

Energy Matters

[A Lasting Legacy of the Fukushima Rescue Mission: Part 2: The Navy Life – Into the Abyss](#)

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By Roger Witherspoon

To the US Government, Operation Tomodachi was just another big humanitarian aid and rescue mission in which the nearest Navy fleet and many land-based personnel rushed to the aid of an ally in need. In this case, the northeast coast of Japan had been flattened by a massive earthquake and tsunami which destroyed infrastructure and killed some 20,000 citizens.

Operation Tomodachi – named after the Japanese word for Friend – began as a large logistical exercise. It seemed that way to the American sailors, both land

based and in the USS Ronald Reagan Aircraft Carrier Strike Group. The view from Washington was that Operation Tomodachi would enhance the long ties between allies.

Then everything changed.

The nuclear fuel in reactors 1,2, and 3 at Fukushima Daiichi overheated and melted down, creating a hydrogen cloud in the process which exploded, spiking radiation readings on detection monitors across Japan. Hydrogen from Unit 3 migrated through a shared venting system into Unit 4 and blew off its roof as well, exposing the spent fuel pool and its 1,500 bundles of fuel rods containing a lethal mix of cesium, iodine and plutonium.



Transcripts of meetings and conference calls hosted by Nuclear Regulatory Commission Chairman Gregory Jaczko showed steadily increasing concern as newer data contradicted previous data and measurements of radiation from the Navy differed markedly from the information coming from the Japanese government and TEPCO, the giant utility which owned the stricken reactors. ([NRC's Operation Center Fukushima Transcript](#))

The NRC itself was flying blind. The agency had believed it was virtually impossible to have multiple meltdowns at the same site. As a result, their emergency models all involved the healthy plant using its working systems to control critical systems in the stricken plant until the problems were solved. Jaczko had publicly urged calm and for Americans in Japan to follow the guidelines of the Japanese government. NRC press releases in the United States all stated prominently that there was no danger from radioactive fallout.

But the transcripts tell another story.

On March 14 Jaczko's conference call was interrupted by senior executive Jack

Grob with bad news:

“JACK GROB: Okay, guys, I apologize for bothering you, but things are degenerating quickly. This reminds me of the drill. [...]

what’s really troubling is that we, we have had that wind shift — the Chairman’s here, by the way — we’ve had that wind shift and the wind is out of the northeast blowing towards the southwest. That’s inland and towards Tokyo. And there’s an aircraft carrier in the port just south of Tokyo. It’s about 180 miles from the site, about 10 miles southwest of Tokyo, and they’re measuring on the order of 10 to 20 millirem over a 12-hour period total effective dose and roughly five to 10 times that, thyroid. [...]

JACK GROB: The, the answer is the dose rates don’t seem to be consistent either with what would be released or with the timing that it would take for a plume to get 180 miles away from the site to the southwest.

MIKE WEBER: Yeah, well, that’s what I struck me when you told us what’s going on.

JACK GROB: Yet, but the, the feedback through Trapp from the admiral is that they used multi instruments and confirmed this in multiple ways [BLACKED OUT]*

MIKE WEBER: Wow.

JACK GROB: They do operate nuclear-powered aircraft carriers, so they must have a level of competence that’s fairly decent. [...]”

This was new territory, and they could not trust data from the Japanese.

For the Americans in Operation Tomodachi, this meant they would be improvising throughout the crisis. They faced the dual needs to conduct search and rescue missions in a devastated landscape with little functioning infrastructure while guarding against unseen contamination from the stricken reactors.

To officials at the Defense and State Departments, and Nuclear Regulatory Commission, Operation Tomodachi was a successful, limited duration event in

which the military worked in a civilian humanitarian mission. It was requested, logged, and finished.

But military operations are carried out in real time by people implementing orders from half a world away who have to live with the consequences of making the mission succeed.

And for some of the Americans sent into action, Operation Tomodachi would mean the end of a career and dream of service in the US Navy, and the start of a new life laced with anxiety.

The Junkie's Kid

Michael Sebourn was just another kid nobody wanted, from a neighborhood nobody cared about, with a future leading towards jail or death and a life nobody would have missed. Then he met the US Navy.

“My mother was a drug addict and my father was killed when I was 18 months old trying to rob a drug dealer,” he said. “We lived in the housing projects in Charleston, South Carolina. My stepfather was abusive and spent all the money my mother made on drugs and alcohol. I was malnourished and underweight.”

At age five he was sent to live with his grandparents, who died two years later. He moved in with an aunt in Gary, Indiana, a poor white kid in a predominantly poor,



black part of a decaying city.

“I never thought I would ever be able to accomplish anything,” Sebourn said. “I knew college was out of the question because I was poor. I worked in a factory for a while after high school, but that didn’t work out and I was homeless for three

months, living out of a truck and driving to Wal-Mart parking lots to sleep.”

He moved back in with his aunt. He had a bad attitude, made bad choices, and “had a couple of run-ins with the law. I needed something new. I had nothing going for myself at all and I wanted a fresh start. I asked my aunt if I should join the military and she ran into the kitchen and got her car keys and said ‘let’s go’. Two days later I was gone.”

He did well in the Navy’s Great Lakes training station and when he was offered a choice of assignments, it turned out to be administrative. “Something clicked,” he said of his entry into the Navy in 1993. “I got my pride back. I got a sense of worth and I started succeeding. I decided serving in the Navy was something I needed to do.

“It was the first time I felt I had a home. It was the first time I felt I had a family.”

It would not be his only family.

He landed in Japan 17 years ago, loved it and stayed at the Navy’s Misawa naval air base, working his way up to head mechanic for the helicopter squadrons based there. He married a Japanese woman and, eventually they had a son. He was half a world and a full life away from the drug dens of South Carolina. He was a Navy man.

The Athlete and the Musician

Maurice Enis was a tall, strapping kid from the frost belt of Rochester, Minnesota whose world revolved around sports and physical fitness. “I was running track at Century High School in Rochester,” he recalled, “doing the 400 and 200 meters and wanted to continue.



“My coach was an ex-Marine who had traveled the world, competing for the military. It sounded like a great life and I wanted to compete for the Navy, too. When I was 19, we went down to the recruiting station and talked about the opportunities they had, and I enlisted. It was 2007, but there was a lot of crying at home because my Mom was afraid I would get hurt because of the war and 9/11. But I told her that this is what I want to do with my life.

“And it was good. It saved me, in a way. I was aimless and it taught me a lot more about my time and what you can do and accomplish. Being deployed, you have no time to do anything extra. Every minute of the day is accounted for. When you get out and have 24 hours to play with, I can accomplish so much more now because I can manage my time and I learned how to prioritize.

“I really did grow up in the Navy. They didn’t have track and field in the Navy anymore, so I chose navigation and general quartermaster. There is the old school way, navigation using different celestial bodies, and the new way, which is all math and computers. You learn to use all the different navigation systems that we have. You apply it to the paper nautical charts and use the satellites and you can actually figure out exactly where we are in the water.”

He also fell in love.

Jaime Plym came from as far away from the snow as one can get without swimming in the Caribbean, which she also enjoyed. She grew up in St. Augustine, Florida, one of the nation’s oldest cities and went on to attend Jacksonville University for two years as a music major, playing bass clarinet.

I decided I wanted music in my life,” Plym said, “but I didn’t want it as my job. I quit school and just worked as a pre-school teacher in Gainesville. I wanted to go back to school, but I had been on a music scholarship and I didn’t have the money for any other major.”

She felt aimless, and went home and loafed on the beach as 2007 drew to a close. She had a brother who was in the Marines and decided she, too, could join the service. “But I wanted to be out to sea,” she said. “I wanted to be on a big ship.”

Plym and Enis were in the same class at the Great Lakes training center and came together at the end. “I was trying to figure out what I wanted to do,” she said. “They told me about quartermaster, which meant we worked at the command center and



were responsible for navigation. I signed up for it.”

Navigation is critical, especially on an aircraft carrier. Other naval craft can move and shift to be in the most favorable position regarding the wind and the currents, with their navigators finding the best and quickest routes to take. That is especially important if there is danger approaching, like a slow moving radioactive cloud.

Navigators on an aircraft carrier do not have that luxury. Their quarter-mile deck slowly rolls side to side, and up and down in accordance with the sea. They must find the smoothest spot and hold it for the duration of the mission, regardless of what comes. After the aircraft leave the deck, the ship must remain at that spot so they can find their way back.

That makes dodging dangerous winds and radioactive currents problematic.

But they didn't know that when they graduated from the training camp and began life as quartermasters and navigators on the USS Ronald Reagan, head of a carrier battle group plying the South Pacific.

“We had a lot of fun,” said Plym. “We were friends at first, and then we started dating.”

On March 11, 2011, the USS Ronald Reagan and Carrier Strike Group 7 were headed for port in South Korea as a tsunami struck the northeastern coast of Japan.

“We knew right away they were going to redirect us to go to Japan and provide aid,” Plym said. “We were there by 5 AM the next morning.



“We didn’t know about the reactors,” said Enis. “We didn’t have outside contact like the internet or cable to know what was going on on land. We just knew there was a major crisis. We had no idea about the nuclear plants till they notified the captain of a possible radiation scare. That’s when we found out that there might be a possible radiation leak.

Something New: Radiation

Operation Tomodachi began with the request for help from the Japanese Embassy to Kurt Campbell, assistant secretary of state for East Asian and Pacific affairs who quickly turned to Gregory Jaczko, then chairman of the US Nuclear Regulatory Commission, and Admiral Mike Mullen, Chairman of the Joint Chiefs of Staff who would regularly brief President Barak Obama on the escalating difficulties on land.

What had begun as a rescue mission was being increasingly complicated by spreading radiation from Unit 1 at the six-reactor, Fukushima-Daiichi nuclear complex. At least three other reactors were in danger of failing, including the

spent fuel pool of reactor Unit 4, holding 1,535 bundles of irradiated fuel.



On February 12, as the USS Ronald Reagan and Carrier Strike Group 7 arrive two miles off the coast, Fukushima Unit 1 blows up. Unit 3 will explode March 14, and the hydrogen gasses migrating through a shared vent will also destroy the containment building at Unit 4, exposing the spent fuel pool to the air. Unit 2 will explode March 15. Tokyo Electric Power Company (TEPCO) will announce that most of the fuel in Units 1,2, and 3 are intact. They are not. They have fused into a molten mass and are oozing through the bottom of their destroyed reactors.

The Japanese government, not wanting to acknowledge that the situation was getting out of control, did not activate its military, the Special Defense Forces, to airlift water to the stricken Unit 4 and continuously drop it on the spent fuel to keep it from exploding in a nuclear fuel fire. According to Asahi Shimbun, a leading Japanese newspaper which obtained the communications between Tokyo and Japan's embassy in Washington, Mullen sent a cable to Ichiro Fujisaki, Japan's ambassador to the US, stating that the SDF should be used to cool the reactors:

"The U.S. military believes the No. 4 reactor is in danger. It feels every step should be taken to cool the reactor, including using the SDF," the cable said. "The United States has made various preparations to deal with the nuclear accident. The president is also very concerned..." (<http://bit.ly/WS7rXG>)

At the Nuclear Regulatory Commission, Jack Grob is leading a crisis team in the 24-hour Operations Center in nearly constant conference calls with Jaczko and a team in Japan. Their previous scenarios – including the long held belief that it was

impossible to have multiple meltdowns in a single nuclear complex, and that the containment structure would stop radiation from spreading from a reactor to the environment – have proved explosively wrong and their scenarios for keeping people safe from spreading radiation are being called into question.

The NRC's redacted transcript of those conversations shows that after the explosion at Unit 4 Grob says in exasperation "The projections on releases with the containment intact are completely insignificant now.

"I mean, this is beginning to feel like an emergency drill where everything goes wrong and you can't, you know, you can't imagine how these things, all of them,



can go wrong."

But the NRC released several daily press releases, all reassuring the public that there was no danger to the public.

And on the high seas and at the American naval installations, the sailors of Operation Tomodachi were on their own.

–Winifred Bird contributed reporting from Japan

Next: Part 3

Cat and Mouse with a Nuclear Ghost

