been able to take photos of the entire ship however I would need a special camera that could resist the pressure of 7.9 bars / 116.13 psi. Unfortunately neither I nor any of the other Team Members have such a camera.

4) How much damage can be seen? Is the mid-section wheelhouse and bridge still intact, what about the aft end, is the smoke stack still standing?

The only damage we could see was in the mid-section of the ship on the starboard side where she was torpedoed. The mid-section wheelhouse and bridge are still intact, only the wings on each side of the bridge have deteriorated and fallen down. In the aft section the smoke stack has fallen and lies on the port side of the wreck on the sea bottom. When the smoke stack fell it landed not on the ship, but beside the ship, on the sand.

5) The ship was at anchor when she was hit, can you still see the anchor chain coming out of the hawser pipe in the bow?

Percy and I were talking about this very thing just this week and he said he remembered the anchor chain coming out of the hawser pipe in the bow, so from his recollection I would say the ship was still at anchor when she was hit.

6) Do you get a funny feeling being around the ship?

I have never had nitrogen narcosis, so no; in that respect I did not feel funny around the ship. At that depth, 225 feet, you have to be very careful for yourself as well as for your dive buddy.

7) What other thought do you have about the dive and the ship?

My thought when I first saw the Oranjestad was “It is amazing how intact the ship lies on the sea bottom after 67 years”. It was almost as if the ship were frozen in time. The reason I think the ship is in such good condition is that she lies in a most favorable position with the bow in the prevailing current. At that depth the low oxygen in the water and lack of sea growth preserves the steel and thus the appearance of the ship.



MISC. PHOTO: Tanks ready to be loaded on *Torpedo*.

Calixto de Palm's Story

(Paying a last tribute to his brother)
By: Dufi Kock



Calixto (Lino) stands in front of Percy as he takes a look at the propeller.

Like most Bonairean (inhabitants of Bonaire) boys from the early years of the last century, Luis Emerenciana was no exception to the occupation of seaman. They were all young guys who did this profession for a better life for their family. They left their families from an early age and went aboard the many tankers that sailed the worldwide waters.

Luis was the eldest son from a family of five, of the late Mrs. Isidoria de Palm-Emerenciana. The youngest son, Mr. Calixto de Palm (Lino), age 80, tells with great emotion about the death of his eldest brother who was on board the *SS Oranjestad*, when it was torpedoed.

It is as if it had happened yesterday, says Lino with great emotion. He says that his brother was aboard the *Oranjestad* and that should have been his last journey. Lino, at that time was a boy of 13, who was in Curaçao together with his mother, sister and the future wife of Wichi (nickname for Luis). They were preparing for the wedding of Wichi (25), after his last trip on the *SS Oranjestad*. After the trip to Aruba, the ship would then go to Curaçao, where they expected him, and together they would then travel to Bonaire for the wedding of Wichi and Shon Popo. Everyone was full of enthusiasm with the preparations, when just seven days before the

scheduled wedding, they got the message that the *SS Oranjestad* had been torpedoed off the coast of Aruba. They had also received the sad message that Wichi was one of the dead.

The family had not even obtained the mortal remains of their beloved one. Almost the entire crew was burned and only sad memories remained.

Lino just could not miss this historic event and was present when the crew brought the propeller of the *SS Oranjestad* on land.

This family tragedy brought back so many sad memories for Lino, as the only living survivor of this family. Lino, not only felt that it was necessary for him to be present at this historic event, but also used this opportunity to pay a last tribute to his beloved brother.



CALIXTO DE PALM



The Team & Committee Members

PERCY SWEETNAM – TEAM LEADER



Percy Sweetnam is a professional diver and the one that first dived to the SS *Oranjestad*. He took the others to the ship and when it was decided to salvage the propeller he was chosen to be the team leader.

Born in Aruba on September 27, 1942, he graduated from Juliana School (Mulo-B) in Aruba and worked for Lago as an underwater hull cleaner on Esso tankers. After leaving Lago he went to California and became an American Certified Commercial Hard Hat Diver. Returning to Aruba he became a Diving Instructor at the Caribbean Hotel and later moved to Curaçao where he worked as a professional diver at Curaçao Dry Dock as well as a professional diver for OCCO, a Dutch company that built a new dry dock in Curaçao. Later, as a supervisor and diver with Interbeton he placed 1,100 pieces of 80-ton blocks for the construction of the container port in Curaçao. Moving to Bonaire he worked for ENECA as diver and supervisor in the construction of a new pier. From there he went to Doha in Qatar with Interbeton and placed 350-ton cells filled with concrete, which are similar to caissons, for a dock for Qatar's crown prince.

He now lives in Aruba and has laid fiber optic cable from land out to sea as well as doing other commercial diving jobs. He also enjoys fishing.

DICK de BRUIN



Dick was the man who sent me the email telling me about this undertaking. He is 42 years old and born in Zeist (1967) near Utrecht in the centre of Holland. He is now living at Palm Beach in Aruba with his lovely wife Mandy and has 2 sons, Leroy and Delano, and his little daughter, Kaylen (Ages 14, 8 and 3).

Dick says he worked in the Dutch navy for twenty-two years, and is now a sergeant. For eleven of those years he worked in three different countries outside his home country, Curacao, Aruba and Belgium. He did 2 UN missions: One in former Yugoslavia 1994 and one in Liberia in 2003.

He has also worked on 4 different kind of navy ships: Hr.Ms. de Ruyter; Hr.Ms. Abraham van der Hulst and Hr.Ms. Jan van Brakel.

The last ship was a Landing Platform Dock ship (LPD) Hr. Ms. Rotterdam L800 and he worked on this ship for 3 years

He is now based on the Marine base M.S.K. Savaneta as the chief cook (2007 till 2010).

He goes on to say; *"I have been doing recreational diving since 1990 and in 1991 was qualified as an Open Water Instructor."* He has also taught people to dive for 18 years for 3 different diving organizations: PDIC, IDD and SSI. He says the enthusiasm of the student divers after every dive is so wonderful, that he still loves to teach. The best dive motto Dick ever heard was: *"If you can breathe, you can dive."* Dick has his own web site www.duikenoparuba.com unfortunately the web site is only in Dutch.

Before the retrieval of the propeller he had only known Toine van der Klooster since 2000 and he met Andre Loonstra in 1998. Last year, he met colleague Rigo Hoencamp on the marine base.

The rest of the dive team, Percy and Paulus he met just 2 weeks before the start of the project in February this year. The dive team came together very quickly and felt as if they had worked together for many years. The words Andre had to say for what happened are very true: *"A good oiled running machine."*

Dick went on to say. *"Everybody in the dive team was very experienced. We were all focused on what had to be done and went at the mission to lift the propeller and it all came together and happened under difficult circumstances with a high risk of danger. During my first dive on the wreck I noticed that the propeller was broken off the shaft."*

"After that dive we discussed with the dive team the possibilities of salvaging the propeller to make a monument. So we started the dive project from 15-02-2009 till 18-04-2009."

The dive team hopes that the monument will be placed in Seroe Colorado, exactly in front of the sea where the SS Oranjestad lays.

Later Dick told Dan Jensen the following: *My interests for WWI & II shipwrecks started in '95, when I dived a lot in the North Sea next to Holland. There were a lot of interesting WW-I British warship wrecks: HMS Cressy, HMS Hogue, HMS Aboukir etc.*

In my summer vacations I went to the South of France, Presquille les Giens in Heyeres to dive on the many WW-II shipwrecks: Le Grec, Le Donator, Michel C etc. and also on a WW-II Mustang airplane at 180 feet.

I made dives on two very interesting submarines: Les Rubis (St Tropez) and Le Ariane (Toulon). These wrecks were not the results of World War II. I also dived to the WW-II shipwreck "HMS Thistlegorm" in the Red Sea, in Egypt.

From 1998 till 2001, I was based on the Marine Barracks Savaneta. Beside my job I dived a lot in my spare time. My interest for the WW-II history on Aruba awakened after several dives on the Antilla and Pedernales. I was searching on the internet and in the Aruban library any information I could find. Also tried to find somebody who dived on the SS Oranjestad, but couldn't find anybody in that period with that kind of deep dive experiences.

With Toine van der Klooster I made some dives a few miles off of the coast of Aruba trying to find a sunken German U boat. We were unlucky, because the information we had wasn't precise.

In 2001, after 450 logged Aruba dives I left the island and hoped that the Dutch Navy would send me to Aruba again in the future.

After a period of 3 years on Landing Platform Dock ship Hr. Ms. Rotterdam and 3 years working in Brugge, Belgium I returned in 2007 again to Aruba.

Met dive friends Toine van der Klooster and Andre Loonstra again after 6 years.

I surfed on the internet to find information for interesting dives and found the most interesting site the Roundtable discussion of German U-156 and U-502.

I printed all the newsletters from the discussion group and read them carefully and in one of the newsletters I read about Historian Dufi Kock trying to get a WWII monument for all who died during the torpedo attacks 15/16 February 1942.

Later when I was diving on SS Oranjestad and I noticed that the propeller was broken off its shaft, I got a hunch: "That propeller will be the WWII monument! Discussed it later, with Percy and Andre in Andre's garage and the "SS Oranjestad Propeller recovery project" was born.

ANDRE LOONSTRA



My name is Andre S. Loonstra. I was born on Aruba March 26 1955. My father was Dutch my mother American. I have lived on Aruba my whole life except for when I attended Prep school at the Choate School in Connecticut and college at Tufts University in Boston where I graduated with a BS in Civil Engineering. After graduation I returned to Aruba and started working at the Victoria Bottling co. which was owned by my father. At that time I also married my girlfriend from college. We have two children, my son Ivan, and my daughter Jacqueline. After working at Victoria Bottling for 7 years I went back to Massachusetts with my son for educational reasons. While living in Fall River, Mass. I got a part-time job at a dive store doing sales and equipment repair. I had already gotten certified as an open water diver as part

of my senior spring project at Choate, so while I worked at the dive shop I decided to take the Instructor training course. After completing the course I became instructor #9709 for the National Association of Underwater Instructors. At this time my now ex-wife came to Massachusetts to take care of our son and I moved back to Aruba where I started Aruba Scuba Center in 1988. I had a dive shop at the Bushiri Beach Resort until 1997 when I decided to stop diving with tourists, and instead concentrate on equipment repair and air fill services for other dive shops. I am still doing this today.

Among my many customers were Percy Sweetnam, Dick de Bruin and Rigo Hoencamp. Percy and I had many conversations about the SS Oranjestad, so I have always wanted to dive the wreck. One day Rigo came to my shop and told me he was interested in diving on the SS Oranjestad and wanted to know if I knew the exact location of the wreck. I told him about Percy, and gave him Percy's phone # that I had on file. Several months later Rigo and Dick came to my shop after an unsuccessful attempt at finding the wreck. They told me it was their second attempt at finding the wreck. I asked them if they had spoken to Percy, and it turns out the number I gave them was Percy's neighbours. At that point I hooked them up with Percy, and within a few days they had done about 3 dives on the site. It was after one of those dives that Percy and Dick both came to my shop to have their SCUBA tanks filled and we sat there and started talking about the wreck. Percy told us that during his research about the ship he had met Dufi Kock and Dufi had been working on a project to make a memorial for the victims of the U boat attacks of February 16, 1942.

We started thinking that a piece of the SS Oranjestad would make a good memorial. At this point Dick asked Percy if he had noticed that one of the props was no longer attached to the shaft. He had not, so another dive was planned. Percy had always wanted to take pictures of the wreck, but did not have a camera that could withstand the pressure at 225 feet. I called some friends, and managed to borrow a UW video camera from Vince Shenker. None of the other divers was free to dive, so Percy asked Paulus Martijn who was the captain of the boat they were using. It was on this dive that the first ever underwater images of the SS Oranjestad were recorded. The video confirmed that the prop was loose, and at that point it was decided to bring the prop up to be used as a memorial. The rest is history. I only participated on 2 dives. The first was when I went down to the wreck for the first time. It was an amazing experience and way too short to take everything in. The second was the day we brought the prop up where I went down to about 50 ft to record the video of the prop being lifted to the surface. The prop recovery was an exciting and also quite dangerous project that required lots of planning and preparatory diving to ensure that it was done safely and without any incidents. I am very proud to be part of the Percy Sweetnam propeller recovery team.

I also want to mention that I have several other hobbies. I have been a drag racer since 1987, and have even competed professionally as the driver of the “Aruba.com” Pro stock car in the IHRA, NMRA, and FUN FORD WEEKEND sanctioning organizations for several years all across the US, and I still drag race here in Aruba although in a more budget friendly class. I am almost finished building my new race car, and have some alternative energy projects on the burner. I also breed exotic birds such as cockatoos, amazons, eclectus, vonures and many others. Basically, I have way too many things going on and not nearly enough time to do them. Fortunately Jenny, my girlfriend of 20+ years had no idea of the dangers involved in the prop recovery project. She is also the mother of my youngest son, Elliott, and I appreciate her support in all my strange projects and experiments. I also want to thank the roundtable for being the excuse we needed to make the prop recovery a must-be-done deal. We probably would have recovered it anyway, but it would have definitely caused a lot of grief on the home front.

TOINE van den KLOOSTER



Toine started diving in Holland with a youth diving club when he was twelve and since then he has been hooked on diving. He always booked his holidays where he could dive and in 2000 while in Aruba on a holiday he met Dick and they did a lot of diving all around the island.

He was born in 's-Hertogenbosch, Holland on June 28, 1974 and after school he joined the Royal Netherlands Marines where he served for nine years. For 18 months he was stationed in Aruba with the Royal Marines and found he liked Aruba and vowed he would one day come back there to live.

After his stint in the Royal Marines he worked as a policeman in Rotterdam, Holland but soon found he did not like being a policeman and quit his job, packed his bag, closed the door on Holland and jumped on a plane for Aruba.

He has been in Aruba now for over four years and works as a manager for a hotel complex with a bar and a restaurant. The place is called Perle d'Or and can be seen at: www.perledoraruba.com.

Toine hopes there will be a "nice" monument for all the men that lost their lives and all the family/friends that stayed behind so they will not be forgotten.

He said he also feels, *“a monument can also be a great testimonial for tourists who come to our island so they will see it's not only sun and beaches here but that also on Aruba, people defended our freedom.”*

When Dick approached him with the plan to get the propeller to shore he just saw it like a nice "job". The more dives he made the more interesting it became.

He went on to say; *“It surprised me a little the impact it made on a lot of people on Aruba and around the world.”*

RIGO HOENCAMP



Rigo was with the team when they raised the propeller from the SS *Oranjestad* to 40 feet of water. That following week, before the propeller was moved to Saveneta and lifted ashore Rigo had to return to Holland on business. For this reason he was unable to assist the team on the final phase.

Rigo lists his Occupation as Military and owner of his own company, *Aquamed Diving Medicine*, which is in The Hague, Netherlands. He has been actively diving since 1994 and his specialty is deep wrecks, (up to 130 meters). He has made over 3,000 deep wreck dives as an instructor in many locations in the world.

He is certified in the following technical diving systems: Trimix; Basic and CCR re-breathers. He is also a PADI/DAN/ANDI/MFA/EFR instructor.

Rigo has dived in the following locations: The Netherlands, Africa, Belgium, England, France, Italy, Sardinia, Sicily, Croatia, Spain, Cyprus, Turkey, Norway, Malta, Mozambique, Gozo, United Arab Emirates, Kuwait, Jordan, Israel, Egypt, Indonesia, Palau, Truck Lagoon, U.S.A., Mexico, Aruba, Bonaire, Curacao, St. Martin, Sint Eustatius, Saba, Cuba, and Martinique.

Rigo has always been in search of special and deep wrecks. The idea of the propeller was initiated by Dick de Bruin and Andre Loonstra. He had known them both before they formed the team. He met Paul Martijn and Percy Sweetnam when the project got started. He discussed diving on the SS *Oranjestad* with Dick and Andre many times but initially when they tried, they could not find the wreck of *Oranjestad*. Later they got in touch with Percy who had the exact coordinates. Subsequently, he had the pleasure of being on the first dive to the wreck with Percy and his nephew. But because of strong current, on that dive they only touched the bottom.

Rigo feels the monument is a good idea; *“It will be a means to remember all those who lost their lives and with this monument, it will also be a reminder to everyone of WWII.”*

Rigo has a web site about his company. The web address is: www.aquamed.nl unfortunately it is only in Dutch.

PAULUS MARTIJN



Paulus Martijn was born May 1, 1963. Presently he is working at the Valero Refinery as a Document Control Coordinator in the Oil Movements Division. He is also a fire fighter and on the Emergency Response Team.

Paulus started to dive when he was 13/14 years old. He says he was the one who was hauling in fish while his old older brothers were doing spear

fishing off the point on the north shore at Seroe Colorado. He then started to spearfish and catch lobster in the Savaneta lagoon and near the reef berth. Later he started diving with tanks and now, "I can't live without diving which has become my hobby."

One day as we returned from diving with the Torpedo, Dick de Bruin approached me to ask me to take them to a sunken ship. Without thinking twice I gave him the time and date that we could go. I never realized that the ship he had in mind was the SS Oranjestad. The day came and we went in search of SS Oranjestad but we were not lucky and did not locate it and I believe that on that day we were not prepared for it either.

After that I decided to approach Percy whom I knew very well. We dived together on many occasions and I knew that Percy is a professional diver. To my surprise when I approached Percy, he already knew of everything and was already preparing for our trip to search for Oranjestad. We went and were lucky this time because we found the ship. I was an emotional moment for all of us when we arrived to the ship. I am very happy and proud to be part of the team to search for SS Oranjestad. Then more so, when we lifted and placed the propeller on shore. I will be happier still when we complete our goal with the placing of the monument in the Lago Colony.

This was written by Paulus Martijn in Dutch and translated by Dufi Kock into English.

DUFI KOCK



Dufi Kock was born in Aruba on September 27, 1936. He attended Don Bosco School and the Lago Vocational School. He then went to

work as a clerk in the Light Oils Office. In 1964, he received a Lago Employee Assistance Program (LEAP) scholarship to study Chemical Engineering at the University of Dayton in Ohio, U.S.A. Upon his return he was assigned as Training Administrator and in this capacity coordinated and taught Basic, Advanced Training, Management Training, and Workshops. As a national and international member of the American Society for Training Development (ASTD), he had the opportunity to attend many courses and seminars in the U.S. and Venezuela.

Dufi also worked in industrial public relations as Secretary of the Lago Scholarship Foundation.

He worked for Lago for 35 years, until it closed down on March 31, 1985. He subsequently worked as a Purchasing Manager at the Sonesta Hotel; as Personnel Manager at the Marriott Hotel; and Personnel Manager at the Paradise Beach Villas Hotel. Later, he decided to dedicate his time to community work. He is a writer and historian. He presently has three books on the market: *How to Apply for a Job*; *The History of Aruba*; and *The History of a Classic Car*. It won't be long before he will publish his fourth book, *The History of Savaneta*.

Dufi spends most of his time either on the computer doing research or reading educational and historical books. He helps school children with their theses, making genealogies, and teaching the history of the island and WW II. Recently he has become a member of the SS Oranjestad Memorial Committee and his role is to help the dive team with the history of WW II. He is the happiest person on the team. He is also a member of the U-156/U-502 Roundtable; a member of The Aruba Chronicle; and a contributor to Dan Jensen's website www.lago-colony.com.

In 2006 Dufi was decorated by Queen Beatrix as a Member in the Order of Orange Nassau for his community work.

He has been working for two years to get a monument in Lago Colony in remembrance of all those who lost their lives during WW II. He strongly believes that with the recovery of the SS Oranjestad's propeller, his wish is going to be accomplished.



The Dive Team in Action

Photos supplied by: Dufi Kock and Andre Loonstra



Let to right: Dick de Bruin, Percy Sweetnam, Toine van den Klooster, Rigo Hoencamp, Andre Loonstra and Paulus Martijn. Rigo had to return to Holland so was not present when the propeller was lifted ashore.



Another shot of the Team after they returned



Loading equipment for one of the dives



On the way to the dive location



Getting ready to dive



On location, SS *Oranjestad* lies 225 feet below



Home after a dive.



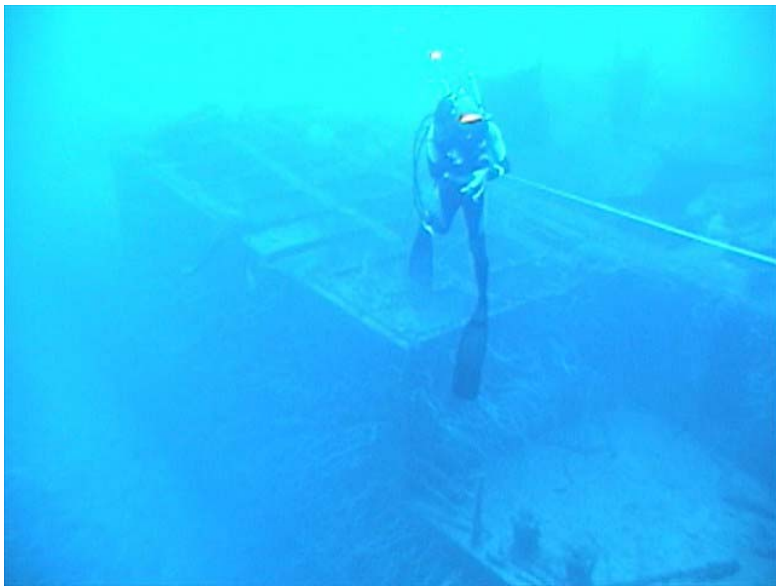
Checking the airbag.



Making ready the ropes for the lift



Making fast to the marker.



This is a photograph taken from video shot at 225 feet by Percy Sweetnam and cut from the video by Andre Loonstra. The aft of the ship can be seen behind the diver.



From that same video, here the prop can be seen in the sand, broken from the shaft. The rudder of the ship can be seen behind the propeller.



Again another photo taken from the same video, this shot is taken along the shaft with the propeller in the foreground, before the lift. These photos were sent to me by Dick de Bruin.



The propeller comes to rest in 40 feet of water



Diver checks his dive time



They also check the rigging on lift line from the propeller to the air bag



Diver begins ascending



Diver checks with his buddy

Now that the propeller is in the bay at Savaneta, it is held in position by the crane, while the divers disconnect the air bag and the drums used to float the propeller to this location.



Just before the lift, drums and air bag are still attached



Percy Sweetnam watches the propeller as it comes ashore



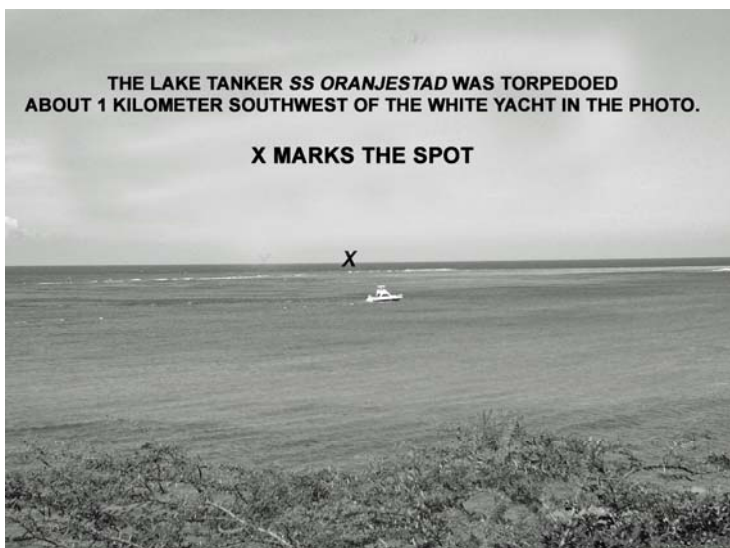
A very happy dive team and their propeller



Mr. Omar Briceno and the crane that lifted the propeller



Clixto de Palm, standing in front of Percy captain of the *Torpedo* is second from left



This will give you a general idea where the *SS Oranjestad* sank on the night of the attack.



This rather bad photo, taken from an 8 mm home movie, shows how the lake tankers anchored just off the reef, in front of Coco Beach (Rodgers' Beach) lagoon.



One of two displays made up for presentations and fundraisings that the Dive Team & the memorial committee have put on in Aruba in the past month.



The other display



Cleaning The Propeller

On May 14, 2009 the Mourik Company, an industrial cleaning company which does contract cleaning for the Valero refinery, steam cleaned the propeller. During the cleaning it was discovered that the propeller had a stamp showing a Lloyds Test had been performed on the propeller.



Cleaning begins



Inspected.



A closer inspection of the hub



And then more cleaning



Inspection the marking stamped in the propeller



The mark of the Lloyds Test. GT 2/3
The numbers are hard to read, 49-9-SO?
11-10-38?

As the sea growth and corrosion of the past 67 years was blasted away, the bronze propeller took on a new look. The rich bronze was pitted, it did not have the smooth machine finish it had when it was new and it had not had the advantage of being washed clean as it churned beneath the ship. The propeller had a color and look that reflected its age and what it had endured. In this condition it would not make a fitting monument to those who were long forgotten. Now, thanks to further cleaning and polishing by Percy and the men who returned it from the deep, this aged propeller will shine as it commemorates those who lost their lives.



After the propeller was steam cleaned Percy set up a tent next to his house and began the final cleaning and removal of the broken shaft from the propeller's hub.



Another view of the propeller, much additional cleaning has been done and the shaft is starting to emerge from the hub.



Still another view of the propeller, note the improvised puller devised by Percy which did the job.





MISC. PHOTO: Rigo Hoencamp checking on equipment



MISC. PHOTO: Dick de Bruin explains what needs to be done



MISC. PHOTO: Close up of the hub of the propeller and the broken shaft

The SS Orangestad Memorial Committee

On May 6, 2009, this committee was formed by the Dive Team. Dufi Kock was asked to be President because he had been trying to establish a monument for some time. Toine van der Klooster became Treasurer. Since Rigo Hoencamp had returned to Holland, he did not become a member for the Committee. An account for the monument was established at the Caribbean Mercantile Bank in Aruba on May 11.



Dufi Kock, President



Toine van der Klooster, Treasurer

Since that time, there has been positive movement. The Committee has requested a local architect to give some suggestions for the structure of the monument. A site has been selected and Minister Ramon Lee is awaiting final approval by the Aruban government for the use of the site.



Seated on the wall in front of the location where the monument will be place are, from left to right; Andre Loonstra; Mrs. Elly Sweetnam; Dick de Bruin; Percy Sweetnam and a friend. (Photo by Dufi Kock)





MISC. PHOTO: Sitting in the *torpedo* in the same location where *Oranjestad* was torpedoed.



MISC. PHOTO: Propeller is set on a mound of dirt when it was first brought ashore.

Press Release in Aruba

SS ORANJESTAD'S PROPELLER AWAITS ON HER FINAL DESTINATION IN THE SEROE COLORADO

On April 18th, after 67 years, a dive team consisting of: Percy Sweetnam, Dick de Bruin, Andre Loonstra, Rigo Hoencamp, Toine van der Klooster and Paulus Martijn, salvaged the propeller of the lake tanker *SS Oranjestad*. When the salvage project was completed several steps were taken for the realization of a WWII monument. This *SS Oranjestad* lies in front of the refinery in a depth of 225 feet or 69 meters.

The propeller becomes part of a WWII monument in the Seroe Colorado. The monument will be dedicated to those who lost their lives during WWII while in Aruba working for and defending the refinery and the island that supplied a large portion of the fuel used by the Allies. The historical torpedo attacks on the Aruban coast were done by a German submarine, U-156, on the early morning of February 16, 1942. The torpedoed tanker, *SS Oranjestad* was the first tanker to be sunk in Aruba and the entire western hemisphere, where 15 of her crew members lost their lives that early morning.

Recently, the propeller was professionally cleaned by a well-known cleaning company Mourik Caribbean N.V. in San Nicholaas. With the newest techniques, they removed the sticking corals. The original bronze color came up and shined directly under the Aruban sun.

Aruban historian, Dufi Kock, and the dive team started the *SS Oranjestad* Memorial Committee and opened a bank account at the Caribbean Mercantile – Noord branch, where interested people can give donations for the WWII monument.

The *SS Oranjestad* Memorial Committee has contacted the office of the Minister of Culture, Mr. Ramon Lee to discuss possible sites that the government could make available for the monument. It is hoped that the decision of the site can be made as soon as possible by Minister Ramon Lee in order to be in time for the groundbreaking ceremony by June 23, during the Lago Aruba Reunion of the ex-Lago people, many of whom were there during the attacks. Approximately 200 Lagoites with their families will be in Aruba for this reunion and we expect many more if we can provide positive confirmation of the groundbreaking ceremony during the reunion.

Should you wish to make a donation, please do so at the Caribbean Mercantile Bank – Noord branch at Palm Beach 4-B, the SS Oranjestad Memorial Committee, bank account number [REDACTED]. If you have any questions, please call 584-1201/592-4917/563-9079. Thank you for your generosity.

For more information on this project, go to www.lago-colony.com, under the link *SS Oranjestad* or World War II, where you will find the Aruba WWII history, including information on the salvaging of the propeller. You will also find three short films on You Tube, part I, II, & III.

Dufi Kock
President
SS Oranjestad Memorial Committee



MISC. PHOTO: Loading the boat.

Meeting With Minister Ramon Lee

June 11, 2009

This morning at 9:00 a.m., The Minister of Labor, Education, and Culture, Mr. Ramon Lee met with Mr. Percy Sweetnam and Mr. Dufi Kock and discussed the proposal to use the recently recovered propeller from the SS *Esso Oranjestad* as the focal point for a monument to those who lost their lives while working in Aruba to supply oil for the Allies in World War II.

The atmosphere in the meeting was tremendous and it was a very positive discussion. Mr. Ramon Lee agreed with the first location that Mr. Sweetnam had selected and which Mr. Kock also felt would be more in keeping. It is not in the triangle which is formed when the hill in front of the Church and the lower road intersect but instead on a little hill across from the church and to the left of the light pole, (see the photo on page 70). The Minister pointed out that the trees would be protected and it was a far safer location than the triangle.

When the Minister learned that about 200 Lagoites would be in Aruba June 20 to June 27 for a reunion he suggested a groundbreaking ceremony on June 24 between 5:00 p.m. and 7:00 p.m. Minister Lee said that he will make the necessary arrangements to have the spot cleaned, provide a tent, chairs, etc. for the ceremony and Percy and Dufi offered to take care of drinks and snacks on behalf of the SS Oranjestad Memorial Committee. That proposal will be discussed in committee meeting of June 20th at the Perle d'Or Restaurant.

Minister Lee also said that by October the monument will be in place at our suggested spot.

Minister Lee went on to suggest that Percy and Dufi take a look at the existing monument dedicated to soldiers who lost their lives in World War II. He felt that a monument along these lines would be in keeping and the propeller would be the focal point.

Dufi has taken a photo of this monument, it is inserted below. Again this design will be discussed at the Committee's next meeting.

Dufi said. "Therefore, we now have a date set for the groundbreaking. I would like to suggest to Dan Jensen and Don Gray that they extend an invitation to our visitors if they would like to attend the groundbreaking ceremony. We told the minister that many will attend." Please consider this an invitation if you are on the island of Aruba at that time.

I am sorry I will be unable to attend but I hope many of the Lagoites do attend and show their support for the monument.

Before leaving Minister Lee's office Percy and Dufi presented The Minister with a copy of a DVD that records the recovery of the propeller and video of the dive.

Dufi closed his report to me with this line, "Percy and I were the happiest persons on this world when we left the minister's office."



Above: Mr. Percy Sweetnam and Mr. Dufi Kock present to Minister Ramon Lee a DVD of the recovery of the propeller from the lake tanker *SS Esso Oranjestad*. Mr. Kock presents Minister Lee with a copy of the web site www.lago-colony.com.



Right: This is the monument in Aruba to the soldiers who lost their lives during World War II. The proposed monument would be similar only in place of the soldier the propeller would be used.



The area to the left is the new location for the monument, almost directly across from the church and above the triangle that was first considered.

This area will offer the monument more protection from traffic and the cactus will be cleared away.



This is a closer shot of the area where the monument is to be placed. It is a much more suitable location than the triangle that was first considered.



MISC. PHOTOS



Sergeant Henderson



Piper



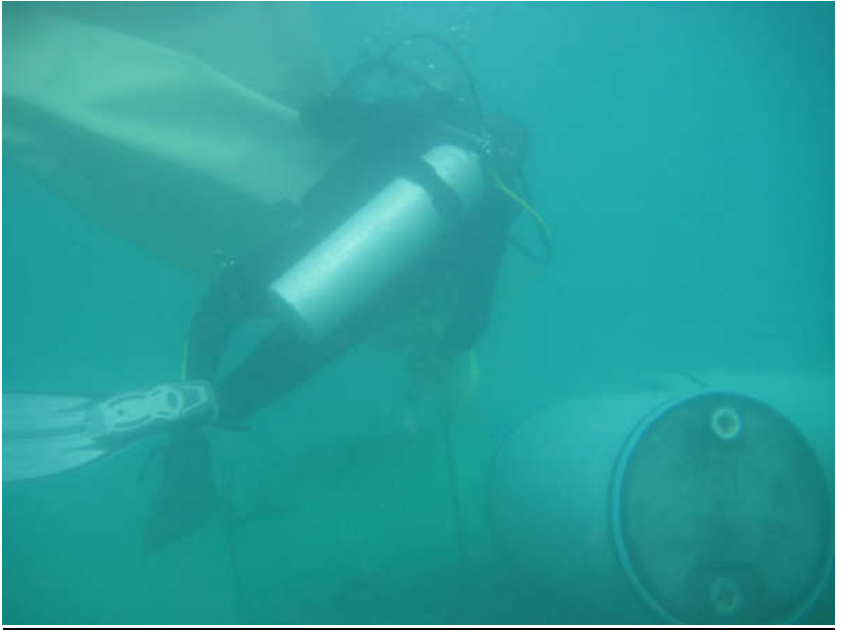
Colonel Barber



Troops



MISC. PHOTO: Working with the airbag in the shallow water



MISC. PHOTO: Getting the airbag and drums ready to fill with air for the lift in shallow water



Percy looking at the photos of the SS Oranjestad

Photo by Lisa Gray
The Old Lago Refinery and Colony



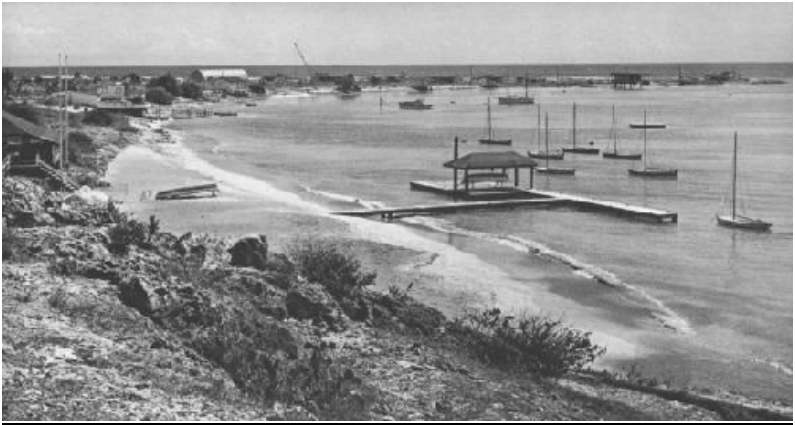
View in front of the Esso Club looking west at the refinery across the lagoon. This photograph was taken in the early 1950's



This photograph shows the Lago Hospital in the foreground, and then the housing in colony. You are looking south. This photograph was taken soon after the war.



View of the lower road in Lago Colony, looking west toward the refinery. This photograph was taken shortly after World War II.



Rodger's Beach as it looked during World War II. Again, this photograph was probably taken shortly after World War II.



Lake Tankers

SS ORANJESTAD

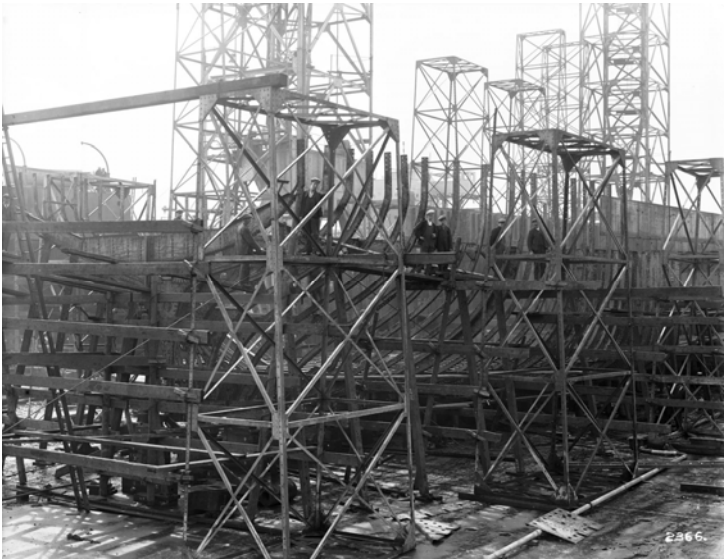
Until June 24 there were no known photos of the *SS Oranjestad*. Then Dick de Bruin revealed that he had obtained eight photos of the ship while under construction and one of her under way. The company who built the ship, Harland & Wolff, Ltd., in Belfast, Ireland directed him to the National Museums, Northern Ireland. (NMNI) Although Dick purchased the photos they still remain the property of the museum but these pictures are used courtesy of the Ulster Folk and Transport Museum.



Lake tanker *SS Oranjestad* on the ways at Harland & Wolff, Ltd., shipbuilders, in their Belfast shipyard in Ireland just before she was launched in 1927.



A Section of the *SS Oranjestad* at the beginning of construction
Note the flat bottom.



The *SS Oranjestad* begins to take shape in the dry dock. Notice that this ship is built with steel ribs and then sheeted in steel, much like the construction of a ship being built with wood.



Here you can see the ship's ribs as the steel skin is applied.



This is a shot of the SS *Oranjestad*. I believe she may be in the process of being launched.



The aft of the ship on the dry dock ways, with a good view of the propeller that was later salvaged. Note how the propeller is tucked up above the flat bottom to protect it when the ship hit crossing the sand bar at the entrance to Lake Maracaibo.



An unfinished SS *Oranjestad* is towed up river for additional work.



A finished SS *Oranjstead*, now under her own steam, heads to sea and Aruba. In this photograph you can see the two bridge wings that Dick says have fallen off the ship as well as the tall smoke stack that now lies beside the ship on the sandy bottom.

To my knowledge these are the first photos of the SS *Oranjstead* that have surfaced since I began my web site. I even asked the children of Captain Morgan, the skipper of the ship the night she was torpedoed and they did not have photographs. I also checked with Auke Visser in Holland who has an extensive web site covering Esso tankers and lake tankers and he did not have a photograph. <http://www.aukevisser.nl/>

Vessel Data Sheet: Basic Ships Details

SOURCE: *Lloyd's Register of Ships 1927 - 1942*

NAME OF VESSEL:	ORANJESTAD
LATER NAMES (if any):	-
OFFICIAL NUMBER (recorded since 1872):	149907
SIGNAL LETTERS (recorded since 1874):	GNFD
RIG DESCRIPTION or TYPE:	Twin screw (tanker)
MASTER:	n/a
SHIPBUILDER:	Harland & Wolff Ltd
PLACE:	Belfast
YEAR:	1927 completed September
TONNAGE:	gross: 2396 net: 1242 Under deck: 1743
DIMENSIONS (in feet unless otherwise stated):	length: 305'7" breadth: 50'2" depth: 14'3"
(recorded since 1863)	
ENGINES (if any):	type: Triple expansion 6 cyl. builder: Harland & Wolff, Belfast
PORT BELONGING TO:	London
FLAG:	British
REGISTERED OWNER:	Lago Shipping Co. Ltd.
MANAGER (if known):	Andrew Weir & Co. (originally)
LLOYD'S REGISTER CLASSIFICATION (where applicable):	✱100A1
OTHER CLASSIFICATION (where applicable):	-

Her original managers were Andrew Weir & Co., and in 1936-7 they changed to F.J. Wolfe. Then in 1940-41 her managers changed to R.A. Carder, throughout her life she was owned by Lago Shipping Co. Ltd.

Our records show her to have been sunk by a German submarine on the 16th February 1942 whilst anchored outside Aruba in a position of 12 25 N., 69 55 W and that she sank in approximately 120 fathoms. Of her 25 crew, 15 were lost.

BIBLIOGRAPHY

1. Lloyd's Register of Ships 1927 - 1942

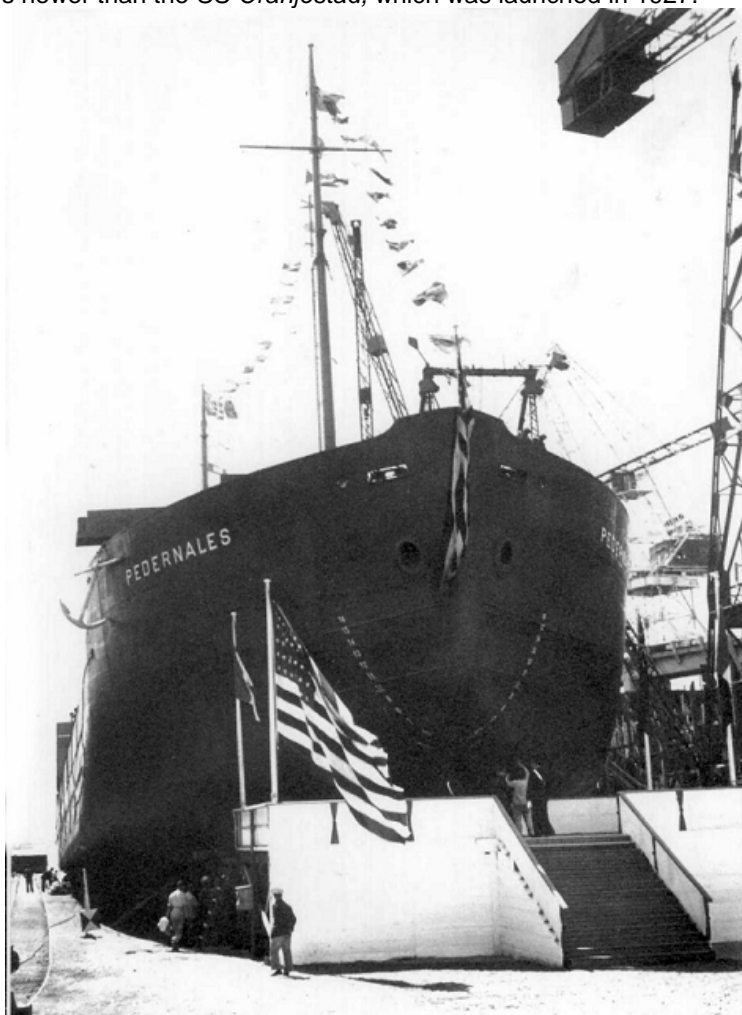
This is the information on the SS *Oranjestad* supplied by Lloyd's Register Group Services, Ltd. in London.

SS Pedernales

The following photos are from: <http://www.aukevisser.nl/>

The *Pedernales* was also torpedoed by U-156 just minutes before the *Oranjestad* was torpedoed. She burned, but did not sink and the following day was taken to the Lago dry dock where her damaged mid-section was removed. She was welded back together as a shorter ship, a temporary wheelhouse was fitted and she made her own way to Baltimore, Maryland where a new mid-section was installed.

The *Pedernales*, launched in 1937, was a very similar ship, although 10 years newer than the *SS Oranjestad*, which was launched in 1927.



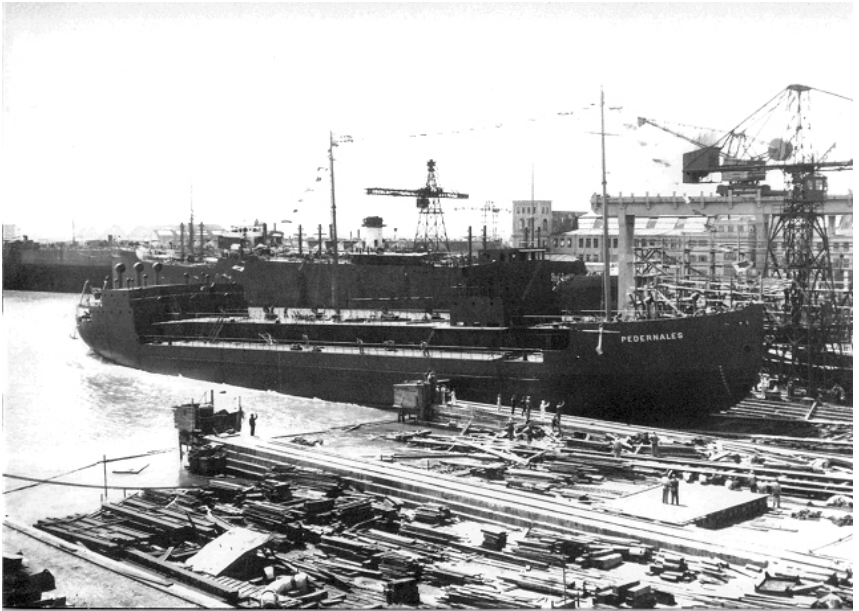
Lake tanker *Pedernales* just before she was launched



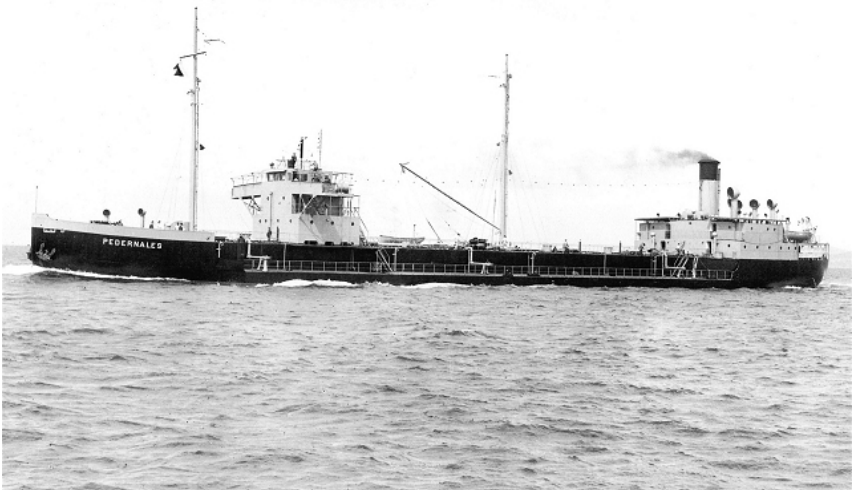
Pedernales on the ways before being launched



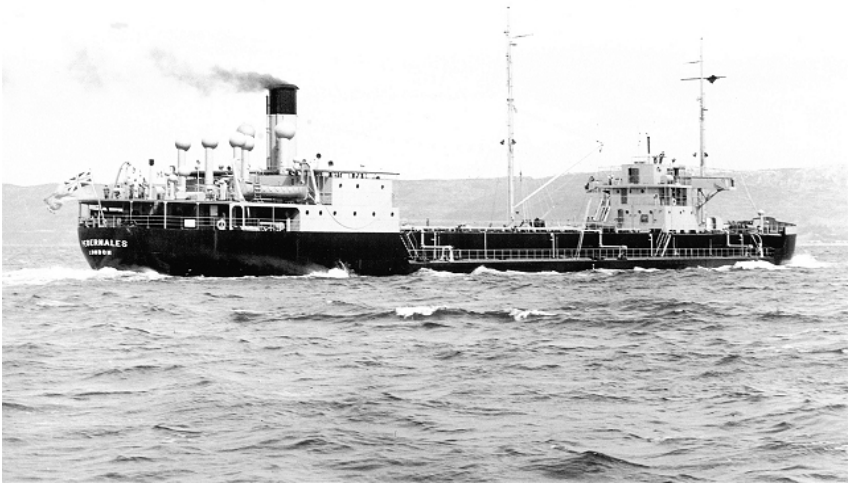
Captain McCall of the *Pedernales*



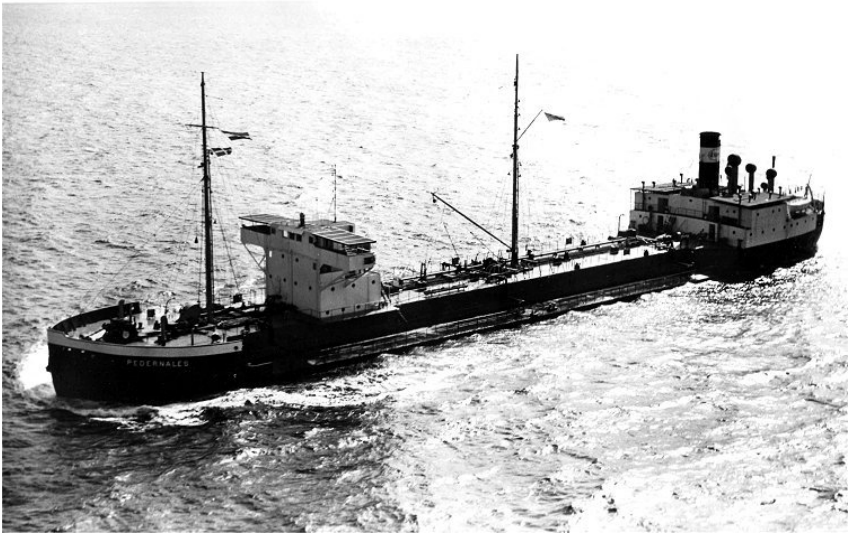
Lake tanker *Pedernales* as she slides into the water after being christened



Pedernales painted the colors of Andrew Weir and Co. Ltd.

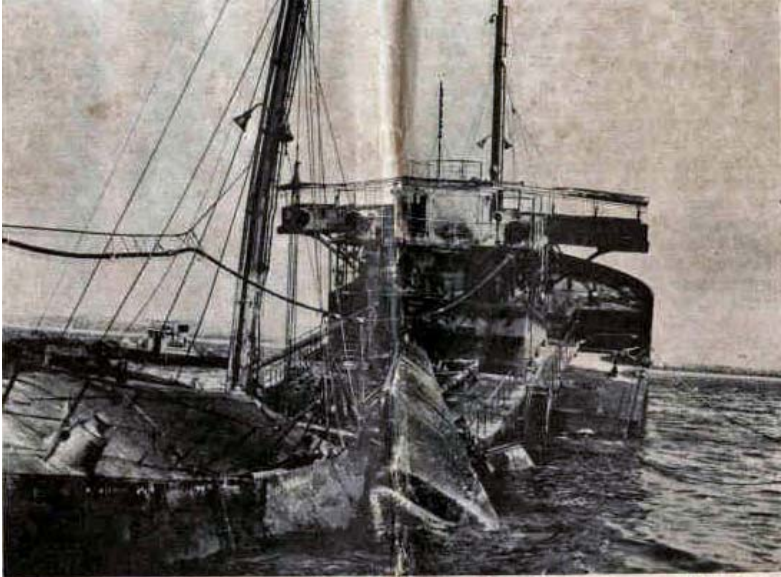


Another photo of the lake tanker *Pedernales* again with the colors of Andrew Weir and Co. Ltd.



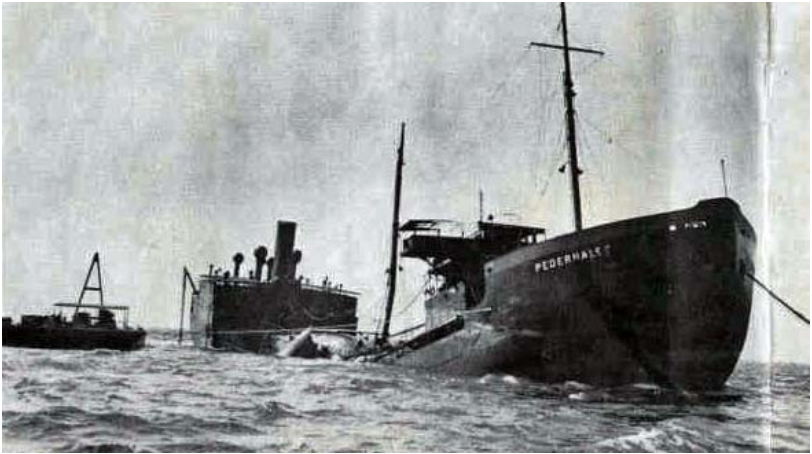
The *Pedernales* after she became the *Esso Pedernales* note the different color of the ship and the stack.

The following photos from the Aruba Esso News – February 16, 1962

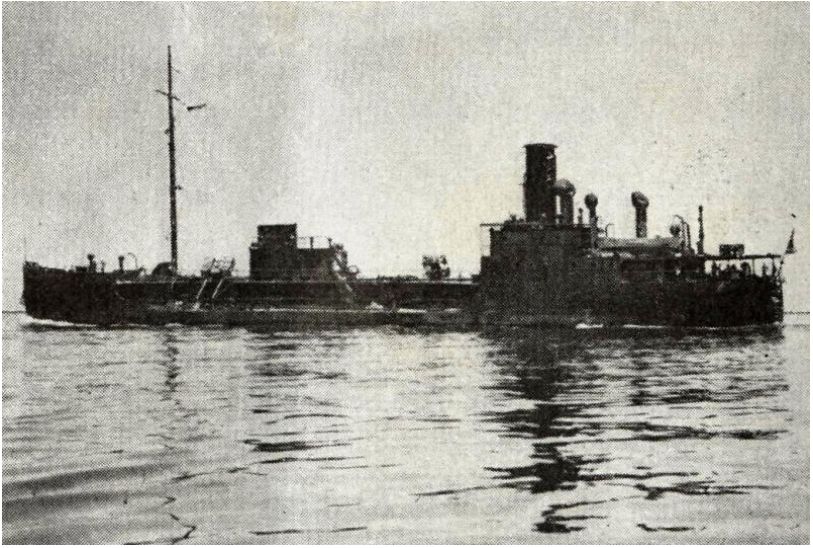


The first U-156 torpedo broke the Pedernales' back, set her afire, but never sank the laker
E primer torpedo di U-156 a kibra lombra di Pedernales, pero no a logra sink e tankero

The deck of the lake tanker SS Esso *Pedernales* after being torpedoed and the fire extinguished



The *Pedernales*, after being torpedoed by U-156 is under tow to the Lago dry dock at San Nicholaas harbor to have her damaged section removed and then welded back together so she can make her way to Baltimore, Maryland to have a new mid-section installed



A shortened *Pedernales* leaves Lago's dry dock for Baltimore
Note the lower, temporary wheelhouse mid-ship



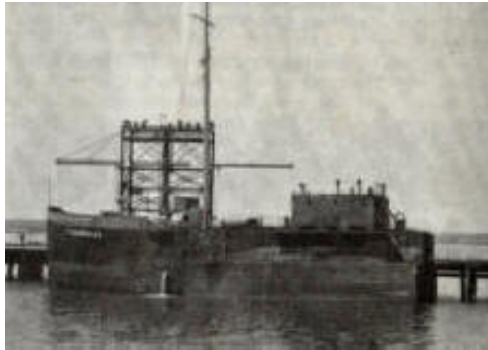
Stamp issued in Aruba to remember the attack on the island. Notice the drawing of the *Pedernales* is the same as the photo of the torpedoed ship on the preceding page. The torpedo on the beach and the two men standing beside it is taken from a photo which can be seen under DEFENSE OF ARUBA. This section is found later in the book.



Another stamp in the series issued to remember the attack on Aruba showing the U-Boat firing on the refinery with the deck canon



The third stamp in the series which has nothing to do with the attack on Aruba. The man honored on this stamp is an Aruban named Boy Ecury who lived in Holland during World War II. As a student he was very active in the Dutch underground and captured and killed by the Gestapo.



Bow of Pedernales after being cut from damaged mid section is moored at a pier waiting to be re-attached to the aft section of the ship



Deck of a lake tanker between mid-ship and aft. Esso employees and family would catch a ride on a lake tanker just to have a break when on local leave. They traveled as guests of the captain.



LT. JG Dryden painting a symbol of a German U-Boat kill on the side of his PB4Y. This is the aircraft and pilot that depth charged the U-156 and sent her to the bottom in 1943. This aircraft was stationed in Trinidad and patrolled the area.



Another view from the bridge of a lake tanker, looking aft

Aruba Esso News

VOL. 23, Special Issue

PUBLISHED BY LAGO OIL & TRANSPORT CO., LTD.

February 16, 1962

The roar of destruction shattered the quiet night. An explosion-ripped tanker sprang forth flaming wrecks of. Crewmen screamed in fire-enveloped quarters. Some scrambled to lifeboats. Others flung themselves into the water. Many died. It was 0131, Feb. 16, 1942, World War II had been brought to Aruba by the German U-boat Navy U-boat 156, Kapitänleutnant Werner Hartenstein, commanding.

The U-156 was commissioned Sept. 4, 1941. Tradition, so much a part of all world navies, constituted the pomp in the ceremonies in which a full-dressed Hartenstein took over the command of the submarine while his full-dressed crew stood rigidly at attention on the vessel's deck. The ceremony took place in Bremen in the yards of the Weser Shipbuilding Company. It was a green crew the submariner commander addressed. The crew knew this, and knew there would be many months of intensive training ahead administered by a strict disciplinarian and an excellent seaman whose naval career had begun in 1925 as a member of the German Weimar Republic Navy.

There were men in the new crew who feared Hartenstein. He was an unrelenting taskmaster. To him accomplishment was matter of fact, the means incidental. Harbly dignified, but indicative of his aggressive character, was the "Crazy Dog" nickname his crew later gave him. He was neither tall, nor stocky. His was a wiry, slight but solid frame that he unflinchingly held erect. His posture was a manifestation of the stein never married; he was wedded to the sea which occupied fifteen of his thirty-

U-156 Brought War To Aruba Feb. 16, 1942

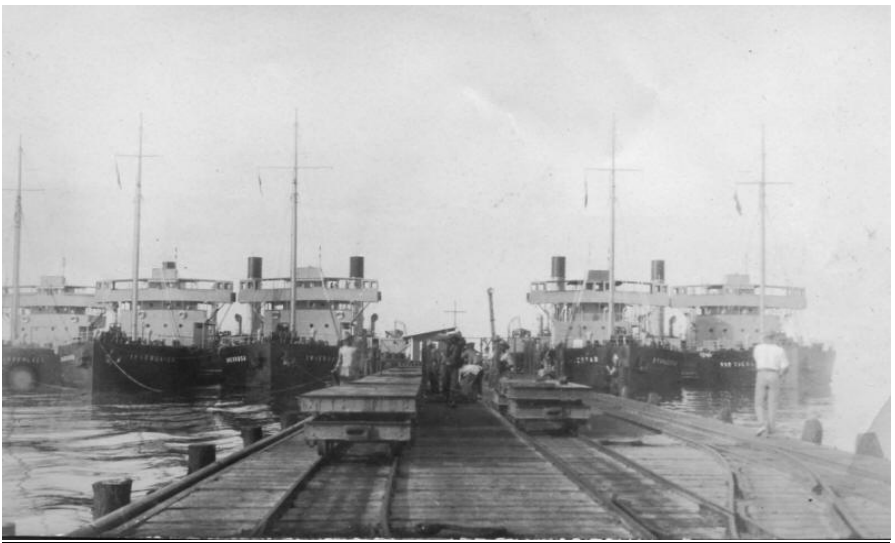


È borote di destruction a rompe e noci silencioso. Un tankeru labri door di explosion tabata aspi crulo na canela. Tripulanten tabata grita den cabinanan na candela. Algun tabata haci esfuerzo na yuga na e botonas salvavidia. Otro tabata tira nan mes na awa. Hopi a muri. Tabata 0131, Feb. 16, 1942. Guerra Mundial II a wordi trefi Aruba door di U-156, un submarino Aleman, cu Kapitänleutnant Werner Hartenstein como comandante.

È U-156 a wordi tuma na servicio Sept. 4, 1941. Tradicion, adas tanto un parti di tur forza naval na mundo, tabata constitui mator parti di e ceremonianan den cual un Hartenstein den pleno uniform a tuma over comando di e submarino mientras su tripulacion, tambe den pleno uniform, tabata pará na atencion ariba dek. E ceremonia a tuma lugar na Bremen na panti-leria di Weser Shipbuilding Company. Tabata un tripulacion berde cu cual e comandante tabata yugia. E tripulacion tabata nobi esaki, y tabata sañi cu dilanti nan lo tin hopi luna di entrenamiento intensivo administrá door di un disciplinero erpido y un excelente marinero, kende su career naval a cuminsa na 1925 como miembro di German Weimar Republic Navy.

Tabatin homber entri e tripulanten cu tabatin temor di Hartenstein. El tabata un trahader sin compasion. Pa e logro tabata lo mas importante, e mediona no tabata importa. No manito digno, pero indicativo di su caracter agresivo, tabata e member di "Cachó loco" cu su tripulacion lo ducirio despues. El no tabata ni grandi, ni chikito. El tabatin un curpa adoto cu na tur momento el tabata tase erecto. Su postura tabata un manifestacion di di disciplina.

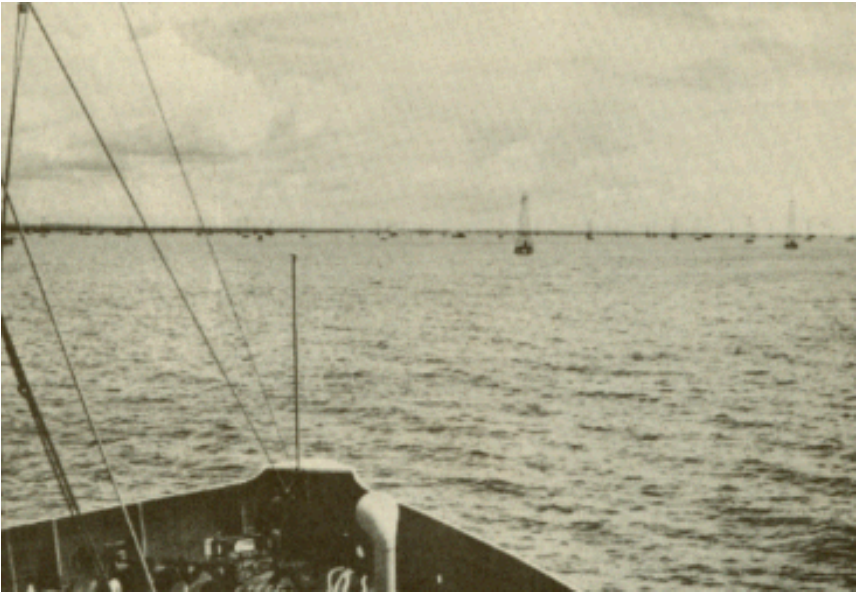
Copy of the company publication, Aruba Esso News, dated February 16, 1962, which carried the story of the attack by U-156 twenty years prior. This article was written shortly after confirmation of Gunnerly Office Lt. Dietrich von dem Borne story. The entire publication is found starting on page 131.



Lake tankers loading at a dock in Lake Maracaibo in the 1930's



Lake tankers lying at anchor in Lake Maracaibo awaiting birth at loading dock



View from the bow of a lake tanker entering Lake Maracaibo



View of the oil wells in Lake Maracaibo from the deck of a lake tanker



Lake tankers tied up at the unloading dock in San Nicholas harbor. The lake tankers shown in this photo were built in the US during the war to replace the lake tankers that were torpedoed.





MISC. PHOTO: Marker for the dive location



MISC. PHOTO: Another view of the propeller as it is being cleaned

Photos of U-156 Officers

Photos from the Aruba Esso News – February 16, 1962



Captain Werner Hartenstein, commander of U-156



Gunnery Office Lt. Dietrich von dem Borne who lost his foot.

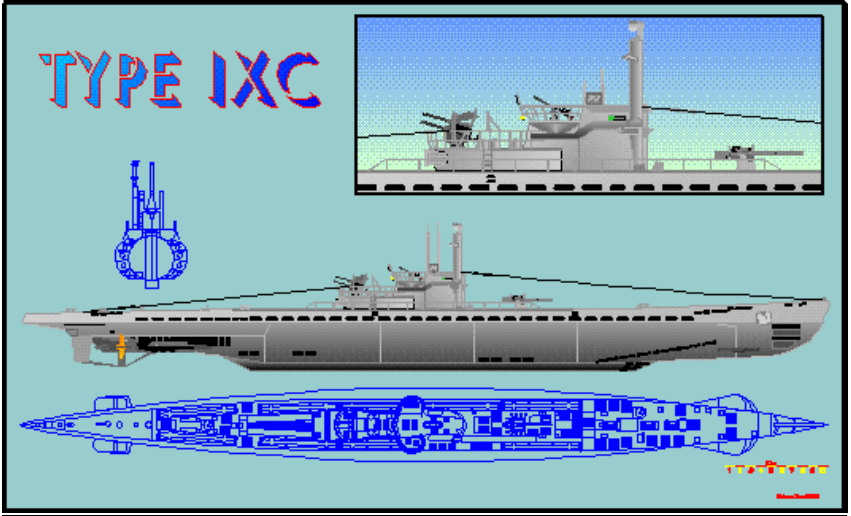


German propaganda poster about the attack, the caption on this poster has been translated. It reads as follows:

February 12, 1942, German submarines invaded the Caribbean Sea, sank three tankers with 17,400 tons by the coast of Curacao and Aruba and fired at the oil refineries on these islands where the raw oil from Venezuela is processed. Due to the lost tankers the already heavily effected oil transportation to England and the United States suffered tremendously. Curacao and Aruba are in Dutch possession. After Holland's capitulation in May of 1940 these islands were taken over by England, and later by the United States after they entered the war. The

submarines fired at factories that lubricated the war machinery. Thousands of tons of oil burned. The oil refineries were destroyed.

This, of course, was German propaganda, four lake tankers were torpedoed but no refinery was destroyed.



Top illustration photo is a drawing of a Type IXC U-Boat, below, left & right, shield and insignia from U-156, from: www.uboat.net.



The Log of U-156

From ARUBA SHIPS

By: Bill Moyer

14 Feb. Caribbean Sea

0000 EC 9348 (map coordinates) Surfaced. Steered to the southeast corner of Aruba. Colorado lighthouse in sight. EC 9347 ENE 5, sea state 4, partly cloudy visibility 6 miles.

0400 EC 9289, ENE 4, sea state 3, partly cloudy, visibility 4 sea miles. Colorado lighthouse 1 sea mile on starboard beam, course 2702. Ran one sea mile along the coast to Nicholaas haven (San Nicholaas Harbor). Entrance to harbor at 900 meters distance. Slow passage made. Reconnaissance of harbor disposition. In port were 4 large tankers, at roadstead 3 small tankers. Factories well lighted, in and out traffic also at night.

0600 At slow speed proceeded northwest along coast to Oranjestad.

0640 off Oranjestad. Off harbor entrance. Little activity in port.

0647 Hooiberg 331, 5.5 sea miles dist. Avoided patrol craft. Stayed at Oranjestad until 0700. Docks empty.

0730 Northwest point 30, 3 sea miles dist. Proceeded on westerly course to reconnaissance merchant ship lanes.

0819 ENE, 4, sea state 3, very cloudy, visibility 5 sea miles on bearing 2902 sighted merchant ship on a 280 degree course. At 1059 turned off. Proceeded to Oranjestad.

0930 Northwest point 80 degrees, 17 sea miles dist. 1200 Northwest point 52 degrees, 5 sea miles dist. ENE 5, sea state 4, partly cloudy, visibility 8 sea miles. Distance sailed: 112 s.m. ow (over water) 21 s.m. uw (under water) total 133 s.m. (sea miles)

1221 Clearing. Dived to observe entrance to Oranjestad. Little traffic

1248 Northwest point in 44,5 degrees, 4, 4 sea miles dist. Until dusk stayed submerged. On bearing 170 degrees tanker on course 250 degrees, leaving Nicholaas haven. At airport 2-42 meter airplanes. Lively air activity in early morning

Signed: Hartenstein

15 FEB Off Aruba

0130 Colorado in 101 degrees 11 sea miles dist. ENE 5, sea state 4, considerable cloudiness, visibility 6 sea miles. Surfaced. Proceeded at 170 degrees, close to the Maracaibo-Nicholaas haven merchant ship sea lane.

0230 Colorado 90 degrees, 12 sea miles dist. Practiced attack maneuver on tanker. Proceeded east course.

1000 Proceeded toward Nicholaas haven.

1200 ENE 5 sea state 4, considerable cloudiness, visibility 30 sea miles. Distance covered: ow 27 sm, uw 11 sm, total 38. 1220 Colorado 32 degrees, 3 sea miles dist. Dived to observe entrance to Nicholaas haven. Considerable activity. Harbor well occupied. proceeded westward thereafter. Official message received. Directed to all Western Hemisphere submarines. (1) The principal assignment is to attack ship targets. (2) If this attack is successful then artillery attack against land targets can be made in the morning, Western Hemisphere time, should opportunities for this be favorable. (3) When no ship targets are encountered, artillery attack against land targets may be made toward evening, West. Hem. time.

1600 Hooiberg 54 degrees, 9 sea miles dist.

1855 Hooiberg 72 degrees, 22, 5 sea miles dist., East 5, Surfaced. Proceeded on west course. sea state 4, cloudy, vis. 12 sea miles.

2000 Hooiberg 69 degrees 27 sea miles dist., East 5, Returned. Proceeded slowly to NW corner of Aruba. sea state 4, light clouds, vis. 12 s.m.. Sighted modern passenger freighter 7000 BRT. Proceeding 120 degrees toward Nicholaas haven or Willemstad. Avoided several sailing vessels.

Signed: Hartenstein

16 FEB

0000 Hooiberg 72 degrees, 21 sea miles dist., ENE 5, sea st. 4, lgt. clouds, visibility 6 sea miles.

0400 Hooiberg 82 degrees, 9 sea miles distant. Proceeded east course Oranjestad.

0500 Hooiberg 92 degrees, 7, 6 sea miles dist.

0514 Off Oranjestad. Lighted tanker being loaded at pier. Proceeding to Nicholaas haven.

0614 Off Nicholaas haven. With L.F. up, proceeded toward two anchored tankers.

0801 Colorado 552, 2 sea miles dist. Under-water bow shot at tanker. Explosion after 48.5 sec. Tanker burned immediately. 3080 tons. ATO 2,5,40,E-5 (range & bearing.) Direct hit amidships.

0803 Underwater bowshot at tanker. Explosion after 53.2 sec. Tanker burned immediately. 2740 tons. ETO 2,5,30 E-5. Direct hit amidships. 0??? Proceeded at 300 degrees for artillery attack against refineries and tanks. Artillery ready. 0811 Fire opened against land targets. 10.5 cm. gun, first shot, gun exploded. Two seriously wounded. 3.7 cm gun, 16 shots. Attacking position poor since there was no night light visibility. Observed one short, quick flame on land. Discontinued fire because of no results.

0850 Proceeded at high speed toward Oranjestad. Patrol craft on course Oranjestad— Nicholas haven passed at distance of 400 meters searching with weak searchlight. Turned off. Searchlights also from land. Colorado 99 degrees, 9 sea miles dist.

0859 Proceeded toward Oranjestad 0900 Seaman Businger died of his wounds. Second Watch Officer lost foot. Bleeding stopped.

0916 off Oranjestad. Headed toward tanker at pier. Underwater bow shot at tanker. Course shot was 54 degrees, No explosion. ETO, 3.30 E-6. Unexplainable miss.

0930 New attack. Under-water bow shot at tanker. Course at shot 29 degrees. No explosion. ETO 3.30 E-6. Unexplainable.

0943 Turned for stern shot. Under—water stern shot at tanker. Course at shot 190 degrees. Another miss. After 1 min. 29.5 sec. explosion on beach.

0946 Aircraft alarm. Stopped. 0947 End alarm. Did not dive. Ran towards north in order to operate by day northward of Island toward Mona passage. Don't expect any of the large tankers to leave today. It seems to me the best thing to do today is to operate on newcomers.

1200 EC 9218, East 5, sea state 5, light clouds, vis. 6 sea miles, swells east 3. Distance covered: o.w. 85 s.m., u.w. 28 s.m., total 113.

1228 Radio message transmitted: Protection only from search-light, aircraft and one patrol boat. Sank two tankers 5800 tons, 2 missed shots against tanker at pier. Gun exploded. Two men seriously injured, one of whom is Second Watch Officer. May I go to Martinique to drop them off? 159 cbm.

Signed: Hartenstein (relayed by another boat, understood by higher authority.)

1600 EC 9222. ENE 4 sea state 3, considerable cloudiness, vis. 12 sea miles. Swells E 3-4. At 1247 hours ran continuously at 60 degrees toward Martinique. At same time, searched ship lanes north of Aruba and Curaçao. Saw nothing.

2000 EC 6395, ENE 6, sea state 5, partially cloudy, vis. 1 2 sea miles.

Signed: Hartenstein

17 FEB North of Aruba

0000 EC 6972, E 4 sea state 4, considerable cloudiness. Visibility 6 sea miles.

0100 EC 6957 Evening position 132 25' N, 682 572W. Burial of Seaman Businger. Radio message received: To Hartenstein. Am considering your request to drop off wounded.

0400 EC 6953, E 4, sea state 4, cloud, rain. Visibility 3 sea miles.

0720 Radio message received: You may proceed to propose island. Leave wounded. Report soonest.

0800 EC 6938, E6, sea state 5, considerable cloudiness, vis. 4 sea miles.

1200 ED 4714, EXS 4, sea state 4, cloudy, Distance covered: 112 s.m. visibility 6 sea miles

1230 ED 4714 Morning position: 1 3257, 5N, 68223, 5.W.

1335 ED 4712 Trial dives. 1514 EXS 4, sea state 3, light clouds, vis. 12 sm. Surfaced. Run continued. Difficult headway against trade winds. Short steep sea.

2000 ED 4491 EXS 5, sea state 4, cloudy, visibility 12 sea miles. At 60 degrees proceeded north because by experience have found the limits of trade wind area lies at 15N. This makes a detour of 30 sm worthwhile.

Signed: Hartenstein

18 FEB

0000 ED 4545 Because of a cross sea from 80 degrees – 120 degrees, high consumption of fuel.

0140 ESE 4, sea state 3, light clouds, visibility 5 sea miles. Radio message transmitted: (1) Air patrol off Antigua. Heavy single traffic in the middle and upper right portion of square 88 appears to radiate from Trinidad. (2) in operating area, no lights until Colorado and harbor lights. Factories were well-lit. There were always 2-4 large tankers in main harbor. Out going traffic mostly west-northwest; also north. Small tankers sail loaded 4 meters deep. Confirmed by hits. Best hunting from 0000 to 0800. (3) Seaman Businger died. Second Watch Officer lost foot. Stopped bleeding. (4) Steering towards Fort de France. 150 cbm. Position 8894.

0400 ED 4528 ESE 4, sea state 3, partially clouded, light rain, vis. 4 sea miles.

0800 ED 4532, ESE 3-4, sea state 3, considerable cloudiness. Visibility 14 sea miles.

THIS ENDS THE LOG





MISC. PHOTO: Out of the water!



MISC. PHOTO: Crowd watches as propeller comes out of water

OIL PRODUCTION AT LAGO REFINERY

1932 TO 1950

YEAR	LAGO'S OUTPUT IN 1000 BARRELS/DAY	ESSO'S TOTAL WORLD OUTPUT IN 1000 BARRELS/DAY	LAGO'S OUTPUT AS % OF ESSO WORLD OUTPUT
1932	53.3	513.7	10 %
1933	109.1	589.1	19 %
1934	138.1	659.1	21 %
1935	162.8	689.3	24 %
1936	185.3	762.1	24 %
1937	225.5	856.5	26 %
1938	221.7	818.1	27 %
1939	227.6	849.8	27 %
1940	168.7	810.4	21 %
1941	228.0	930.5	25 %
1942	147.1	720.3	20 %
1943	222.4	874.6	25 %
1944	280.7	1,069.2	26 %
1945	298.3	1,120.4	27 %
1946	330.7	1,221.3	27 %
1947	359.6	1,343.2	27 %
1948	367.1	1,514.9	24 %
1949	376.4	1,452.7	26 %
1950	405.9	1,639.5	25 %

A BARREL IS 40 GALLONS

The war years, denoted by darker numbers, shows a drop between 1941 & 1943 caused by the loss of four lake tankers. After the attack U. S. Navy escort slowed the turn-a-round time further, thus cutting the refineries supply and production. In 1943 new lake tankers arrived and production increased. The production drop in 1939 – 1940 was caused by the war in Europe.



LAGO OIL AND TRANSPORT CO., LTD.
Aruba Refinery

February 28, 1945

NOTICE

To: ALL LAGO COLONY & LAGO HEIGHTS RESIDENTS

WHAT: A Blackout

WHEN: Today, Wednesday, February 28, 1945.

TIME: 7:30 p.m.

DURATION: Until Naval Authorities are satisfied with
blackout.

SUGGESTION: Blackout as quickly and as completely as
possible and the duration will be shorter.

HINT: There will be no advance notice on black-
outs to come.

COLONY SERVICE DEPARTMENT

MISC. PHOTO: Blackout notice dated 1945 for Lago Colony & Lago Heights.

Defense of Aruba

1940 - 1942
CAMERON HIGHLANDERS SCOTLAND



Cameron Highlanders insignia and tartan



Highlanders on parade in Saveneta, Aruba



Cameron Highlanders march through refinery and into Lago Colony
The bagpipers lead the parade



American and Scottish troops pose together on the day of the transfer of
command



American Troops

1942 – 1945

252nd COASTAL ARTILLERY BATTALION

American troops replaced Scottish troops in 1942.



American troops on parade in Oranjestad, Aruba



GUARD DUTY - LAGO REFINERY WWII



Torpedo at Eagle Beach
Unexploded torpedo fired on 16 Feb. 1942 by U-156 at the Arkansas, berthed at Eagle Pier.
Inspected by Dutch, left, and US Army Officer, Cap. Robert Bruskin.
Four Dutch marines were killed when trying to take it apart and it exploded.

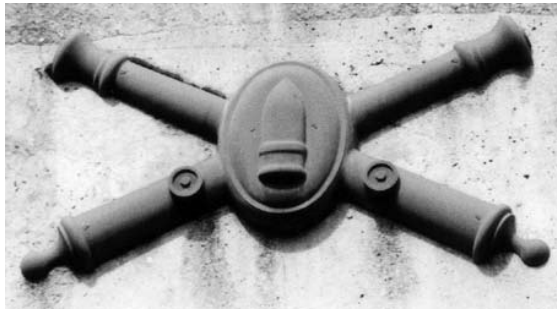
Photo of torpedo on Eagle Beach before it exploded, killing four Dutch Marines



7.5 inch gun, one of three on the island at the time of the attack was manned by Dutch Military Personnel. These gun emplacements can still be seen; they were not fired the night of the attack because of the smoke from the burning ships that hindered the view.

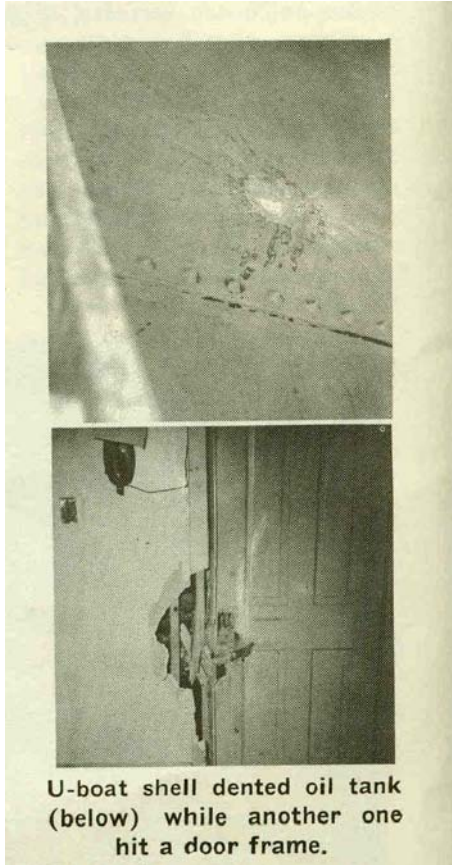


Remains of "Panama Mount" for 155-mm Howitzers located at Colorado Point, there were four of these mounts with guns at this site. These "Panama Mount" emplacements allowed the Howitzer to fire 360 degrees and can still be seen at the top of Colorado Point on the east end of Aruba.



Insignia of the Coastal Artillery





MISC. PHOTO: From an Aruba Esso News, shows the damage done by the 20 mm shells fired by U-156.



MISC. PHOTO: TV crew goes out with the divers on the last dive.

Pilots of the 32nd Fighter Squadron



Top row, left to right: 2Lt. Edward M. Beaver 2Lt. Arthur E. Qualtney (killed in a P-38 in Panama) 2Lt. James J. Epscamp 2Lt. Gerard F. Cavanaugh - transferred to ETO, 95th Squadron P-38's. 2Lt. Francis P. Hanlon - transferred to ETO, 95th Squadron P-38's, killed in action June 10 (or 16), 1944 2Lt. Robert B. Koster - killed in mid-air collision over France Field, Panama.

Bottom row, L to R: 2Lt. Louis Grillo - transferred to P-38's out of 32nd, retired as colonel. Captain Virgil Roan, deputy CO at Aruba; Captain Charles E. Ramsey, CO at Aruba, retired as colonel. 2Lt. Robert B. Schick 2Lt. Edward Slaughter - retired as major.



Douglas A-20A





MISC. PHOTO: Dick getting suited up to dive



MISC. PHOTO: Site where the monument will be placed, to the right of the light pole.

Fact About Diving Deeper Than 130 Feet

THIS INFORMATION IS PROVIDED TO STRESS HOW DANGEROUS THIS TYPE OF DIVING IS AND THE RISK TAKEN BY THE DIVE TEAM TO RETRIEVE THE PROPELLER.

A Few Things Your Sport Diving Instructor May Not Have Told You about Deeper Diving

By
Larry "Harris" Taylor, Ph.D.
Diving Safety Coordinator
University of Michigan
Ann Arbor, Michigan

This is from an article that appeared in SOURCES (Nov/Dec. 1991, p. 63-68 & THE BEST OF SOURCES, p. 37-41).

ACRONYMS USED IN THE ARTICLE

DAN = Diver's Alert Network
ffw = feet fresh water
fsw = feet sea water
ppm = parts per million

There is an incredible fascination with diving on intact shipwrecks. In the quest for this thrill of diving unmolested wrecks, some divers in the Great Lakes are diving on compressed air in the vicinity of 200 ffw or deeper. A few of these "sport divers" have taken years to develop skills, technique and equipment that allow them to survive these penetrations into that deep, dark, cold and silent world that lies beneath the sport diving limit of 100 - 130 Feet. A few are truly highly skilled diving adventurers. Some would call them pioneers. Others would call them something less dignified. It is true that some walk with a noticeable limp, stand a little funny (numbness in the legs), have difficulty remembering things or seem to have somehow slowed their thinking and speech processes. None-the-less, many of these diving adventurers have seen splendors that not many will ever know. Other diving "adventurers" have found unique pains and death.

Divers new to our sport often do not realize that the successful deep diver has generally taken a decade or more to develop the necessary skills, equipment and technique to survive consistently this deeper diving. Make no mistake; some of these divers are highly skilled and physically fit. That exceptional proficiency, however, was not acquired in only a few days or even years. Although most are self-taught, many of these deep divers were trained when diving courses were longer and

discussions on diving physics and physiology was more extensive. Thus, they have had access to information often missing in today's shorter curriculum ... material that is essential to make informed risk/benefit assessments. There are distinct physiological problems associated with deep diving. Since divers do not breathe water, the physiological impairments caused by deep diving can be (and have been) life threatening. Sport "deep diving" courses are simply insufficient training for diving to depths "below the limits." Divers compelled to dive below 100 feet should consider commercial or military dive training - depths below 100 feet are beyond the realm of sport diving...Sport diving equipment and techniques no longer are adequate! In addition, the training agencies will not, for a variety of reasons, address the question of training, at this time, for diving below 100-130 feet.

There are those who earn their livelihood diving at depths below 100 feet. Many of these commercial divers would consider sport divers foolhardy for diving under conditions a professional would consider to be too dangerous. Note that commercial operations are conducted under federal/state OSHA regulations. Recreational and scientific diving is specifically exempted from these regulations. (Scientific diving, however, operates under similar guidelines promulgated by the American Academy of Underwater Sciences.) Whenever any employer/employee relationship exists, these rules do apply. This means even if the diver is volunteering services and equipment, non-recreational, non-scientific diving **may** be subject to federal/state occupational safety regulations. These federal regulations decree that all dives more than 130 fsw (some states have tougher regulations; Michigan, for example, places the limit at 100 feet) or any dive requiring decompression be conducted with a tender for each diver, a stand-by safety diver, a surface decompression chamber on the dive site, and an adequate supply of breathing gas for the diver, the stand-by diver and the recompression chamber. The law specifies that the vessel used as a diving platform be Coast Guard approved and commanded by a Coast Guard licensed operator. A designated "diving supervisor" who insures that all OSHA regulations are met during the dive operation must control the diving. There are additional requirements specifying the first aid equipment, including oxygen, which must be on the dive site. The law also requires that a complete time/event log be maintained. The British government mandates that all diving more than 165 fsw under their jurisdiction be done on mixed gas. In today's liability conscious society, most legitimate diving contractors will exceed the minimum OSHA standards.

Since federal diving safety regulations prohibit non-recreational scuba operations below 130 fsw, commercial/scientific diving is often a single diver down mode with a tended tether, surface supplied breathing gas and some sort of dry face mask/helmet equipped with hard wire communications. This equipment significantly increases the safety of the diver. The communication system allows the surface support personnel to monitor the diver's psychological and physiological status. Surface control of the entire dive operation minimizes task loading on the diver. This insures that potentially narcosis-free surface support personnel make life threatening/saving decisions. The dry mask/helmet provides mechanical and thermal protection for the diver's head and face. More importantly, it gives the diver a dry atmosphere that is breathable if a blackout occurs.

Commercial operations must be conducted with redundant equipment and personnel. It is this contingency for the unexpected that increases diver safety. This redundancy is most often missing in deep sport diving excursions. (This equipment is beyond the finances and training of most in the sport diving community.) Thus, the deep sport diving adventurer has very little, if any, margin for human error.

There are significant physiological problems in deeper diving. These include:

BLACKOUT: Divers have been known to suddenly lose consciousness. This may be from carbon dioxide toxicity, carbon monoxide poisoning, severe decompression sickness, drowning (loss of regulator because of malfunction; more likely a result of snag or hindered regulator exchange at depth; vomiting from seasickness followed by aspiration of seawater, etc.), hypoglycemia, hyperthermia, hypothermia, hypoxia from equipment malfunction or miscalculation of breathing gas composition, severe nitrogen narcosis, oxygen toxicity, pulmonary barotrauma of ascent (air embolism), or syncope of ascent.

Each specific loss of consciousness under water may be due to a unique combination of environmental, equipment or diver physiology factors. It is not possible to predict each diver's vulnerability in absolute terms. Conditions which may increase the likelihood of unconsciousness include: low blood sugar, either from dieting or sustained workload, fatigue from lack of rest or sustained workload, being too warm or too cold, dehydration, drugs, particularly anything that has a warning label about "not operating machinery," anxiety/fear and inexperience. Surveys have shown that the inexperienced diver often is the most at risk. If a commercial/scientific diver loses

consciousness, he/she continues to breathe a dry gas inside the mask/helmet; the lack of diver response alerts the surface communicator that a problem has occurred. Often, the communicator is aware of a problem before the diver and can initiate steps to alleviate the problem. Two-way communication is a vital safety feature often missing in sport diving situations. If a sport diver loses consciousness, there is concern that a sport diver's regulator will fall out of the mouth. The sport diver then attempts to breathe water and drowns. In addition, the unconscious diver must depend on a buddy, if present, to insure return to the surface.

The cave diving community has noted a condition where the diver simply appears to fall asleep. The eyes remain open; the diver does nothing but breathe. In these cases, the regulator, for unknown reasons, has remained in the mouth. The victims, rescued by their buddies, recall no warning signs. In the 15 reported cases, all victims were on their deepest ever dive.

CARBON DIOXIDE (CO₂) TOXICITY: Carbon dioxide is the normal waste product of human metabolism. As more work is done, more CO₂ is generated. A person in poor physical condition may generate 2-4 times the amount of CO₂ as someone who is in excellent physical condition while doing the same workload. At depth, the density of the breathing gas increases. This increases the work associated with breathing and may lead to inadequate pulmonary ventilation. It is important for divers to realize that on scuba the CO₂ comes from internal body chemistry, not from the gas being breathed. It is the inability of the body to eliminate this waste product that creates the problem. This means that CO₂ can be a significant problem in deeper diving.

Symptoms of high CO₂ usually begin with increased rate of respiration. There is often the feeling that the regulator cannot supply enough air. This may lead the diver to conclude falsely that an out-of-air emergency exists. This feeling of inadequate respiration may be accompanied by a feeling of constriction around the chest, heavy perspiration, lightheadedness, or headache. The headache commonly is an intense pain in the center of the forehead. This "CO₂ hit," the feeling of total inadequacy to breathe, can be a terrifying experience. Underwater "CO₂ hits" can easily lead to panic. Panic can lead to an uncontrolled "escape" to the surface. This panicked ascent can cause a fatal cerebral air embolism. A diver doing work at depth, however, may have little, if any, warning of CO₂ problems before losing consciousness. Again, loss of consciousness under water in sport diving equipment has a low probability of survival. In addition, it is

believed that high CO₂ increases the likelihood of decompression sickness, nitrogen narcosis and oxygen toxicity.

If the diver is aware that a CO₂ problem is beginning to occur, the diver should stop all activity and initiate slow, deep breathing until perceived symptoms are eliminated. It is wise to continue resting a bit once relief is felt and to proceed at a slower pace. Note that most experienced divers develop a slow breathing pattern. This means a routinely high CO₂ level during diving activities. Work, coupled with poor physical condition, aggravates the problem. It is also believed that oxygen enriched breathing mixtures can increase CO₂ retention.

CARBON MONOXIDE (CO) TOXICITY: Despite the tendency to blame diver unconsciousness on this malady, it is rarely observed. Carbon monoxide is primarily generated from incomplete combustion. It can be present in the air supplied from faulty compressors (electric, as well as gas driven) or taken into the compressor intake from a CO source such as a kerosene heater, gas or diesel engine exhaust or cigarette smoke. The CO binds to hemoglobin about 200 times tighter than oxygen. This means the hemoglobin that has reacted with CO will not carry oxygen. Lack of oxygen can be fatal. The uptake of CO is dependent on the concentration of CO in the breathing gas, on respiration rate and the time of exposure. Symptoms may include: frontal headache, nausea, tingling in the fingers and toes, lightheadedness, vision disturbances or loss of consciousness with no warning. The often-quoted cherry red lips or fingernails are a very unreliable sign and may only be visible at autopsy. At depth the increased partial pressure of oxygen may mask some of the hypoxia created by the oxygen deprived carboxyhemoglobin. On ascent, the hemoglobin will still be compromised, but the decreased pO₂ will no longer compensate and unconsciousness occurs without warning.

Finally, the U.S. Navy pure air standards for breathing compressed air allow only 20 ppm CO in scuba air. Smoke from an American cigarette typically contains about 4% (20,000 ppm) CO. The average inhalation of a smoker contains about 500 ppm CO. This means that finishing a cigarette just before a dive will make about 3 -7% of the hemoglobin in the blood unable to carry oxygen. The oxygen carrying capacity of the red blood cells will be diminished for 5-8 hrs after the last exposure to smoke. Breathing smoke, actively or passively, will decrease the ability of the blood to carry oxygen and this decrease in efficiency may contribute to decreased performance at depth.

DECOMPRESSION SICKNESS: The risk of permanent tissue injury increases with depth. Many sport divers have been given the impression that "the bends" is a benign disease. That simply is not true. The bends can kill, but most often it cripples. The DAN numbers show more than 500 divers a year now require chamber treatment. After 3 months post treatment, 13% of those treated still show some residual impairment. Severe sport diver bends hits most often show spinal cord involvement. This means that anything "South" of the lesion will be impaired. The spinal cord mediated functions most often tainted are walking, urinating, defecating, and sexual response. So, if you like to walk without a cane or wheelchair, go to the bathroom unassisted or to have sex, it is worth your while to develop some understanding of decompression sickness and its prevention. (A recent national survey reported in Skin Diver magazine noted that approximately 60% of those in the sport diving community surveyed could not recognize the symptoms of the bends and almost every survey of divers done recently suggests that more than 50% of sport divers cannot plan dives using decompression tables.)

A real danger of decompression sickness is that it is often a progressive disease; it may continue to get worse until treated. In North America the time from onset of recognizable symptoms to chamber treatment is often more than 12 hours. It is this delay that can be so devastating. It is believed that the longer the delay between onset of severe symptoms and treatment, the less the chance for total recovery. During the delay the bubbles formed continue to impair or destroy body functions. The key to successful recovery from the bends is immediate recognition of symptoms and the prompt administration of the highest possible concentration of O₂ (preferably by demand mask). Medical consultation/treatment should always be sought. Not recognizing or ignoring the symptoms may allow the disease to do more damage. Although there are anecdotal stories of acute relief of decompression sickness symptoms without medical treatment, there is a lingering question of the potential for long-term damage even though immediate clinical signs were absent or simply went away.

The problems linked to decompression sickness can primarily be called "bubble trouble." Whenever bubbles form, they obstruct normal body function. This may prevent normal exchange of nutrients and oxygen and allows waste products to accumulate. This can, over time, create destruction of body cells. Medical evidence is beginning to accumulate that suggests there may be gradual deterioration of nervous system tissue upon repeated exposure to deep diving. It is believed that this damage can occur without ever showing gross clinical signs (i.e. joint pain, etc.) classically associated with decompression sickness hits.

Although still far from complete, early studies seem to imply that there is a marked deterioration in short-term memory and reasoning skills in commercial divers aged 24-39. Autopsy studies of three deep divers who died of non-diving related causes indicated that there was a marked degradation of spinal cord tissue. It is believed that the spinal cord lesions were created from diving. Although controversial, there is some evidence that deep diving can block retinal blood flow and create vision problems due to a damaged retina. Additional studies measuring blood chemistry and urine of divers imply that the liver, as well, may be damaged in divers diving as shallow as 30 meters (98 feet).

The body is a remarkable biochemical machine with much redundancy. It can sustain some tissue damage that can be compensated for by this redundancy. However, repeated exposure to tissue-damaging conditions will ultimately result in loss of function.

Bottom line: The DAN numbers suggest that diving below 80 fsw is a significant risk factor for sport divers (more than 70% of DAN treatments involved sport dives to depths below 80 fsw). The deeper and more often this deep diving occurs, the more the risk for long-term neurological damage. It is not possible to predict the type and severity of this physiological impairment.

NITROGEN NARCOSIS: Many sport divers consider the "high" associated with narcosis to be a desirable event. This reflects a lack of understanding of the dangers associated with breathing compressed air at depth. Nitrogen is physiologically inert (not consumed in metabolism), but it does dissolve in body tissues. As more and more nitrogen dissolves (Remember: Henry's Law), the abundance of nitrogen interferes with the nervous system. The more nitrogen present, the more likely there will be a loss of performance. The result is impairment of intellectual capacity, degradation of neuromuscular performance and changes in mood and behavior. The narcosis effect poses a significant danger to the diver because as it increases the risk of an accident due to inability to perform at depth, it decreases the diver's perception that any problem may exist. Direct injury (aside from short term memory loss) from narcosis is unlikely. The danger is people do not breathe water. Under the influence of narcosis, divers may make inappropriate decisions that place them at risk. (Such observed diver decisions have included removal of life-support equipment at depth.) The degradation of performance and perception caused by narcosis is often claimed to be the primary reason for the sport diving limit of 100-130 fsw. (Historically, however, the US Navy used the 130-fsw as the limit because this was considered the deepest

depth that divers could do useful work while breathing from a two hose style regulator (state-of-the-art at the time the limit was imposed.)

There is a marked variation in susceptibility to narcosis. This variation is not predictable. Thus, it is not possible to equate absolutely symptoms observed with depth. Some divers may be affected at 80 - 90 fsw or even shallower. The effects may vary within the same diver from day to day. The physiological degradation begins within moments of reaching depth and increases with further descent. The higher mental functions such as ability to reason - to make potential life-saving judgments, to remember recent events, to learn new tasks and to focus concentration on a specific task are first affected. (One reason for commercial hard wire communications is so that surface personnel can monitor a diver's ability to function and remind the diver what is to be done.) In warm, clear water divers may first feel euphoric and overconfident ... sort of like the "Do what you will, you can't hurt me feeling" that arises from breathing nitrous oxide (laughing gas) at the dentist's office. In cold, limited visibility water or in water where neither the surface nor the bottom is visible, the diver may develop a sense of foreboding or impending doom. This sense of doom may escalate to terror and panic. As depth increases, progressive impairment of both physical and mental skills increases. The diver may feel drowsy. Idea fixation and hallucination may occur. Some divers may note a narrowing of vision, like looking through a narrow tube. It is common for a "narced" diver to forget the reason for the dive. One reason that deep diving sport divers take pictures is that often they can't remember what they saw on the dive. Short-term amnesia is a common aftereffect of narcosis. The photos (if recognizable) tell them that they were at least somewhere near a wreck. Nitrogen narcosis is aggravated by high CO₂ levels, anxiety, cold, fatigue and medications, particularly sedatives (anti-motion sickness remedies?) and alcohol. There are anecdotal reports that women will show shallower onset and increased severity of symptoms when diving during periods of normal fluid retention.

Narcosis is easily avoided by liberal applications of common sense. Simply confining dives to shallower than 90 fsw will most likely eliminate most narcosis problems. Ascent when symptoms are recognized will relieve the physiological compromises that narcosis generates. Relief is generally rapid on ascent.

Bottom line: If you are human and dive below 90 fsw breathing compressed air, then your normal human physiology will be impaired and it is impossible to predict the severity of your inability to perform.

OXYGEN TOXICITY: Oxygen is a component of the air we breathe. The body uses chemical reactions based on oxygen to generate heat and chemical energy. It is this process called metabolism that keeps us alive. Oxygen reacts chemically with many different substances. The rate at which oxygen will react (oxidation) with another chemical compound in the body is determined, in part, by the partial pressure of the oxygen in the breathing gas mix. As we descend in the water column, we increase the partial pressure of all gases, including oxygen. Reactions with oxygen will therefore increase. Some of these oxidation products can have harmful effects on human beings. The exact mechanism of these harmful effects is not yet understood.

High oxygen concentrations affect the central nervous system in a variety of ways. Observed symptoms, which may appear alone or in any combination, include: nausea, vomiting, lightheadedness, dizziness that may increase to vertigo, ringing in the ears, a feeling of impending collapse, excessive perspiration, slowing of the heart rate, tunnel vision, muscle twitching, particularly around the mouth and facial area, dilation of the pupils, generalized peripheral muscle twitching, hiccups, amnesia, hallucination and mental confusion. The symptoms can lead into a "grand mal" epileptic-type seizure. This seizure may appear without warning. A grand mal convulsive seizure at depth in sport diving equipment is not considered to be a survivable event. Increased physical activity, excitement or anxiety, and being too warm at depth apparently increase the risk of an oxygen toxicity problem. The susceptibility of individual divers to oxygen toxicity cannot be predicted. It is now believed to be dependent on the individual's body chemistry on the actual day of diving. The once used "oxygen tolerance test" is no longer considered reliable.

It used to be believed that if the diver were breathing a gas containing less than 2 ATA partial pressure of O_2 , that potential oxygen toxicity problems would be eliminated. This corresponds to a depth of 33 fsw for breathing 100% O_2 . That is no longer current thinking. Current practice is to avoid breathing gas that has a partial pressure of more than 1.6 ATA (19 fsw on 100% O_2 ; 218 fsw on air) or to even a lower p O_2 . Oxygen toxicity seizures have been observed in divers breathing compressed air in the 220-fsw range. This observation suggests to avoid acute oxygen toxicity hits, dives on compressed air should not exceed 180 fsw.

There are other problems that could result from the practice of breathing pure O_2 at depth (during decompression stops?). There are some medical authorities who consider 100% O_2 at elevated pressures a cellular toxin. Breathing pure O_2 at elevated pressures for extended

times can induce abnormalities in the red blood cells that carry O₂ to the body. High O₂ concentrations can constrict blood vessels in the eye and lead to visual problems. In addition, high O₂ can create a mild hearing loss that may appear hours after the dive and take a day or so to disappear. High p O₂ has also been proposed as contributing to dysbaric osteonecrosis ("bone death"- usually seen in deep diving commercial divers; this malady may eventually require surgery to replace bone joints with artificial devices.)

Bottom line: The potential for grand mal seizure and subsequent death caused by oxygen toxicity makes diving below 180 fsw in sport diving equipment on compressed air an extremely high risk activity. Below 200 fsw many diving authorities believe that oxygen toxicity poses a greater risk to the diver on compressed air than nitrogen narcosis.

SYNCOPE OF ASCENT: This refers to the unexpected transient loss of consciousness that may be due to partial breath holding during ascent. It is believed to be caused by the expansion of gases within the thoracic cavity that interferes with venous blood return. This lack of returning blood to the heart reduces cardiac output. The reduced blood flow to the head causes loss of consciousness. In sport diving equipment, this loss of consciousness could lead to loss of regulator and subsequent drowning.

UNEXPLAINED BEHAVIOR: The effects of pressure on human physiology and psychology are often unpredictable. Hyperbaric medicine is not yet an exact science. Divers have been known to exhibit, for no known reason, behavior that is contrary to survival. For example, I was with a diver along a sheer rock wall at a depth of about 25 feet of water. We had been down for 18 minutes (following a 2 hr and 10 min surface interval from a wreck dive of 15 minutes in 40 F water at a maximum depth of 108 feet.) We exchanged "time-to-turn-around-and-head-for-the-dive-boat" signals (a touch to the watch and the "thumbs up") and the diver's "O.K." The diver then turned and headed straight for the bottom. The diver was near 60 feet before I re-established contact and asserted control. When I caught the diver, I grabbed the shoulder and rotated the diver so that I could see the face. It was as if I were waking the diver from a deep sleep. The diver, even when prompted with eyewitnesses' accounts, has no recollection of the entire episode. After several years, the event is still unexplained.

RISK: REAL OR THEORETICAL? There is a wreck, the Gunilda, which lies at 256 ffw in the Great Lakes. Since it has historical significance and lies close to the Canadian shore, the diving activity on

this vessel has been monitored. To date, there have been 26 divers who have visited this wreck. Twelve of these divers (operating under commercial-type protocols) account for 136 dives on this vessel. Within this group, 1 dive required treatment for severe decompression sickness (to a diver who had 34 dives on this wreck) and there were no fatalities. There have been 14 sport divers on compressed air that have accounted for 33 dives. Of these 33 dives, 9 (27%) have resulted in severe decompression sickness that required chamber treatment, 5 dives (15%) were aborted due to severe narcosis that required the diver to be rescued, and there were two fatalities (6%). In addition, two of these surviving divers, one from each group, have subsequently died on another deep wreck.

The population of sport divers who visited this wreck is small. These divers have seen an awesome spectacle. Not all divers have been visibly injured. However, there were two sport diving fatalities and a high percentage of sport divers requiring treatment for severe decompression sickness. It would appear from this admittedly small survey that diving to 250 ffw on compressed air does, indeed, pose a significant risk to the recreational diver.

It is most interesting to listen to these deep diving adventurers post-treatment. One diver, after leaving the chamber against medical advice, stated that he had experienced "no narcosis problem" at 256 ffw on compressed air. (Remember, short-term amnesia is a common after effect.) This diver went on to state that the bends had produced only a "mild" pain. (Perhaps the "mildness" of the pain could be attributed to the morphine that was administered to this diver by the emergency medical team on the flight to the chamber.)

FINAL THOUGHTS: No one has the right to restrict your personal style of recreational diving. Lee Somers, Ph.D., Diving Safety Officer for the University of Michigan and one of the Founding Fathers of our sport, calls this "THE RIGHT TO DIvE!" Dan Orr, Training Coordinator for DAN, calls deep sport diving "an exercise in natural selection." The decision to risk life and spinal cord for the sake of recreational adventure rests with each diver. This risk (loss of life or maybe only a slight compromise in mental faculties, the ability to walk, go to the bathroom unassisted or to have sex) / benefit (adventure, thrill, status, or fame) decision should, however, be based on knowledge and evaluation of the actual risks incurred and not solely on the perceived status of survival.

I once asked a very highly skilled and well-known Great Lakes deep sport diver about diving to extreme depths on compressed air without the redundancy of commercial equipment and personnel. My question, "What do you do alone at 250 feet under the influence of narcosis to deal with an equipment emergency?" His answer, "I die!" Enough said! The decision to dive to "adventurer depths" rests with the individual diver. Choose wisely!

Acknowledgment

The author, Larry "Harris" Taylor, Ph.D., wishes to express his gratitude to Karl Huggins, Dan Orr and Lee Somers for hours of stimulating conversation about this topic. In particular, he would like to thank Karl for testing the capacity of his answering machine with an impromptu discussion on the deep divers of the Gunilda.

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List of Those Who Died in World War II from Aruba

The following names can be found on www.lago-colony.com along with their dates of birth, where they worked, and when they died. Look under WORLD WAR II and then go to THOSE WHO DIED.

ADAIR, William T.S.
AGNEW, Harold
ALBERTUS, B
BURNABELA, Humiliano P.
BOEKHOUDT, Jose Pilatus
BOOM, Ulises
BOROM, Ellsworth,
BRINKWORTH, William
BURTON, James
CAPELLO, Francito L.
CARDONA, David Gonzalez
CARRASQUILLO, Eddie
CICILIA, Claude Benedicto
CHANG, Wong Wai
CHARLES, Joseph
CHEUN, Yong Quia
CHONG, Yong Ah
CLARINDA, Nicolaas A.
COFFI, Antonio C.P.
COFFI, Juan Cancio
COLBY JR., Whitney
CONSTANCIA, Tito Martis
CORNETT, James Stewart
DAANCHI, Juan
DAVIES, Thomas D.
DAVIS, P. A.
DAWSON, W. J.
DCHIN, Tsai
DEBROT, Charles Marius
DE JONG, K.
DELGADO, Luis Enrique
DELLIMORE, John Maitland
DEL ROSARIO, Jose Mercedes
DE MAAGD, Dirk Adrianus C.
DEMBROOKE, John Otavo
DE PALM, Andres José
DE PALM, Hubert
DE VRIES, J.
DUKHOFF, Pedrito

DORAN, Gumercinde L.
DUNLOCK, John William
ECURY, Secundo Jorge A.
EMERENCIANA, Louis Nicolaas
ENRIQUEZ, Octavio Ciorda
FARRELL, Desmond
FOH, Tan Ah
FOO, Mit-Che
FORDE, W. St. C.
FRIDAEI, L. H.
GEMMELL, Neil C.
GIBBS, H. L.
GOELOE, Juan Domingo
GONZALEZ, Cardona David
GUILLOT, Roberto Antonio
HAAYEN, Jan F
HARGREAVES, J. S.
HART, J. A.
HASSON, Leonard R.
HECKER, Gerardo
HOLLAND, Norris Reddon
HOLMES, Frank W.
HONG, Cheng
HOOKER, William O.
HYGRELL, Gustaff
IMLER, Robert
ISIJK, Martinus Bibiano
JACKSON, Anthony D.
JACKSON, Edward J.
JANGA, Delfincio G.
JANSEN, Enrique J
JOSSE, Pieter
KANE, Samuel M.
KENNEY, Rupert R.
KING, Hsu
KING, Fa
KING, Hsu
KING, Lam
KOYMAN, Leonardus
KRAAL, Benjamin C.
LAGUNA, Rafael
LAURENS, Marco L.
LAVEIST, Esau E.
LEES, David B. B.
LEITO, Benito

LINZEY, Eric Norbert
LITTLE, Delphis Joseph
LOPEZ, Ildenso
LOW, Ng Poy
LYNCH, Darcey Kenneth
MAAS, F. A.
MAASDAMME, J. Edward M.
MADURO, George, J. L.
MANUELA, Gabriel A.
MARCHENA, Rafael C.
MARTIJN, Dominico
MARTIJN, Hose Bernardo
MARTIJN, Olivero Dominico
MARTIJN, P. W. H.
MARTIJN, Thomas F.
MARTIS, Hendrik Natividad
MAXWELL, James Andrew
McFARLANE, Abrahaam
McMASTER, William
MILBANKE, George
MILLS, James
MILLS, William A.
MITCHEL, Robert
MOL, J. J.
MOORE, John
MULLER, Julius August
NAN, Wang
NUDAM, A.
PANNEFLEK, Federico M.
PIETER, Alberto Gregorio
PIETERSZ, Julio S. R.
PING, Yu Hong
POURIR, David H. P.
RAFAEL, Charles H. B.
RICHARDSON, George R.
RIDGE, John A.
RIVERA NORAT, Ruben B.
RODRIQUEZ, R.
ROSALIA, Jose B.
ROSARIA, William F.
ROZEBOOM, S.
RUSSELL, William M.
SCHEELBEEK, A. H.
SILBERIE, Marco
SHING, Ho Muk

SIMMONS, Benjamin E.
SINCLAIR, Roy E.
SMIT, C.
STOEL, A. Th.
TCHAO, Wang.
TEJEDA, Raul Ernesto
THIELMAN, Jose G.
THODE, Antonio F.
THOMAS, E. St. C.
THOMPSON, C.
TJIETJIE, P. W.
TROMP, Bartolo
VAN DER HOEVEN, Gerardo
VAN DER LINDE, J.
VAN MECHELEN, C. A.
VAN PUTTEN, James C.
VERHEY, J.
VERHOEKS, Arturo F.
VOGELENZANG, Johannes
WALKER, Enoch Ditchfield
WALKER, James
WALKER, James
WHITFIELD, Wilson
WILSON, Clifford Achilles
WILSON, John
WINKLAAR, Elias O.
WONG, Chang
WOODS, Antonio Duran
WOODS, Henry Swinton
WIJNGANG, M.D.J.
YUNG, Wong Tek

**ADDITIONAL LIST OF NAMES WITH NO OTHER
INFORMATION KNOWN**

Anthony, M. R.
Bernabela, H. G.
Charlouis, M. T. H.
Cicilia, C. E.
De Haseth Gorsira, M.C.B.
De Jong, K.
Dortalina, J. L.
Emnes, G. L.
Forbes, H. J. H.
Goedgedrag, P. V.

Landenga, U.
Lyton, J. M.
Leito, B. F.
Leepelaars, J.
Leepelaars, L. W.
Lodrigo, H. L.
Lourens, M. M.
Martes, C. R.
Martina, E. A.
Martina, P. A.
Stelk, E. A. J.
Ten Have, A. G.
Ten Have, G.
Ten Have, K.
Ten Have, N.
Thode, S.
Van den Bert, J. W.
Van den Hoevert, N. A.
Wensing, H.
Wensing, M. T. H.
Gosira, M. C. B.
Granger, A. D.
Hartiel, T.
Hooker, W. D.
Hommerson, A. G.
Jansen, H. C.
Knevel, A. M. V.
Landenga, J
Matrona, E. A.
Matrona, M. R.
Muller, Statius G. I.
Neeleman, W.
Rosalina, J. B.
Scherptong, L. B.
Serberie, S. M.
Smiet, L. E.
Wensing, Hesselling, M. G.
Wingang, M. D. I.
Winfield, A. C.
Winklaar, A. C.
Woods, A. D.
Woods, H. S.

**List compiled by Adolf (Dufi) Kock, Writer/Historian
Savaneta, Aruba**



MISC. PHOTO: Fund raising raffle for the monument in Aruba



MISC. PHOTO: Aruba Coast Guard looks on as propeller is readied for lift, air bag can also be seen floating

Marine Club Plaque to Fallen Members



This plaque hung in the Lago Marine Club, which was located inside the refinery area and down by the docks. It was dedicated to Club Members who lost their lives during World War II. As best can be determined, from people who remember seeing the plaque over the years, when the Lago Marine Club closed, the plaque was moved to the International Seamen's Club where it hung until closed. The Seamen's Club was located next door to the Saint Teresita Church. The plaque was then moved to Saint Teresita Church in San Nicholaas, where it hangs today.



This is the same plaque, showing only the copper sheet with the names, the board to which the copper sheet is attached has been cropped out to allow the names to appear clearer.



Interesting Numbers and Trivia

FIRST THE NUMBERS

I got to thinking about monuments to civilians killed because of World War II and wondering how Aruba stacked up against other countries. Just how safe was it for a civilian to live in Aruba during World War II?

As compared to other countries, how much sacrifice did the Aruba population, native and non-native, make during World War II?

Here is what I found.

Aruba's population in the war years was about 35,000, which is probably a little high, but it is based on the average population from 1940 to 1945. These numbers were obtained from the web site shown below.

For the number of persons lost I used Dufi Kock's list of Those Who Died, which has 215 names. This list breaks down to 163 with information about them, age, place of birth and occupation. There are an additional 62 names with little, other than their names, known about them. Again, a few of the persons on the list were military; I estimate about 6, leaving 209 civilian casualties.

Using these numbers, 0.006 percent of the Aruban civilian population gave their lives to the war effort

The English civilian casualties for World War II, as a direct result of World War II are shown as .0014 percent. This includes the civilians killed in the bombing of London and Coventry. This is a little less than a quarter of Aruba's number. In other words, for every one civilian killed in Britain because of the war there were four civilians killed who lived in Aruba. These numbers were obtained from Wikipedia, see below.

For the United States the civilian casualties are shown as .00013 percent. Same source as used for England.

Next I looked at France, a country where a lot of fighting took place. The population of France in World War II was listed as 41,700,000 and the civilian casualties listed as 267,000. This works out to 0.006%.

Based on these figures you can see that Aruba gave a very much larger percentage of its civilian population to the war effort than either the United States or England and Aruba's loss equals that of France.

Granted, these people were not all from Aruba, but they were living there as residents, so for a civilian living in Aruba, Aruba was not as safe as the United States or England during the war.

Causality source for United States, England & France:
[http://en.wikipedia.org/wiki/World War II casualties](http://en.wikipedia.org/wiki/World_War_II_casualties)

Population source for Aruba:
<http://www.populstat.info/Americas/arubac.htm>

Causality source for Singapore:
http://infopedia.nl.sg/articles/SIP_516_2004-12-23.html

TRIVIA

Dick's diary of the dives says the propeller was lifted on April 13, 2009. The passenger ship RMS Titanic struck an iceberg on the night of April 14, 1912 and sank on the morning of the 15th. Both the Titanic and the Oranjestad were built by Harland & Wolff in their Belfast shipyards.



Aruba Esso News

The February 16, 1962, Special Edition, when the story was first told.
In English and Papiamentu.

Aruba Esso News

February 16, 1962

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VOL. 23, Special Issue



The roar of destruction shattered the quiet night. An explosion-tipped tanker spewed forth flaming crude oil. Crewmen screamed in fire-enveloped quarters. Some scrambled to lifeboats. Others flung themselves into the sea. The attack was a deadly one. On Feb. 16, 1942, World War II was brought to Aruba by the German Reich Navy U-boat 156, Kapitänleutnant Werner Hartenstein, commanding.

U-156 Brought War To Aruba Feb. 16, 1942

The U-156 was commissioned Sept. 4, 1941. Tradition, so much a part of all world navies, says that the man in command of which is full-dressed Hartenstein took over the command of the submarine while his full-dressed crew stood rigidly at attention on the vessel's deck. The ceremony took place in Bremen in the yards of the Weser Shipbuilding Company. It was a green crew the submarine commander addressed. In the twenty months of intensive training aboard administered by a man whose naval career had begun in 1928 as a member of the German Weimar Republic Navy.

There were men in the new crew who feared Hartenstein. He was an unrelenting taskmaster, but that the means incidental. Hardly dignified, but indicative of his aggressive character was the "Gravy Dog" nickname his crew later gave him. He was neither tall, nor stocky. His was a wiry, slight but solid frame that he outgallingly held erect. His posture was a manifestation of the man's men: proper and correct. Before the steel never married; it was needed to the sea, which occupied fifteen of his thirty-

E borofo di destruction a rompe e nochi silencioso. Un tankero labri door di explosion tabata scupi crudo na candela. Tripantianan tabata grita den cuartanan na yega na e botoman salshabida. Otro tabata tira, nan nes na awa. Hopi a muri. Tabata wordo treci Aruba door di U-156, un submarino Aleman, cu Kapitänleutnant Werner Hartenstein como comandante.

E U-156 a wordo tuma na servicio Sept. 4, 1941. Tradicion, asina tanto un parti di tur forza naval na mundo, tabata constitui mayor parti di e ceremoniaman den cual un Hartenstein den pleno uniform a tuma over comando di e submarino mientras su tripulacion, tambe den pieno uniform, bishita pará na atencion arpa dek. E eedilmanan di Weser Shipbuilding Company. Tambe un tripulacion berde cu cual e comandante tabata pará. E tripulacion tabata dabi tabata pará. E tripulacion tabata saki, y tabata saki cu dilant man lo tin hopi luna di entrenamento intensivo administrá, door di un disciplinario stricto y un excelente marinero. Kende su career na vavé a cuminsa na 1928 como miembro di German Weimar Republic Navy. Su postur a manifestá un parádestrecho di disciplinacion



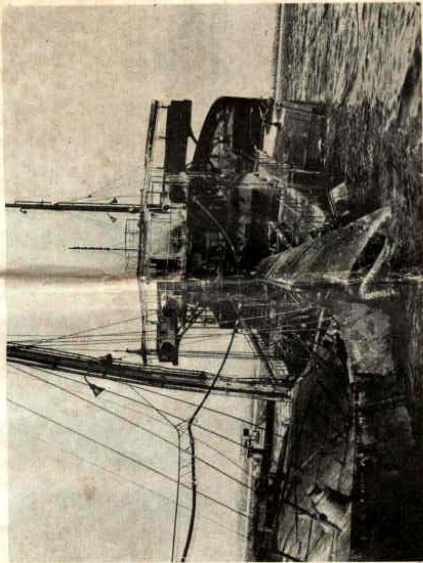
The German command was to be a heavy officer aboard heavy naval craft. At the beginning of World War I, he transferred to the command of the submarine command and second class, and the German Cross in Gold before entering the underwater service. The U-156 was his first submarine command.

Out from Bremen glided the U-156 destined for Kiel and much training for the crew in between. The training was given to the Spartan intensity of the submarine life. It was expected that something would happen in battle for their boat, and they also became well aware, if they hadn't before, that Hartenstein accepted nothing less than perfection. They operated without lights; water was allowed in through a breach; they experienced engine failures; they had jamming and control problems. Every battle action that a submarine could expect was practiced over and over. Often the crew did not know whether it was real or another drill. More often the crew grumbled about "Crazy Dog," Hartenstein.

The officers were experienced. All were not steeped in submarine service, but they were qualified in the various aspects of the job. Lt. Just joined the German Luftwaffe in 1935, and before entering the submarine service in 1941 had flown 160 raids over the British Isles. Von dem Borne, Berlin-born son of a World War I German vice admiral and chief of staff, had been on mine laying ships and destroyers before he was assigned to the U-156. The other officers included the crew of the Shestland Islands and into the mouth of the River Thames.

By mid-December, 1941, Hartenstein concluded that he had a crew and a ship that could withstand the rigors of a minor patrol. Christmas Eve, the U-156 slid away from her berth in Kiel and travelled north-east through the Kiel Canal to the North Sea. The U-156 was assigned to the Norwegian coast, the Skagerrak to the vicinity of Larkvik, a Norwegian seaport, and engage British movements. Stormy seas precluded offensive action. Hartenstein's annoyance at not being able to strike Allied craft flushed full within him. He could not accept or indifference worthless ventures or endea-

Kapiteinmeester van der Polder, Commandant - U-boat 156
First Watch Officer - U-boat 156



The first U-156 torpedo broke the Podernales' back, set her afire, but never sank the tanker. A premier torpedo of U-156 a kibra lombra di l'edernales, pero no a logra sink e tankero.

U-Boat 156 A Trece Guerra Na Aruba

cu a ocupa diez-cinco di su tripia, y tres anja y finalmente a reclama su vida. E comandante Aleman tabata un oficial di artilleria a bordo di barconan pist. Na principio di Guerra Mundial I el a wordo transporta pa comanda e comandante di un buque de guerra. El a gana e Cross di Hero den Obo. U-156 tabata su premier comando over di submarino.

For di Bremen U-156 a sali destina pa Kiel y hopi entrenamento na camina. E entrenamento tabata segun e simplicidad Spartan di bida submarino. Tur job por socede den combate a wordo simulat. E tripulacion a sipli concenacion, si atuda nan na a ghera tin ne, cu Hartenstein no tabata acepta nada menos cu perfeccion. Nan tabata opera sin luz; awa tabata bin aden door di un buraco; nan a experimenta fayo di motor; nan tabatin fayo di pump; nan a simula perdida di control den bamento y subimiento. Tur accion di combate cu un submarino por a experimenta. Cada batalla cada batalla saba cu tabata real of solamente un otro exercicio. Frequentemente e tripulacion tabata grunja tocante e "Cachó Loco" Hartenstein.

E oficialnan tabatin experiencia. Tur no tabata cushi den servicio submarino, pero tabata hombernan cualifica cu fondo maritim. Just a bin cerca di e la drenta servicio submarino na 1941 el a bota 160 mision over di Islanan Ingles. Von dem Borne, naci na Berlin y yiu di un vice almirante den Guerra Mundial I y jefe di estado, tabata arriba bapornan di planta mina y destroyers premier cu el a wordo asigna pa e U-156. Su trabao di planta mina a hibe rond di Shestland Islana y te den boca di River Thames.

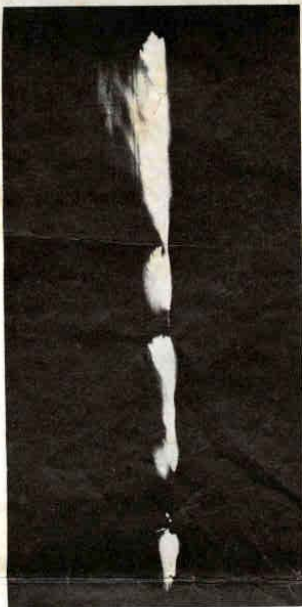
Pa mei mei di December 1941, Hartenstein a conclui cu el tabatin un tripulacion y barco cu por wanta e rigornan di un patrulla menor. Bispao di Pasco, e U-156 a sali for di su lugar di mara na Kiel y a viaja noordost door di e canal di Kiel pa Noordzee. E instrucionnan di Hartenstein tabata pa sigui arriba Skagere, te den y tuma e Larkvik, un puertito na Noruega, y tuma e instrucionnan pa busca buques aliados y tuma e accion ofensivo. E rabia di Hartenstein cu no

TWENTY YEARS AGO

U-156 was one of four submarines of the Neuland Group assigned to the Feb. 16 Antilles-Lake Maracaibo strike

voers. The commander stepped up operational training lest inactivity induce complacency. He still had a long patrol ahead.

North through the Atlantic Ocean plowed the U-156. The seas were rough and mines were always present. The submarine travelled wide around northern Scotland to the Rockhall Banks, west of Ireland. The ship had a frigid one, the boat was cold and the crew had to heat system on a hot water from its engines' water machine was running at high speeds. The turbulent North Atlantic held the U-boat far below her surface cruising speed of 18.3 knots. There existed an electric heating system, but it consumed a great deal of current. It was rarely used. The crew fortified themselves with double foam underwear, a woolen pullover, heavy boots on in bed, heavy and leather jacket, heavy coat on in bed. The crew members of the U-156 dropped off two floating weather boys. The high seas and cumberdomness of the boys made the laying difficult, but they had to be positioned. These buoys and many others planted by the German Navy and Luftwaffe relayed valuable weather information to meteorologists in Germany. Predominate weather — the prevailing westerlies — moves across the North Atlantic and the British Isles to Germany. Scoring what weather was comparable to their military planning. The U-156 planned two. Both were approximately forty-nine feet long including a twenty-two-foot antenna. They bobbed in the water and were anchored much like a marker buoy. Periodically, coded signals were sent by



Burning oil from the Pedernales and Oranjestad rolled along the surface of water where the tankers had been hit by the first two torpedoes fired by the U-boat 156 in combat. Azeia kimanado di Pedernales y Oranjestad tabata lora ariba awa unda e tankeronan a worde gosal door di e promer dos torpedo lanzá door di e U-boat 156 Aleman den combate aki.

The U-156's two Diesels, which were capable of generating 2500 horsepower each, pushed the German boat past the north coast of Guadeloupe Feb. 10. The crew knew then that the Caribbean would be their hunting grounds. They did not know, however, whom was to be hunted.

Three days later, heading south, Curaçao came up on the horizon. Hartenstein addressed the crew. He told them the U-156 was part of the Neuland Group assigned to attack the Aruba and Curaçao refineries and engage the tankers between the Netherlands Antilles and Lake Maracaibo. Others in the group were Kapitänleutnant Müller-Stöckmann's U-367, Kapitänleutnant Albrecht Achter, U-161 and Kapitänleutnant Jürgen Schmalzer's U-302. The U-156 and U-302 were to attack the Aruba refinery and tankers at its shore. The attack would be launched during the morning dark hours of Feb. 16.

Excitement raced through the ship. The operations initiated on the crew caused individuals to involuntarily review order of battle and equipment readiness. They were ready and eager. At 1830, Feb. 13, the U-156 submerged and steered for the Colorado Point. The submarine proceeded around the Point and at 2030 moved past the

warm weather reduced the ring of the cold winds that laced the French harbor. Von dem Borne casually guessed the patrol would be around the tip of South Africa to the Indian Ocean.

Preparations for the long journey took eleven days. The men pondered over the placement of huge stores of food. The U-156 had 250 feet long and twenty-two feet at its greatest width. At its highest point it was thirty-one feet. Each of the forty-eight men aboard the U-156, with the possible exception of Hartenstein, who always was positively sure about such things, soon found out where all the supplies were to be stowed. Every possible nook and cranny were utilized. Boxes full of eggs were stacked on tables; in the passages, crates were piled up. The food was packed with tin cans. The foodstuffs in jars and cans; the toilet in the crew quarters was shut off and used as a toilet for canned food, and a huge crate of potatoes was plopped squarely in the middle of the control room. Nine torpedoes were strapped under bunks, six more were placed in the U-boat's tubes, and ten were secured in the watertight compartment on the deck.

Jan. 19, 1942, the U-156 left Lorient, France.

The submarine headed southwest, and when she sailed past the Azores the crew assumed their waters of operation would be off the coast of South America. Crossing the Atlantic afforded the crew some warm, leisure hours. Breaks in watches and training were used to sun bathe

divy stored by the instruments in the buoys. They had been stored in the watertight torpedo compartment on the submarine's deck.

The U-156 sailed down the west coast of Ireland and made for France. Jan. 8, 1942, the submarine came up in Lorent Harbor on the northwest coast of France. A rigid Hildebrand-Joyeuse buoy net was engaged by the enemy and two weather buoy's placed constituted the first patrol.

Lieutenants Paul Just and Dietrich A. von dem Borne stood on the slier of pier that extended into Lorent Harbor. Secured alongside was the long, grey form of a submarine. The red and black swastika above the conning tower whipped in the cold January air. The two officers and puzzled crew took their bearings. The two officers and puzzled crew took their bearings. The two officers and puzzled crew took their bearings. The two officers and puzzled crew took their bearings.

Lt. Just and Von dem Borne hadn't received the slightest inkling from Hartenstein where their next patrol would take them. Two aspects of the future were obvious to them as they gazed at the pier. The patrol would be a long one, and it would be in warm latitudes. The prospect of

persons. Again representative of Hartenstein's personal characteristics, he wanted his men to shower daily at the engine room. Under no circumstances would the U-boat come ashore. There was no word about Hartenstein, or the boat and crew under his command.

But while he was impossible in his person and operated with thoroughness and efficiency, his men had come, now, to respect his energies, abilities and consideration for others. On this the U-156's first major patrol, Hartenstein had molded a green crew into a cohesive combatant unit. The camaraderie ran high. In respect for the likes and dislikes of von dem Borne, Hartenstein permitted the men to wear the messes desired. The majority ruled that was unnecessary in the military. The officers and non-commissioned officers preferred tuna fish in oil for breakfast. The enlisted men liked marmalade and worst beef.

Quite often the crew of the U-156 had tried flying fish for breakfast. Not only was the fish a delightful respite for the stomach, but it was a delightful surprise. Being watched by other on the number of catches, and, of course, the winning group shared a kitty contributed to by the others. The record for a twenty-four-hour period was sixty fish.



Deutsches U-Boot besichtigt (Offizierinnen auf der Insel Aruba)

large tankers were in port and three were at roundabout. The ship also moved at night." Satisfied with his first look at the coast to Oranjestad, he sped his boat and went into the mouth of the harbor, but there was little to be seen. Early morning air activity from Princess Beatrix Airport, which Hartenstein logged as two to four two-motored airplanes, caused the U-156 to submerge before detection. The sun broke through the clouds of the northwest coast of Aruba until dusk Feb. 14.

Since the weather was not so favorable, Hartenstein sailed into the tanker route between the Antilles and the lake. Hartenstein and crew spotted tanker silhouettes and practiced attack maneuvers on the unsuspecting tankers. None was fired at; the primary objective was the refinery. Their practice completed to Hartenstein's satisfaction, the boat moved back to Aruba. There was Hartenstein and moved up to the surface. The U-156 had a "considerable activity bar" where her commander had not "considerable activity bar" well occupied." The U-156 moved off toward Oranjestad.

At 0610, Feb. 15, Hartenstein's procedure orders were changed. The commander correctly assumed that the German high command had been rankled by disagreement. The countermarching official message to all Western Hemisphere submarines was:

1) The principal assignment is to attack ship's targets; 2) If these targets can be made on the morning of the Western Hemisphere time should opportunity for this be favorable; and 3) when no ship targets are encountered, artillery attack against land targets may be made toward evening of Western Hemisphere time.

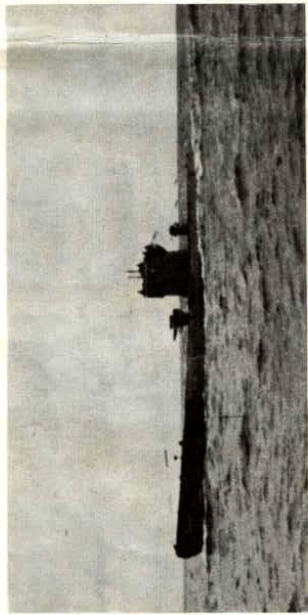
Admiral Karl Donitz's view of the Arubi operation, with which Admiral Dönitz disagreed, was that the U-156 was to be used to destroy the refinery and tanks needed for a successful attack on the almost impenetrable lake tankers. Donitz succeeded Raeder as commander in chief of the Reich Navy in January, 1943.

The U-156 remained just below the surface most of Feb. 15 observing, from its position less than two miles off Seroc Colorado, the activity in the refinery and the harbor. The crew's greatest activity was in keeping their vessel in position. The U-156 surfaced and almost ran into a patrol boat. Von dem Borne, who had the watch, ordered her hard over and avoided the boat. Luck ran with the U-156 at that moment; it was never seen.

On the surface outside the refinery, the crew scrambled to the deck and manuevered at the light and the activity. They had been living and operating in the refinery in Europe for over two years, and the lights of the refinery and towns and cars and the homes in Seroc Colorado

This, a propaganda poster done by a German artist in 1942, depicts the U-156 successfully shelling and setting afire the Lago Refinery. Untrue, of course, yet the poster undoubtedly received wide circulation and belief in Germany. A copy of the poster is shown here by a United States Army soldier during the advance on Berlin in 1945.

Each, un plachi di propaganda pinia door di un artista Aleman na 1942, ta manustra U-156 tirando cu exito y ponendo refineria di Lago na candela. No ta berdad, naturalmente, pero e plachi a worde circula extensamente y a worde hier na Alemanan. Un copia di e plachi a worde haya den un school evacu na Alemanan door di un solda di Ehercito Americano durante e avance aruba Berlin na 1945.



por a stakta bapornan Alhado a monta den djé. El no por acepta cu indiferencia veniamanato, asina cu e inactividad lo no resulta den indiferencia. Alnda el tabatin un patrulla bargo su dilanti.

E U-156 tabata cerca na nord den Oceano Atlantico. Laman tabata bruto y semper tabatin mina presente. E submarino a viaje den un boog grandi rond di parti nord di Escocia pa Rockhall Banks, pabao Irlanda. E viaje tabata uno frio. E boto tabata calentá door di un sistema di calefaccion central, cuil tabata cu un sistema di calefaccion central. Pero na tabata duna calor suficiente pa e submarino ta corra na velocidad halto. E turbulente Norte Atlantico a tene e submarino leuw bawo su velocidad di cruce di 18.3 nudo. Tabatin un sistema di calefaccion electrico, pero e tabata gasta un cantidad di combustible. Rara vez e tabata wordé usá. E tripulacion a fortifica su mes cu panja di abao dobie pisá, pullover di lana, uniform pisá di invierno y bachi di cuero, y tur tabata wordé renti bisá basta den cama. For dos bosí di tempo, E habo halto y inactividad di e bostman a baci di potencionto difícil, pero nan mester a wordé posicioná. E bostman aki y hofí otro nan plantá door di Navy y Forza Aerea Aleman tabata manda informacion valioso locante tempo pa meteorologistanan na Alemania. E tempo predominante — blento di abao — ta pasa over di Atlantico Norte y e Islanan Ingles pa Alemania. E suber di e tempo cu tabata bini den nan direccion tabata furni e Alemanman cu informacion valioso pa nan planeamento militar. E U-156 a bina. dos. Tur dos tabata mas of menos cuarenta y

tripulacion algun ora di reposo y calor. Intervencion den vida y centrimento a wordé usá pa tuma bapelo di solo ariba dek, pisca, hunga carta y schabak y scucha radio. Tambe esaki a duna e homieran hopi tempo pa percura pa nan mes. Atrobe representativo di e caracteristicionan personal di Hartenstein, el tabata kier pa su homieran tuma un bapelo tur dia ora ta bira scur. Un douché a wordé instalá ariba dek y un otro den cuarto di maquina. Edo di ningun circunstancia e comandante tabata tola bapelo di mas cu cuarenta y ocho ora sin felta. No tabatin bapelo di mas cu cuarenta y ocho hora di e barco or e tripulacion bawo su comando.

Pero mientras el tabata impecable den su persona y tabata opera cu exactitud y eficiencia, su homieran ya awor tabata respecta su energia, habilidad y consideracion pa otro. Ariba di promer patrulla grandi di U-156, Hartenstein a converti un tripulacion berde den un unidad cohesivo di bataya. E amishá tabata intimo. En respectu pa loke cuarenta y ocho homber ta gusta y laga di gusta, Hartenstein, Rusia. E mayori homieran pa e. E opinion tabata cu e bostman. E mayori homieran ta e opinion tabatin y tendencia pa reduci e kohanun locante un asunto cu tabata universalmente critica den servicio militar. E oficialnan tabata preferi una fish den azeta pa desayuno. E matrosunan tabata preferi marmalade cu wrost. Hopi vez tripulacion di U-156 tabata hasa piscá vorilante pa desayuno. No solamente e piscá tabata un variacion substancial for di e comida normal, pero pa col nan tabata un diversion, agradable. Wardianan ariba dek tabata compeli cu otro planeamento, y e bostman tabata un error asador tabata parti un suma chikito contribui

ariba terra por wordé haci banda di anochi di tempo den Hemisferio Occidental.

E vista di Almirante Karl Donitz tocante e operacion na Aruba, cu cual Almirante Erich Raeder tabata diferencia fuertemente, tabata cu e tiramento inicial di refineria y tankinan cu cayonan ariba dek lo destrui e elemento di sorpresa necesario pa un atake exitoso ariba e lake tonkera irremplazable. Donitz a sigui Raeder como comandante supremo di Reich Navy na Januari 1945. E U-156 tabata un submarino di clase IX-C. E tabata cu un peso maximo di 11,000 milta, y velocidad di cruce di 18.3 nudo ariba awa y 7.3 nudo bawo awa.

Ariba awa atrobe pafor di su posicion menos cu dos milá dianti Serwe Colorado, actividad di refineria y di baaf. E problema di mas grandi di e tripulacion tabata pa evita pa nan submarino no wordé mirá door di boto di pisca. Poco despues cu nochi a cerra e U-156 a lanta y casi a topa cu un boto di patrulla. Von dem Borne, kende tabata na warda, a ordena pa bira liber y a evita e boto. Shuert tabata cu U-156 na e momento aki; e no a wordé mirá. Ariba awa atrobe pafor di refineria, e tripulacion a subi na dek y tabata goza di e luznan y e actividad. Pa mas cu dos arja nan tur tabata biba y opera den un Europa scur, y luznan di refineria y di casnan y autonnan den Serwe Colorado tabata sensacional. Von dem Borne, ademá di tin e warda di cruce di 0900 te 0400, tabata tambe oficial di artilleria. El a supervisá su grupo den preparacion di e cayonan di 10.5 cm y 3.7 cm y e warda di 2 cm contra avion. El a usa, e promer oficial di warda, y su grupo tabata cu e U-156 y su tripulacion tabata cla pa dal. E U-156 y su tripulacion tabata cla pa dal. Pa 0133, Feb. 16 — tabata 0801 ora di Berlin — U-156



The U-156 was an IX-C class submarine. The boat carried 25 torpedoes, had a maximum speed of 18.3 knots surfaced and 7.3 knots submerged. E U-156 tabata un submarino di clase IX-C. E tabata cu un peso maximo di 11,000 milta, y velocidad di cruce di 18.3 nudo ariba awa y 7.3 nudo bawo awa.

Neprotivodimosti e bođman akti ta transmitti senjali na odole
frenk. Njemački, avarski, i drugi vojnici, avarski, i drugi vojnici.
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Neprotivodimosti e bođman akti ta transmitti senjali na odole
frenk. Njemački, avarski, i drugi vojnici, avarski, i drugi vojnici.

U-156 a nabega bin abao na e costa di Irlanda i a
tira pa Francia. Jan. 8, 1942, e submarino a mara na
vijaže fro di diez-diecio dia sin. Ardent den combate cu
mer patrullia.
Luitenantman Paul Just y Dietrich A. von dem Borne
tabata pará arba e póda pier extendiendo den haaf di
Lorient. Mará na un banda tabata e forma largo, shimishi
di un submarino. E swastika corrá y preto arba e brug
tabata sutu den e biento fro di Januari. E dos ofisialhan
y tripulacion tabata puntra nan mes unda nan siguiente
patrullia lo hiba nan. E cantidad grandi di alimento y
medicamento tabata cu nan. E prospecto di tempo
tabata diferente for di esun cu nan a usa arba e
patrullia cu a caba di worde completá.

Li. Just y Von dem Borne no a recibí ni e minimo indi-
cacion di Hartenstein unda nan siguiente patrullia lo hiba
nan. Dos aspecto di futuro tabata evidente pa nan mien-
tras nan tabata contempla e enorme cantidad di abasteci-
mento stiva arba e pier di Lorient. E patrullia lo ta un
vijaže y retoi seorvidad di bota. E prospecto di tempo
tabata diferente for di esun cu nan mes cu e patrullia
lo ta rond di punta di Sur Africo pa Oceano Indio.

Preparacion pa e vijaže largo a tuna diez-un dia. E
hombrian tabatin un problema pa stiva e cantidad
grandi di alimento, panja y arma. E U-156 tabata sola-
mente 252 pia largo y binti-dos pia na su banchura mas
grande. Na su punto mas alto e tabata trinta y un pia.
E U-156, cu e posible excepcion di Hanteman a bordo di e
bota, tabata cu e posible excepcion di Hanteman e cosnan aki,
per tabata positivamente segur tocante e cosnan aki,
pronto a haya sabi unda tur e material aki mester a
worde stivá. Tur posible huki y skina a worde utilizá.
Caha yen di webo a worde stivá arba mes; e hamaca-
nan den pasada tabata yená cu pan y lamoenchi, cashiman
di panja yen di cuminda ta bieki y botter; e excusado
den apartamento di e tripulacion a worde cerrá y usá pa
worde tirá den centro di saia. E U-156, cu e bota
a worde mará baw cama, seis mas a worde poní den topo
man di e submarino, y diez a worde asegurá den e com-
partamento a prueba di awa arba dek.

Jan. 19, 1942, e U-156 a sali for di Lorient, Francia.

E submarino a tira zuidwest, y ora el a pasa Azores e
tripulacion a pensa cu nan lugar di opera lo ta dilanti
costa di Sur America. Cruzamento di Atlantico a duna e

E dos Diesel di e U-156, cual tabata capaz di genera
2400 forza di cabal cu un bato, a baha bo. Alas, e U-156
tabata cu e Cabo de Guayana. Pa lo tanto, e U-156
publicacion tabata sabi cu Capitan Pa. lo no efi di ope-
cion. Sin embargo, nan no tabata sabi unda kende lo ta e
victimu di exactamente unda.

Tres dia despues, cortado zuid, Curacao a soma na
horizonte. Hartenstein a dirigí su mes na e tripulacion. El
a bisa nan cu U-156 tabata parti di e Grupo Neuland
y asigná pa ataka refinerman di Curacao y Aruba, y e
tankeronan cu ta vijaže entre Antillas Neerlandes y Lago
Maracaibo. Cronan den un U-boat. Hartenstein a
Molle-Schlotheim. U-boat. Hartenstein a
Achilles cu U-161, y Kapitaneitman Jürgen Rosenberg
cu U-502. U-156 a worde asigná a refinaria di Aruba y
tankerman na su costa. E skake lo tuna lugar durante e
maarduga di Feb. 16.

Excitacion a subi borto di e bapor. E operacionman
cual nan a worde participá impulsu nan pa repasa bi-
voluntariamente ordenman El bataya y preparacion pa
combaté. Nan tabata cla y dispuesto. Pa. 1830, Feb. 13,
U-156 a sali for di Lorient. E U-156, cu e U-156, e
submarino a sigui rond di e punto, pa. 2030 el bato
dilanti refinaria. Un milla dilanti costa, Hartenstein y
su ofisialhan a nota cu "refineria tabatin hopi luz, cuatro
tankero grandi tabata den haaf y tabatin tres mará ta
warda, y cu trafico tabata sigui anochi tambe." Satis-
ficho cu su promer vista Hartenstein a aumenta velocidad
di su bato y a sigui canto bi costa pa Oranjestad. El a
bota su bato y a drenta den e haaf, pero no a bota
mas cu e U-156. E U-156, cu e U-156, e U-156, e U-156,
veld Prinses Beatrix, cual Hartenstein a bota como de-
de e cuatro avion di dos motor, a causa U-156 di bai abao
promer cu el worde mirá. E submarino a keda baw awa
dilanti costa di Aruba te ora a bira secur Feb. 14.

Arba awa atrobe baw ul cielo nubia, e submarino a
recorre e ruta di tankero entre Antillas y e lago. Hart-
enstein y su tripulacion a mirá silueta di tankero, y a pre-
paracion di atake arba tankero insuspensio. Nan
no a bota arba. E U-156, cu e U-156, e U-156, e U-156,
Nan practico completá secur satisficcion di Hartenstein.
E bato a worde atrobe pa Aruba. Akti el a lanta y a move
te den boca di haaf di San Nicolas unda e comandante a
nota "considerable actividad, haaf bon ocupá." E U-156
a move den direccion di Oranjestad.

Pa 0610 Feb. 15, e ordenman di Hartenstein a worde
cambió. E comandante corticamente a asumí cu e alto
comando tabata parti den desacuerdo. E mensahe
oficial tabata pa tur submarino den Hemisferio Occi-
dental tabata:

- 1) e encargo principal tabata pa ataca bapor;
- 2) si e atake aki tin éxito, anto atake di artilleria con-
tra meta arba terra por worde haci arba malinta di
tempo den Hemisferio Occidental si oportunidad pa esaki
ta favorable; y
- 3) si no contra bapor, atake di artilleria contra meta

converti e tankero den un inferno. Pa. 0133, un segunda
boto for di e tuboman adiantu di U-156 a sink Orange-
stad.

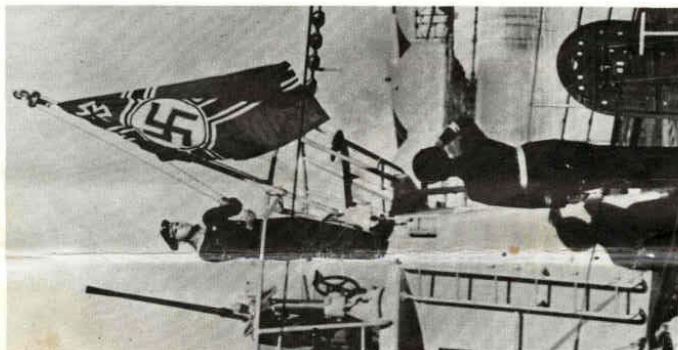
Hartenstein a ordena e submarino adiantu den direc-
cion di haaf, despues a para tres cuarto milla dilanti rif.
E artilleria tabata cla. E comando pa tira a worde sigui
pa un borto ensoador cu a sagudi henter e boto. Ma-
troos Businger tabata benta keto arba dek. Von dem
Borne tabata antá den otro na pia di e brug unda forza
di e exposicion a beneficé. E otro tripulacionman di e cayon-
man a sigui tira te ora Hartenstein a stop nan como resul-
ta di un bato. E U-156, cu e U-156, e U-156, e U-156,
dek pa mira, kiko a socede cu e cayon di 10.5 kibrah, e
cayon grandi cu el tabata segur lo a produci resultado.
El a haya e contesta.



One of the first enemy shells to strike the Western Hemi-
sphere bounced off tank 112. Another went through a hole
north of the lower tank farm. The shelling injured no one.
Un di e promer balanan enemigo pa dal den Hemisferio
Occidental a bota na tank 112. Un otro a pasa door di un
caja pa nord di tanknan. E iramento no a herida ningun hende.



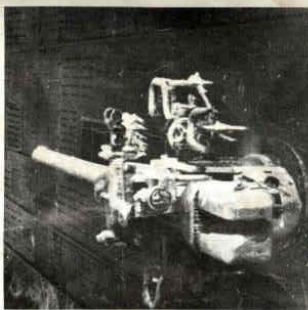
Kapitanleutnant Werner Hartenstein, in formal commissioning ceremonies, addressed his crew on the deck of the U-156. A member of the German navy since 1928, he was a well-decorated, energetic and strict officer. Kapitanleutnant Werner Hartenstein, den ceremonianan formal di comisionamento, a dirigi palabra na su tripulacion arriba dek di U-156. Un miembro di Navy Aleman desde 1928, el tabata bon decorá, y energéitico.



The Nazi flag was raised above the conning tower during ceremonies of the U-156 Sept. 4, 1941. The boat, built by Blohm and Voorn, was christened by the German Navy. E bandera Nazi a wordi hisa arriba e boga durante ceremonianan di comisionamento di U-156 Sept. 4, 1941. E submarino, trahí na Bremen, a sali for di Kiel, Aleman.



Deck armament comprised a 2 cm anti-aircraft gun, 8.7 and 10.5 cm cannons. The 10.5, which exploded, below is ice covered on a northern patrol. Armamento na dek tabata inclui un cayon anti-aereo di 2 cm, cayon di 8.7 y 10.5 cm. E 10.5, abao, ta cubri cu ijs arriba un patrulla den norte.



were sensational. Von dem Borrie, in addition to having the midnight to 0400 watch, was also artillery officer. He supervised his crew in preparing the 10.5 cm and the 3.7 cm cannons and the 2 cm anti-aircraft gun. Lt. Just, the first watch officer, and his crew readied the torpedoes. It was now a matter of time; the U-156 and crew were ready to strike.

At 0131, Feb. 16 — it was 0801 Berlin time — the U-156 fired its torpedoes. Precisely 48.5 seconds later the two torpedoes exploded on the side of the Pedernales and she was blown into an inferno. At 0133, a second torpedo from the bow tubes of the U-156 sank the Oranjestad.

Hartenstein ordered the submarine ahead in the direction of the harbor, then stopped three-quarters of a mile off the reef. The artillery was readied. The command to fire at 0141 was followed by a deafening roarless explosion of the entire boat. Some of the crew sat stunned propped against the base of the conning tower where he had been slammed by the force of the explosion. The other gun crews continued their fire until Hartenstein halted their action when no results were apparent. The infuriated commander ordered the boat out of the area, then charged along the deck to find out what had happened to the shattered 10.5 cm cannon. He was given the same answer: no results.

The crewmen were ready and eager, but at the moment

of action they were over excited. They seized water out of the cannon's muzzle plug, which seeps water out of the barrel when submerged, and the shell exploded. The water barreled its tip. In view of the explosion, the crew would have trumpeted "P" for "Pier" in 1942. Lago if artillery had been fired in battle procedure can only be left to conjecture.

The U-156 steamed along the surface to Oranjestad where three torpedoes were fired at the Arkansas at Engle Pier. One rammed the gas free tank and she suffered only the force of the explosion; the second was never found, and the third ground to halt on the beach. It exploded and killed four demolition men who attempted to disarm it the next day.

The Lago lake tanker Pedernales was the first. She was the first lake tanker to be torpedoed; she was the first ship to be struck by the enemy in the Netherlands-Antilles-Lake Maracaibo area; she was the first target of the U-156's first Caribbean patrol, and hers was the explosion that knocked Aruba's front door off its hinges and let in the horror of war.

The Lago was one of more than two dozen tiny, shallow-draft lake tankers owned by Lago which tirelessly chugged back and forth between Aruba and Lake Maracaibo hauling crude to the Lago Refinery, riding in ballast to the lake. They were, in a way, specialty ships. They had a specific assignment which made them indispensable. Their average capacity was about 28,000 barrels, and their draft was shallow enough to allow them to clear at high tide the shoals and reefs of the mouth of the Lago. They were during the era before the bar was lowered and the shore of constant dredging initiated to keep the channel deep enough to accommodate ocean tankers.

The Pedernales was loaded with crude oil when she anchored off the coral reef that fronts Seroc Colorado, Herbert McCall, the tanker's master, was asleep in his bunk by a dull report came from the conning tower. At 0131 by a dull report came from the conning tower. The light of a searchlight came from the conning tower. He saw that her back had been broken by the explosion. He groped his way to the port quarter which was high out of the water and not burning. The Pedernales captain left his ill-fated ship with a small cluster of his men in the only lifeboat that was able to be lowered.

The lifeboat with men injured and burned, some badly, drifted toward Oranjestad. In the lifeboat constituted the majority of the Pedernales' eighteen survivors. Eight were lost.

The tanker survived, charred, twisted and crumpled she remained afloat. She drifted from the location where she was torpedoed and took much of her fire with her. Later in the morning the fire that earlier had enveloped

musled her against near Oranjestad. Shipyard crews had beached the bulk in two. The bow and stern, then, were towed separately back to Lago's shipyard. The two pieces were fitted together and the stubby Pedernales, 124 feet shorter than she was the night before Feb. 16, set sail for the United States. There the little-laker was again cut in half, rebuilt and returned to service. Included in her wartime action was the African campaign.

The second officer burst into the captain's quarters and roused Herbert Morgan, master of the lake tanker Oranjestad, from sleep. He excitedly told him the Pedernales was afire. Morgan's reply was immediate and terse: "Prepare to weigh anchor."

Morgan quickly drew on his trousers and raced out of his cabin. When he reached the ship's lower bridge he was blinded by a flash. His ship had been hit by a torpedo. At 0133, Feb. 16, he saw the Oranjestad's deck had been broken and consumed by fire. Her back had been broken and she was doomed to sink. Morgan returned to his cabin to get his life jacket. He scrambled to the ship's starboard side and was flung back by a sheet of flame. He attempted to cross the ship but fell and was pitched back to the flaming starboard quarters. The fall fractured his ribs, but desperation overrode any pain. With three mates he made his way to the bow of the ruptured all-steel section of the four men huddled together. The men signaled for help but were never recognized. The Oranjestad settled gradually. About an hour after she was hit, the Oranjestad slipped beneath the water's surface. The captain and his associates were washed off their perch. All had life-jackets except the second officer, who was lost. The men were retrieved from the oily sea about 0330 by a Dutch patrol boat.

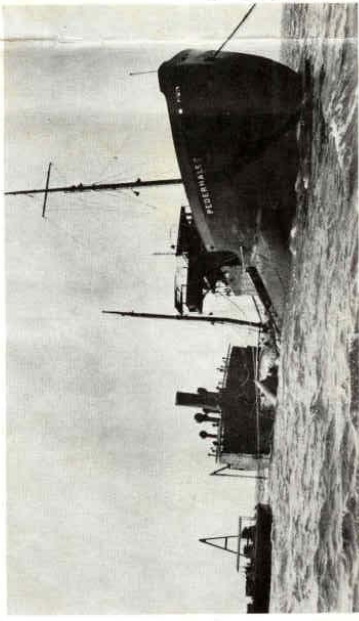
Out of every tragedy and emergency arises accounts of devotion and bravery. Aboard the Oranjestad were two men who had sailed together for years. They were from the same island and had lived much of their childhood together. There was a tight bond of friendship held fast by their constant and compatible association aboard the Oranjestad.

At 0131, Feb. 16, one was in the crew's quarters and the other was in the wife room. The force of the torpedo explosion crashed men into bulkheads and dashed them to the deck. The friend in the crew's quarters was smashed into a bunk frame. In the confusion that ensued throughout the ship and with head reeling from the blow, he didn't know what had happened. He, like many others, gave no thought to enemy action, but figured that the tanker's petroleum cargo had been ignited through mishap.

The details of what happened did not interest him at



William van Putten - Pedernales Survivor



The Pedermales was the first tanker hit by the U.S. Navy's attack submarines. She was hit ed fiercely, she never foundered. Her charred hull drifted toward Oranjestad where Lago tugs shoved her up on the beach the next day.

Pedermales tabata e promer tankero gedid door di U-156. Maske el a explota y kima fuertemente, el no a sink. E casca kima a drief den direccion di Oranjestad unda terra-molcadornan di Lago a push'e la ariba terra.

leun. E explosion a parti Pedermales na mitar y a manda su parti adikanti y patras ya laria manera un hero birá. El tabata leun pisá pa e stridor.

Ariba man cu pisá, su briza drechi y lomba cubri cu azeta ceyente, Van Putten a busca na banda patras di e bapor pa un lugar di salbacion. Na e momento aki el a mira un obheto luciente corre over di awa den costado di Oranjestad. Un otro explosion a rompe e bato salbador y e tanquero chikito cu azeta kimaando for di tankinan. Motivá ya temor y substancia, Van Putten a subi na costado bapor di e bapor kimaando. Con, el no ta cordá, y ora el a yega na lugar di e boto salbador, tripulantenan frantico tabata corta e unico boto usable for di su aguiante. El a benta su mes den e boto mientras el a salí cu na banda. El a dal den awa cu su manish promer.

Van Putten a tene desesperadamente na e boto salbador; otro a subi iden y a salta den e bato salbador den awa. E boto salbador a tene un tempo tabata Pedermales. E grupo chikito den e boto salbador tabata consola un cu otro y particularmente esnan seriamente heridá. Tabata un anochi tragico y e horror tabata continua ora tras ora. Hombenan, kende nan herida tabatin mester di tratamiento, tabata drief sin destino den un boto salbador sin medio di propulsion — e remanan a bai porá ora e boto

buente di vuelta pa Aruba. El a cruza su briza cortico over di un pecho hanchico y tabata waak e oloshi di bapor. Tabata exactamente 0230. E fecha tabata Feb. 16, 1942.

Na e exacto momento aki, un explosion a manda Semeleer di cabes den un pombi, ariba cual e oloshi tabata colgá cual a registra indoliblemente den mente di e fireman e ora cu e torpedu a termina bida di Tin. Juanan.

Su corda den e pomp a wra e abasacion di aguiante y e bapor a herde su temida ni ora e bapor a leun fuertemente. No tabatin ni corda di azeta den e cuarto di maquina, pero e forza trocicada di e explosion a crea un peligró casi mes grandi: portanan trancá. Semeleer a rancá pasa door di un salida. Mesos cu otro cu a wordé topusá, el no tabata sabi kiko a sucede, pero el tabata sabi cu el mester abandona e bapor. E porta di salida no kier a labri. Su estufornan a wordé complicá ainda mas door di e fuernmento di e bapor cuil tabata haci'e rip for fuertemente.

Tabata haci'e rip for fuertemente ya tabata un esfuerzo sobrehumano sin e tazen alicionan di forza habri e porta. Semeleer a eherce tur su forza y peso cu el tabata por y, milagrosamente podiser, el a move e porta trancá bastante pa pasa su cabes. El a pusha e resto di su curpa door di e apertura chikito.

Na dek el a realiza su eslamante seriedad di e situacion, pero tambe di su mes mala suerte. El tabata hito sanki awa na a banded ariba di un tankero salbador. E India

posible, y esaki sin duda a contribui na salbacion di Semeleer. Semeleer tabata reza pa nan miferé. Pero con? Un figura solitario den awa den oranan di malata lo ta casi imposible pa mira. E hombre den awa tabata segur cu comandante di e submarino Aleman toman nasha bon e causa hato. Awor Semeleer tabata reza nasha bon e causa hato.

E bon fortuna di Semeleer y e keda cu ne. E tripulacion di e tankero Ramona di Shell a tende e explosion y mira Monages kima. E promer reaccion di e tripulantenan tabata cu un di e boilers di e bapor a hula. Ramona a reduci velocidad y a sigui cuiddosamente den direccion di e bapor malogrado. Captain di e tankero a yama tur tripulante na dek pa waak pa hende den awa. Un tripulante a mira e solitario Semeleer. E tankero di Shell a para y a lizele e bordo. Ora nan a pautre le kiko a sucede, el a grita: "Torpedo, torpedo".

E like tanker Ramona di Shell tabata hulto y liber ariba su vijie di vuelta pa e lago. Su tripulacion tabata haci su trabao sin otro preocupacion sino propio operacion di e bapor. E viaxenan bai y bin entre Curacao y Lago Maracabó generalmente tabata sin evento. Vicente G. Provençe, botaswain di Ramona, tabata gelon na e sailing poco promer di casona e awa pa Olandia. E bato tabata urociusa. Provençe di probablemente cuakler tri-

Don e otro se subió e chif steward malamente herido a bordo. El resto de la tripulación se salvó después de su yegada a San Pedro Hospital. Van Patten y otrosman a bordo trató y transfirió pa hospital di Lago. No a dura largo pa Van Patten su kinaduranan cura sin ni laga marca y el a bolbe den servicio. Su siguiente bapor tabata Quirequire, pero ta Pedernales ta esna cu el no por lubida nunca. Masha bon el a corda e temor semper presente durante e siguiente anjanan di guerra, cu su tanquero lo ta pilotado di un otro atake di submarino.

El no a bati na 1945, y awe el ta un foreman cu un contratista di verficamento na Lago.

Francisco G. Thomas tabata un marinero hunto cu Van Patten ariba Pedernales. El tumbó a drifet den otro sal-babida, pero siendo mas afortunado cu algun otro, el a logra su cuarto y e bapor sin ningun marca. El tabata na sonjo ora e tramento a socede. Releiva di su trabao como anochi el a cai babor pa bancia mas tempran den resurgimiento a bordo di e bapor a desperdite. Instintivamente el a col camina pa dek. Na momento di e explosion el no tabatin un idea kiko a socede y el no kier a para pa puntra tampoco. Su unico deseo tabata pa abandona e bapor. E foramento di e tanquero a bente le abao. El no a haya kintá di vian, solamente el a toca cu azete cu ligueta corre door di e passadann. Cu dificultad, pero tan lijeramente, el a bato sal-babida por permiti.

Ora Thomas a yega banda petras el a mira Oranjestad explota den un bola di candela. El a haya miedo. El a res- liza e ora cu guerra na Europa y Atlantico a transalada pa Caribe.

Thomas a bolbe pa su cas na Bonaire despues di sink- mento Pedernales. El tabata den lake fleet di Lago meos 1945 y el a tabatin intencion pa bolbe den mas of menos 1946. El a bato sal-babida y siguiente bapor tabata Andino. Thomas y e baporera ariba babor tabata a wordé molestia mas door di enemigo. En efecto, el a mira un bapor wordé tirá mas durante su viahenan entre Aruba y Lago, y un viaje largo cu su barco a haci como parti di un convoi grand pa Estados Unidos.

Thomas a liga lake fleet na 1956, pero ainda el ta mabega. Kl ora cu el tin chens, el ta firma a bordo di tan- quero pa un viaje pa e lago. Su ultimo tabata un bapor Naosaga. Ora cu quarter di e bapor termina, el ta baba y ta warda un ote.

Ernesto J. Semeleer, un veterano di cinco anja di lake fleet, tabata pará met-nei di e cuarto di maquina di Tia Juana. El tabata pará keto y silencioso completamente cu atencion ariba trahamiento di e motornan bao su cuidó. Su planan tabata poco apart pa absorba e foramento di e tanquero carga mientras esaki tabata cruzá e lama tur-

por cu un otro submarino. Semeleer ta vionan cu vionan, un otro tripulante tabata colgá over di e railing. El a grite le, pero e homber no a contesta. Semeleer a coi e railing tene y a ratca su mes den direccion di tripulante. El a sagradí e baporera pa bato sal-babida. Un momento mas di e resulto e mensahe afluencia. El a bato sal-babida a cadaver y a cumenza pensa ariba su mes. Un bato sal-babida tabata cerca di dje, y el a purba los e. Tabata un viano. E leummento di e bapor tabata asina grand cu el a causa e boto di cai ariba suborietren y despues den azeta kinando.

Semeleer no tabata graa landador y el tabata teme Janar, su grandora y, na e momento aki, sin apariencia mar y anochi. Semeleer, candelá tabata un peligro a laga su mes baha den un ligueta, cu un sal-babida. El no tabatin un idea exacto di con largo el tabata drifet den awa purbandu pa tene cabes na larra. No tabata parece le mucho largo despues cu el a larga e bapor cu el a sinti un concusion door den awa ora e boilers di Tia Juana a explota y e bapor a sink. Mas laat el tabata morto cansa y molto di azeta for di un periodo di exposition cu el den un estado de shock. Semeleer, anochi bogá y curpa yen di concusion, drifet contra e bato sal-babida y viviente di Tia Juana, tur tani na un sal-babida. E otroman a tene Semeleer y a pushé le entre nan.

E grupo a sigui drifet. Un tanquero a hini na vista, y a reduci velocidad manera cu el tabata rondando sobre- viviente. Su tripulantenan humanamente, pero no muy sabio, a tira un spot-light over di awa. E hombernan den awa a mira e bapor colgo e tanquero Gulf, Monagas, y yen di antimonio. Semeleer a bato sal-babida, anochi y el no tabata sigui capaz pa continua. Nan cinco a laga e sal-babida cu ne y a cumenza landa den direccion di e tan- quero.

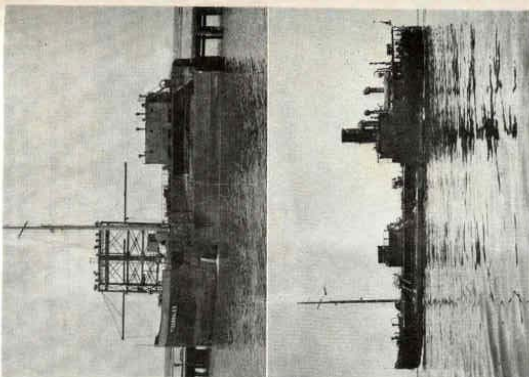
Rapidamente e hombernan a desparece for di vista di Semeleer. El tabata sol atrobe met-nei den Caribe. Des- pués di un periodo largo tin tin — tempo no tabatin ni un bato sal-babida pa bato sal-babida. Monagas a explota den un monton di vionan. Un otro bapor a bato sal-babida a dal su mata, cu oficialmente a wordé anplá pa 6330.

Casi manera cu tabatin comodidad di seguridad pa wordé ganá kitando for di un marca enemigo, Semeleer a purba landa den direccion contrario di Monagas ki- mando. Cu ayudo di e sal-babida tabata un poco mas facil pa keda flota. El tabata moro su brasa poco poco, mescos cu su planan; benter su curpa tabata dolor di frío y cau- sando.

Un otro tanquero a aparce. Lo tin hopi mas como esaki ta ruta hopi frecuentá entre Lago, Manao y Anisias Neerlandes. E accion nautica aki a tuma lugar den mas of menos diez pa diez-cinco milla den radius dilanti Punta Macolla di Venezuela. E tanquero cu Semeleer a mira aparentemente tabata hini den vicinaria di Monagas pa investiga. El a reduci velocidad mas tanto

pesa den un awa sin mucho aereencia, pero esaki tabata Feb. 16, 1942.

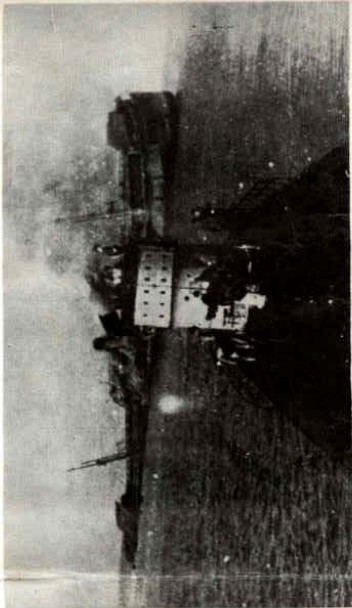
E homber cu el tabata pa releiva a bisa Providence cu parece tabatin algun incidente extraño ta socede y el otro. Manao, un bato sal-babida. Un bapor tabata na vol- gero Manao, el a sona, el tin idea cu el a mira vionan den direccion di Tia Juana. Awe, Semeleer lo largo di e ruta pa e lago. Su preocupacion e corce de- dimento di e tripulacion di Ramona, y consternacion di e homber- nan tovañte loko nan no tabata sabi, a tene nan pa dek di e bapor. Di repente nan a realiza; nan a tende explo-



The Pedernales was cut in two. The bow and stern sections were floated to Lago where they were joined. A stubby Pedernales, 124 feet shorter, sailed to the States to be rebuilt. Pedernales a kibra na dos. E seccionnan di boga y di atras a wordé treci Lago unda a pega nan na otro. Un Pedernales cortico e viaja pa Estados Unidos pa reconstruction.

TWENTY YEARS AGO

Torpedoes from the U-156 buckled the Pedernales and sank the Oranjestad just off the Seroe Colorado reef



The U-156 and crew watch one of their Caribbean victims sink. The German submarine sank over 100,000 gross tons of Allied shipping during its year of silent, underwater hunting. E U-156 y tripulación ta waka un di nan victima den Caribe sink. E submarino Aleman a sink na di 100,000 tonelada bruto di embarcacion Aliado durante su anja di actividad.

second explosion. The captain of the Ramona was struck with the cold realization that he was sailing his ship over waters that hid two, maybe more, enemy submarines.

The Ramona cut short her dash to the lake when a torpedo struck her stern. She was unable to stop. The Ramona allowed again to continue her search for survivors. It was then the crew saw the tanker that had been hit twice. Ahead were the remains of the torpedoed lake tanker San Nicolas. She stood vertically, her stern on the bottom and her bow jutting through the water's surface in ugly defiance of her tormentor.

The crew of the Ramona sighted small knots of men; one group of six clung to the wreckage of a lifeboat and four others supported themselves on a nearby spar. Of ten men only eight were pulled aboard the rescuing tanker. Two men slipped beneath the waves, their senses numbed by exhaustion with rescue arm's lengths away. One who was lost grasped a line from the Ramona, but his strength had ebbed during the ordeal and he was unable to hold it.

The Ramona and the Lago tanker Yamanota rescued eighteen San Nicolas crewmen. Seven were lost. Three were killed instantly when the first torpedo hit the engine room. The other five were killed later in the same room. The apparently compassed the U-boat commander and fifteen minutes after firing his first torpedo he sped

almost impossible to see. The bobbing man felt sure that the German submarine commanders would see the high-riding tanker. Semelner was now well aware of the cause of the Tia Juana's and the Monagas's explosions.

Semelner's good fortune remained with him. The Shell tanker Ramona crew sensed the danger and the captain of the ship's boilers had blown. The Ramona slowed and proceeded cautiously in the direction of the distressed ship. The tanker's captain summoned all hands to the deck to watch for men in the water. One crewman spotted the lone Semelner. The Shell tanker stopped and pulled him aboard. When asked what had happened, he shouted: "Torpedo! Torpedo!"

The Shell lake tanker Ramona rode light and high in the water on her return trip to the lake. Her crew went about their duties unconcerned with all but the proper operation of their ship. The trips back and forth between Curacao and Lake Maracabou were usually uneventful. Vicente G. Provence, Ramona boatswain, lolled about the sailing shortly before relieving the watch at 0400. Not that it mattered to Provence or probably any crewmember since at sea days run into nights and nights into days when the sun and stars were the only lights that were visible. The man he

aboard one of the ships had reached the rocket box and the flares were exploding at will.

Suddenly the mantle of disguise was pulled clear of Eaton's thoughts and the clarity of more realistic reasoning stunned him. Those were not ship's flares. They were tracer projectiles being "jettisoned" from an unknown enemy lurking outside the reef. The conflagration that burned the ships was not the result of a fire but rather the direct result of definite, planned and efficient action. Those ships were torpedoed. This was no accident; this was war.

Eaton's first reaction was to move his family away from the waterfront house. Normally a location that attracted active bidding, the waterfront residence was not exactly the most desirable spot during a war. He roused his little girls, Alice, two and one-half years, and Susan, three months. Outside his home he glanced down at the water. A sudden flash of fire. This turned out to be caused by a blow down.

A. T. Rynalski breezed by and told Eaton to take his

ships were in distress. Earlier, he resisted, he thought, he saw flames in the direction of the Aruba refinery; then later flashes along the lake route. His uneasiness seemed to drift through the Ramona's crew, and the men's conversation — over what they knew not — brought them to the ship's deck. It suddenly became apparent that they heard the explosion; they saw the flames. The tanker cruised in to the lake. The Ramona was sighted in the water. The crew of the Ramona ordered full astern to pick up the survivor. As the ship's forward motion decreased then stopped, a phosphorescent blur whipped past her bow.

Pulled out of the water and asked what had happened, the wet and oily figure inside the life jacket identified himself as a Tia Juana fireman and shouted: "Torpedo! Torpedo!"

The captain of Ramona screamed for full ahead. Simultaneously the order was the realization of what had transpired. The torpedo had passed his bow. The forward motion of the Ramona was none too soon, and just enough. A second torpedo ripped the surface of the water off the ship's stern. Underway with all the speed her engines could generate, the Ramona captain employed zig-zag evasive maneuvers. He knew he had been sighted by German submarines, and he wasn't at all surprised by the U-boat commotion and vengeance that was being visited by the Ramona twice, once at the lake and once at having missed the Ramona twice. At 0400 fear gripped the Ramona's crew when they heard the report of another explosion. No flame was readily visible. Fifteen minutes later, the crew heard a



The gun crew of the 10.5 cm swing the bow cannon started during a practice session. This is the cannon that exploded Feb. 16 when the U-156 shelled the refinery. E tripulanteau di e cayon di 10.5 cm ta swing e cayon di boia na banda dreschi durante entrenamiento. Esaki ta e cayon cu a explota ora cu U-156 a tira arba refinaria.

The Ramona carried her survivors to Maracaibo, and left behind the bulk of the San Nicolas, a burning Gulf tanker, Monrovia, and the oiler, that marked where the Tia Juana had sunk beneath the Caribbean. The Tia Juana was the first of those ships sunk along the lake route. The watch on the Ramona had mentioned to Providence the feeling of unworldly incidents, and that earlier he had seen flashes. What he didn't know at the time was that he had seen the Tia Juana explode.

In minutes she heeled over sternward, flames washed through her crumpled side and burst out below a flame-covered surface. Of the four Lago lakers torpedoed the morning of Feb. 16, the crew of the Tia Juana suffered the largest number of casualties.

Semeler and other survivors were kept in Maracaibo for two weeks and then flown back to Aruba. Not deterred by the incident, the stoiky fireman returned to his tanker duty and served on the quinquennial James Watson. He also was on the Tia Juana in 1944, being on the Tia Juana when she foundered March 7, 1944, being on the Aruba to Panama. He joined the U.S. Marine Department Aug. 4, 1947. Both men are now on Lago towboats. Semeler is an older and relief tug engineer and Providence is a tug engineer.

The reactions of Serow, Chorinda, residents who kept from their beds at 0130 Feb. 16, were varied. They as if not in degrees of curiosity, fear, indifference, but panic. Families whose bungalows overlooked the lagoon were awakened to a war that had spilled itself and all the fire and destruction that goes with it at their very doorsteps. The Fred C. Eaton family was one brought abruptly to the face of war. The Eatons live on waterfront bungalow 12, which no longer exists. The sleeping area in the residence, however, from the sea. The glow of the burning Pedernales, however, disturbed Mrs. Eaton's sleep.

She wakened her husband and pointed to the orange glow that glanced through the louvers and flickered ere fingers of light across the ceiling. Eaton rose and from the front of his house he saw the burning tanker. His immediate conclusion, comforted in the complacency which seemed to have predominated the thoughtless it residents, was that someone must have ignited the tank must have been an accident. The thought of enemy attack never entered his mind.

He averted into the lagoon area, watching the flames mount. A second ship, farther downwind, exploded. Complacency still was the guiding attitude. Thought: Eaton: a spark from the burning ship blown by the Trade Winds must have ignited the second tanker. A display of pyrotechnics zoomed overhead. Eaton reasoned that the fire

bungalow 241 where they watched the flaming waters.

Eaton's family was spared direct enemy action as were all the families in Aruba. The only aerobically strenuous suffered Feb. 16 was the 15-minute boat-ride-out to had with another boat. Both were proceeding to the ships of such converging lights. Bright little spots of incandescence flicked on in homes and then were doused quickly when the users realized this was war. Some residents drove to the lagoon area with car lights blazing until they realized this was not accidental fire. One who was then general manager, L. O. J. He, the next area was the boatwalk through the lights that illuminated the boatwalk through the main dock to the lake illuminated. He extinguished all of them.

In close proximity to the refinery and tank farm. Some watched the fires burn themselves out, and saw the unshakable Pedernales drift away. The ambulance raced back and forth taking the injured to the hospital. The harbor was alive with small boats, many from the rescuing survivors. Watching the activity from the deck of the ship, the captain of the crew of the SS of the ship, the captain of the crew of the crew of the SS of 3900 tons of TNT in the ship's hold.

The ship's sailing had been delayed by coffee, it was reported. She had been scheduled to sail shortly after midnight, but the crew's insistence to have coffee before they sailed kept the ship at its San Nicolas harbor berth. The concession granted and the departure shortly after 0100, Feb. 16. The ship, the Pedernales went up in flames. The Gibbons eased away from the position to clear the captain wanted to continue full ahead, but the pilot refused to proceed into what he adjudged certain disaster. The Gibbons was returned to her earlier berth. The Army ship left later in the morning when the submarine threat had been cleared by Allied aircraft.

With the exception of the Gibbons, there was no ship traffic in or out of San Nicolas harbor, Feb. 16. In fact, it was packed with ships nested together inside the protective reef barrier.

In one Lago desk drawer atop a sheaf of papers, newspapers clippings, baseball schedules and travel folders reposed a suggestion. It was written in detail, checked and ready to be dropped into the company suggestion box and suggestion system. The suggestion, however, was logically satisfied that he had presented it as logically as possible to ensure it was consideration and hopefully implementation. It was indeed a worthwhile suggestion thought Henri M. Naasy, former public relations em-

sión, nan a mira e vlamman. E tanquero a cói rumbo pa bisiá. Un hombre a wordé mirá den awa. Capitan di Ramona a mira e tanquero jatrás pa recoge e sobreviviente. Segun movimiento del tanquero, el se aleja de la zona y después para, un obbato liciente a cruzá dilanti su boeg.

Sacé for di den awa y puntrá kiko a socede, e figura mihní y na azeta den e salbada a identifica su mes como fireman di Tia Juana y a grita: "Torpedo, Torpedo."

Capitan di Ramona a grita pa plena forza adiantí. Huntu cu e orden tabata e realizacion di loka a caba di no tabata. Un segundito despues, e movimiento del torpedo a cortá door di awa net patras di e tanquer.

Captan di Ramona a usa manobrnan di zig-zag. El tabata sabí cu un submarino tabatin na na vista, y el no tabata segur cuanto determinacion y venganza a wordé incitá den e comandante di e submarino pa motibo di a hera dos bida.

E a sperera di tripulacion di Ramona ora e ta tende informá di e movimiento del tanquero. Nan no tabata visible mes ora. Capitan di Ramona a salubra e tabata nabegando den awa bao di cual tabatin dos, posiblemente mas, submarino enemigo.

Ramona a cortá su viaje purá pa e lago ora aeroplano a aparece den laria maínta. Sabó cu proteccion aereo, Ramona a bolbe slow pa rondia sobreviviente. Ta e ora e tripulacion a mira e tanquero cu a wordé gerdá dos vez. El tabata bisiá den e tanquero. El tanquero a bota laria como si fuera el tabata resta a topar.

Tripulacion di Ramona a haya gruponan chikito di hombre na vista, un grupo di seis tabata colgá na resto di un boto salbada y cuatro otro tabata wanta na un boto chikito gebouter. Di e diez, solamente ocho a wordé ligá a bordo di e tanquero salvador. Dos hombre a slip bao awa, pa falta di fortaleza, cu auxilio ey mes presente. E ora cu a bat derivá a cói un cubaya di Ramona, pero su for e caba, durante e salubacion y el tabata incapaz pa ton'e.

Ramona y tanquero Yamanata di Lago a salba diez ocho tripulante di San Nicolas. Siete a perde nan bida. Tres a wordé matá al instante ora e promer torpedo a dal e cuarto di maquina. San Nicolas a leun abruptamente, pero el no a pega candela. Esaki aparentemente a prepura e comandante di submarino, y un cuarto di ora despues di tira su promer torpedo el a manda un segunda torpedo na otro den banda patras di San Nicolas. Cu su bodega kibra su bodega, e tanquero a bota. E bodega di Ramona a biba su bodega. E tanquero Maracubio, y a laga atras e bodega di San Nicolas, un tanquero Gulf

eventoman di e ultimo ornan. E conclusionnan tabata hopi, pero tur tabata yega ha e mes contesta. Mientras trahera cu e stakke in verensich tabata roliga, awor tomor trahera cu e stakke in verensich. Nan a mira un vision di submarino cu ta bolbe, y cu loka a salba e sobreviviente. E sobreviviente ta bolbe, y cu loka a salba e sobreviviente. E sobreviviente ta bolbe, y cu loka a salba e sobreviviente. E sobreviviente ta bolbe, y cu loka a salba e sobreviviente.

Poco e bendanan aki tabata sabi, y, naturalmente, no tabatin medio pa nan sabi, pa no solamente un U-156, pero tres otro submarino. Amanan durante e ultimo dos dias di e guerra, e submarino U-156 a bota un torpedo y a bota un torpedo.

Residentnan eeres di refugia, sin embargo, tabata argumentando den temor cu e comandante di e submarino lo conta su experiencia na otro destructornan di bao awa. Lo ta solamente un cuestion di tempo promer Lago y su cercania lo ta involvi door di candela causá pa e forza naval di Nazian. Alisórá den pakietamente frantico pa move nan familia un distancia seguro for di laman y refugia di mas grandi di nan propiedad. Nan, den momento di sercopia cu hopi di nan propiedad, nan, den momento di sercopia cu hopi di nan propiedad, nan, den momento di sercopia cu hopi di nan propiedad.

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Ermencio J. Semeleer - Tia Juana Survivor

evita wordé mirá, a fha contra-balance ariba barril di e cayon unda Hartenstein, e competente oficial di artilleria, a posiciona nan.

Tur tabata den Caribe y cercano Atlántico. Nunca mas, sin embargo, el a opera dentro di vista di Aruba. El a cual el a gana e Cruz di Caballero y Cruz di Hero y a pone le entre e promer trinta y cinco comandante di submarino. Mientras cu e tonelada no ta impresivo segun normanan di awenda, binti sarja pasá 100,000 tonelada brito gesink tabata representa un promedio di binti bapora. Ariba tres patrulla — no ta conóc Alko Hiringsma a boga Ariba su di cuatro y ultimo patrulla — U-156 a sink brito gesink.

E stakenonan aki a socede na 1942 tempo cu actividadnan di U-boat tabata na su zenith. Esporman Aliadó tabatin nan luna di mas peor na Juni 1942, tempo cu 141 bapora a wordé gesink. E perdidanan mas severo den registro ta...

promer cu a wordé gedial eitzre e taqumnan gesink i lo largo di e ruta di e lago. E warda abordo di Ramona a metañona na Providence e sentimento di incidentenan stranjero, y cu mas promer el a mira vlam. Loke el no tabata sabi e ora ey tabata cu e vlamnan cu el a mira tabata di Tia Juana explotando.

El a wordé torpedá den centro y a col candela mes ora. Dun algun momento el a leun fueramente. Awa a bini den barco door di su costado fibrá, y a sink e bano di un superfieci. E bano a cayendo diez-siete di su tripulacion cu ne. Di e cuatro lakes tanks a wordé torpedá Feb. 16 mañina, e tripulacion di Tia Juana a crey cu esey.

Semeler y otro sobrevivientenan a wordé teni na Maracaibo dos siman y despues tres Aruba cu avion. Sin te-moriza door di e incidente, e balente fireman a bolbe nalgua ariba lake tanker y a traha a bordo di Quatreque y acorssedá. El tabata tambe a bordo di e tanqueru Valerie na Panama. Providence, laga a bini na Steti durante averg. El a bin traha na Marine Department den febr. 4, 1947. Tur dos homber ta traha swor ariba remodelador di Lago. Semelser ta oiler y tug engineer di relieve y Providence ta tug engineer.

Den lachi di un lessemanar na Lago ariba un monton di papeli, corant, lista di bapelas y folleto di viaje, tabata essey. Despues di esey tabata un mapa de lavaya, gebeck y cia pa wordé tirá den e bano. E oryginador, anembargo, tabata kier ta satisfeco cu el presenta su idea tan logico posible pa asegura considerberdad un idea cu vale la pena, asina Henri M. Nassy, antes empleado di Public Relations Department y awe parte di servicio informativo di gobierno di Surinam, tabata cu el mesun bida di hende, y seguramente spiar placa pa compra un nuevo equipo. Tambe lo e yudá e causa Aliado door di proteha, produccion di petroleo necesario y tanqueronan esencial.

Pero el tabata un poco particular di mas tocanse e redaccion y composicion propio. Tambe el a dilata un poco, y como resultado e sugerencia alinda tabata den su lachi Feb. 16, 1942, e mainta despues cu dos tanqueru cargá hanca pafó di rif a wordé torpedá door di submarino enemigu.

Su idea, hancra tanqueronan esperando paden di rif pa yuda proteha nan contra accion di submarino enemigu.

Despues di e dramamento di Feb. 16, hopi residente di casnan den cercania di refineria di tank farm a haya asustao. Esaki tabata comprensible y muy natural, particularmente pa mas di menos 9' or e mainta despues di e atake ora grupo di homber y muhernan a reconstrui e

"Si, inmediatamente."

"Ah, bo kierende mi bo curá di waya si bo ta bai?" e homber a puntra un secundo, pensando cu e trabao duro di instalá un su mes lo termina un e momento aki. Asina a socede. Homber cogéle. Mi ta bai."

Feb. 16 tabata un dia di susto pa tur hende, particularmente esnan cu tabata biba cerca di traha den refineria. Promer cu canino a bolbe, jo algun tabata mescos cu nan tabata unan un turri di polvo wardando pa e fase kimando aleanza un turri di Newvotonun lalho. Hendenan tabata sadta cu e mannan boroto, specialmente noticianan alarmante.

Asina dos empleado di Lago a duna otro un spanto di morto den un momento. Ora nan a cuba di lacha nan, uno a pasa maná na un serbete di papel cu tabata colga for di e contenedor di metal. El a col e punta abao di e papel y su jobá a kraak. E mocion no tabata mas, ni menos cu e seccion de control cu tabata mesun y enbudo. E grupo di e control cu tabata a haci normalmente, Feb. 16, sin embargo, no tabata otro dia. El boroto di e papel a duna su companjero un spanto di e mundo di mes momento e tapadera di e contenedor a slip y a dai un poco duro. Tur dos tabata segur cu nan a wordé tirá. Momentonan despues nan labata hari ora susto a pasa y ridiculez di e momento a bira aparente. Di dos a bisé: "Bo a hera, tira atrobe."

Abordo di e U-156, cual tabata submergá den awanan pa nord di Aruba ora dia ta habi Feb. 16, 1942. Businger a muri di heridanan causá door di e castro y explosiva. Diez-siete ora despues di e atako, U-156 a lanta cu e isla na Vista alinda. Hartsenstein a itonona Nos Tata, e tripulante a canta "My Tuislein Un Compañero," y Businger "a wordé entregá na lamár cu pleno honor militar."

Eran explotando a kita pia di Von dem Borne afor. Farmaceutico di Antwerpen por mengua e sangramento. Pero Hartsenstein, cu un lachi y e cu nester a baha su segunda oficial di warda na terra pa e ministercion medico. Feb. 17 el a recibí permiso for di ministercion di marina Aleman pa pone Von dem Borne na terra na Martinique, loke el a haci Feb. 21.

Despues di pone su segunda oficial di warda na terra, Hartsenstein y U-156 a sigui nan hazanja di baw awa, Caribbean y Atlantico. E seriedad y determinacion di Hartsenstein. El sinti door di e tripulacion ora nan a laga Martinique. El sinti door anuncionnan na un punto gresplet di e barril di dinamita, zang afor e causá of su blade cayente di mas el tabata bai. A un y otro tabata tuma su lugar te ora e barril a wordé cortá limpi. Welders, trahando anochi baw tarpaulinas pa

diñá na Hartsenstein — a bai. Operando 1,170 submarino den Guerra Mundial II, e submariniano Aleman a sink 2779 buco comercial cu un tonelada brutto total di mas cu diez-cuatro milon.

E fin di U-156 y su comandante di treinta y tres anja a bini Maart 5, 1943, mas o menos 340 milla, p'ariba, di Barbados. Un bombero di Estados Unidos na patrulla, pa motor, un submarino PT-56, tabata ribando na base ora el a mira submarino U-156. Un submariniano tabata repasa den solo ariba dek. E PRY Catalina a sero den un baba y laga baha di cabes Aruba y U-boot. E plano a nivela na 100 pia over di e tripulacion completamente sorprendi y a laga cuatro bom cay, di cual dos a dai canto di e brug.

U-156 a kibra, den tres pida, y a sink mes ora. E aeroplano a mira sobreviviente y dief y a tira sabalida y cumada pa nan, pero bapornan nunca a haya nan.

E U-156 no tabata e ultimo submarino cu a bisita Aruba. Maske Hartsenstein a opera den awanan di Caribe te su mes destruccion y di su submarino, nunca el a regressa, e sitio di su promer victorianan. Otro a bolbe, y uno particularmente no mucho despues di e atake di e U-156.

Tabata poco despues di merdia na Oranjestad. Tabata un bano alegre e dñanan color oranje tabata brilla den e manera alegre e dñanan color oranje. Un dia di Aruba. Podiser tabata e diaknan, pero mas probable y logico tabata seroe Hoelberg cu a sirbi Hartsenstein como marea, y a presta su mes como un ayudo di navegacion y a submarino cu a lamia den e awanan keto dilanti Oranjestad. El a lamta y a keda flomamento ariba awa mesos cu un bayana den solo tropical. E comparacion no ta un fondo. Hopi bayana a wordé tirá como nan for di e marea y submarino tabata sintá, y su oficialnan tabata wask, e muchanan cu tabata bolbe. Hartsenstein School a corra bat canto di awa pa mira e vista. E muchanan, sin preocupacion pa e peligro, a duna completo liberad na nan curiosidad den e excitacion di mira un instrumento di guerra y di historia.

Nunca mas tabatin tratamiento ariba Aruba, y nunca mas tabatin sintermento pa buco. Un dia di Aruba. E unico golpé enemigu sufri door di e maquina di guerra di aki tabata e promer lanzá door di e maquina di guerra di Nazian den Hemsferio Occidental. Miestras Aruba y su residentenan tabata biba den anticipacion di accion enemigo contra e refineria cu ta furni mayor parti di combustible pa Alalamon, nunca el a bini. E enemigo a lanta for di den awa. De vez en cuando pa wask, pero el no a mira mas. Algun submarino a wordé reportá gezink door di un grupo di informan situadon na Aruba, pero ningun a bolbe causa e falta di e mainta di Feb. 16, 1942.

TWENTY YEARS AGO

A United States Navy patrol bomber sank the U-156 March 8, 1943

Patrol bomber action, such as this, sank the U-156 March 8, 1943, 340 miles east of Barbados. In this exceptional U.S. Navy photograph taken from the attacking plane, a submarine, of the same class as the U-156, was bombed and sunk.



ployee and today head of the Surinam Government's information service. It would save men's lives, and surely save the company money. The Allied cause by protecting needed petroleum products and sorely needed tankers.

But he was a little too intent on explicit wording and proper composition. He also prearranged a mite, and as a result the suggestion was still in his desk drawer Feb. 16, 1942, the morning after two loaded tankers anchored outside the reef had been blown apart by enemy submarine action.

His suggestion: anchor waiting tankers inside the reef to help protect them from enemy submarine action.

After the Feb. 16 shelling, many residents of homes in close proximity to the refinery abandoned their homes. They returned about nine the morning after the attack when groups of men and women reconstructed the events of the previous hours. The conclusions were many, but they all spelled out the same answer. Whereas before the infamous attack complacency was the rule, now fear was the master of many. They had visions of returning submarines, and what had happened, the queasy were sure, would be accompanied by a fiercer attack. The physical layout of the refinery. Their assumptions were predicated on the fact that one U-boat had surfaced and fired on the refinery.

Little did these people know, and, of course, there was no way for them to know, that not only the U-156, but

grasped the towel's bottom edge and flicked his wrist. The motion was no more, no less than he had done hundreds of times before. But against the background of a normal day, however. The pulp of the paper sent his associate into a body-stiffening moment of fright. As he did, the paper snapper reacted in involuntary unison. Both were sure the other had been shot.

Moments later they laughed as tensions eased and the ridiculousness of the moment became apparent. Said the second: "You missed, fire again."

Aboard the U-156, which lay submerged in waters north of Aruba the day of the hours of Feb. 16, Seaman Businger died of wounds inflicted by the exploding cannon. Seventeen hours after the attack, the U-156 surfaced with the island still in sight. Hartenstein intoned the Lord's Prayer, the crew sang "I Had A Comrade," and Businger was "delivered to the sea with full military honors."

The exploding catxan had ripped off Van dem Borne's foot. The ship's pharmacist was able to stop the bleeding but Hartenstein realized he had to get his second watch officer ashore for proper medical attention. Feb. 17 he received permission from the Reich admiralty to put Van dem Borne ashore in Mar-tinique, which he did Feb. 21.

After putting his second watch officer ashore, Hartenstein and the U-156 continued their underwater exploits in the Caribbean and Atlantic. Hartenstein's sternness and determination was felt by the crew when the boat left Martinique. He had his men work the ship hard and fast. When one man took a hot, he strapped aside and another took

their curiosity in the excitement of viewing an instrument of war and of history.

Businger worked on a waterfront home looked compellingly out to sea from his perch atop a ladder. Relaxing a moment, while still appearing to be at work, he suddenly saw the sea monster break through the water's surface. He smiled to himself as he recognized the form shedding water to be a submarine. His smile was a reassurance to himself that all was safe; here was a United States' undersea vessel standing by to protect Aruba. His composure was shattered by the alerting cry of danger, warning him that the U-156 had returned on the ground. When he dared move again, he was no worse because of his fall, only a couple of sore spots and an anxious moment.

He stole a guarded look over the water, but the submarine had gone. It had dived when planes from Princess Beatrix Airport took off after the unwanted prowler. The appearance of the submarine caught the Orinestad population by surprise. The U-156's presence was so unexpected that it seemed to be directly opposed. Had the enemy intended to see the other half raised into the cañon to get away.

Aruba was never shelled again, and tankers were never sunk along the island's perimeter. The only enemy blow suffered by this little Caribbean island was the first launched by the Nazi war machine in the Western Hemisphere. While Aruba and her residents lived in anticipation of enemy action against the refining installation that provided the lion's share of fuel for the Allied advance, the enemy never came. The enemy never did, and the islanders were never so shocked, but not so, as the Germans, since they were reported sunk by Aruba based air and surface craft, but none recreated the infamy of the morning of Feb. 16,

Shell refineries and had made numerous practice runs on unsuspecting commander's introduction to the plant's layout. Hartenstein, exercising the thoroughness that marked him, previously had studied every detail visible through his periscope of the harbor's openings, the configuration of the harbor and location of its piers, the roadstead area, the tank farm and the factory, as Hartenstein referred to the refinery in his log. He had reasoned in advance that the refinery would relate his findings fear that the U-156 would be destroyed. It would be only a matter of time before Lago and environs would be consumed by holocaust, inflicted by the Nazi navy. Absorbed in frenzied packing to move their households a safe distance from the sea and refining unit-lined shore of the largest Allied refinery, many couldn't be bothered with much of their physical belongings. They, in moments of remorse, unthinking actions, gave not the slightest thought to the labors that afforded them the possessions they quickly cast aside as worthless, bothersome, irrelevant to the life of a refugee. Out into the cunucu was the only thought.

Some, however, did choose to stay. And of this group there were the quick-witted who saw opportunities to gather unto themselves additions free or very low priced. One such industrious resident happened to be constructing a fence around his property. In the course of building a fence he looked around to see if his neighbor, whose home appropriate to the area, was making a dash for the cunucu. "Where are you going?" the stay-at-home asked. "I'm going out into the country. Got to get my family out there as soon as possible. Too close, too close to the refinery here. Those Nazi subs will come back and shoot a couple more tankers, then shoot at those tanks until we will all go up in flames. No, no, I'm going quick. You're leaving behind a house?" "Yes, yes, will you sell me your picket fence since you're leaving?" asked the unafraid, excited at the thought that the laborious task of constructing a fence for himself could end this moment. It did.

"Sell it! Man, take it. I'm gone."

Feb. 16 was a jittery one for all. It was, to some before composure had been regained, much like sitting on a keg of powder waiting for the burning fuse to light. People explosive. Nerves were edged raw with tension. People jumped at the least sound, especially sharp reports. Lago had two Lago employees in a lavatory watching each other a skin-crawling scare. Finished washing his hands, one reached for a paper towel that dropped accessibly from a sparkling metal wall container. He

fixed on his periscope on the cannon's barrel where Hartenstein, the skilled artillery officer, had positioned them. Hartenstein completed three successful patrols in 1942. All were in the Caribbean and near Atlantic. He sank over 100,000 gross tons of shipping, which earned him the Knight's Cross of the Iron Cross and placed him among the top thirty-five U-boat commanders. While the tonnage is not impressive by today's standards, twenty years ago 100,000 gross tons sank represented it is not known what number of ships. On three occasions it is not known how many U-156 sank twenty-two ships.

These sinkings occurred in 1942 when U-boat operation was at its zenith. Allied merchant shipping suffered its worst month in June, 1942, when 141 ships were sunk. The most severe losses suffered by the Caribbean and Mid-Atlantic regions were in August, 1942. In that month forty-six ships — four credited to Hartenstein — were lost. Operating 1170 U-boat hours in 1942, the German submarine force sank 400,000 gross tons of shipping which took 400 million gross tons.

The end of the U-156 and his thirty-three-year-old commander came March 8, 1943, approximately 340 miles east of Barbados. A United States patrol bomber from Squadron VP-53 returning from patrol sighted the surface submarine. Men lounged on the deck summing things up. The PBY Catalina dived into clouds and dived at the U-boat. The plane flared out at 100 feet over the water. The U-156 broke into three pieces. Two completely surprised crew members dropped four bombs, two of which failed to explode.

The U-156 broke into three pieces and sank immediately. The patrol plane sighted survivors and dropped a life raft and rations to them, but surface craft never found them.

The U-156 was not the last submarine to visit Aniba. Although Hartenstein operated in the Caribbean waters until his and the U-156 were sunk, he never returned to the waters of first victories. Others did, and one in particular not long after the U-156's attack.

It was shortly after mid-day in Oranjestad. It was typically bright and all the orange colored roofs shone in the gay manner that is an Aruban landmark. Perhaps it was the roofs, but more probably and logically it was the Hooberg promontory, which served Hartenstein as a landmark, that led to his still agonizing off surface submarine which surely waited leisurely on the Oranjestad. He was, like while lolling in the tropical sun. The comparison is not unfounded. Many whales, mammals, were "sunk" because their shape resembled that of the U-boat. And while the submarine sank and its officers looked, the students returning to Juliana School tumbled down to the waterfront to see the submarine. The children, unconcerned with the poised danger, gave full freedom to

Acknowledgements

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Source material included Battle of the Atlantic by R. E. Morison, American Antisubmarine Operation in the Atlantic by F. J. Lindenberg, and United States Naval Institute Proceedings. Aruba photographs were taken by R. E. Morison, who was Kapitänleutnant D. A. von dem Borne, German Federal Navy, Kiel, former second watch officer of the U-156 who lost his foot during the Lago attack. Without Herr Von dem Borne's assistance, the account would not have portrayed the intimacy of life aboard the U-156. Pictures of the submarine and her crew were supplied by him. To complete Herr Von dem Borne's story, the France and prisoner of war photographs of the U-156, France and her crew including Hartenstein. Two years later the United States military flew him to New York where he boarded the SS Gripsholm with other Germans involved in prisoner exchange. The exchange took place May 19, 1944, in Barcelona, Spain, and Herr Von dem Borne returned to Germany.

WCH

On a Personal Note

I was five when the *SS Esso Pedernales* and *SS Esso Oranjestad* were torpedoed. It is strange because I remember the night as though it were yesterday and it is one of my earliest of my childhood memories. Of course, being awakened and told the Germans were attacking and then watching two loaded tankers burn not a mile away across the open water is something that would probably be burned into any young mind.

At that time I lived in Bungalow 252, about 1,000 feet from where the Monument Committee would like to place the propeller and less than a mile away, across the lagoon, from where the ships were torpedoed.

My parents had gone to a party at the Army base in Savaneta given by the newly arrived American troops. A friend of theirs, Johnny Sneer, was baby sitting me--his family being in the States on vacation. I called him "Uncle Johnny" although he was not related. He was a tool and die maker as well as head of the refinery foundry.

When the *Pedernales* was torpedoed, Uncle Johnny woke me and said the Germans were attacking. He me out of bed and we walked across the street to the next road going down to Baby Beach. I remember sitting on a white pipe railing with Uncle Johnny standing behind me and holding me. From this vantage point we had a clear view over the water and watched the two tankers burn. This sight is implanted in my brain and to this day is the largest fire I have ever seen.

I do not know how long we were there, but my parents returned and the four of us watched. I remember there was talk among the adults: Should they go down on the beach and look for survivors? Had any of the small launches in the harbor gone to help? Soon after that my father and Uncle Johnny left, presumably to go to the refinery and my mother and I continued to watch the fires.

The next evening Lago went into blackout mode for the remainder of the war; I remember living behind black curtains. This made the house very hot because the curtains prevented the trade winds from blowing through the house and keeping you cool. If the curtains were open you turned off all the lights and sat in the dark. Many a night my family sat in the dark talking about the war after listening to the news on the short wave radio.

Now I live in a retirement community in Austin, Texas. It has been exciting and a pleasure to be able to witness the salvage operation of

the propeller thanks to the miracle of emails and instant photographs as well as video from the web. After the propeller's recovery, the development and planning that has gone into making the propeller into a monument and the effort put forth to obtain a location is incredible. This has all been documented on the web site I maintain. www.lago-colony.com.

I know the monument will become a reality; it is just a matter of time. When completed and dedicated, there finally will be something in Aruba to commemorate and honor those who lost their lives in the effort to supply oil for World War II.

I encourage all of you, if you have not already done so, to please send a contribution to the Memorial Committee. Addresses where you can send a check are found at the end of this book.

Dan Jensen,
Austin, TX
July, 2009



Additional Reading and Sources

On my web site, www.lago-colony.com

- [THE DAY HITLER LOST THE WAR](#) by Lee A. Dew
- [STATISTICS ABOUT LAGO](#) compiled by Don Gray
- [ORANJESTAD PROPELLER](#) About the retrieval of the propeller.
- [WHEN LAGO WAS LUCKY](#) by Ray H. Burson

For sale in book stores in Aruba.

- [THE LAGO STORY](#) by Jorge R. Ridderstaat

Other Web Sites Related to the Story.

- <http://uboat.net/boats/u156.htm> U-boats/156
- <http://www.aukevisser.nl/> Lake Tankers
- <http://www.ubootwaffe.net/ops/boat.cgi?boat=156>
Information about U-156
- <http://www.mindspring.com/~divegeek/home.htm>
Dr. Larry "Harris" Taylor's web page
- <http://www.mindspring.com/~divegeek/deep.htm>
Dr. Taylor's article on deep diving.
- www.aquamet.nl
Rigo Hoencamp (This web site is in Dutch)

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NOTES

THE END