

AF Has to Clean Up H-Bomb Mess Near Thule

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By DON KIRKMAN
Scripps-Howard Science
Writer

WASHINGTON — An Air Force party, working in 25-
below-zero temperatures, was
reparing today to clean up the
uclear mess created by the
rash of an H-bomb-carrying
B-52 bomber near Thule, Green-
land, Sunday.

A temporary camp with a
helicopter pad has been
organized on ice-bound North
Star Bay, seven miles from the
big air base the U.S. maintains
in the Danish-owned island.

Pieces Spotted

An Air Force search party
has spotted pieces of the B-52's
four H-bombs amidst the
plane's debris, a Defense
Department spokesman said.

Radiation levels at the crash
site are not dangerous, the
Defense Department said.

Radiation from "Alpha"
particles detected in a 75-by-500-
yard area near the crash site
is strong evidence that some
— if not all — of the B-52's
ombs are not at the bottom
of North Star Bay. The Air
Force says it doesn't know for
sure where the bombs are.

"Alpha" particles, an H-
bomb's least dangerous product,
are emitted by uranium or
plutonium (or both), the nuclear
heart of an H-bomb's com-
plicated mechanism. This
means at least some H-bomb
innards were spilled when the
B-52 hit the six-to nine-foot-thick
ce sheet covering the bay.

Can Be Halted

"Alpha" particles can not
penetrate even the upper layer
of human skin and can be
halted by something as thin as
a single sheet of paper.

The particles could have been
scattered over the ice in a couple
of ways:

1. The touchy TNT charges
that trigger each H-bomb could
have exploded when the plane
hit the ice or been heated to
the explosion point if the plane
burned.

2. The casing of one or more
of the H-bombs could have split
and spilled uranium or
plutonium.

Exploded on Impact

Evidence indicates the plane
possibly exploded on impact.
This, then, would lead to the
theory that the TNT triggers
probably detonated and spatter-
ed atomic materials in all
directions.

The Defense Department
takes precautions to prevent a
TNT blast from turning into a
nuclear holocaust. In an H-
bomb, a number of TNT
charges circle a grapefruit-sized
ball of uranium or plutonium.

To fire the bomb, all these
TNT charges must be triggered
at the same precise mini-second
to create enough force to
squeeze the nuclear materials.
When compressed to the right
size they become — in the
language of the atom experts
— a "critical mass" and start
a chain reaction. That is, an
atomic bomb. This atomic bomb
produces thousands of degrees
of heat needed to fire the
enormously more devastating
H-bomb.

Not Placed

When the Air Force says an
H-bomb is unarmed — as the
missing bombs were — it
means some of the TNT
charges have not been placed
into their proper places around
the uranium and plutonium.
This means the nuclear
material cannot be squeezed
and exploded.

A number of the Air Force's

previous atomic accidents have
exploded the TNT charges. But
none has ever erupted into a
nuclear explosion, and no
civilian deaths have ever been
caused.

In the Thule incident the B-
52's explosion may have melted
the upper layer of ice and
created a pool of water. Some
of the "Alpha" particles prob-

ably sank to the bottom of
this pool and are now frozen
into the ice.

Other particles probably were
strewn around the surface
nearby. The first Air Force
search party reported low levels
of "Alpha" particles on their
boots.

To clean up North Star Bay,
the clean-up team may have to

dig the radiation out of the ice,
ship it to the U.S. and bury
it at an Atomic Energy Com-
mission disposal area.

But if some of the bombs
have gone through the ice and
spilled their uranium and
plutonium on the bottom of the
bay, the Air Force will find
it impossible to recover all the
nuclear material.