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# Seconds Away From Midnight: U.S. Nuclear Missile Pioneers on Okinawa Break Fifty Year Silence on a Hidden Nuclear Crisis of 1962

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by Jon Mitchell

July 24, 2012

Japanese translations by Abe Kosuzu are available here:

[http://www.projectdisagree.org/2012/07/blog-post\\_11.html](http://www.projectdisagree.org/2012/07/blog-post_11.html)

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## I. Introduction

Jon Mitchell states that "six months prior to the Cuban Missile Crisis...a parallel drama played out on the other side of the world as the U.S. secretly brought near-identical missiles to the ones the Russians stationed on Cuba to another small island — Okinawa. While the full facts of that deployment have never been officially disclosed, now for the first time three of the U.S. Air Force's nuclear pioneers have broken the silence about Okinawa's secret missiles, life within the bunkers

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and a military miscalculation of apocalyptic proportions — the targeting of unaligned China at a time when China-Soviet polemics were in full public view."

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The author would like to thank Mark Selden for his invaluable input.

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## II. Report

Seconds Away From Midnight: U.S. Nuclear Missile Pioneers on Okinawa Break Fifty Year Silence on a Hidden Nuclear Crisis of 1962  
by Jon Mitchell

In October 1962, the United States and the Soviet Union teetered on the brink of nuclear war after American spy planes discovered that the Kremlin had stationed medium-range atomic missiles on the communist island of Cuba in the Caribbean, barely over the horizon from Florida.

The weapons placed large swaths of the Eastern U.S. — including Washington, D.C. — within range of attack and sparked a two-week showdown between the superpowers that Pulitzer Prize-winning U.S. historian and Kennedy advisor Arthur Schlesinger Jr. called "the most dangerous moment in all human history." [1]

Six months prior to the Cuban Missile Crisis, however, a parallel drama had played out on the other side of the world as the U.S. secretly brought near-identical missiles to the ones the Russians stationed on Cuba to another small island — Okinawa.

[caption id="attachment\_25268" align="alignleft" width="350"]



Deadly secret: A 1962 aerial photograph shows Okinawa's first Mace missile site at Bolo Point, Yomitan. [/caption]

While the full facts of that deployment have never been officially disclosed, now for the first time three of the U.S. Air Force's nuclear pioneers have broken the silence about Okinawa's secret

missiles, life within the bunkers and a military miscalculation of apocalyptic proportions — the targeting of unaligned China at a time when China-Soviet polemics were in full public view.

John Bordne, Larry Havemann and Bill Horn were all born during the early days of World War II, but their motivations in joining the U.S. Air Force were very different. Coming from a family steeped in military tradition, Bordne signed up out of a sense of patriotism. Havemann, a laboratory technician, saw the air force as a means to secure a stable income for his family. For Horn, the military offered an escape route from impoverished West Virginia. "Besides, I liked the color of the uniform," he says. [2]

Soon after joining the air force, these three men from contrasting backgrounds were assigned to the 498th Tactical Missile Group and sent to Lowry Air Force Base, Colorado. There they first set eyes on the latest weapon in their nation's nuclear arsenal — the TM-76 Mace. A progeny of the V-1 "doodlebug" rockets that the Nazis rained down on Britain during World War II, the 13-meter-long Mace missiles weighed 8 tons and cost \$500,000 each. Packed into the missile's guts was a 1.1-megaton nuclear warhead that, at over 75 times the power of the bomb dropped on Hiroshima, could obliterate everything within a 5-km radius, create a crater 20 stories deep and irradiate the landscape for decades to come. The Mace was dispatched to West Berlin and Republic of Korea in 1959 and Okinawa in 1961.

"For such a horrendous weapon, it was very unimposing," recalls Horn. "It reminded me of a silver hotdog with wings."

[caption id="attachment\_25267" align="alignnone" width="540"]



Head-turner: A Mace missile is trundled through the Okinawa city of Gushikawa in the early 1960s in a rare open display. Courtesy of Charles Headlee[/caption]

At Lowry, the new recruits were streamed into seven-man crews and received intensive training in the missiles' engines, guidance systems and nuclear payload. Six months later, the newly graduated "missileers" were ready for their combat postings — which they assumed would be in Europe, where the East Germans had just started work on the Berlin Wall. But to their surprise, they found themselves on a 36-hour island-hopping flight to the U.S. military's keystone of the Pacific — Okinawa.

The U.S. military had seized Okinawa in June of 1945 in the bloodiest battle of World War II in the

Pacific and from early on split it off from Japan as a US military colony. With the Chinese Communist victory in 1949 and the Korean War, which broke out in June 1950, the island's strategic importance, and U.S. fortification increased. The 1952 Treaty of San Francisco, which ended the U.S.-led Allied Occupation of mainland Japan, assured continued control of Okinawa. The island was rapidly transformed into the linchpin of U.S. Cold War plans for Asia.

In 1954, the U.S. brought hydrogen-bomb armed F-100 fighter-bombers to its key hub in the Pacific, Kadena Air Base in Okinawa — the first of thousands of nuclear weapons that it would station on the island before their removal in 1972. [3]

When Bordne and Horn arrived in 1961 (Havemann went in 1962), Okinawa still bore the scars of World War II — civilian buildings were cobbled together from military scrap timber and the wrecks of U.S. invasion ships lay rusting off the shores. Bordne and Horn were in for another surprise. "The missile sites still hadn't been finished," says Horn. "Site One was a massive hole in the ground. For the first couple of months, we had to help the civilian contractors in the 100-degree heat to pull cables from the launch bays to the control centers down below."

[caption id="attachment\_25271" align="alignleft" width="350"]



Missileer Bill Horn on Kadena Air Base, 1962: "I liked the color of the uniform." Courtesy of Bill Horn[/caption]

Finally, in early 1962, Bolo Point in Yomitan, the first of Okinawa's nuclear-missile sites, became operational. Hidden beneath tarpaulins and under the cover of darkness, eight Mace missiles were trucked from Kadena Air Base and loaded into launch tubes aimed over the East China Sea.

Still in the same seven-member teams from Lowry, the men began the work for which they'd been trained — "to defend the island, protect the institution of democracy and halt the spread of communism," explains Horn with an ironic chuckle.

The men's eight-hour round-the-clock shifts began with a briefing at the missile control center on Kadena Air Base to update them on the day's weather and the current geopolitical climate. Following this, the crews drove to Bolo Point where, upon arrival, they'd be met by an escort from the previous shift with the latest password. "It was something simple like 'Apple' or '1324' or 'Mary had a little lamb.' But sometimes the escort would get distracted and forget it. That's when they'd send in the

guard dogs to see if there was a problem," says Havemann.

Once safely past the security check, the missileers climbed into the launch site itself. Consisting of three main areas — a crew ready room, a diesel generator chamber and a launch room replete with a red telephone hotline to Kadena. Roughly 10 meters away sat the eight missiles around which the men's duties revolved. They checked the engines and fine-tuned the guidance systems, drilled themselves on safety procedures and practiced countdowns to ensure the missiles were ready to fire at a moment's notice.

However, considering the apocalyptic power at their fingertips, life within the missile sites was terrifyingly mundane. To pass the time, the men studied for correspondence classes, played endless rounds of pinochle and compared notes on the shows they'd seen recently at base nightclubs — including a (then) little-known band called The Supremes. The missileers had also been tasked by American manufacturers to field test a new gadget — microwave ovens. Bordne remembers, "They only came with one setting, so meat came out like shoe leather and the mashed potatoes had ice cubes in the middle."

The missiles themselves created few problems for the men and the gigantic springs beneath the bunkers — designed to protect them from nuclear blasts — dampened the effects of the earthquakes and typhoons that rattled nerves among their colleagues on the surface.

But the events of October 1962 soon dashed any hopes that Okinawa would be a sun-drenched holiday posting. "At Kadena, we learned about the photographs several days before the American public. From that moment on, things became very serious," says Horn.

The photos mentioned by Horn were those taken on Oct. 14, 1962, by an American spy plane on a surveillance flight over Western Cuba. The images revealed that, for the first time in its history, the Soviet Union had stationed nuclear weapons outside its borders. The SS-4 medium range missiles — at 22 meters nose-to-tail and carrying a one megaton warhead — could reach the White House 15 minutes after launch. JFK took the news as a personal affront — branding Khrushchev "an immoral gangster," he immediately demanded that his top brass draw up plans to bomb the Cuban sites. [\[4\]](#)

Back on Okinawa, the Air Force missileers' reactions to the photographs varied. "Some guys were mad, some sad, some were depressed and others closed and quiet," recalls Bordne in his unpublished memoirs. "Everyone accepted the possible outcome but handled this acceptance differently."

Over the next few days, tensions escalated in the Caribbean and the Pentagon raised the nation's Defense Condition (DEFCON) to level two. Bordne remembers, "Our colonel told us that DEFCON 2 meant we were within 15 minutes of a declaration of nuclear war. If DEFCON 1 was reached, then we would be within five minutes of launching our missiles. A look of dread washed across everyone's faces, and I felt the blood drain out of mine, too."

Havemann shared Bordne's fear. "Being trained on the nuclear weapons, I knew that the whole world was in great peril. I thought of my family in America, but I could do nothing to help them. I wrote a letter to my mother knowing that if war came it would never get there. But writing it helped me mentally."

Mingled with the missileers' fear, though, there was also a sense of professional rivalry as the men compared their own Maces with the grainy spy-plane footage of the Soviet missiles — and reassured themselves that the SS-4's appeared technically inferior. Furthermore, they experienced a complex sense of excitement that they might finally be given a chance to put their hard months of training

into practice.

According to Bordne, "After we reached DEFCON 2, another mechanic offered me \$1,000 to give him my shift. That was a lot of money — a year's salary — but I flatly turned him down. I wanted to be there for launch as badly as he did."

For a horrifying few days, it seemed like Bordne would receive his chance as events spiraled out of JFK's and Khrushchev's control on the other side of the world — the Cubans shot down a U.S. spy plane and the American Navy dropped explosives on Russian submarines forcing them to surface. Hearing these developments, the Okinawa missileers steeled themselves for the announcement of DEFCON 1. Stationed at the still-incomplete Onna site, Havemann was told that if things became any worse, his crew would have to improvise by loading the warheads onto the missiles and covering the launch doors with tarpaulins.

Meanwhile at Bolo Point, Horn was locked underground for 48 hours. "A sealed canvas bag had been delivered containing our countdown instructions — and we were waiting for the red phone to ring with our launch orders from Kadena. When that time came, our officer would have broken the seal. There would have been three separate commands and then we would have launched. We were seconds away from midnight on the nuclear clock."

But the telephone stayed silent.

On Oct. 28, Kennedy and Khrushchev finally struck a secret deal whereby the Soviets promised to withdraw their nuclear missiles from Cuba in return for U.S. promises never to invade the island and assurances it would pull its atomic rockets out of NATO-aligned Turkey.

When word reached Okinawa, Horn likened the experience to a near-missed car wreck. "At the time, you don't realize how close things were. It's only when you pull over to the side of the road that you really start shaking."

But the missileers' accounts beg the question: If that telephone had rung, where would their nuclear weapons have struck?

Until now, all three men have willingly answered every question about their time on Okinawa — right down to the "honey buckets" they used as toilets. But this issue makes them more tight-lipped. "For the purpose of your story just say that the missiles were preprogrammed and we weren't told the destinations for security reasons," says Bordne. Havemann's reply: "I don't know. And if I did — even today — I don't think it would be wise to say."

Horn is the only one prepared to put voice to the unspeakable. "Although we didn't know for sure, we surmised that it was somewhere in China."

The Maces' relatively short range of 2,000 km (1250 miles) put almost the entire Soviet Union, with the possible exception of Vladivostok, tantalizingly out of the missiles' reach — and this technical data, combined with Horn's suspicion, illustrates one of the biggest failings of 20th century U.S. military intelligence. Today the 1959 Sino-Soviet split is well-documented — Khrushchev and Mao had come to blows over Russia's refusal to help China develop nuclear weapons combined with a fratricidal ideological debate over communism's future. However at the time, the Pentagon continued to operate on the assumption that the two countries were allies. This misconception laid the basis of America's infamous blueprint for atomic war — the Single Integrated Operational Plan — dubbed by one government adviser as a "massive, total, comprehensive, obliterating strategic attack on everything Red." 5 While JFK had made token changes to the plan in early 1962, the amendments

apparently hadn't filtered down to the missile control center on Kadena.

Given the tensions between China and the Soviet Union, it is highly likely that Mao would have sat out the Soviet-American armageddon sparked by the Cuban Crisis. But had the Okinawan Maces annihilated Shanghai and Beijing, killing millions of Chinese, the U.S. and China would have been at war.

While the three missileers are understandably reluctant to discuss the targeting of China, they all agree that the U.S. missiles on Okinawa made the island a potential Soviet target. Bordne worried about the possible "evaporation of Okinawa in a preemptive or retaliatory strike," while Horn believes that "The Okinawans were a human shield."

Havemann raises an even more frightening prospect for the islanders still traumatized by the Battle of Okinawa in which between a quarter and a third of the civilian population had died — an invasion by Russian or Chinese troops. At the same time he was warned that he might need to load the warheads into the Onna Maces, Havemann says, "We were told to get our equipment, helmets and backpacks ready in case we had to head for the jungles. If we were overrun by an attacking force we were to destroy the nuclear weapons, seal the sites and do what we could to survive."

Ironically, in his Oct. 22 televised speech in which he broke the news about the Soviet missiles in the Caribbean, JFK accused Castro of turning Cuba "into the first Latin American country to become a target for nuclear war." [6] Now it seems clear that not only the 7 million Cubans but also the 900,000 residents of Okinawa were pawns in a far larger power play among distant superpowers who apparently cared little about the civilians whose lives their nuclear weapons were supposed to protect.

Fifty years after their days on Okinawa, all three American missileers are now retired with time to reflect upon their roles in human history's most dangerous moment.

Of the three, Horn is the most rueful. "We were all just kids doing a man's job. The American military machine taught us that it was our right to take anything or go anywhere we wanted. But we never realized that people didn't want us or our weapons on their island."

[caption id="attachment\_25273" align="alignleft" width="250"]



Redesigned: The missileers' patch was redesigned after U.S. Secretary of Defense Robert McNamara banned the word "missile." Courtesy of Larry Johnston[/caption]

Bordne is proud that he had been able to perpetuate his family's long military heritage. But the ensuing half century has revealed to him some unexpected similarities with his erstwhile enemies on

Cuba. "I used to hate the Russian missileers, but after reading accounts of their experiences, it is clear that they exercised the same restraint and clear judgment as we did. Now, I know that none of us wanted to alter life on this planet for eternity."

Havemann shares Bordne's sense of responsibility and he is a firm believer in passing on the lessons of 1962 to future generations. "Nowadays, when I watch the news, it seems some people, like the leaders of Iran, think that a nuclear weapon is little more than a big stick of dynamite — and it's fine to set one off here and there. It gives me a strange feeling in my stomach and sometimes I come close to tears."

### **Okinawa, Nuclear Weapons and Japan's 'Special Psychological Problem'**

Situated among boiling sulfur pits and magma-blackened rocks, the hot-spring resort of Hakone, 100 km west of Tokyo, provided a suitably apocalyptic backdrop for secret nuclear talks held between the United States and Japan in November 1961. [7] The meetings, attended by U.S. President John F. Kennedy's secretary of state, Dean Rusk, and Japan's foreign minister, Kosaka Zentarō, had repercussions for the U.S. Air Force missileers then recently dispatched to Okinawa — and they offer a disturbing glimpse into Tokyo's attitude toward U.S. atomic weapons just 16 years after the bombings of Hiroshima and Nagasaki.

The issue of nuclear-armed U.S. Mace missiles had first been broached by Kosaka when he met Rusk at the Hakone Kanko Hotel on Nov. 4. Apparently unaware that the Americans were just about to put the finishing touches to the first Mace launch site at Bolo Point on the main island of Okinawa, the Japanese foreign minister stressed the critical importance of preventing word from leaking out about the presence of nuclear missiles on Okinawa.

"Announcing the deployment creates very strong repercussions in Japan, obliging the government to answer interpellations in the Diet," read the official memorandum of their conversation.

Rusk assured Kosaka that he would pass the request to his higher-ups in Washington — and it seems he was true to his word. Bill Horn, a crew member with the 498th Tactical Missile Group on Okinawa, recalls the measures adopted by the air force to hide the missiles from public view, including draping the rockets in tarpaulin sheets and transporting them only at night. He also remembers what happened when his crew ordered uniform patches from an off-base tailor embroidered with the words "Tactical Missile Group."

"Right away, Robert McNamara (Kennedy's secretary of defense) put the squash on those patches. We were told to make them disappear. We were to be known only as the 'TMG,' and nobody was supposed to know what the letters stood for. But it was a farce — we were hiding in plain sight," says Horn.

The Hakone memoranda and missileers' accounts hint at the deep tensions within the heart of the Washington-Tokyo alliance. While Japanese public opinion was overwhelmingly opposed to nuclear weapons, Japan's leaders were either ambivalent about nuclear weapons or, in some cases, incontrovertibly pronuclear.

During the U.S.-led postwar Allied Occupation of Japan, American authorities had rigorously censored all media discussions of Hiroshima and Nagasaki. But the end of the Occupation, in 1952, was accompanied by a flood of stories about survivors' ongoing struggles with radiation sickness. The public's anger was reinforced in 1954 when the 23 crew members of the Lucky Dragon #5 fishing trawler were irradiated mid-Pacific following a U.S. H-bomb test explosion on Bikini Atoll in the Marshall Islands. [8] One crew member died leaving the others to face the lifelong effects of

radiation. In protest, 30 million Japanese people — more than a third of the population — signed a petition demanding the abolition of nuclear weapons and in August 1955 the World Conference Against Atomic and Hydrogen Bombs was held in Hiroshima.

However, successive Japanese governments, including the one in which Kosaka served, did not share the electorate's sentiments on abolition of nuclear weapons. Operating firmly within the Cold War consensus that prioritized the need to combat the spread of Asian communism, Japanese leaders never questioned U.S. nuclear weapons and the U.S. nuclear umbrella.

In fact, the day before Kosaka met Rusk, Prime Minister Ikeda Hayato— the so-called father of Japan's postwar industrial growth — had wondered out loud with the secretary of state whether it might be a good idea for Japan to possess its own nuclear weapons. [\[9\]](#) Ikeda seemed to care little that his veiled request for the U.S. to nuclear-equip Japan was in direct defiance of its war-renouncing Constitution — and Rusk shimmied around Ikeda's proposal with an awkward joke before explaining that the U.S. was opposed to nuclear proliferation of any kind.

The U.S. certainly had no qualms about stationing nuclear weapons under its own control on Okinawa — but it was not prepared to contemplate the possibility of Japanese fingers on nuclear triggers.

Niihara Shoji, the researcher at the forefront of U.S.-Japan nuclear relations, first uncovered the Hakone memos at the U.S. National Archives in Maryland in 2001. He said: "The Japanese government was so subservient. High-ranking officials really might have thought that nuclear weapons were the guardian of the U.S.-Japan military alliance." [\[10\]](#)

Tokyo's two-faced approach to maintaining an antinuclear stance in public while secretly supporting the Bomb behind closed doors was once again on display in Hakone when, on Nov. 4, Kosaka discussed U.S. plans to resume atmospheric nuclear tests in the Pacific. Despite such tests having caused the fatal Lucky Dragon incident (and, unknown to the public, the potential irradiation of more than 850 other Japanese fishing vessels at the same time), Kosaka said his government had "no quarrel with the military necessity of the action." Instead, he worried that U.S. atmospheric explosions might slow growing anti-Soviet feelings in his country. The memorandum recorded Rusk's reply: "The United States does understand and respect Japan's special psychological problem."

More than any other, it is this phrase that cuts to the core of U.S.-Japan atomic relations. Rusk's failure to acknowledge that the root of Japan's nuclear trauma lay in U.S. atomic bombing of Hiroshima and Nagasaki, and in the Lucky Dragon Incident, is equaled only in the Japanese government's hypocrisy in pretending it knew nothing about U.S. nuclear weapons in Okinawa in order to maintain face with its public.

[caption id="attachment\_25269" align="alignleft" width="350"]



Below: One of the Okinawa Mace missiles is now displayed at the National Museum of the USAF in Dayton, Ohio Courtesy of Larry Johnston[/caption]

"The Japanese government didn't want to confirm officially the presence of U.S. nuclear weapons on Okinawa because they hoped to avoid any responsibility for them. This kind of thinking has made a big rift between them and the ordinary, antiwar Japanese public," says Niihara.

Throughout the 1960s, neither the government of Japan nor the U.S. admitted that there were nuclear weapons on Okinawa. According to Niihara's research, it was only in 1971, when the two countries were negotiating for the return of the island, that the U.S. publicly admitted to their presence. The reason for this sudden honesty? Washington wanted Tokyo to cough up tens of millions of dollars for the weapons' removal - which it eventually did.

In 1971, with the U.S. economy sluggish and Japanese finances booming, it seems that the need for Cold War confidentiality had been outstripped by a more pressing priority: the need for cold hard cash.

#### Okinawa and Atom Bombs: A Timeline

1945 U.S. military seizes control of Okinawa after three months fighting.

1952 Treaty of San Francisco ends U.S.-led postwar Allied Occupation of mainland Japan, but grants the U.S. military jurisdiction over Okinawa.

1954 The crew of the Japanese fishing boat Lucky Dragon #5 are irradiated in the U.S. H-bomb test at Bikini Island in the Pacific. More than 30 million Japanese people sign a petition in protest. For the first time, the U.S. military secretly stations nuclear weapons on Okinawa.

1956 The Ryukyu Assembly of Elected Officials demands the withdrawal of all nuclear weapons from Okinawa and any other islands.

1962 The first of four Mace nuclear-missile sites becomes operational at Bolo Point, Okinawa.

1965 The U.S. loses a hydrogen bomb from the U.S.S. Ticonderoga 130 km off Okinawa's coast.

1966 Iejima Island residents successfully block the deployment of U.S. Nike nuclear missiles.

1967 Prime Minister Sato Eisaku first proclaims Japan's three non-nuclear principles: Not to possess, manufacturer or allow the introduction of atomic weapons.

1968 A U.S. B-52 strategic bomber crashes near nuclear-warhead bunkers on Kadena Air Base.

1969 Japan and the U.S. conclude a secret agreement — allegedly still in operation — which allows the U.S. to reintroduce nuclear weapons to Japan during times of crisis.

1971 Washington demands Tokyo help to pay for the removal of nuclear arms from Okinawa — the first official U.S. admission of the presence of nuclear weapons on the island.

1972 Okinawa reverts to Japanese control.

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### III. References

[1] “Bush’s Thousand Days”, The Washington Post, April 24, 2006.

[2] Interviews with Horn, Bordne and Havemann conducted by telephone and email between April 2011 and June 2012.

[3] See for example, Daniel Ellsberg’s “The American Doomsday Machine” excerpt available here: [http://www.truthdig.com/report/item/20090910\\_a\\_hundred\\_holocausts\\_an\\_insiders\\_window\\_into\\_us\\_nuclear\\_policy/](http://www.truthdig.com/report/item/20090910_a_hundred_holocausts_an_insiders_window_into_us_nuclear_policy/)

[4] Quote from Michael Dobbs, “One Minute To Midnight”, Knopf, New York, 2008, 14.

[5] Quote from Ibid., 224.

[6] Quote from Ibid., 50.

[7] Department of State Memorandum of Conversation, Hakone, Japan, November 4 1961, 9:30AM.

[8] See for example, Matashichi Ooishi, The Day The Sun Rose In The West, University of Hawaii Press, Honolulu, 2011.

[9] Department of State Memorandum of Conversation, Hakone, Japan, November 3 1961, 1PM.

[10] Interviews with Niihara conducted between May and June 2012.

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### IV. Nautilus invites your responses

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