



MINOT'S BENT SPEAR

The Air Force made major changes in organization, culture, and leadership after nuclear missiles were accidentally flown from North Dakota to Louisiana.

By Peter Grier

It was about 8:30 p.m. on Aug. 30, 2007, when a team of five munitions airmen pulled up to a B-52H parked on the flight line at Barksdale AFB, La., thinking they were about to do a routine weapons unloading.

The big bomber had ferried in a dozen AGM-129 cruise missiles—each capable of carrying a nuclear warhead—from Minot AFB, N.D., around 11:30 that morning. The Air Force was consolidating its inventory of the stealthy weapons at Barksdale for eventual elimination under arms treaties. Each wing of the B-52H carried a pylon loaded with six missiles apiece.

The missiles were supposed to be mounted with inert warheads—simple weights taking the place of nuclear warheads—used for training, or in this case, a ferry flight. As the crew prepared to unload the left pylon, however, one of the airmen saw something wrong and called over a supervisor.

Airmen load AGM-129 Advanced Cruise Missiles onto a B-52H during a snowstorm at Minot AFB, N.D., during an alert status exercise in 2002.

Photo: SSgt. Adam R. Wooten



Airmen load ACMs onto a B-52H at Minot. During a 2007 incident, six of 12 missiles loaded were “hot” (i.e., nuclear armed) instead of “cold.” No one noticed.

During his safe status check, shining a flashlight through a small diamond-shaped window to verify the warheads were “cold,” or inert, he discovered that one of them was “hot.”

A check of the other missiles confirmed it: Minot personnel had loaded and dispatched a plane with six real nuclear weapons.

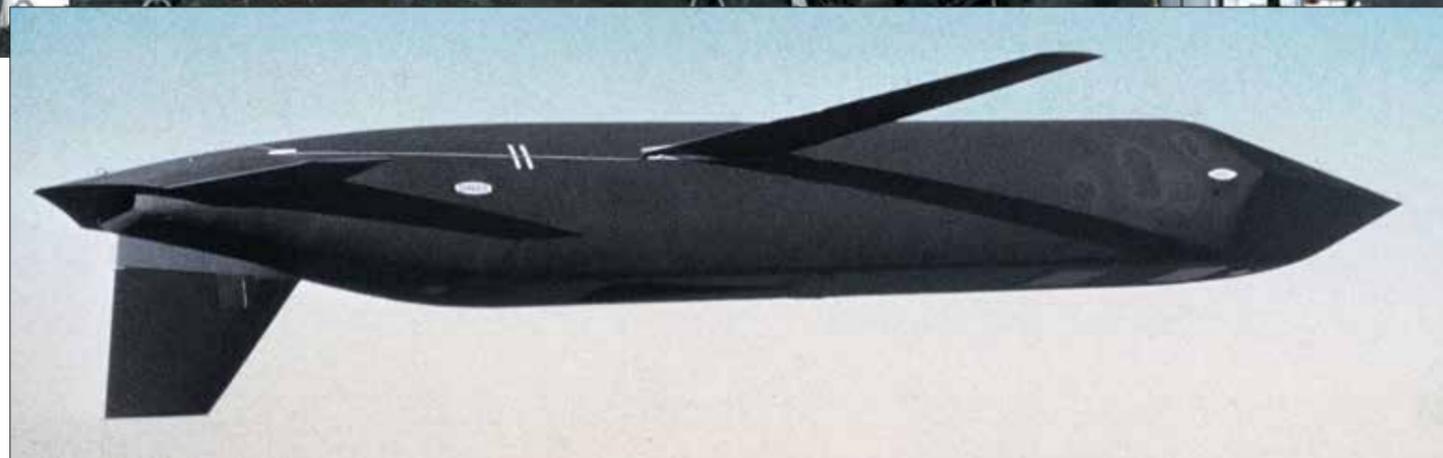
At Barksdale, the jet had been parked for about nine hours without a special guard.

SHOCK WAVES

How had this happened? The munitions team quickly called superiors to tell them about the seriousness of the situation and ask for direction.

“The five of us who were present did what we could to keep the area secure while we waited for security forces to arrive,” one of the airmen told Air Force investigators a few weeks later.

The Minot episode sent shock waves through the Air Force and the Depart-



An AGM-129 ACM.

ment of Defense. The rare “Bent Spear” nuclear incident report grabbed the attention of the highest levels of the US government and headlines nationwide.

At a time when much of the military was largely focused on operations in the Middle East, the incident presented a clear symptom of a decline in attention to the nuclear mission.

Ten years later, the unauthorized, unintentional transfer of the nuclear-armed AGM-129s has resulted in wide-ranging improvements in the handling of nuclear weapons. It led to firings, revamped training procedures, a new nuclear culture, and higher per-

formance standards and elevated the nuclear mission back to the top of the Air Force’s priority list. It also led to the creation of Air Force Global Strike Command, with a singular focus on nuclear missions and standards.

For context, it’s important to remember what did not happen during the inadvertent transfer of nuclear-armed AGM-129s from North Dakota to Louisiana a decade ago.

The warheads were never unsecured. The crew of the B-52 carrying the weapons could not have launched them, or even armed them, according to the investigation carried out in the

sion of his final report, Raaberg judged the transfer to have been caused by a “breakdown in training, discipline, supervision, and leadership.”

Lost adherence to strict Air Force nuclear procedures was at the heart of the problem. At many steps along the way that day, one simple check would have caught the mistake. Somehow, all those checks were missed.

SHORTCUTS

In the hundreds of pages of personal testimony produced for Raaberg’s report, there seems a clear sense of incredulity among many of those involved. Why did this happen? It just didn’t seem possible at the time.

“All the checks were missed, by many different personnel involved in the scheduling and execution of the operation,” said one member of a Minot weapons handling squadron in an interview with Air Force investigators.

The roots of the incident lay in Minot’s weapons handling scheduling process. Those involved had become used to using shortcuts to lessen the workload. Senior NCOs permitted that to continue, according to USAF’s investigations.

At issue were the activities of Minot’s 5th Munitions Squadron. For this unit, the printed weekly schedule—a formal, signed document—was routinely virtually ignored, investigators discovered. Instead, squadron members worked off informal slides prepared by an inexperienced airman throughout the week for scheduling and production meetings.

This became a serious problem in late August 2007, when there was a change in plans. The squadron was preparing missiles for transfer to Barksdale. The formal schedule identified two particular missile pylons for preparation. But someone decided to swap one pylon for another. This was noted on the informal working slides but not on the official schedule.

On Wednesday, Aug. 29, tow crews showed up at weapons shelters to

transfer the missile pylons out to the Minot flight line for shipment. The transfer crews were working off the formal schedule, as approved by the wing commander.

“The wing was caught in their own faulty process and oversight,” said the Raaberg report.

The incident still should not have happened. What followed were what Air Force officials later identified as five key procedural failures that occurred between the time the door was opened at the Minot weapons storage facility and the time the B-52H ferry aircraft took off for Barksdale the following morning.

The first procedural breakdown occurred around 8 a.m. on Aug. 29. Airmen assigned to the weapons storage area failed to examine all the missile-carrying pylons located in the storage area, said Maj. Gen. Richard Y. Newton III, assistant deputy chief of staff for operations, plans, and requirements, at a briefing for reporters in October after the Air Force had finished its initial round of investigations.

Procedural breakdown No. 2 occurred shortly thereafter. The crew operating the trailer that was supposed to move the pylons to the ferry aircraft began hooking up to their cargo while required inspections were still underway. They were supposed to wait for confirmation that everything had been done correctly, said Newton.

Breakdown No. 3 was related—and crucial. The crew failed to verify the status of the particular pylons they were moving.

“The crew is required to inspect the munitions before departing. They did not do that,” Newton told reporters.

This inspection required shining a flashlight through windows in the cruise missile payload bay door. A stencil on the W-80 warhead would identify it as “nuclear,” said a munitions squadron member interviewed by investigators following the incident.

A Type 3 trainer warhead for the missile would say “inert.”

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A tactical ferry payload would say “tactical ferry” and would be painted white.

MORE BREAKDOWNS

One of the pylons marked for removal on the morning of Aug. 29 did receive a safe status check, according to an airman who was present. Its cruise missiles were marked “tactical ferry,” as expected.

Then the airman who conducted this first check turned to the second pylon. This person did not see anyone looking through the small, diamond-shaped window in the pylon’s missiles. There was not even anyone holding a flashlight nearby.

The airman asked a coworker standing next to the second pylon if it was “good to go.”

He “responded that it was,” according to the report.

At this time no one mentioned that only one of the pylons was marked with placards indicating its readiness for movement. The other was not. While it’s true that the placards on the properly prepared pylon were pretty low tech—two pieces of computer printer paper—the lack of marking on the other was yet another oversight.

The fourth procedural breakdown was an additional missed check, as the Minot munitions control center failed to verify the status of the missiles en route to the flight line at about 9:25 that morning. The center did not access a database—a required step—that would have flagged one of the pylons as unprepared for transfer, according to Newton.

At this point the wrong weapons arrived at the B-52 that was to ferry them south. Minot munitions handlers loaded the pylons onto the aircraft. They remained there overnight, in a secure area.

“Critical safeguard procedures had been disregarded,” said Newton.

The fifth and final procedural breakdown occurred just before the B-52’s flight time the morning of Aug. 30. The aircraft’s Barksdale-based radar navigator was responsible for checking all weapons, to ensure they were in safe status, and for verifying the payload prior to takeoff. The navigator didn’t fully perform this duty, however.

Instead, this crew member did a spot check of one missile on the right pylon. As bad luck would have it, this was the pylon carrying the expected, non-nuclear payloads. The other pylon was not checked and with this lapse, the last line of defense had failed.

“If the radar navigator had completed [the] checklist, the individual would have discovered the six warheads loaded onto the B-52 aircraft and prevented their flight across the United States,” wrote Raaberg in his report.

That individual told investigators that he had been trained only to do a spot check of the weapons. Some members of the radar navigator’s squadron concurred that the unit had developed a spot check “culture.” But even these witnesses felt that a proper spot check needed to include a look at both pylons.

The B-52, call sign Doom 99, took off from Minot at 8:40 a.m. on Aug. 30 and arrived at Barksdale at 11:23 a.m.



A B-52H takes off from Minot during a rapid-launch generation exercise Aug. 9, 2007, a few weeks before the Bent Spear incident.

that same day. The weapons unloading process began almost eight hours later, around 7 p.m. that evening.

Once the presence of nuclear weapons was discovered, munitions personnel followed correct procedures, according to Air Force investigators. They immediately reported the mistake, set up a quick security cordon, and reported the incident up the chain of command.

HEADS ROLL

That evening there was a senior NCO induction dinner at the wing involved at Barksdale. Near the end of the dinner, commanders got the word of a flight line emergency. They quickly left, found and briefed the wing commander, and went to the aircraft to see the situation for themselves.

The pylons were moved into safe storage at Barksdale by 11 p.m., according to an Air Force time line. This occurred while there were active thunderstorms within 25 miles of the area.

All the Barksdale airmen acted properly, said a senior Barksdale commander whose name was redacted from the unclassified version of the Raaberg report.

In the aftermath of the unauthorized transfer, the Air Force sacked a number of commanders. The munitions squadron commander at Minot was relieved of duty promptly, along with a number of officers and NCOs at lower levels. In October 2007, after further investigations, Air Combat Command decided to relieve Minot’s wing commander and maintenance group command-



Wynne



Moseley

er and Barksdale’s operations group commander.

The accountability went all the way to the top. In June 2008, Defense Secretary Robert M. Gates asked for the resignations of Air Force Secretary Michael W. Wynne and Chief of Staff Gen. T. Michael Moseley.

Gates cited the Minot incident—as well as a subsequent misshipment of ICBM reentry vehicle assemblies to Taiwan that proved to largely be a failure of the Defense Logistics Agency—as his grounds for the firings, saying the two had allowed a lax culture to develop around the nuclear mission.

FADED SKILLS

It was the first time any military service’s top uniformed and civilian leaders had been fired at once.

For the Air Force and the Department of Defense, the main takeaway from Minot was that the old, Cold War focus on the nuclear mission had taken a back seat to real-world combat. Partly because of competing priorities and airmen and equipment that split their time between strategic and conven-

tional missions, USAF’s nuclear weapons skills had faded among younger airmen and at lower ranks.

As conventional weapons became more sophisticated and wars proliferated in the Middle East, those were the things the Air Force had stressed. Over time, USAF’s nuclear skill faded.

“To emphasize, the nuclear skill sets have not been exercised. They are atrophied. It was evident in the testimony of every operations group member we interviewed,” concluded the Raaberg report.

HANDS OFF

Perhaps an indicator of the environment in 2007 can be discerned from the fact that the instructor pilot for Doom 99, a distinguished graduate of the USAF Weapons School, had never physically touched a nuclear weapon, and none among the Barksdale-based crew had ever actually touched an AGM-129 prior to that mission.

In the aftermath of the Minot incident, a series of evaluations and reports were done about how the Air Force should refocus on the nuclear enterprise.

Raaberg’s report, for example, urged a review of nuclear training and tighter standards for nuclear custodial procedures. In early 2008, the Defense Science Board, under the leadership of retired Gen. Larry D. Welch, former Chief of Staff, conducted another study. It recommended, among other things, that wing commanders be re-estab-

lished as the approval authority for the movement of any nuclear weapons outside storage areas and that nuclear and non-nuclear weapons should never again be stored in the same place.

The review having arguably the greatest impact was the 2008 Secretary of Defense Task Force on Nuclear Management, overseen by former Defense Secretary James R. Schlesinger. It urged a re-emphasis on nuclear weapons at the highest levels, including the White House. For example, the Schlesinger report recommended that the Secretaries of Defense and Energy periodically brief the President with a review of nuclear capabilities and forces.

This renewed DOD concern about the strategic nuclear mission led directly to the creation of Air Force Global Strike Command.

AFGSC ACTIVATED

This major command began operations in August 2009 and took over responsibility for the ICBMs, previously controlled by Air Force Space Command, and the nuclear bomber mission of Air Combat Command, consolidating USAF’s two legs of the nuclear triad in a single command having one focus. Many called it a reincarnation of Strategic Air Command, which had responsibility for the whole nuclear mission from the Air Force’s founding until SAC’s inactivation in 1992. In 2015, USAF upgraded the AFGSC commander’s position from a three-star position to four-star status.

Taken together, these changes increased concentration on the Air Force’s nuclear enterprise and set new standards for training and performance. Gen. C. Robert Kehler, commander of US Strategic Command at the time, told defense reporters in 2013, “A lot has changed ... in terms of the intensity of the focus on the nuclear part of our mission [and] the assessment and evaluation that we put on the units.” He said, “Perfection is really the standard when we talk about nuclear weapons.”

This June, Gen. Robin Rand, AFGSC commander, said, “The Air Force and AFGSC have undertaken monumental shifts to support our No. 1 priority, the nuclear enterprise.”

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Secretary of the Air Force Michael Donley (l) answers questions from the press at the Pentagon on Oct. 24, 2008, when he announced the creation of Air Force Global Strike Command, a major command to control all USAF nuclear bombers, missiles, and personnel.