

Fukushima Continues to Plague Pacific Ocean Fishery

The Japanese fishing community and watchdog groups have raised alarms over government plans to dump over one million tons of highly contaminated waste water from the three devastated Fukushima nuclear reactors into the Pacific Ocean.

The *London Telegraph* reported last October that Japan's "plan to release the approximately 1.09 million tons of water currently stored in 900 tanks... has triggered a fierce backlash from local residents and environmental organizations, as well as groups in South Korea and Taiwan fearful that radioactivity from the second-worst nuclear disaster in history might wash up on their shores."

Making matters worse, Greenpeace issued a report last January 22 slamming the dumping plan, reminding readers that Tokyo Electric Power Co. or TEPCO—owners of the destroyed reactors—admitted in 2018 that its water decontamination system had never worked. The *Telegraph* noted, "[T]he Advanced Liquid Processing System (ALPS) has consistently failed to eliminate a cocktail of other radioactive elements, including iodine, ruthenium, rhodium, antimony, tellurium, cobalt and strontium." Further, "In late September [2018], Tepco was forced to admit that around 80% of the water stored at the Fukushima site still contains radioactive substances above legal levels..." the *Telegraph* said.

The *South China Morning Post* reported, "Despite the much-vaunted ALPS plant... TEPCO has con-

firmed that levels of strontium-90 are more than 100 times above legally permitted levels in 65,000 tons of water that have already been through the ALPS system." Some of the "treated" waste water still has strontium-90 concentrations 20,000 times the allowable limit.

Japan's fishing community was outraged about the dumping threat during a series of public hearings last year that were designed to convince skeptical observers that pouring more radiation in the Pacific is a good idea. The magnitude-9 earthquake, and the tsunami it caused on March 11, 2011, left more than 27,500 people dead or missing in northeast Japan and triggered the largest oceanic radioactive contamination in history.

Fukushima's contaminated water continues to flow into the Pacific at a rate of around 2 billion Becquerels a day, *Japan Times* reported on March 29, 2018.

Dumping Radioactive Water Poisons Fish

Since Fukushima's meltdowns began in 2011, there has been regular news of seafood contamination. As recently as Feb. 2, the *Japan Times* reported that cesium-137 far above Japan's legal limit was detected in fish caught off Fukushima. According to the local Fishery Cooperative Association, skate that were caught over 180 feet deep were found with 161 Becquerels-per-kilogram of radioactive cesium-137, exceeding the allowable limit of 100 Bq-per-kg.

Cesium-137 from Fukushima has been found in fish in the US and Canadian waters. The *Haida Gwaii Observer* in Queen Charlotte, British Columbia reported March 16, 2018 on a study by Simon Fraser University. Author Krzysztof Starosta discovered that cesium-137 "levels found in both the salmon and soil samples remained below Canada's safety guidelines, posing minimal health risk to B.C.'s salmon and human populations." The use of the word "minimal" by Starosta is not a scientific term of art. "Minimal" means there is some risk, especially considering the cumulative effect of eating contaminated fish over many years.

"You can't say there is absolutely zero risk because any radiation is assumed to carry at least some small risk," said Delvan Neville of Oregon State University's Department of Nuclear Engineering & Radiation Health Physics. The *Oregon Statesman Journal* reported on Neville's 2014 study which found that cesium-137 from Fukushima in albacore tuna caught off Oregon's coast had tripled since the three meltdowns. In 2012, albacore and blue fin tuna caught off the west coast, were also found contaminated.

Until 2018, TEPCO repeatedly claimed, and news reporters often noted, that its "advanced [ALPS] processes had reduced the cancer-causing radioactive contaminants" such as strontium-90, iodine-129 and ruthenium-106 in the water "to non-detectable levels."
—John LaForge

Space Force Called "Provocative, destabilizing & basically insane"

By Karl Grossman

Beginning to fulfill his declaration of last year about turning outer space into a war zone and establishing a US "Space Force," President Trump was at the Pentagon January 17 promoting a plan titled "Missile Defense Review."

As *The New York Times* said in its headline on the scheme: "Plans Evoke 1983 'Star Wars' Program." Bruce Gagnon, coordinator of the Global Network Against Weapons and Nuclear Power in Space, calls it "provocative, destabilizing and basically insane."

Trump said at the Pentagon: "We will recognize that space is a new war-fighting domain with the Space Force leading the way. My upcoming budget will invest in a space-based missile defense layer technology. It's ultimately going to be a very, very big part of our defense and obviously of our offense."

The new United States' outer space military plan comes despite the Outer Space Treaty of 1967, that designates space as a global commons to be used for peaceful purposes.... It has been ratified or signed by 123 nations. The release of the 100-page "Missile Defense Review" follows Trump's June announcement at the Pentagon that he is moving to establish a US Space Force as a sixth branch of the US armed forces. He said then, "It is not enough to merely have an American presence in space, we must have American dominance in space".... [On Feb. 19, Trump signed "Space Policy Directive-4" ordering the Pentagon to establish the Space Force.]

As the *Times* said: "In the most contentious proposal, the report embraced Reagan's Star Wars plan of putting weapons in space to shoot down enemy missiles during ascent." The *Times* also noted that "the document was careful to describe the step as largely a research project—for now."

Of this component, the "Missile Defense Review" says: "The space-basing of interceptors also may provide significant advantages, particularly for boost-phase defense. As directed by Congress, [Pentagon] will identify the most promising technologies, and estimated schedule, cost, and personnel requirements for a possible space based defensive layer that achieves early operational capability for boost-phase defense."

The Reagan Star Wars program also utilized a "defense" rationale—it was formally called Strategic Defense Initiative. ... Despite its claim of being defensive, it was criticized for being offensive and a major element in what the US military in numerous documents then and since has described as "full spectrum dominance" of the Earth below that the US is seeking in taking the "ultimate high ground" of space.

Gagnon, whose Maine-based organization has been a world leader since its formation in 1992 in challenging the weaponization of space, said: "The new Trump space proposal is a key element in Pentagon first-strike attack planning sold to the public as 'missile defense.' The system is not actually designed to protect the US from every nuclear missile launched at us—that would be a mathematical impossibility. This Star Wars system would only work as the 'shield' to be used to pick off Russian or Chinese retaliatory responses after a US first-strike sword is thrust."

Gagnon said "we know this because the Space Command" (the division of the US Air Force which Trump seeks to have succeeded by a separate Space Force) "has been computer war gaming such a scenario for years—they call it the 'Red team' versus the 'Blue team.'"

"The kicker," regarding the US space military plans, said Gagnon, "is that the costs would be colossal—what the aerospace industry has long said would be



Image courtesy of Global Network Against Weapons & Nuclear Power in Space; space4peace.org

the 'largest industrial project in human history.' The only way the US can pay for it is by cutting Social Security, Medicare, Medicaid and by twisting the arms of NATO members to pony up more money."

The Outer Space Treaty was spurred, as Craig Eisenrath, who had been a US State Department officer involved in its creation ... said, "we sought to de-weaponize space before it got weaponized... to keep war out of space."

[The treaty] provides that nations "undertake not to place in orbit around the Earth any objects carrying nuclear weapons or any other kinds of weapons of mass destruction, install such weapons on celestial bodies, or station such weapons in space in any other manner."

In recent decades, Canada, Russia and China have been leaders in pushing a treaty that would broaden the Outer Space Treaty—the Prevention of an Arms Race in Outer Space (PAROS) Treaty. This treaty would ban all weapons in space. But US administration after administration, Democrat and Republican, have refused to support the PAROS Treaty, thus providing a veto of its passage at the United Nations.

The new "Missile Defense Review" is explicit in how the US "will not accept any limitation or constraint on the development or deployment of missile defense capabilities."

The announcement of the new US space plan came a day after the US confirmed it would [withdraw from] the Intermediate-Range Nuclear Forces (INF) Treaty of 1987. [Note: This has now taken place.]

... An AP story out of Russia [in January] reported: "The Russian Foreign Ministry described the new US strategy as a proof of 'Washington's desire to ensure uncontested military domination in the world.' ... It warned that the expansion of the US missile defense system 'will inevitably start an arms race in space with the most negative consequences for international security and stability.'"

The "implementation of its plans and approaches will not strengthen security of the US and its allies," the ministry said in a statement. "Attempts to take that path will have the opposite effect and deal another heavy blow to international stability."

The AP story said: "The Russian Foreign Ministry described the review as an attempt to reproduce President Ronald Reagan's 'Star Wars' missile defense plans on a new technological level and urged the Trump administration to 'come to its senses' and engage in arms control talks with Russia."

Meanwhile, *Defense News* is questioning whether Congress will fund the "Missile Defense Review" proposals. It said that "unless Congress approves the major funding increases that will be required to make it a reality, many of those programs may fall by the wayside—and questions are emerging over whether these systems will be funded by the Democratic House of Representatives that is looking to cut defense spending." ...

—Karl Grossman is a professor of journalism at the State University of New York/College at Old Westbury, & an associate of the media watch group Fairness and Accuracy in Reporting (FAIR). He is the author of *The Wrong Stuff: The Space Program's Nuclear Threat to Our Planet*. This article is excerpted from *Beyond-NuclearInternational.org*.