



U.S. Nuclear Weapons Deployments Disclosed

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The history of U.S. nuclear weapons deployments during the Cold War has become significantly more accessible with the declassification of the report History of the Custody and Deployment of Nuclear Weapons: July 1945 through September 1977. The History was released in response to a request by the [Natural Resources Defense Council](#) under the Freedom of Information Act and first described in an article in the November-December 1999 issue of the Bulletin of the Atomic Scientists.

Significant portions of the History remain classified, however, even though some of the information is no longer a secret and has been widely described in public. The most vivid example of this is deployment of U.S. nuclear weapons in Greenland, an island under the jurisdiction of Denmark. All references to Greenland are deleted in the History despite Greenland being one of the most thoroughly documented cases of overseas deployment of U.S. nuclear weapons during the Cold War.

Below is an outline of the Greenland deployment and U.S.-Danish nuclear relations. A shorter version of this outline was published in the November-December issues of the Bulletin of the Atomic Scientists. For various links relating to this story:

- * The feature article Where They Were is available at the Bulletin of the Atomic Scientists. Also available in [PDF-format](#).
- * Excerpts from the original document [History of the Custody and Deployment of Nuclear Weapons: July 1945 through September 1977](#). This and other historical FOIA documents relating to nuclear policy is also available at the [National Security Archive](#) website.
- * The sidebar Secrecy on a Sliding Scale accompanying the main story is also available at the [Bulletin of the Atomic Scientists](#).
- * A press release is available from [Natural Resources Defense Council](#).
- * [Status of Nuclear Weapons Storage \(June 30, 1958\)](#) from the 1958 history of U.S. Strategic Air Command, recently released to Kristensen under FOIA.
- * [The Denmark FOIA Documents](#) at the Nautilus Institute Digital Library.

Secrecy On A Sliding Scale: U.S. Nuclear Weapons Deployments And Danish Non-Nuclear Policy

Hans M. Kristensen

In 1993, declassified U.S. Air Force records disclosed that Strategic Air Command bombers routinely overflew Greenland with nuclear weapons during most of the 1960s. Subject to Danish jurisdiction, Greenland was covered by Denmark's ban against nuclear weapons on its territory, a policy first enacted in 1957. One of the bombers crashed on the ice off Thule Air Base in January 1968, provoking accusations that Denmark's nuclear ban was routinely violated. Yet both U.S. and Danish officials at the time insisted that the aircraft had approached the area because of an emergency and was not on a routine flight over Greenland. The declassified documents, however, revealed that not only had the ill-fated bomber overflowed Greenland *prior* to the accident, it had been loitering right above Thule Air Base as part of a top-secret mission to monitor the important BMEWS-radar, a vital element in the U.S. defense against a Soviet nuclear strike.

The disclosure, combined with pressure by former Thule-personnel who feared they suffered from illnesses caused by the contamination from the 1968-crash, prompted the Danish government to conduct an internal review of its records. The review uncovered documents that not only confirmed a violation of the non-nuclear policy but also could serve to explain why. The result of the review was a four-page report presented to the Danish parliament in June 1995. The report not only confirmed the overflights, but concluded that the United States had acted in good faith. The report put the blame on the late Danish Prime Minister H. C. Hansen, who during a 1957 meeting with the U.S. Ambassador had refrained from making Danish non-policy clear when asked if Denmark wanted to be informed in case the United States decided to deploy nuclear weapons in Greenland. In doing so, the report concluded, Hansen gave the United States a tacit go-ahead.

Shortly after the report was released, U.S. Defense Secretary William Perry visited Denmark. After meeting with Perry, Danish Foreign Minister Niels Helveg Petersen assured the press that while nuclear weapons had overflow Greenland, it was certain that no nuclear weapons had ever been deployed on the ground. Yet only a few days later, Petersen received a [letter from the U.S. government](#) which informed that an internal investigation showed that nuclear weapons had in fact been deployed on the ground. Deeply embarrassed and embroiled in a scandal, the Danish government decided to make the information public. A semi-independent investigation was commissioned that was given access to previously declassified documents from the Danish archives.

Although the U.S. government declined to grant any special declassification favors to the Danish investigation, the available information provides sufficient information to outline the extent of the U.S. deployment of nuclear weapons in Greenland. This is based on the following five bodies of documents:

- 1. The

[U.S. letter](#)

- to the Danish government about nuclear deployments in Greenland;
- 2. The overflights under the Airborne Alert Program;
- 3. The semi-independent

investigation by the Danish Institute of International Affairs

- 4. The recent release of

[History of the Custody and Deployment of Nuclear Weapons: July 1945 through September 1977](#)

- 5. The recent release of

[a nuclear deployment list](#)

- from Strategic Air Command's 1958 History.

1. The U.S. Letter to the Danish Government.

The first document is the [U.S. letter from July 1995](#) to the Danish government which outlined the deployment of nuclear weapons in Greenland. Although the letter itself remains classified, the details were disclosed by the Danish government in various public statements in 1995 and 1996. Moreover, the letter was subsequently leaked to the press by a source in the Danish government.

The letter explained that an internal investigation reviewing documents dating back as far as 1958 disclosed that nuclear weapons were introduced at Thule Air Base on two occasions. The first occurred in February 1958 when four airborne weapons and 15 non-nuclear components were deployed. The weapons were returned to the United States about eight months later. The second introduction began in December 1959, and consisted of 48 air defense weapons. These weapons remained in place until the summer of 1965 when they were returned to the United States as the U.S. Army canceled its air defense program at Thule Air Base. After the summer of 1965, the letter explains, the United States has not deployed nuclear weapons in Greenland.

2. The Airborne Alert Program.

The second group of documents relates to the Strategic Air Command's Airborne Alert Program. During the 1950s and 1960s, the United States maintained up to a dozen nuclear-armed bombers airborne 24 hours a day. The justification was that a possible Soviet surprise-attack that, the Pentagon feared, could destroy a large portion of the U.S. strategic bomber force on the ground before they had a chance to take off. To prevent such a partial disarming of the U.S. deterrent force, the Pentagon began building up an Airborne Alert Program from the mid-1950s. The nuclear-armed program continued until under various code names such as Head Start, Round Robin, and Chrome Dome until the day after the Thule crash when the Pentagon ordered the nuclear weapons taken off the planes.

The Airborne Alert Program placed up to 12 B-52 bombers armed with live nuclear weapons and a combat ready crew on airborne alert flying along designated flight-routes. One of these routes cut through Greenland air space, resulting in at least two overflights a day with nuclear weapons for almost a decade. Another route headed east across Spain into the Mediterranean, and a third main route crossed the Pacific from Alaska to Japan. In addition to the ordinary flights across Greenland, a special mission placed bombers loitering continuously above the Thule Air Base. The mission, which was code-named Hard Head, intended to ensure continuous visual surveillance of Thule Air Base and its important BMEWS-radar, a critical element for the U.S. response to a Soviet surprise-attack on North America. The bomber that crashed on the ice off Thule Air Base in January 1968 was on such a Thule monitor mission, codenamed Butterknife V, when fire broke out onboard.

The Danish government was not informed about these overflights, but was aware of frequent overflights by B-52 aircraft in general. The United States considered that it was free to perform such

overflights under the 1951 U.S.-Danish defense agreement on Greenland, although the agreement does not specifically mention nuclear weapons. During the 1960s, nuclear-armed B-52s conducted emergency landings at Thule Air Base on several occasions, something the Danish government was aware of, but given the emergency involved, these cases were not considered violation of the non-nuclear policy. As the Chrome Dome program started in July 1961. The U.S. Air Force told the Joint Chiefs of Staff that "in accordance with current governmental understandings, there do not appear to be any restrictions on overflights of Spain or Greenland with nuclear weapons." Yet "internal understandings" are one thing but public policy is another. The crash happened less than 48 hours before a national election in Denmark, and the U.S. Embassy warned the State Department about the severe repercussions in light of the "special nuclear sensitivities" in Denmark. The Embassy emphasized that "it is imperative [sic] to stress that [the] crashed plane was 'diverted' to Thule and not on [a] 'routine flight to Thule'." And that became the official story.

Airborne Alert Aircraft carried a variety of nuclear bombs. The bomber involved in the 1968-crash carried four B28 thermonuclear bombs. In general, alert aircraft on Hard Head and Chrome Dome missions carried either four B28 bombs or two larger bombs such as the B36 and B53. Due to the frequency of the flights, four to eight nuclear bombs were almost continuously present in the airspace over Greenland for eight years.

Following the accident in 1968 and the nuclear scandal, the carrying of nuclear weapons on Airborne Indoctrination Flights was discontinued. The day after the accident, Strategic Air Command ordered the nuclear weapons removed from airborne alert aircraft. In December 1969, when SAC briefed the Danish military liaison at Thule Air Base about the 1969 Thule Monitor mission., the flight route avoided Greenland airspace even though the aircraft no longer carried nuclear weapons. This was also the case in 1971 for the Giant Lance routes: Greenland airspace was avoided.

3. The investigation.

One of the surprising events in the Thulegate affair was the Danish government's decision to "open up" its archives. In a testimony to the seriousness of the scandal created by years of discrepancy between public and secret nuclear policy, the government commissioned the semi-independent institute Danish Institute of International Affairs to investigate the role of Greenland in U.S. and Danish defense policy. Despite its limitations, the institute's report confirmed the overflights and the nuclear weapons at Thule. Yet it was not allowed to dig into material younger than the 1968-crash -- avoiding the more contentious issue of nuclear weapons onboard U.S. warships visiting Danish ports.

Beyond the details of nuclear weapons, however, the investigation's central conclusion -- and probably its most profound observation -- touched upon the core of democracy itself. Danish governments, it concluded, had exercised a double nuclear policy on Greenland during the 1960s: a public policy that banned nuclear weapons, and a secret policy that accepted nuclear weapons. This conclusion has profound implications for the integrity of democracy because of issues such as government accountability and the public's ability to verify that a government carries out the policy that it was elected to carry out.

4. The Release Of *The History*.

The fourth document is the [History of the Custody and Deployment of Nuclear Weapons: July 1945 through September 1977](#). The History represents the first public U.S. confirmation -- albeit a reluctant one -- that it deployed nuclear weapons in Greenland. The diplomatic battle U.S. and Danish government officials fought out in the mid-1990s over disclosure of this secret deployment

received virtually no coverage in the United States.

Despite its merits the History is incomplete, reflecting the enormous challenge involved in keeping track of nuclear weapons information within the government. While it lists "bomb" and "Nike Hercules" as deployed in Greenland, it fails to mention 15 non-nuclear bombs that the U.S. government in 1995 told Denmark it deployed in Thule as well. Such non-nuclear bombs are listed for other deployments in the History. It also fails to mention Falcon air-to-air missiles that were deployed at Thule Air Base around the same time of Nike Hercules, a fact disclosed by other Air Force documents and confirmed by the Danish investigation.

5. The Strategic Air Command 1958 History.

The fifth and final document is the 1958 history of Strategic Air Command. This document, part of which was released to the author by the Air Force only one month after the History, contains [a complete list of the locations where SAC had nuclear bombs deployed in June 1958](#). The list includes 41 locations, including 14 bases in six foreign countries. One of these is Thule Air Base in Greenland. Moreover, the list discloses the different types of nuclear bombs stored at each base. The bombs in Thule were Mk-6 and Mk-36 Mod 1. The Mk-6, which where deployed without its nuclear capsule, had an explosive yield of up to 180 kilotons. The Mk-36, on the other hand, had a maximum yield of as much 10 megatons.

The list in the SAC history was released by the Air Force in full after an appeal of the initial release that deleted all mentioning of the foreign locations and the details of the type of bombs at each base. After more than 40 years, the Air Force apparently concluded -- and correctly so -- that no meaningful purpose was served by continuing to classify the information.

Conclusion.

As a result of the information released in the many cases described above, it is possible to detail the deployment of U.S. nuclear weapons in Greenland:

U.S.Nuclear Weapons In Greenland	
<u>Weapon Type</u>	<u>Years Deployed</u>
<i>At Thule Air Base</i>	
4 Mk 36 Mod 1	Feb-Dec 1958
15 Mk 6 (no capsule installed)*	Feb-Dec 1958
48 W31/Nike Hercules SAM	Dec 59-Jul 65
? W54/Falcon (GAR-11)* <i>Airborne**</i>	~1961-mid 1965

**4-8 B36/B53/B28
bombs on Chrome
Dome and Hard
Head missions**

**Jul 1961-Jan
1968**

* These weapons,
earmarked for F-102A
aircraft of the 332nd
Fighter-Interceptor
Squadron, are not
mentioned in The History.
** Weapons on Chrome
Dome airborne alert
aircraft and Hard Head
Thule Monitor missions are
approximate but
considered almost
continuously present over
Greenland given the high
frequency of the flights.

The “Thulegate” disclosures in Denmark and the Air Force historical documents have revealed so much detailed information about the deployment of U.S. nuclear weapons in Greenland that it is difficult to accept the OSD’s sweeping deletions of references to Greenland in the History. The contradiction between the Air Force’s willingness to release “Greenland” material and the OSD’s unwillingness is particularly striking, given that the departments are supposed to be implementing the same law. In practice, as Air Force officials explained to me, every department reviews documents differently, and it is eventually up to the individual that processes the request to determine what should or should not be released.

In this case, the Air Force made the right decision. After 30-40 years, every reasonable national security interest served by withholding references to Greenland in documenting the history of nuclear weapons deployments has evaporated. The OSD should have similarly prioritized the benefits to the public's understanding of this important part of our nuclear history above obsolescent and impulsive secrecy. At a deeper level, the incident raises questions about the justifications used by government agencies to continually withhold such information under the Freedom of Information Act. The Clinton Administration has several times issued new guidelines intended to ease the release of unclassified information, but the excessive deletions in the OSD report indicate that we still have far to go.

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