A MAD MAN'S THEORY: PROJECT PLUTO

Atomic warfare, nuclear doctrine, mutually assured destruction, a dead man's switch, Star Wars, these all are punchlines which highlight the crux of the era we now know as the Cold War. Both world's greatest superpowers clashed with one another in a different war that was fought with science and technological advancement. It was a war of minds, imaginations, and dreams. However, it would be foolish to think that only the sane amongst those imaginations and dreams were the ones to make it to the drawing board. For 13 days in October of 1962, it almost seemed as if one's most tragic nightmare could potentially become a reality. But perhaps what was even worse was that despite the severity of the situation in the Caribbean at that time, an even more sinister development had started in 1957. Even though the project was cancelled in 1963, the thought of such a weapon entered the defense community - a harrowing tale ensues as we examine Project Pluto; "the Devil's dirty secret."

The weapon was designed with various states of deployment means, however, its specifications, design, and the time which it was conceived point to a heinous and ethical

The Supersonic Low-Altitude Missile (SLAM) design was conceived by the demand of the United States Air Force's (USAF) demand for a cruise missile weapon system capable of utilizing both nuclear power and ramjet technology to deliver a payload over enemy territory. The order was made on 1 January 1957 for feasibility studies to begin, and research to be funded with the intent to

procure materiel and produce such a weapon. The cruise missile would ensure a relatively cheap means to deploy weapons to virtually and it would be able to be launched and guided at an elevation that would make it virtually invisible to radar.

It's nuclear powerplant meant that it could fly virtually without any range restrictions. That is, the weapon could stay in a state of perpetual flight after it was launched if the reactor or payload did not explode or shut down. In a state of heightened tensions, this weapon could be launched and left in a state of flight, say over an ocean, ready to strike at the behest of its operator. Due to the nature of its power plant and its payload, however, the only way for it to land again - even if there was no need for it to strike - would result in massive nuclear fallout and destruction.

The use of a nuclear reactor meant that the power plant could melt down and go critical. While in critical mass, the missile would be able to continue its flight, as the reactor would not simply cease to power the powertrain. Meanwhile, the only means of exit of waste and radiation would be through the exhaust of the missile, falling over whatever areas the missile was traversing. In theory, the weapon would be able to jettison its payload and force a critical mass, thereby causing nuclear explosions but spreading fallout radiation to virtually anywhere.

The missile was designed to launch Multiple Independently Targeted Vehicle warheads (MIRV), enabling the missile to strike multiple targets at the same time. The multiple payload system ensured that multiple targets could be struck with the weapon. Some

designs included that up to ten separate MIRV warheads be deployed. By this time, thermonuclear devices had been employed, anywhere in the world with little to no notice, and multiple Intercontinental Ballistic Missiles (ICBM) had been designed as well. The largest test carried out by the Americans at the time was roughly 15 MT, totally an output of over 150 MT of explosives, three times that of the Russian Tsar Bomba.

> While SLAM would undoubtedly be a game changer in the Cold War era, it was felt that it was too much of a game changer. Multiple other means of atomic and nuclear deployment were readily available, including the fresh B-52 Stratofortress. The weapon presented a moral and ethical dilemma to those who were examining it in the Department of Defense. Tensions of the Cuban Missile Crisis had brought a stark realization of the dangers of an atomic battle. The weapon was conceivably capable of destroying all life on Earth on its own. In addition, the risk of its malfunction en route to its target presented difficulties that the military was unable to reconcile.

> Later ICBM designs also deployed MIRV concepts in large quantities. These concepts proved to be just as destructive as the SLAM payload concept, without the risk of runaway vehicles and the chance of single-impact strikes. It did not require the eventual critical mass of a weapons system or long-term nuclear fallout risk. Long-range, deeppenetration bombers were also being deployed, such as the B-58 Hustler which reduced the risk for out-of-control deployment.



On December 7, 1941, in a two-hour surprise attack on Pearl Harbor, Japanese warplanes sank or damaged 18 warships and destroyed 164 aircraft. Over 2,400 servicemen and civilians lost their lives.

The next day, before a joint session of Congress, President Franklin D. Roosevelt spoke to the nation and war was declared on Japan. Senators and representatives who no more than 48 hours earlier — were champions of isolationism and critics of FDR were now in full support of the war.

The United States faced a mammoth job. It had to prepare to fight on two distant and very different fronts, Europe and the Pacific. America needed to quickly raise, train, and outfit a vast military force. Contributions from all Americans, young and old, men and women, would be necessary to build up what President Roosevelt called the "Arsenal of Democracy." Americans answered the call.

For more information on the multicultural effort of World War II and all wars since from the Defense **Equal Opportunity** Management Institute, scan the code to the right.



MONTHLY TRIVIA

- When was the Trinity bomb detonated in the Alamogordo Test Range?
- What is the name of the crisis in the Caribbean that took place in October 1962?
- What was the ship that was tasked with bringing components of the nuclear devices to Tinian Island?

TRIVIA ANSWERS

1 How many different "V-weapons" existed?

Approximately how many tons of bombs 2 were used during the Combined Bomber Offensive in Europe?

Over 2.7 Million

What were the key industrial targets during the Combined Bomber Offensive?

War Materiel Production Factories & Oil Sites

One of the most fascinating studies in geopolitics is the former Yugoslavia. Here a Communist Dictatorship thrived under the thumb of Josip Tito. Tito leveraged both the West and Soviet governments to his benefit and squashed all opposition with an iron fist. Because of his hybridized ruling style. Yugoslavia saw a fair amount of prosperity, but that all vanished when Tito died in 1980. As soon as he passed, a power vacuum was created that still hasn't been filled to this

Henry H. "Hap" Arnold overcomes his fear of flight and receives his pilot's license, becoming one of the world's first military aviators.

Amelia Earhart takes off from New Guinea on her fated flight and heads for the tiny coral atoll of Howland Island. This will be the last time she is

The National Security Act of 1947 is passed, establishing the Department of Defense, the National Security Council, and the Central Intelligence Agency.

MAJ John Glenn streaks across the country on the first supersonic ranscontinental flight from California to New York in a record-setting 3 hours and 22 minutes.

Apollo 11 Astronaut Neil A. Armstrong takes "one small step," becoming the N first human in history to 5 walk on the surface of the

Tito: *dies*

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The Balkans seconds later:



Gaddis, John Lewis. The Cold War: A New History. Penguin Publishing, New York. 2005. Publications for this system are available in limited quantities from the Defense Technology Information Center (DTIC).

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