

TerranearPMC Safety Share

Week of February 10, 2014 – “What If?”

When we develop our health and safety plans (HASPs), integrated work documents, activity hazard analyses, or other documents that are intended to capture hazards associated with various work activities; we need to ask the question, “What if.” Many times we write a HASP or similar type document and “borrow” from a previous plan as a starting point to obtain possible hazards for which we may encounter for the new project. Without a doubt, using other documents to help write a new program is not a crime; after all why waste valuable time reinventing the wheel? However, we still need to understand that every project has its nuances and unique hazards. If we do not delve into the specifics of our new project hazards, then we will surely miss something and maybe find out just what it is that was missed when it is too late. This is where the importance of “What if” comes into play.

With all the stories and movies made about the greatest military invasion in the history of mankind – D-Day – I have never heard of tanks coming to shore and playing a role in securing the allied position on the Normandy coastline. And there’s a good reason for that – they didn’t! However, they were supposed to be there, providing valuable support to the infantry at Omaha Beach where allied forces encountered heavy resistance, resulting in thousands of casualties.

Prior to D-day, the allied forces made extensive preparations in England. Realizing the importance of tank support, military engineers were tasked to find a way to get Sherman tanks from sea vessels to the shore. The engineers devised the “Duplex Drive” tanks or DDs and were fitted with large water-proof canvas skirts around the upper portion of the tanks, which were designed to float low in the water, thereby appearing (to the enemy) as nothing more than a rubber boat. They were powered by two rear propellers and could be launched off a boat miles away from the shore.

The DD tanks carried a crew of 5, and were armed with one 75 mm gun as well as two 0.3 inch machine guns. The maximum speed in water was about 4 knots and the tanks could manage up to 1 foot high waves. The unsuspecting Germans were in for quite a surprise when the “what appeared to be rubber boats,” began firing their main guns. On Sword, and Utah Beaches, the majority of the DD tanks successfully propelled to shore. On Gold Beach the tanks were brought directly to the shore by landing craft due to the high tide. On Juno Beach, only some of the tanks were launched because of high seas. But on Omaha Beach, 27 of the 29 DD tanks sank at sea in six foot waves, after being launched three miles from the beach.

Apparently nobody ever asked the question, “What if.” While the DDs were designed to be amphibious and travel in water with 1-foot waves, no one asked, “what if the ocean waves were greater than 1 foot?” After all, the possibility of steep swells was not far-fetched. The consequence was that, while most of the tank crew was able to swim out of the DD tank skirt, the



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tank operators were stuck in the tank and drowned. Meanwhile the soldiers on Omaha Beach did not have the tank support they were expecting and for the entire morning suffered the worst losses of any of the other beach fronts. According to historians and military strategists, the lack of tank support proved to be influential in the heavy casualties at Omaha Beach.

If only someone asked “WHAT IF there is rough waters and the DDs encounter sea swells greater than 1 foot? Will they be able to get to shore?” If such a question would have been asked, then quite possibly, the concern would have been addressed. Maybe the DD skirts would have been redesigned to float in rough waters, or quite possibly, their use at Omaha Beach would have been scrubbed and possibly another tactic could have been deployed. In either case, the loss of life at Omaha Beach would not have been so severe.

So how does this old World War II scenario relate to our project challenges? Very simply, we need to take a look at our hazards and their proposed controls and ask ourselves, “What If?” An example can be protecting workers in confined spaces. According to the OSHA *Permit-Required Confined Spaces* standard (29 CFR 1910.146), appropriate rescue equipment and services need to be available and ready-for-use during entry into a confined space. The fact is, many times, rescue equipment, such as a tripod-with-winch and full body harnesses, used for retrieval, has not been properly inspected. As such, in the event that this equipment is needed and it is discovered that the retrieval line is degraded or frayed, the entrant cannot be rescued. Many times a local fire department may be close enough to a project where a confined space entry is scheduled; however (quite typical) the specific fire station does not have the individuals properly trained to respond to a confined space emergency. By an initial contact with the local fire house and a pre-inspection of the designated retrieval equipment, we can determine if the project is prepared to respond to an emergency and therefore, prepared to perform work in a confined space environment.

The only way we can be sure if we are ready to perform a work task is if we ask the all-important “What If” questions. What if someone falls? What if the equipment isn’t available? Of course, when we ask such questions during pre-start-up or project planning stages, there may be a few sighs around the room indicating inconvenience or annoyance; but if “What If” questions cannot be fully answered, then we need to understand that we have left ourselves open to a potential tragedy – this is something that no project can live with; especially if we know that we had the ability and opportunity to prevent its occurrence.

Every one you meet is fighting a battle you know nothing about

Brad Meltzer (Author)

