

We thought that the radar operation was “for training more than any idea that it would be real,” Lt. General Walter C. Short admitted about the radar systems that warned of Japan’s surprise attack.(1) On December 7, 1941, over 350 Japanese planes from four aircraft carriers launched a surprise attack on US military installations across the Hawaiian Island of Oahu, with the Pearl Harbor Naval Base most heavily targeted. The attack killed or wounded 3,500 civilians and American troops, and damaged or destroyed 21 ships and 188 planes. In the aftermath of this tragic event, a question emerged. Could the excessive damage and incredible loss of life have been reduced if the military bases had been notified 53 minutes prior, changing the history of the war in the Pacific? Studying December 7 through the eyes of a radar operator at Opana Point shows us that although this early warning notification could have been provided, a chance timing of friendly aircraft arriving at the same time, complacent responses to radar information, a fear of correcting a superior, and a breakdown in communication and organization through the chain of command prevented this critical information from reaching the people who needed it most.

A radar operator’s job was to report any unusual findings on the radar to the Information Center at Fort Shafter, and track enemy planes in the airspace. On December 7, 1941, a quiet Sunday morning, Privates Joseph Lockard from Pennsylvania and George Elliott from Illinois were operating the Opana Radar, located at the northernmost point of Oahu, from 4 AM to 7 AM.(2) Lockard was teaching Elliott how to use the radar, and because the truck that took them from their remote site overlooking the north shore to breakfast was late, they kept the radar on for extra training after their shift had finished.(3) At 7:02 AM, the operators spotted something unusual. There was a massive blip on the edge of the scope, 137 miles out, northeast of Oahu. At 7:06 AM Elliot phoned the Information Center to report what he assumed to be a large formation of planes. It was also breakfast time at the Information Center, so the junior staff

members were on shift. Private Joseph McDonald was the telephone operator, and Wheeler Field pilot, Lieutenant Kermit Tyler, who was on his second day of the job and had received very little training, was on duty.(4) Upon hearing about the unidentified blip, he told McDonald not to worry. Tyler had heard that there was a shipment of B-17 bombers due from the West Coast and believed that these were those planes. He also reasoned that even if it wasn't the bombers that were on the radar, it was probably a Naval Air Patrol Squadron.(5) When McDonald questioned his decision, Tyler ordered McDonald not to contact their command center. However, Lockard and Elliott continued tracking the planes as Elliott had wanted more practice because he was still learning to operate the radar. The blips of the planes disappeared at 7:45 AM, as they flew into the radar shadow caused by the rugged Ko'olau Mountain Range enroute to their many targets across the island.

The information received an indifferent reaction from the Information Center because the work at the Opana radar station was not deemed essential to the military at the time, nor was it organized. All six radar sites on Oahu operated independently and they were not manned 24 hours a day. Each radar site was a mobile unit that consisted of four trucks. Eventually, the stations were intended to be integrated together, but unfortunately this had not yet occurred.(3) The indifferent reaction was also due to communication issues between the radar operators and the lieutenant. The shipment of B-17s contained around a dozen bombers, but the blip spotted on the radar indicated a significantly larger number of aircraft. Both parties failed to mention these critical details to the other. It is truly astonishing to think that if one of them had communicated this detail, the military may have had time to prepare, leading to less damage and loss of life in the attack, and a shorter war in the Pacific.

Another complicating factor was that because Lieutenant Tyler directly ordered Private McDonald not to report the unidentified planes to their superiors, McDonald was afraid of being court-martialed for going against the Lieutenant's wishes, even though he was concerned about the fleet of planes. Because of military protocol, McDonald did not disobey Tyler, even though he suspected that the Lieutenant was wrong in his decision making. He will regret following orders for the rest of his life.(6)

We can learn two main lessons from studying December 7, 1941, by focusing on the experiences of Lockard and Elliot. Firstly, trusting and incorporating new technology is something that not just the military, but also organizations, companies, and businesses must continue to adapt to. Our world is more technological now than it has ever been, and our generation will need to incorporate, trust, and use advancements that we cannot yet picture. Secondly, we need to recognize that the most junior people in an organization can hold the key to a puzzle. We must create an environment where everyone is empowered to speak up and present critical information when they believe something is wrong.

The information existed to provide a warning of the Japanese attack on Pearl Harbor, an hour before it occurred. Sadly, complacency and mistrust of new technology and a military rank structure where junior members didn't question their superior's analysis resulted in the Information Center failing to respond to the information in a productive way. The events that happened at the Opana Radar Site and the attack on Pearl Harbor affect my life on a daily basis. I live on Oahu, and have seen the effects of the bombing of Pearl Harbor with my own eyes. I have visited Pearl Harbor and seen the battleship Arizona still leaking oil more than 80 years after the attack, with hundreds of names engraved in marble above their final resting place. I've seen bullet holes in the buildings at Hickam Air Force Base and the monument where a Japanese Zero

crash-landed in Kaneohe. Seeing these historical monuments and places on a daily basis has made me interested to learn more about the Pacific Theater of World War II. Could the Opana Radar Site be one of the greatest “what ifs” of the war? It is hard for me to imagine a Pearl Harbor where the Arizona doesn’t leak and thousands of people didn’t die. The name “Pearl Harbor” is recognized by most Americans because it was a surprise attack on American soil. Had the Opana Radar Site been able to give proper warning, maybe the attack could have been defeated, or at least ended with less American losses. To think that a lot of the damage could have been prevented if the Japanese had lost their element of surprise will always be a haunting thought.

Works Cited

Sources:

1--<https://militaryembedded.com/radar-ew/signal-processing/radars-role-at-pearl-harbor#:~:text=tough%20assignment%2C%20but%20we%20endured%20%E2%80%A6&text=The%20problem%20was%2C%20%5Bat%20that%20hour%5D%20we%20had%20no%20identification%20people%20on%20staff.%E2%80%9D&text=Short%2C%20commander%20of%20the%20military%20defenses%20at,than%20any%20idea%20it%20would%20be%20real.%E2%80%9D>

Military Embedded Systems, “Radar’s role at Pearl Harbor” by John M. Mchale III, editorial dictator, July 31, 2017

2--<https://cfvts.org/17339/cape-fear-voices/early-warning-at-pearl-harbor-on-7-december-1941/#>

“Early Warning at Pearl Harbor on 7 December 1941” by Frank T. Stritter, Contributing Writer, November 30 2023

3-https://www.jstor.org/stable/43597367?searchText=Opana+Radar+site&searchUri=%2Faction%2FdoBasicSearch%3FQuery%3DOpana%2BRadar%2Bsite%26so%3Drel&ab_segments=0%2Fbasic_search_gsv2%2Fcontrol&refreqid=fastly-default%3A26615706130883b822fad22461dfdec8&seq=1 “The Opana Radar Site” by Harry A. Butowsky The George Wright Forum Vol. 11, No. 2 (1994), pp. 17-20 (4 pages)

4 -<https://www.nps.gov/articles/opana-radar-site.htm> “Opana Radar Site” by Aviation: From Sand Dunes to Sonic Booms

5- <https://www.nps.gov/perl/learn/historyculture/opana-mobile-radar-site.htm> “Opana Mobile Radar Site” last updated September 25, 2024

6-https://www.army.mil/article/178799/vet_94_recalls_friends_lifelong_regret_over_pearl_harbor U.S. Army: “Vet, 94, recalls friend's lifelong regret over Pearl Harbor” by Katie Lange, November 28, 2016