COMMANDER DIRECTED REPORT OF INVESTIGATION

PREPARED BY

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INVESTIGATING OFFICER

CONCERNING

AN UNAUTHORIZED TRANSFER OF NUCLEAR WARHEADS

BETWEEN MINOT AFB, NORTH DAKOTA

AND

BARKSDALE AFB, LOUSIANA

30 AUGUST 2007

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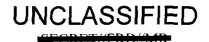


Tab A

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Tab A: Appointment Letter

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Tab B

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Tab B: Authority and Scope

- (U) Commanders have the inherent authority to conduct a Commander-Directed Investigation to investigate matters under their command, unless preempted by higher authority. Pursuant to this authority, General Ronald E. Keys, ACC Commander, appointed Major General Douglas L. Raaberg on 31 August 2007 to conduct the investigation into the underlying facts and circumstances that led to the unauthorized transfer of nuclear warheads between Minot Air Force Base, North Dakota, and Barksdale Air Force Base, Louisiana on 30 August 2007. The investigation should include any deviations from established safety and transfer procedures, as well as a complete review of security procedures.
 - (U) The Investigating Officer (IO) investigated the following:

Allegation

(U) Between 29 and 30 August 2007, the 5th Bomb Wing permitted the unauthorized transfer of nuclear warheads from Minot AFB to Barksdale AFB in violation of AFI 91-111, Safety Rules for US Strategic Bomber Aircraft, and Commander, Air Combat Command's Cruise Missile Repositioning Order, REPORD (DTG: 141400Z Mar 07). SUBSTANTIATED.

Investigation

- (U) The purpose of this Commander Directed Investigation is to report the facts surrounding the allegation, the root causes and assign reasonable accountability. The results in this report are fully transparent. The testimonial documentation has been meticulously prepared to avoid impropriety. Additionally, I have provided the forensics to facilitate command-level consideration for disciplinary actions.
- (U) As the Investigating Officer, I have organized this report into three major categories. Each category is a <u>phase</u> in the investigation that includes a tier of individuals, a set of distinct events and a menu of oversights that led to this incident. The phases are:
- (U) Door opening to wheels up: Those individuals directly responsible for the chain-of-custody to verification-of-the-weapons breakdowns from the moment the nuclear shelter was opened to the time the B-52 was airborne.
 - (U) <u>Scheduling to dispatch</u>: Those individuals who had a direct hand in the scheduling of the Tactical Ferry pylons (preparation and receipt), oversight of maintenance actions and eventual dispatch of the weapons; this includes the lack of proper monitoring of the pylons moving from the shelter to the aircraft,
 - (U) <u>Supervision to leadership</u>: This is self-evident; however, it is a more refined focus of overall supervision to wing-level leadership at Minot AFB and Barksdale AFB.
 - (U) I conducted all witness testimonies. The testimonies began on Monday of Labor Day weekend, 3 September 2007, at Minot AFB. I finished the last interview on 27 September 2007.

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Except for one day, my legal advisor and I spent nineteen (19) continual days interviewing over seventy (70) witnesses.

Oversight

(U) The Secretary of the Air Force asked the DoD Inspector General to provide "oversight of investigative...activities" initiated by the Air Force in response to the incident and to follow-up on recommendations generated by those activities. The Chairman of the Senate Armed Services Committee requested the Secretary of Defense for this independent review of the matter.

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Tab C

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Tab C: Background

Executive Summar		
	(b)(1) ACC	
		·
The unauthorized transdiscipline, supervision and	fer of these nuclear warheads w leadership.	as caused by a breakdown in training,
		· · · · · · · · · · · · · · · · · · ·
	(b)(1) ACC	· .

- (U) The chain of events, the testimony of those interviewed and the evidence presented show an erosion of adherence to rigid, Air Force nuclear procedures. This report will show how the intricate system of nuclear checks and balances was either ignored or disregarded.
- (U) ## The report identifies deviations from established safety, security and transfer procedures that explain the circumstances and details of the unauthorized transfer of nuclear weapons. Finally,

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the report identifies those individuals whose actions contributed to this unauthorized transfer and whose dereliction may warrant disciplinary action.

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(b)(1	I) ACC		

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Door Open to Wheels Up		
	(b)(1) ACC	
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(b)(1) ACC
The B-52H aircrew arrived at the aircraft the morning of 30 August 2007. The crew consisted of the aircraft commander, an instructor pilot; the copilot, and an instructor radar navigator. The B-52 Instructor Radar Navigator (IRN) is responsible to the aircraft commander for checking the weapons prior to flight. The IRN is required to check all missiles. The check includes verification of the payload and confirmation of a SAFE status. However, the Instructor Radar Navigator only did a "spot check" on one missile, and only on the right pylon loaded with nuclear-inert payloads. If the IRN had accomplished a full and complete weapon's preflight, the IRN should have discovered the nuclear warheads.
(U) At no time during their flight did the radar navigator apply electrical power to the missiles. The radar navigator electronically verified that the missiles were OFF (no power) and SAFE (not Armed) after the engines were started. That was the last time the radar navigator electronically accessed the status of the missiles. In short, the radar navigator never turned the power back on.
(b)(1) ACC
(U) To be clear, the aircrew could have jettisoned a missile or missiles in the event of an emergency that required reduced weight to remain airborne. Also, if the emergency situation had dictated, the crew could have jettisoned one or both of the pylons with all the missiles attached. To accomplish any jettison of a missile or missiles, the radar navigator would have applied electrical power only to the rack to which the missile was attached. Additionally, to jettison the pylon from the aircraft, electrical power would have to be applied to the pylon attached to the aircraft's wing. In all jettison scenarios, the missiles would have fallen to the ground.
(b)(1) ACC

(U) This incident was propagated by numerous failures to follow stringent nuclear procedures. However, the catalyst for the failure began in the scheduling process. It further broke down because the supervisors; predominantly the Non-Commissioned Officers and Senior Non-Commissioned Officers, did not do their jobs.

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Scheduling to Dispatch

- (U) Our audit of the maintenance logs shows the warhead rebasing changes and original tactical ferry flow plan did not contribute to the mistaken removal of the nuclear pylon, designated GZ203. Note: A GZ-pylon is a pylon loaded with Advanced Cruise Missiles (ACM). In military nomenclature the ACM is an AGM-129A. The catalyst for this failure began in the scheduling process. It further broke down because the supervisors; predominantly the NCOs and SNCOs, didn't do their job. They were the propellant that accelerated the wing's failure to meticulously track daily scheduled maintenance events. They did not account for key actions that would have prepared the pylons for air shipment on 30 Aug. Collective testimony shows a series of personnel changes or absences of leadership throughout July and August. Except for one Technical Sergeant put in charge of Special Weapons Handling (those that move pylon packages) most of those put in charge of the scheduling or superintendent positions were too new or incapable of doing their jobs. They trusted each other, but never verified the information they received.
- (U) The scheduling process and products the 5th Munitions Squadron used is very complicated to describe. Testimony shows the squadron's formal, signed and printed weekly schedule was disregarded by every individual. Instead, they informally used their 'working slides' throughout the week to prepare for scheduling and production meetings. They carried over the 'working slides' from the Wednesday NCOIC scheduling meeting to brief the work status at the Tuesday and Friday production meetings. For them, the 'working slides' were the de facto schedule.
- (U) Literally...from the Munitions Squadron Commander to the NCOIC and assistant NCOICs of each shop in the Special Weapons Flight; from the scheduling meetings to the actual work performed...they all assumed the other was doing their job. Ironically, none of them used the printed weekly-maintenance schedule as the overarching document to track weekly maintenance events. Again, every witness testified they came to the Special Weapons Flight meetings with blank notebooks. They relied on a set of slides produced by a very young Plans & Scheduling Airman (one-striper) to guide their discussion for the Tuesday and Friday production meetings, and the Wednesday scheduling meeting. This is where a failure occurred. Someone changed the schedule, but did not fully brief the others. The information was carried onto other slides, but not accurately carried to the printed maintenance schedule. The squadron commander, operations officer and Chiefs were not given sound information from the "shop chiefs."

(U) GZ203 and another pylon, GZ377, were identified on the 'working slides' f	or tactical ferry
preparation; and, eventual B-52 air shipment on 30 August. This was all accord	ing to the
original flow plan. A change of pylons occurred between the informal working	ng slides and the
formal printed schedule. GZ203 was replaced by a new pylon, GZ358.	mosaíc (b)(1)
	···

preparation. These two pylons were prepared for shipment the following week. However, a week later, on 22 August, the line supervisors used the same information from the previous week's 'working slides' to now reflect the movement of GZ203 and GZ377 from the nuclear shelters to the bomber. GZ358 fell off the formal printed schedule.

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Ironically, GZ358 vanished from the informal 'working slides.' The 5th Bomb Wing's formal printed schedule; the Wing Commander approved 21-165 schedule, now showed GZ203 and GZ377 scheduled for tactical ferry. Embedded in the wing's formal schedule is the 5th Munitions Squadron's weekly Maintenance Summary for the week of Aug 27-Sep 2 2007 which directs GZ203 and GZ377 to be transported to the flightline for tactical ferry. That is why the tow crews went and retrieved GZ203 and GZ377 from their respective shelters on Wednesday, 29 August. It was a scheduled event. The Wing was caught in their own faulty process and oversight.

AF (b)(3)	
AF (b)(3)	GZ203 always

remained on the informal working slides and appeared on the "radar scope" when it was briefed for movement at 23 August production meeting and subsequently published on the wing schedule. No one noticed the changes occurring on the schedules.

(U) In short, the munitions squadron produced a weekly maintenance schedule...no one followed it, not even the commander or operations officer. The production meetings were a loose knit confederation of shop chiefs who did not bring key documents or a "bird's eye" view of what work had to be accomplished. They relied on their corporate memory. They used the wrong slides to follow the work.

Supervision to Leadership

- (U) In hindsight, one witness described this event as the "perfect storm" that could have been avoided. Little did that individual know the warning systems that could have prevented the unauthorized transfer of nuclear warheads from Minot AFB to Barksdale AFB had been turned off, ignored or never designed by the two air wing's supervision or leadership. In fact, it was a breakdown in training, discipline, supervision and leadership.
- (U) The chain reaction that supposedly started at Minot actually started at Barksdale. There were two warning systems that failed, faltered or frustrated the key personnel responsible for assuring nuclear weapons security...Minot's maintenance scheduling-to-dispatch processes and Barksdale's operational focus. Both were lost upon supervision and leadership.

Facts

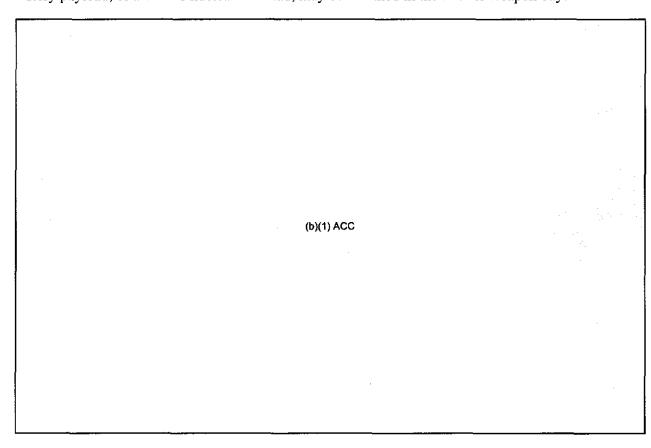
- Fact: Six W80-1 nuclear warheads were inadvertently transferred from Minot AFB to Barksdale AFB without proper authorization
- Fact: STRATCOM J-38 confirmed that the codes for the Advanced Cruise Missiles that were flown by the Barksdale B-52 crew were not compromised
- Fact: The missiles were never electronically accessed
- Fact: The B-52H crew could not have launched or armed the Advanced Cruise Missiles they were carrying
- Fact: The B-52H crew was capable of jettisoning the missile, missiles, or pylon in the event of an emergency
- Fact: Personnel failed to follow strict established nuclear procedures

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- Fact: Numerous scheduling errors resulted in the actual transfer of nuclear warheads
- Fact: Leadership and supervision did not prevent this from happening

Basic Information

- (U) The <u>Boeing B-52</u> "Stratofortress" aircraft is of the land based heavy bombardment class designed for long range flight at high speed and altitude. The aircraft has provisions for ten crewmembers: a basic crew of five, three instructors and two additional crewmembers. The basic crew consists of Pilot, Co-pilot, Radar Navigator, Navigator and Electronic Warfare Officer. A highly variable weapons load may be carried on external pylons in combination with internal bomb bay weapons loads. Aircraft safety features allow for the jettison of weapons loads, to include cruise missiles and pylons as a last ditch measure, in the event of a serious inflight emergency. Missiles and pylons are jettisoned in a "safe" mode.
- (U) The <u>AGM-129</u> Advanced Cruise Missile, or ACM, is a subsonic, turbofan-engine powered, winged cruise missile. This cruise missile can deliver a nuclear warhead in an air-to-ground mission with a very high degree of accuracy at long range. During captive flight, the missile's flight surfaces (wings and fin) are folded or retracted in a stowed position. Displays in the cockpit of the B-52 allow the crew to constantly monitor the status of the missile. After launch the missile's flight surfaces are deployed and the engine provides thrust within a few seconds. Computer controlled navigation directs the missile to its target. A non-explosive training or ferry payload, or a W80-1 nuclear warhead, may be installed in the missile weapon bay.



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	(b)(1) ACC	
	AF (b)(3)	
(U) Sole-Vouching Authority (SVA): N 204). The SVA is responsible for verifyi or exclusion area where nuclear weapons to the no-lone zone. Local Operating Pro Procedures) requires the SVA to complet ensure everyone who enters the no-lone z and maintain an accurate count of person	ng that only authorized are located. They esta ocedures (Sole Vouchir te the Storage Structur cone receives a safety by	d individuals enter a no-lone zone ablish a single entry control point as Authority Storage Structure be Opening/Closing checklist, oriefing, line badge requirements,
	AF (b)(3)	

(U) <u>Tow Team:</u> Consists of two people who perform tow procedures (MHU-196 trailer checklist), safety checks (*Missile Safe Status Check*), and operate the tow vehicle. The tow team either performs the *Missile Safe Status Check* or ensures the check was accomplished. They also perform the pre-tow procedures, request transport authorization from munitions control, and transports the trailer to its destination.

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Cruise Missile Reposturing Background

Drivers		
		Line jako
	(b)(1) ACC	
ACC Repositioning Order (REP	ORD)	
	(b)(1) ACC (b)(3) DOE	

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4		
·	(b)(1) ACC (b)(3) DOE	•
		•

- (U) The wings were given great flexibility to schedule tactical ferry missions every other week with alternating points of origin. The order allows the wings maximum flexibility to schedule tactical ferry missions around other requirements. This REPORD also required the wings to deliver to Headquarters ACC a Mission Risk Assessment Plan covering all safety considerations for the missions. Both bomb wings were aware of this tasking, participated in several planning meetings, and made inputs to the REPORD.
- (U) Air Combat Command and Air Force Materiel Command evaluated two rebasing methods; tactical ferry and ground shipment. Tactical ferry was selected for a number of reasons:
 - PBD-720 will eliminate all AFSC 2W2X1 (131) and 2M0X1 (142) manpower authorizations effective 1 July 2009. PBD-725 is not achievable without them
 - Tactical ferry is a proven method for transporting Advance Cruise Missiles and Air Launched Cruise Missiles
 - The tactical ferry option required 8-months to complete as opposed to 24-months for ground shipment
 - Ground shipment requires an additional 27,600 man-hours due to additional handling, and test requirements.
 - Tactical ferry saved \$1.6M

(b)(3) DOE

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	(b)(1) ACC	
Pylon Transfer Plan (I	Rebasing Schedule)	· · · · · · · · · · · · · · · · · · ·
	(b)(1) ACC (b)(3) DOE	
	(b)(1) ACC (b)(3) DOE AF (b)(3)	

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		1
	(b)(1) ACC	

- (U) The 5th Munitions Squadron's schedule is supposed to be a coordinated document that ties all work centers together. The scheduling process begins when each work center (with the key exception of Weapons Handling) forwards its maintenance requirements to the Missile Analysis section in Special Weapons Maintenance (SWM) Flight. Analysis then compiles the work center inputs as well as other maintenance requirements and forwards the inputs to 5th Maintenance Operations Squadron Plans and Scheduling (P&S). (Tab F40, p. 2; Tab F21, p. 2; Tab F18, p. 3)
- (U) On Wednesdays, the SWM Flight holds a scheduling meeting chaired by the Production Superintendent. This meeting is attended by each element NCOIC and a 5th Maintenance Operations Squadron P&S scheduler (an Airman, E-2). (Tab F40) P&S displays a draft schedule, derived from the inputs forwarded earlier by Analysis flight, on PowerPoint slides and takes notes on any changes made by the section chiefs during the meeting. These notes and changes are then used to create the weekly maintenance schedule that includes the job breakout. The job breakout is a listing of specific tasks to be performed along with their Job Control Number (JCN) and is often more detailed than the slides. (Tab F40, p.2)
- (U) On Thursday morning, the flight commanders meet with the 5th Munitions Operations Officer (MOO) and P&S for the squadron scheduling meeting. Only the updated P&S PowerPoint slides are briefed and not the accompanying job breakout. At the end of the meeting, the MOO and each flight representative sign the schedule cover sheet reflecting their approval of the weekly schedule. It is important to note the complete schedule is not briefed or reviewed by the flight chiefs, squadron superintendent, or the Munitions Ops Officer. (Tab F12, p. 2; Tab F40, p. 1)

Production Meetings

(U) The SWM Flight Production Superintendent chairs the Tuesday and Friday production meetings. The Tuesday meeting evaluates current production against the schedule. The Friday meeting centers on the current week wrap-up and looks ahead to the following week's operations. These production meetings are used as a venue for the different flight sections to exchange information pertaining to the maintenance schedule. All SWM Flight section NCOICs attend these meetings or send a representative in their absence. The Production Superintendent polls each representative for input and then writes their input on the white board in the SWM Flight supervision office. According to (b)(6) ACC none of the section representatives bring schedules to these meetings; instead they take notes in order to take the information back to their respective sections. (Tab F23, p.2; Tab F16, p. 4-5)

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(U) The Maintenance Operations Officer (MOO) receives a daily status briefing from Munitions Control personnel. The briefing consists of slides with information obtained from each flight within the squadron. The purpose of the briefing is to give the MOO a snapshot of the maintenance occurring in the squadron at that moment in time. It provides no summary of the work completed or scheduled to be done and does not highlight bottlenecks or delays in maintenance production. The briefing captures current maintenance but is ineffective as a tool for the Munitions Ops Officer to track maintenance productivity. (Tab G12, p. 1-4)

Operations Scheduling

- (U) Both 2 BW and 5 BW Plans & Programs sections were notified of the Tac Ferry message on 14 March 2007 and tasked their respective Operations Groups through Wing Scheduling to execute these missions. These missions were to be scheduled using the routine ACCI 21-165 scheduling process. (Tab G17, p. 1-2)
- (U) (SCERE) After receipt of the repositioning directive, both wings began to develop flight procedures on how to implement the tasking, incorporating operational risk management procedures. The wings were directed to submit these procedures to HQ ACC/A3S. 5 BW developed a thorough Tac Ferry program which they shared with 2 BW, who then tailored it to their own specific operations. As part of the program, 5 BW provided briefings to selected aircrews; they were pilot-centric in nature, explaining procedures, processes and risks involved with the transportation of cruise missiles. Although these missions were not Higher Headquarters Directed (HHD), the 5th Operations Group (5 OG) supervision treated Tac Ferry sorties as HHD sorties. (Tab F41, p. 2-3) The 2 BW did not provide the same training to their aircrews and did not treat these missions as HHDs. Selected 2 BW aircrews were required to review an information binder on their own during mission planning and then brief the 2nd Operations Group leadership before mission execution. The 2 BW program neglected to emphasize navigator responsibilities, including the importance of a thorough weapons preflight. (Tab F19, p. 2; Tab F3, p.2)
 - (U) The 2nd Operations Group did not emphasize to the flying squadrons that Combat Mission Ready-Nuclear (CMR-N) crewmembers were required for these ferry sorties. (G17, p. 1-2; Tab F55, p. 2) The tasked squadron Director of Operations (96 BS/DO) was aware of the Tac Ferry requirements (minus the CMR-N tasking) and had ample time to establish the crew line-up for these sorties. The squadron scheduling process, which includes all flight commanders and the SQ/DO or designated representative, determined that these ferry sorties need only be filled by a minimum number of crewmembers normally required by T.O. 1B-52H-1. This precluded two weapons qualified navigators from accomplishing the weapons preflight. (Tab F27, p. 2)

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Inspection History

PAST REPORTS...Since 1996...:

(U) I have completed a thorough review of past nuclear-related inspections of both wings. Holistically, there are no remarkable items in the reports that show a charted course of erosion in nuclear operations or adherence to procedures. Yes, there are specific non-compliance issues; even unsatisfactory performance. However, they are isolated problems that don't appear to cascade to the next inspection nor this incident. Oftentimes, the deficiency is corrected and recertified by the same inspection team.

The inspection teams were firm, fair and consistent. I will leave it to other audits to confirm that statement.

Minot AFB...12 Major Inspections:

- (U) Since 1996, Minot's 5th Bomb Wing has SATISFACTORILY passed six (6) Nuclear Surety Inspections. NSIs and Joint NSIs evaluate the wing's "ability to manage nuclear resources while complying with all nuclear surety standards." They received an UNSATISFACTORY grade on their 2003 Joint Nuclear Surety Inspection for an improper missile upload inspection item. The 5 BW also supports their partner 91st Space Wing's NSI. In 2004, though the 91 SW passed its NSI, the 5 BW received an UNSATISFACTORY rating for support. The "host-unit (read 5 BW) provided an unserviceable tractor to transport nuclear resources on numerous occasions."
- (U) Over the last eleven years the wing has received an EXCELLENT or COMBAT READY rating on the four (4) Nuclear Operational Readiness Inspections. Unlike an NSI which focuses on compliance, the NORI is a go-to-war test; it "evaluates the wing's ability to generate and manage nuclear resources and mobilize to deploy bomber reconstitution assets." These 12 inspections have been thorough.
- (U) We did not discount the preparatory Nuclear Surety Staff Assistance Visit Reports. They tend to be a little tougher since they are not graded, yet provide a set of observations that range from significant to repeat problems. The Jan 2006 and Jun 2007 reports don't reveal an impending trend.
- (U) Finally, the wing's Quality Assurance program dating back to Jan 2007 was thoroughly reviewed. Further look back did not give us appreciable concerns. However, I do note that a weapons handling crew of two (2) individuals did fail a no-notice evaluation of their nuclear storage access and Missile Safe Status Check procedures. It so happens that the NCO on the team that failed that 25 Jun 07 spot inspection is the same Staff Sergeant who acted in the same capacity the day the nuclear-loaded pylon was accessed and transported from the Weapon Storage Area. He was our first witness. He invoked his Article 31 rights before giving any testimony. (Tab F52, p. 1; Tab G11, p. 1-2) That is the only sliver of a trend that we've found.
- (U) In my view, there is no pronounced event or finding that points to a clear indication from the inspection reports that Minot AFB was lax in its adherence to nuclear procedures. The Operations Group and the Minot B-52 crews were well prepared for the tactical ferry program.

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They met every measure with alacrity. Leadership promptly submitted or accomplished every requirement outlined in the COMACC-direct Repositioning Order. Furthermore, they carried a full complement of crew members on each mission they flew. The flight records show that. It is very notable that Minot AFB assigned the right officer to build, coordinate and orchestrate their tactical ferry program. He is a very nuclear experienced radar navigator who facilitated a benchmark tactical ferry program from the beginning. He shared it equally with Barksdale AFB whose overall program was lacking or lackluster at best.

Barksdale AFB...12 Major Inspections and more:

- (U) Barksdale's 2nd Bomb Wing history of nuclear inspection performance is less than sterling compared to Minot AFB as evidenced in their recent UNSATISFACTORY rating during the 2005 Nuclear Surety Inspection. The 2005 NSI was also a combined Joint Nuclear Surety Inspection. They busted in multiple areas from weapons loading procedures, nuclear shelter entry & control deficiencies to the profound failure when B-52 crewmembers without Personnel Reliability Procedures (PRP) certification were allowed to handle nuclear-code documents. The seven (7) NSIs since 1996 were satisfactory except for this noted NSI and a MARGINAL grade in 1999. Of note, however, is the wing's inability to pass a Joint Nuclear Surety Inspection. They failed in 2000 for nuclear safety violations regarding equipment handling.
- (U) Their three (3) nuclear operational readiness inspections are unremarkable. The last inspection occurred in 2003. They received a SATISFACTORY. Their next NORI is scheduled for Apr 2008...it will be a combined NORI and NSI.
- (U) The trend isn't robust. Unlike Minot and Whiteman, the 2 BW appears to have unilaterally reduced the number of times they generate to nuclear status, albeit before having submitted a July 2007 request to waive both generations for this year. Let me put it in simple terms. This wing is required to generate at least 40 bombers twice a year; about 80 bomber sorties for the year. The wing commander can, through a local exercise, generate his entire bomber fleet to war-plan status or he can fully or partially participate in a joint, STRATCOM generation. For example, STRATCOM recently conducted a large-scale exercise, GLOBAL THUNDER, in early August. All bomber wings participated. Yet, Barksdale only sent three (3) bombers and associated crews to Minot to participate in the deployed portion of GLOBAL THUNDER. They had previously requested and were granted deferment from fully generating at home. They have yet to locally generate bombers in 2007! Also, our records show that over the last three years the wing has generated about sixty (60) sorties...far short of the almost two hundred (200) bomber aircraft they would minimally have been required to generate to nuclear war status. I'm sure the reasons are plenty to include PACOM Theater Support Plan commitments, but the other bomber units have similar requirements. This leads to other observations that will be covered in the Supervision to Leadership section.

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Tab D

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Tab D: Facts, Analysis and Conclusions

Phase I - Door Opening to Wheels Up

Background		
		·
(b)(1) ACC & (b)(3) DOE	¥
(U) The handling team is made up of the fo	allowing positions: A Loc	ok B Lock Sole Vouching
Authority (SVA); Munitions Close-In Sentr required to be a noncommissioned officer.	ry (MCIS), and two tow d	rivers. The A Lock is
the shelter The SVA is responsible for condu	AF (b)(3)	list" as discussed in the
following paragraph.	icting the opening check	nst as discussed in the

(U) When handling teams access a storage shelter, they are required to follow specific procedures defined on their opening checklist. The opening checklist requires the team to accomplish the *Missile Safe Status Checks* on the missiles when the first two people enter the shelter together (two-person policy). This is usually accomplished by the A Lock and B Lock. Importantly, their job is to verify the type of payload each missile contains which requires shining a flashlight into a small, diamond shaped window and reading the label printed inside. They must also verify that all missiles are not leaking jet fuel, are not damaged, that they indicate SAFE and that nothing precludes further maintenance actions. Every time a shelter is opened, this *Missile Safe Status Check* must be completed on each missile before other actions can occur. Furthermore, the tow driver is required to verify the payload before hooking up the trailer to the pylon ready for transport.

Facts

(U) On 29 August 2007, the handling team was responsible for towing two Tac Ferry packages to the flightline. Based upon information from their supervisor, (b)(6) ACQ, the handling team understood the pylons were GZ377 and GZ203. (Tab F28, p. 2; Tab G1, p.5; Tab G5, p. 2) This handling team consisted of (b)(6) ACQ, the Sole Vouching Authority (SVA), (b)(6) ACQ, A Lock (b)(6) ACQ, tow driver for GZ377 and (b)(6) ACQ, tow driver for GZ203. (Tab F28, p. 2)

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(U) At 0820 hours, the tow team opened Structure 1857 and staged GZ377 outside of the shelter. GZ377 contained the Tac Ferry placards described above. Structure 1857 was closed at 0842 hours. This same team then opened Structure 1854 at 0849 hours. According to (b)(6) ACQ, he directed b)(6) ACQ and b)(6) ACQ to do the Missile Safe Status Checks on GZ203 while he and b)(6) ACQ (b) Adjusted the remaining four packages inside the structure. (Tab F4, p.2) (b)(6) Acc. stated that and (b)(6) ACQ. finished their checks to include the Missile Safe Status Checks. (b)(6) ACQ did not see b)(6) ACC oxb)(6) ACC with a flashlight or checklist in hand performing the status checks on GZ203 so he asked (b)(6) ACQ if "GZ203 was good to go." According to (b)(6) ACC responded that it was. (Tab F4, p.2) (D)(6) ACC then connected the tow vehicle to GZ203 and removed it from Structure 1854 at 0912 hours. GZ203 was not marked with the Tac Ferry placard. ony was contradicted by other witnesses. Specifically (NG) ACC testified that (b)(6) ACC (b)(6) ACC conducted the Missile Safe Status Checks inside structure 1854 and that he was not told to perform any of the weapon inspections. (Tab F32, p. 2) In fact, according to **b)**(6) ACQ he had never performed these duties before as he was new to the job. (Tab F32, p. 2) Both (b)(6) ACQ and (b)(6) ACQ invoked their Article 31 rights and did not provide a statement. Because (b)(6) ACC was the first witness to be interviewed, very little information was known at the time. He was contacted later for additional testimony. Before this second interview could begin, however, he was advised of his Article 31 rights as he had become a suspect. He initially waived his Article 31 rights but shortly after the questioning began he invoked his rights electing not to provide additional testimony. (Tab F4, p. 5) $(U)\Gamma$ (b)(6) ACC I for GZ377, testified that he did not conduct the *Missile Safe Status* Check on GZ377 before he connected his trailer. He admitted this step was required in the technical order (TO), however since he was "under the impression that this package for sure was Tac Ferry," he did not do it. GZ377 was appropriately labeled with two "TAC Ferry" signs; one on each side. As for the status check of GZ203, he did not see anyone performing this task or even carrying a flashlight. (Tab F32, p.2) This point is critical as these status checks absolutely require shining a flashlight into the payload window. (b)(6) ACC (U) While the handling team was at the shelters that morning, (b)(6) ACC spoke on the phone. (b)(6) ACC asked when they were going to transport two pylons from her shop back to the storage shelter. (b)(6) ACC told her that the tow team would be there after they finished transporting pylons GZ203 and GZ377. (b)(6) ACC, toldb)(6) ACC, that GZ203 had not been through her shop for Tac Ferry prep and therefore it was not ready. He told(b)(6) ACC that he would get back with her. (Tab F5, p.2; F15, p.2) (6) ACC hung up the phone and looked at the Tac Ferry schedule (Tab G2, p.3) located on the "S" drive under plans and scheduling. He did not see GZ203 so he called (b)(6) ACQ who was still at the shelter. (b)(6) ACC told him that he was looking at the wrong schedule on the S Drive and that in fact GZ203 was scheduled to go to the fightline. [b)(6) ACC also told him that (the Shop Chief) had written it on his white board in his office. (Tab G8, p. 1-3) After confirming this information by checking another schedule on the S drive and reviewing notes on the white board, he was convinced that (b)(6) ACC was correct. (Tab F5, p. 2; Tab G2, p. 2-4)(6) ACC

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(b)(s) According to the flightline.

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- (U) The routine procedure is to position the two loads of missiles in front of the left and right side of the nose of the aircraft in preparation for mating to the jet. Essentially, the trailer-mounted pylons only have to be backed straight up under the left, right wings for uploading. The tow drivers drove the loads out to aircraft 1010, parked on STUB 29, unhooked and left the loads in front of the B-52. The two tow crews never returned after dropping off the trailers with pylon-loaded missiles. (Tab F48, p. 2)
- (U) It is also necessary to mention that throughout the structure opening and pre-tow procedures, by(6) ACC (Munitions Control) never verified the status of GZ203 and GZ377. According to his ny, it is not common practice for munitions controllers to verify status at the time of movement. Therefore, he granted transport permission for GZ203 and GZ377 to the flightline without conducting any verification procedures. (Tab F44, p.2) Had he done the required verification procedures, he would have recognized GZ203 was carrying warheads and only GZ377 was a Tac Ferry package. (Tab G25, p. 1-2, Tab G3)
- (U) A qualified weapons load crew had been dispatched to complete the next task of attaching the pylon-mated missiles to the aircraft. They are not required in the technical manuals to ever check the presence of a payload. When all pylons are attached, they complete a full missile systems check and then confirm each and every missile is SAFE. Again, no payload verification is required by the load crew. They are required to check the ARM-DISARM device for a SAFE indication (white "S" on a green background) and (b)(6) ACQ. accomplished this task on all missiles. (Tab F46, p.2) Current technical data does not require weapons load crews to verify the missile for the presence of a payload prior to loading. (T.O. 1B-52H-16 and 1B-52H-16CL-1)

(U) Early on the m	norning of 30 August, the crew	v of Doom 99 arrived	at their aircraft to prepare
it for flight.	(b)(6) ACC	was respon	sible to the (b)(6) ACC
(b)(6) ACC	for checking the weapons	before flight. (b)(6) ACC	was required to check all
missiles for SAFE	status and verify the payload.	b)(6) ACC did a "spot c	heck" of one missile on the
right pylon that had	d the Tactical Ferry payloads.	<u>Б)(6) ACQ</u> did not prope	erly check the entire load.
(Tab F2, p.2) The	takeoff from Minot was uneve	entful.	

Analysis

(U) There are firm reasons to conclude that the 5th Munitions Squadron's Weapons Handling failed at the door. They failed to perform *Missile Safe Status Checks* immediately after opening structures 1854 and 1857. Once the doors were opened to the shelter, the team was required to do immediate status checks on all missiles before any other maintenance could be performed. (Tab G22, p. 2; Tab G31, p. 1-2) In consideration of all the testimony concerning the events at both Structures 1854 and 1857, a clear picture emerges where all members of the handling team enters the shelter simultaneously. The tow driver in this picture immediately brings his tractor up to the pylon trailer and starts hooking up the equipment as (b)(6) ACC go through the motions of looking at the remaining packages in the structure. According to Security Forces Central Security Control logs, Structure 1854 had been opened only for twenty-two minutes, when GZ203 had been moved out. (Tab G21, p.1-2) Perhaps, the sergeants checked the missiles for obvious damage or fuel leaks; however, based upon the overall investigation, twenty-two

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minutes is simply not enough time to accomplish a complete *Missile Safe Status Checks* of all five packages stored inside.

(U) This failure to verify the payload GZ203 is even more inexplicable in light of the fact that the entire handling team failed to detect that GZ203 was not placarded or coned (the flightline surveillance cameras photographed both GZ203 and GZ377 as they were being towed out of the weapons storage area and onto the flightline; GZ377 was clearly marked "TAC FERRY PACKAGE" whereas GZ203 was not). (Tab G9, p. 1-4) Absence of these markings should have raised an immediate red flag to at least the two noncommissioned officers on the team (D)(6) ACC Tac Ferry prepped pylons are marked or placard with two 8 ½ x 11 "TAC"
FERRY PACKAGE" signs; one on each side of the pylon. Why no one looked at GZ377
marked with the standard two "TAC Ferry Package" signs; one on each side, and then not notice
GZ203 was missing these markings, is simply baffling. In sum, there is simply no rationale why
the handling team would not have, at a minimum, conducted a status check on the only pylon
being towed out of Structure 1854 and out to the flightline; especially a pylon not marked for
Tac Ferry.
(U) While certain members of this handling team are more at fault than others, they all should be held accountable; specifically (b)(6) ACC
accountable is (b)(6) ACC section. While the
handling team was in the process of moving GZ203, (5)(6) ACC who is very knowledgeable in her field, that GZ203 had not been prepped for Tac Ferry and was not ready to
be rolled to the flightline (b)(6) ACC had a duty to follow-up with (b)(6) ACC before allowing the
handling team to continue with the operation. He should have discussed the schedule that he
looked at on the S Drive as well as (b)(6) ACC information with (b)(6) ACC to confirm the status of
GZ203. After interviewing (b)(6) ACC there is no doubt that if he had called her with this
information, she would have stopped the operation immediately.
(U) While (b)(6) ACC may have tried to minimize his culpability during his first interview,
eventually evidence revealed that he, not (b)(6) ACC was in charge of the operation. (b)(6) ACC
(b)(6) ACC testified that (b)(6) ACC was in charge. (Tab F28, p. 2)
Additionally, the evidence supports DIGIACO , as the Sole Vouching Authority (SVA) was in
charge of the operation. As the SVA, it was his responsibility to ensure the Missile Safe Status
Checks were accomplished on all missiles immediately after the structures were opened. (Tab
G22, p. 2; Tab G31, p. 1-2)
(II) Associate to his source testimone (EVO) and to all already of the argument of (Tab EA to 2). The
(U) According to his own testimony, (5)(6) ACC took charge of the operation. (Tab F4, p. 2) The only evidence that (5)(6) ACC assigned (5)(6) ACC the responsibility of conducting the
Missile Safe Status Checks on GZ203 is (6)(6) ACC testimony. (b)(6) ACC definitively denied he had
been given this responsibility. It is important to note that (b)(6) ACC was new to the job and testified
that he had the responsibility to physically get the doors open but had no role in inspecting the
weapons stored inside. During his testimony, (p)(6) ACC came across as credible and forthright.
(Tab F32, p. 2) Even assuming b)(6) ACQ, had assigned this responsibility to b)(6) ACQ and b)(6) ACQ, it
was ultimately (b)(6) ACC responsibility to ensure the status checks had been accomplished before

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GZ203 was moved out of the structure.

(U) Regardless of who was in charge of the operation (b)(6) ACC is clearly responsible as the othe noncommissioned officer on scene. He also had a duty to ensure the written checklist had been followed. (Tab G23, p. 1-2) (b)(6) ACC prior duty performance is also suspect. He previously received two letters of reprimand; one for a security violation and the other was for failure to follow proper checklist procedures. (Tab G10, p. 1-6) Additionally, he was written up for a detected safety violation. (Tab G11, p. 1-2)
(U) Lastly (b)(6) ACC failed to perform Missile Safe Status Checks before towing GZ203 and GZ377 respectively. (Tab 23A) Some witnesses discussed the practice of tow drivers not performing these checks during a "continuous" or "concurrent" operation as long as they verified that in fact these status checks had been performed. (Tab G24; Tab F15, p. 4) There is simply no credible evidence that either tow driver had received this verification of the payload before connecting to his trailer and towing the pylons to the flightline.
(U) Other members of 5 MUNS should have also recognized GZ203 had not been prepped for Tac Ferry. In accordance with AFI 21-204, <i>Nuclear Weapons Maintenance Procedures</i> , paragraph 1.4.11, the "Munitions Control element is the focal point for planning, coordinating, <i>directing and controlling munitions/weapons activities.</i> " Additionally, Munitions Control is required to maintain the "operation/non-operational status and location of all assigned nuclear weapons" (AFI 21-204, para. 1.4.11.2.6). In order to effectively direct and control a weapon transport operation, Munitions Control must first validate the operational status of the assets to be moved. This validation can be accomplished by verifying weapons status using MUNSCON or by checking the pylon's build-up sheet.
(U) The
(U) (b)(6) ACC testified that he was not trained to verify the status of Tac Ferry pylons during movement. (Tab F44, p. 2) His supervisor (b)(6) ACC testified that he had never trained his controllers to verify weapons status using MUNSCON or by checking the pylon's build-up sheet. At this point in the interview, he was read his Article 31 rights. He invoked those rights and did not provide a statement.
(U) Regrettably, the breakdown in checklist discipline continued when the 2 BW aircrew took possession of the aircraft. (b)(6) ACC failed to ensure all missiles contained Tac Ferry payloads. The IRN failed to follow the exterior inspection checklist by checking only one missile payload on GZ377 rather than all missile payloads on both pylons as required. (Tab G18, p. 2-4)

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(U) (b)(6) ACC written testimony states that only one weapon was "spot checked" on the right
pylon. (Tab F2, p. 2) When <u>bx6) ACC</u> was questioned about the checklist requiring that all
"missiles" be checked, the individual stated that they were trained only to do a spot check of the
weapons. According to the testimony of 2 OG leadership, some members of the 96 th Bomb
Squadron believed a habit or a culture of only "spot checking" had formed in the squadron. (Tab
F55, p. 3) However, the majority of the witnesses interviewed, well. that even if a spot check
was permissible, it would require a spot check of both pylons. agreed

(U) Lastly,	(b)(6) ACC	failed to verify there was an entry in
the aircraft forms	indicating weapons preflight w	was complied with. (T.O. 1B-52H-30-1, Aircraft
Weapon Delivery	Manual, Page 2-8, NOTE). (1	Tab G18, Tab F19, p. 3; Tab G7) The failures of
the crew were cert	tainly significant as they were	the last opportunity to discover the error before
the weapons left N	, .	

Conclusion

- (U) The Handling team removed GZ203 and GZ377 from their respective shelters and towed them to the flightline without verifying the payload of either pylon. This failure to verify the payload of GZ203 is even more inexplicable in light of the fact that the pylon was missing the standard placard with a 8 ½ x 11 "TAC FERRY PACKAGE" sign. No team member noticed that GZ203 was missing the standard "TAC FERRY PACKAGE" signs even though GZ377 was correctly placard. Their failures as a team and as individuals are the root cause of the unauthorized transfer of nuclear warheads.
- (U) Despite being responsible for the monitoring the movement of these pylons, the munitions control center failed to verify their status. If the senior controller had accessed the software-tracking program (MUNSCON) to verify its status, he would have known instantly GZ203 was carrying nuclear warheads before the pylon had been uploaded onto the B-52.
- (U) The last line of defense failed when the aircrew, and more specifically the Radar Navigator, failed to follow technical order procedures. If the Radar Navigator had completed checklist, the individual would have discovered the six warheads loaded onto the B-52 aircraft and prevented their flight across the United States.

Phase II - Scheduling to Dispatch

Background

(U) The 5th Munitions Squadron Special Weapons Maintenance (SWM) Flight is organized into multiple work centers: Weapons Handling, Weapons Maintenance, Re-entry Vehicle Maintenance, Missile Maintenance, Verification and Checkout Equipment Maintenance, and Flight Support sections. Each section is responsible for a specific portion of the flight maintenance mission. For example, Weapons handling transports weapons/missiles from storage to the maintenance facility. The weapons/missiles are then handed to weapons maintenance who disassembles the entire package. From there missiles without warheads are transferred to missile

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maintenance and the warheads, pylons and ejectors are maintained by weapons maintenance. After several days, all the components are then assembled back into a packaged pylon by weapons maintenance and then transported by weapons handling back to storage.

,	(C/FPD)	AF (b)(3)	
		AF (b)(3)	(b)(3) DOE
	coordinated sched	their schedule even and stable throughout the 24 ule had 2 BW ALCM pylons paired with 5 BW Annue dates closely aligned. (Tab F16, p. 3-4; Ta	ACM pylons to ensure
•		(b)(1) ACC	

- (U) The 5th Munitions Squadron's maintenance schedule is a coordinated document that ties all work centers together. The scheduling process begins when each work center (with the key exception of Weapons Handling) forwards its maintenance requirements to the Missile Analysis section in Special Weapons Maintenance Flight. Analysis then compiles the work center inputs as well as other maintenance requirements and forwards the inputs to 5th Maintenance Operations Squadron (5 MOS) Plans and Scheduling (P&S). (Tab F40, p. 2; Tab F1, p. 2; Tab G15)
- (U) On Wednesdays, the Special Weapons Maintenance Flight holds a scheduling meeting chaired by the Production Superintendent. This meeting is attended by each of the element NCOICs and a 5 MOS P&S scheduler. P&S displays a draft schedule, derived from the inputs forwarded earlier by Analysis, on PowerPoint slides and takes notes on any changes made by the section chiefs during the meeting. (Tab G26A) These notes and changes are then used to create an updated set of slides reflecting the maintenance schedule and job breakout. (Tab G26) The job breakout is a listing of specific tasks to be performed along with their Job Control Number (JCN), and is often more detailed than the slides. (Tab G26; Tab F40, p.2; Tab F1, p.2)
- (U) On Thursday morning the flight commanders meet with the Munitions Operations Officer (MOO) and P&S for the squadron scheduling meeting. Only the updated P&S PowerPoint slides are briefed and not the accompanying job breakout. At the end of the meeting, the MOO and each flight representative sign a schedule cover sheet reflecting their approval of the schedule. It is important to note the complete schedule is not briefed or reviewed by the flight chiefs, squadron superintendent, and the MOO. (Tab F12, p.2; Tab F51, p.2)
- (U) The Special Weapons Maintenance Flight Production Superintendent chairs the Tuesday and Friday Special Weapons Maintenance (SWM) Flight production meetings. The Tuesday meeting evaluates current production against the schedule. The Friday meeting centers on the current week wrap-up and looks ahead to the following week's operations. These production meetings are used as a venue for the different flight sections to exchange information pertaining

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to the maintenance schedule. All Special Weapons Maintenance Flight section NCOICs attends these meetings unless a representative is sent, due to their absence. The Production Superintendent polls each representative for input and then writes their input on the white board in the SWM supervision office. According to the Production Superintendent, none of the section representatives bring schedules to these meetings; instead they take notes in order to take the information back to their respective sections. (Tab F16, p.4-5)

(U) The Maintenance Operations Officer (MOO) receives a daily status briefing from Munitions Control personnel. The briefing consists of slides with information obtained from each flight within the squadron. (Tab G12, p.1-4) The purpose of the briefing is to give the Muns Ops Officer a snapshot of the maintenance occurring in the squadron at that moment in time. It provides no summary of the work completed or scheduled to be done and does not highlight bottlenecks or delays in maintenance production. The briefing captures current maintenance but is ineffective as a tool for the Muns Ops Officer to track maintenance productivity. (Tab G12, p.1-4)

Facts

(U) Starting in mid July,	(b)(6) ACC	section of the
Integrated Maintenance Facility	(IMF), began sending b)(6) ACQ in hi	is place to the Wednesday
scheduling meetings. (Tab F1,	p.2) At these meetings (b)(6) ACC sim	ply took notes and made
changes based on what was disc	ussed at the meeting and on the gui	idance given by (b)(6) ACC
(b)(6) ACC	rarely attended the scheduling	meeting and (b)(6) ACC
(b)(6) ACC was out of th	e area for much of that month. At t	the same time (b)(6) ACC who
had been in place for over two y	ears, put in his paperwork to retire	and was beginning to train a
new production superintendent.	Testimony indicates the section NO	COICs did not bring the
	but rather took notes on what was	
following week. (Tab F1, p. 2;		J
	(b)(1) ACC, (b)(3) DOE	
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(U) On 15 August, the SWM Flight held its weekly scheduling meeting to develop the 20-26 Aug schedule. (b)(6) ACC], the acting production superintendent, led the meeting. (b)(6) ACC] NCOIC of Weapons Maintenance, was not in attendance. (b)(6) ACC] as sasistant, (b)(6) ACC] as placed on swing shift (see Tab F34, p. 2; Tab G6 for his failure to update payload schedule). (b)(6) ACC] directed (b)(6) ACC] to represent him but gave her no direction. (Tab F1, p. 2) On 16 August, the 5th Munitions Squadron held its scheduling meeting. Both GZ203 and GZ377 were reflected on the slide with the task: "Upload Package." No one caught the error on the slide; (b)(6) ACC] and flight representatives signed the schedule cover sheet. (Tab F12, p. 2) (U) Sometime after the schedule cover sheet was signed, Weapons Maintenance leadership directed missile analysis to change the schedule and replace GZ203 with GZ358. The preponderance of the evidence shows (b)(6) ACC] was the one who gave the direction and there is no documentation or approval of the schedule change. Schedulers updated the "Job Breakout" (Tab G28) but not the slides. (Tab G29)
(b)(1) ACC
(U) At the Tuesday, 21 August production meeting, GZ358 and GZ377 were discussed and the SWM log confirms that GZ358 and GZ377 were in the IMF. Although the 60(6) ACC attended, he didn't know what was in the schedule. He had not been at the scheduling meeting the week prior and did not bring any schedule to the meeting. (Tab G14, p. 5; Tab F1, p. 2)
(U) On 22 August, the 27 Aug-2 Sep schedule was developed by SWM Flight. (Tab G28) GZ203 and GZ377 were on the scheduling slides as the pylons that would be transported to the flightline for Tac Ferry. (Tab G29, p. 4) However, no one noticed that GZ203 had not been prepared for Tac Ferry and that GZ358 had been prepared instead. (Tab G16, p. 13) The Munitions Ops Officer signed the schedule cover page approving the scheduling slides. Additionally, the "job breakout" had no tasks for Weapons Handling to move any pylons. (Tab G28, p.6) This is a routine process for 5 th Munitions Squadron.
(U) The last production meeting of the week was held on Thursday, 23 Aug because Friday was a Utilization (UTE) down day. The meeting was rushed because there was a scheduled power outage in the IMF and supervisors wanted to finish before it occurred. At this meeting the following week's maintenance actions were reviewed. The slides depicted GZ203 and GZ377 were to be Tac-Ferried the following week. (Tab G29, p. 4) The

	(b)(6) ACC took notes at the meeting and wrote down GZ203 and GZ377 as the ones to move. (Tab G5. p. 4) (D)(6) ACC then transcribed his notes to a whiteboard in Weapons Handling and listed
	GZ203 and GZ377 as moving on 29 Aug. (Tab G8, p. 1-2) He also briefed (b)(6) ACC , and
	(b)(6) ACC (Tab F5, p. 2) The ineffective production meeting procedures and lack of supervision
	of the scheduling process led directly to this error. (Tab F16, p. 5)
	(U) The following week on 27 August, the new (b)(6) ACC took leave and a substitute (b)(6) ACC took over. However, (b)(6) ACC had not attended the previous week's meeting. Additionally, (b)(6) ACC (Missile Analysis) was preoccupied with other duties and (b)(6) ACC (Missile Analysis) (b)(6) ACC (Tab F1, p. 2; Tab F14, p. 2; Tab F18, p. 2)
	(U) TSgt I., 5th Munitions Squadron Weapons Handling Assistant Noncommissioned Officer-in-Charge, failed to determine the proper pylons to transport to the flightline to support the Tac Ferry mission. (Tab F5, p. 2; Tab G2, p. 1-4) (see also, AFI 21-204, Nuclear Weapons Maintenance Procedures, Paragraph 1.4.7.3)
	(U) Based upon Quality Assurance reports dating back to 1 January 2007, a review of personnel records of Weapons Handling personnel, and most notably verbal testimony, it was quite apparent that the section was in a state of disrepair during his tenure. Verbal testimony indicates that (b)(6) ACQ was an ineffective leader who routinely chastised his personnel. (Tab F28, p. 2; Tab F51, p. 2-3) His subordinates frequently worked through lunch to complete scheduled activities but were not compensated in any way. Rather, he would keep them beyond normal work hours in an effort to assert his dominance as shop chief. He created a hostile working environment. While his subordinates worked well together, they clearly felt that they couldn't turn to b)(6) ACQ for help and advice. (Tab F28, p. 2)
(b)	(U) Another missed opportunity to prevent this transfer occurred when b(6) ACC failed to ensure his section produced an accurate schedule and track work order progress in the Weapons Maintenance section. (Tab G15) This failure allowed GZ203 to stay on the schedule for Tac rry delivery, when in fact it had never been in the maintenance bay for Tac Ferry prep. b(6) ACC (6) ACC (6) ACC (6) ACC (7)
	(U) (b)(6) ACC was the (b)(6) ACC and failed to verify the proper maintenance was being performed. (Tab F23, p. 2) Had he ensured the maintenance actions were completed, he would have seen GZ203 had never been in the maintenance bay for Tac Ferry prep; even though it was scheduled for delivery to the flightline. This oversight allowed GZ203 to remain on the schedule for delivery to the aircraft.
	Analysis

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- (U) We now know that the catalyst for this failure began in the scheduling process. It further broke down because the supervisors; predominantly the NCOs and SNCOs, did no do their job. They were the propellant that accelerated the wing's failure to meticulously track daily scheduled maintenance events. They did not account for key actions that would have prepared the pylons for air shipment. I would simply summarize their failure as too much trust and no verification. That is the key distinction in this phase of the investigation.
- (U) The Munitions Squadron supervision did not pay close attention to the schedule components. From the scheduling meetings to the actual work performed, they all assumed the other was doing their job. The irony is none of them used the weekly maintenance schedule as the overarching source document to track weekly maintenance events. This was all supposedly done in the bi-weekly work production meetings...another failure point.

(U) Furthermore, it is clear that officers process. In general, the munitions squad predominantly leave the daily activities cleadership. Only the (b)(6)ACC leadership did not know how loose and consumptions of others. What's worse the	dron chain of command is foct completely in the hands of the lis "muddy boots." 5 th disconnected maintenance pro	used upwards. They c Chiefs and enlisted Munitions Squadron's oduction relied on
assumptions of others. What's worse, they failed to watch the schedule. That's how the nuclear-loaded pylon was never prepared for tactical ferry. In fact, another pylon had been prepared for tactical ferry.		
(U)	(b)(3) DOE	
	AF (b)(3	<u>s) </u>
San As a regult. I had the original pule	AF (b)(3)	-lan that the true bases
AF (b)(3) As a result, I had the original pylo oratively built for executing the py		AF (b)(3) Both
wings have carried out the directed chan		
AF (b)(3)	·	mally driven, not a result of
a change in venue. The munitions squadron produced a weekly maintenance scheduleno one followed it.		
(U) The production meetings were a loose knit confederation of shop chiefs who did not bring key documents or a "bird's eye" view of what work was and had to be accomplished; they relied on memory. AF (b)(3)		
	AF (b)(3)	
	(b)(1) mosaic ACC	

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(U) The munitions control center that is responsible for 'monitoring' the movement of these pylons did not verify the status of the pylons that were moved. They too did not use any written schedule to confirm that day's activities. Also, they had a software-tracking program (MUNSCON) that could have easily told the controller on duty that the pylons were prepared for tactical ferry with nuclear-inert payloads or still loaded with nuclear warheads. The software still shows the pylon that was flown to Barksdale AFB has nuclear warheads installed in each missile.

Conclusion

- (U) GZ203 and GZ377 were on the schedule for an "Upload Package" job profile. (Tab G26A, p. 5) A job profile is a standardized group of tasks. This profile does not contain all required tasks for Tac Ferry preparation. The "Tac Ferry Prep" job profile was actually needed in this case. This caused P&S to schedule the wrong job profile.

Phase III - Supervision to Leadership

- (U) In hindsight, one witness described this event as the "perfect storm." (Tab F5) The NCO regrets that this could have been avoided. Little did the individual know the warning systems that could have prevented the unauthorized transfer of nuclear warheads from Minot AFB to Barksdale AFB had been turned off, ignored or never designed by the two air wing's supervision and leadership. In fact, this incident was caused by a breakdown in training, discipline, supervision and leadership. Beyond the nuclear procedures that were to be followed in the Weapons Storage Area, the program was treated as if this was a nuclear-inert movement. AF (b)(3)
- (U) The Air Force has valid nuclear procedures. There is erosion which led to this incident.
- (U) The chain reaction supposedly started at Minot actually started at Barksdale. There were two (2) warning systems that failed, faltered or frustrated the key personnel responsible for assuring nuclear weapons security--Minot's maintenance scheduling-to-dispatch processes and Barksdale's operational focus. Both were lost upon supervision and leadership.

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(U) Minot's 5th Bomb Wing has a very strong operational "warning system." Its crew force would have prevented the inadvertent flight of nuclear weapons. However, their maintenance scheduling faltered due to a lack of leadership and supervision.

(U) Holistically, Minot AFB had thoroughly prepared for the tactical ferry program from maintenance to operations. Testimony and detailed records show the 5th Bomb Wing's leadership took it very seriously. They responded with alacrity from the planning stages throug the execution of the missile reposturing program. The missile rebasing plan they built in collaboration with Barksdale's 2d Munitions Squadron did not change appreciably from the original plan. (Tab G4)			
	AF (b)(3)		
	(b)(1) ACC & (b)(3) DOE		
(U) [AF (b)(3)		
AF (b)(3)	AF (b)(3)		

(ACM). In military nomenclature the ACM is an AGM-129A. The catalyst for this failure began in the scheduling process. It further broke down because the supervisors; predominantly the NCOs and SNCOs, did not do their job. They did not account for key actions that would have prepared the pylons for air shipment on 30 August. Collective testimony shows a series of personnel changes or absences of leadership throughout July and August. Except for one Technical Sergeant put in charge of Special Weapons Handling (those that move pylon packages) most of those put in charge of the scheduling or superintendent positions were too new or incapable of doing their jobs. They trusted each other, but never verified the information they received.

(U) Literally...from the Munitions Squadron Commander to the NCOIC and assistant NCOICs of each shop in the Special Weapons Flight; from the scheduling meetings to the actual work performed...they all assumed the other was doing their job. Ironically, none of them used the printed weekly-maintenance schedule as the overarching document to track weekly maintenance events. Again, every witness testified they came to the Special Weapons Flight meetings with blank notebooks. They relied on a set of slides produced by a very young Plans & Scheduling Airman (Amn W.) to guide their discussion for the Tuesday and Friday production meetings, and

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CECDET//FDD/4

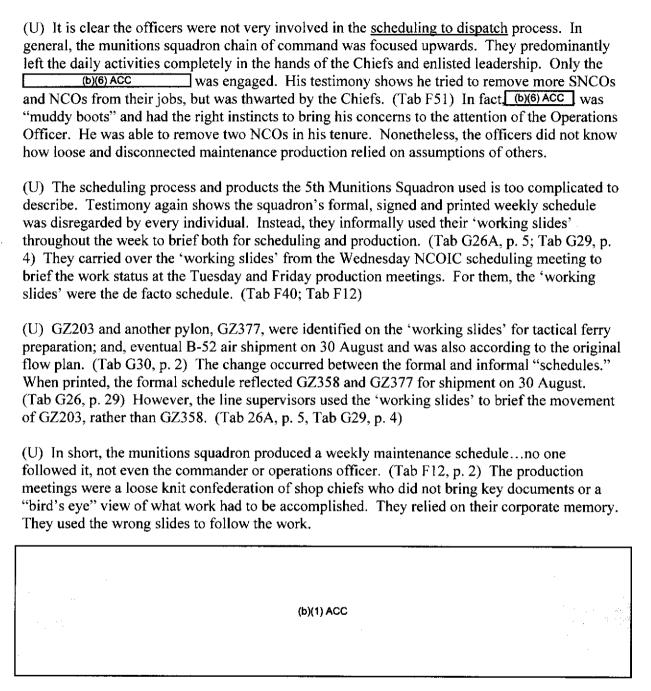
the Wednesday scheduling meeting. (Tab F40, G26A, p.5; G29, p. 4) This is where a failure occurred. Someone changed the schedule, but did not fully brief the others. The information was carried onto other slides, but not accurately carried to the printed maintenance schedule. (Tab G26, p.29) The squadron commander, operations officer and chiefs were not given sound information from the "shop chiefs."

	group and wing leaders; there were t	
munitions squadron who really knew	w what was occurring on a daily basis	s with regards to nuclear
munitions maintenancea	(b)(6) ACC	
(b)(6) ACQ (Tab F23) and a	(b)(6) ACC	who had strong
knowledge of what pylons were bei	ng or had been worked on. (Tab F15) They actually could
have prevented this incident had the	y known what was transpiring.	
the final weeks. His testimony show the job. Yes, he had surfaced that we production superintendent replacemer reaction because he intimately under of effort and attended all the meeting he was very good at it. Again, his to reproach. He had worked diligently hand over the "keys to the car" to his	is called, did not attend the most impose he was uncomfortable with his report he leadership, but no action was takent. The 6060 ACC would have restood the flow plan, had given strict ges that kept the proper work flowing estimony shows his level of competer to train his replacement. Yet, he knows replacement. (Tab F23) The 600 and 100 and	placement's ability to do en to find a suitable stopped this chain guidance on the priority. This was his job and note to be above ew he eventually had to (b)(6) ACC
Her NCOIC attends the meetings and chain of events. When the assistant "bay chief" to confirm what pylons countermanded the ANCOIC when loading. She was adamant GZ203 v. The ANCOIC of the towing team list team chief. Unfortunately, he was it their scheduling board was correct; (Tab F5) According to the bay chief.	endent, the (b)(6) ACC doesn't ad passes any changes. However, her NCOIC of the Special Weapons Har were moving the morning of 29 Aug he indicated they were retrieving GZ was never prepared for tactical ferry stened to her earnest plea and subsequented to her back. The wrown wrongly identified GZ203 for shipmented to her back.	role is significant in the adling section called the she immediately 203 for tactical ferry chipment. (Tab F15) wently called the towdual the information on ed from Shelter 1854.
	ence shows the NCOIC of ged the order of the shipment from Gomponents on another pylon and that (b)(1) mosaic ACC	
GZ358 was ready for shipment had	that GZ358 had been prepared for tac never been carried through the sched e. The NCOIC of Weapons Maintena	uling products or

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making the change and not communicating it to others.

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(U) When the crews accessed and towed GZ377 from Shelter 1857, GZ203 from Shelter 1854 they were supposedly monitored by the Munitions Control Center. Neither the NCOIC nor the controller on duty used any written schedule to confirm that day's activities. Also, they had at their disposal a software-tracking program (MUNSCON) which would have immediately notified the controller on duty if one of the pylons the crew were moving was still loaded with nuclear warheads; the other without. The supervisor and controller never verified the status of

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either pylon throughout the movement process. MUNSCON would have told them had they used it as they have been taught and directed.

- (U) Operationally, the 5 BW had assigned the right planning officer. He is a nuclear-experienced [fb/(6)/ACC] and he is also a ____(b)(6)/ACC] He authored, facilitated and orchestrated an incredible program for the entire B-52 community. (Tab G20, p. 1-10) For the aircrews, he designed three key products.
- (U) The 5 BW tactical ferry plan was sound. It gave the aircrews and leadership the right focus. The plan was well written, coordinated and sent to Air Combat Command headquarters and their sister wing. There were three major products that formed the bulwark of stability for the B-52 crews. First, he fashioned a training course for all crews to receive academic and simulator training. He knew ferrying missiles aboard a B-52 was extraordinary for the younger crew force. This training course even covered the nuances of how to check each missile and verify the various nuclear-inert or nuclear-training payloads were installed. Second, he authored a pretakeoff briefing. It treats the ferry flight as a higher-headquarters directed mission. It sets the tone for both the crew and their leadership. Third, he accomplished what he was tasked to do...provide an Operational Risk Management assessment of the wing's personal program and submit it to Air Combat Command. He shared all three products equally with Barksdale AFB.
- (U) Minot's Wing Commander and Maintenance Group Commander have been in command since June 2007. They were just beginning to gain insights as to the quality of their respective organizations. They both participated in the early August GLOBAL THUNDER exercise. This is a STRATCOM-directed nuclear exercise. This was their first opportunity to see the nuclear generation cycle and assess the wing and group's performance. Both had visited the Weapon Storage Area during their immersion program as new commanders. Nothing remarkable stands out in their leadership performance. The Maintenance Group Commander was in the process of pushing for more munitions products in the wing's schedule. Finally, they treated the tactical ferry program with interest, but nothing remarkable from the daily schedule. They were well aware of the foundation of the program between the wings to include the close ties between the 5th Munitions Squadron and the 2d Munitions Squadron to build a meticulous flow plan for transferring Air Launched and Advanced Cruise Missiles. The mechanics of the program were sound.
- (U) Barksdale AFB's 2nd Bomb Wing (2 BW) has a strong <u>maintenance</u> "warning system." Their maintenance complex would have readily caught the same scheduling error. Conversely, their air crews were not properly prepared to fly this very important mission. They are competent to fly pylon loads of munitions, but their nuclear experience is lacking. The supervision and leadership in the Operations Group had developed a tactical ferry program which was lacking or lackluster. This was evident in the minimum crew composition they assigned to fly the mission.
- (U) The reality is the 2 BW has a very strong maintenance-scheduling process. The 2nd Maintenance Group Commander assures that it is a model for planning, scheduling and accomplishing the full line of aircraft and munitions maintenance actions. (Tab G13) Line workers, supervisors and leaders use a common schedule by which they accomplish their weekly

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activities. In all, they have well-trained, disciplined maintainers from the supervisors to the top leader. They have a focus of purpose using a common scheduling process. On balance, they

would have easily caught a scheduling the leadership, supervision and scheduling bombers to nuclear capability.	ng error. Their warning system is i	intact. However, beyond
	(b)(1) ACC	
three years to nearly conventional-or	The Advanced Cru	n by design. (b)(3) DOE ise Missiles from Minot
and the remaining Air Launched Crudemilitarization, destruction or depa		
(U) However, on the operations gro conventional weaponry at all levels of generate, but they will rely on key por rely on existing, precisely written che exercised. They are atrophied. It was member we interviewed. When refe Maintenance input that only requires	of leadership to the core training for ersonnel to carry them through a water lecklists. To emphasize, the nucleat as evident in the testimony of every erring to the tactical ferry program to	ocus. They are prepared to ar-preparation exercise or ar skill sets have not been y operations group they believe it is a, "Depot

(U)

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from point A to point B!" That is a quote. They have treated the program in the generalist sense.

CECDET//CDD//MD

		AF (b)(3)		· 	
In their view	, and the	views the B-52 aircrew witness	es, they	v've flown	heavier loads of

bombs and missiles in war.

- (U) Very few admit they saw the COMACC-directed Repositioning Order (REPORD) that came through formal message traffic. (Tab G17, p. 1-4) Rather, the tactical-ferry program preparation was given to a check pilot. The GNG/ACC built a three-ring binder of guidance with a pilot's eye on safety of flight. The book was never coordinated within the wing nor fully vetted with operations squadron, group or wing leadership. In fact, some guidance in the book, which was primarily written for aircraft commander consumption, was unattainable. The book was resident in the standardization, evaluation office. From what we can ascertain, the crews did review the flight parameters with their deputy group or group commander the day prior to the sortie...that was a well followed provision. However, that's not because it was directive in nature. It was understood the leadership wanted oversight of each crew's readiness for this mission. There was no formal presentation, just make contact.
- (U) We asked for a simulator with a Formal Training Unit instructor cadre to review nuclear checklist procedures and "switchology" to fully understand basic nuclear, tactical-ferry and emergency (weapon, pylon) jettison procedures. The "school house" instructors did a magnificent job. They also revealed the initial B-52 training course they teach has, over time, reduced the nuclear syllabus in lieu of accomplishing conventional preparation. For example, the one academic block of instruction for nuclear operations is planned for 3-hours. It is not taught in a classroom; rather, it is a computer-based course. Also, the one flight devoted to nuclear procedures has devolved to a simulator 'ride'. There is a catch. They believe nuclear training is really taught after a B-52 crew graduates from the school house. It is in the formal school house which some of the discipline of performing a full preflight of every weapon is lost upon the crews. It has carried over into the squadrons where actual testimony of pilots and navigators reveals that some implicitly believe the checklist calls for "spot checking" or partially checking or fully checking the weapons. To many, "It depends." The assumption is the navigators are taught up front to accomplish a thorough preflight, weapon by weapon. Not true. The pervasive assumption has trickled into their nuclear training. Leadership failed to identify this issue of "spot checking" weapons as a problem that needed a solution.
- (U) During the mission qualification phase in the bomber squadron, the crew is scheduled for indepth nuclear academics in the wing's nuclear "vault". The "vault" is a secure war-planning section in the wing's operational support squadron. It is here the crew is taught or exposed to basic nuclear weapons design, how to decode documents and generate a nuclear bomber to meet STRATCOM's war plans. This training takes about two weeks. It is assumed in this phase the crews have been taught in general, in the school house, how to preflight weapons. The vault personnel do take the crews out to the weapons-load trainer to see nuclear-training munitions. They generally do not touch the real thing, just mock training missiles. This is where the crews have lost some of the ability to properly preflight a missile. This is also where the streams of assumption have crossed. Final testimonial note...the Barksdale AFB aircrew that flew the Advanced Cruise Missiles from Minot AFB have never physically touched a real missile...their

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fingers have never put an imprint on an actual advanced or air launched missile...neither the experienced instructor pilot, radar navigator or inexperienced copilot.

- (U) The resultant has been a further erosion of the nuclear skill sets at this base particularly. Barksdale holds the keys to every aspect of B-52 training. It is evident in the "school house" where B-52 crews learn the fundamentals to the ultimate weapons school where the PhD's of the B-52 are taught to be experts in both conventional and (supposedly) nuclear weapons, tactics and procedures. The nuclear academia has eroded. They are conventional only. The B-52 Weapons Instructor Course does not teach its premier "weaponeers" the fundamentals of their nuclear trade craft. In testimony, we asked every single Weapon School graduate from colonel to captain about their training at Barksdale and Nellis AFB...the older graduates distinctly remember training on nuclear weapons, no differently than conventional weapons. The most recent Distinguished Graduate from weapon school, the instructor pilot on 'Doom 99' which transported the nuclear warheads aboard her B-52, did not receive specific nuclear weapons instruction in Class 07-A. Again, she admitted she had never physically touched a nuclear weapon. There are deeply rooted changes in training which have evolved over the years. The Air Force and Air Combat Command will need to further study the training syllabi in a more comprehensive study. The calculus has changed; the contrast is evident.
- (U) There is a contrast between the two B-52 wings.
- (U) Barksdale AFB 2 BW's scheduling processes are very sharp, especially in the maintenance complex. The Operations and Maintenance Group leadership regularly meets to 'level the bubbles' and untie any Gordian Knots. It's commendable. Combined, the maintenance leadership, scheduling processes and wing commander oversight would have invariably caught the scheduling anomalies that caused this incident to occur at Minot. The operations leadership never caught the two unqualified, non-combat mission ready for nuclear (CMR-N) crew members. In fact, they had disregarded the requirement in the REPORD to be basic-mission or combat-mission ready in nuclear procedures to conduct tactical ferry operations. This is true even though T6X6) ACC admits that he did read the message and had expressed his concern that the CMR-N requirement was too restrictive. He had been the (b)(6) ACC (b)(6) ACC I at which time he had stepped in as the (b)(6) ACC pending the (b)(6) ACC After expressing his concern about the CMR-N requirement to arrival of the his staff, he failed to ensure compliance with the REPORD or to forward his concern to ACC.
- (U) The IP on Doom 99 was not CMR-N; a requirement for this mission. (Tab F19, p. 2; Tab G17, p. 3) We have found another 2 BW aircrew member flew without nuclear qualification. To repeat, the operational chain of command never read or followed the COMACC REPORD message nor was aware of the guidance in the tactical ferry book. The thin margin of nuclear emphasis on the 2 BW operational side would not and did not, in our view, give rise to any ability to catch a mistake at the aircraft in the tactical ferry program...that's why the Barksdale crew missed the nuclear-loaded pylon.
- (U) The 2 BW has unwittingly abrogated its nuclear imperative. Except for two senior O-6 leaders, the wing by in large is incapable of performing the nuclear mission it is assigned. Future inspections will have to bear that out. The second-order effect is worse. Because the wing is

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responsible for the entire training spectrum, this de-emphasis is now permeated within at least the younger, emerging B-52 crew force.

- (U) The chain reaction which started at Minot actually started at Barksdale; if anything, it ended with a Barksdale B-52 crew. More than ever, the complete picture shows there was a breakdown in <u>discipline</u>, <u>supervision</u> and <u>leadership</u>. The fourth ingredient that has eroded is <u>training</u>.
- (U) In sum, two fault waves occurred and caused this "perfect storm." There was no visible warning of this coming. It occurred at the wing level and below.

We have thoroughly investigated upwards the entire chain of command from the Air Force-level direction to Air Combat Command Commander's order to reposition the missiles to the 8th Air Force Commander responsible in his capacity as Task Force 204 Commander. TF 204 is STRATCOM's assigned nuclear bomber and reconnaissance task force. The 5th Bomb Wing's maintenance personnel and 2nd Bomb Wing's aircrew who facilitated the unauthorized transfer of nuclear warheads from Minot AFB to Barksdale AFB are clearly at fault and should be held accountable by their commanders.

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Tab E

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Tab E: Recommendations

DoD

(U) I have one overarching recommendation. The Air Force should request a comprehensive inter-agency study of nuclear standards outlined in top level, current guidance (DTRA, DOE, OSD, STRATCOM) and compare those standards to the respective force provider's standards (USAF, USN). Though there was a clear failure to secure and prevent an unauthorized transfer of nuclear warheads, it would be mutually beneficial for others to assist us in reviewing any seams in the nuclear standards.

Air Force

- (U) (CTRE) Suspend any further B-52 tactical ferry operations for this remaining Air Launched Cruise Missile and Advanced Cruise Missile reposturing program; unless movements are directed by the CDR USTRATCOM for operational requirements and further approved by SECDEF.
 - (U) Initiate a thorough review of tactical ferry options to assure each respective MAJCOM (i.e., ACC, AFSPC, AMC, USAFE, etc.) adheres to one rigid standard of training and execution similar to the Primary Nuclear Airlift Program (PNAF).

(b)(1) ACC

- (U) Direct all nuclear units to separate nuclear from nuclear-training, nuclear-testing and nuclear-inert payloads. If able, put them in separate shelters. Separate shelters would diminish the same human error that caused this incident. If unable to separately shelter, then establish clear guidance to mark, delineate and separate the dissimilar payloads. Regardless, treat all shelters with the same nuclear surety, safety and reliability procedures. Leave nothing to chance. Maintain the same nuclear shelter protection of sealing doors and completely blocking the doors from floor to ceiling with Massive Modular Blocks; per existing procedures.
 - (U) AFI 91-101, Air Force Nuclear Weapons Surety Program, does not permit the storage of conventional and nuclear ordnance in the same shelter. That's why Conventional Air Launched Cruise Missiles (CALCM) can not be sheltered with ALCMs.
 - (U) There is no CJCS guidance that we are aware of that addresses the storage of nuclear weapons. CJCSI 3150.04, Nuclear Weapons Stockpile Logistics Management and

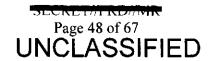
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Nuclear Weapons Reports Under the Joint Reporting Structure, is not restrictive regarding how services store nuclear or nuclear-inert munitions.

- (U) The Air Force permits mixed storage on nuclear and nuclear-inert weapons. This
 was even done in Strategic Air Command days. SAC regularly mixed loads in storage in
 preparation for testing, training and tactical ferry missions. Previously, SAC regulations
 and now AFI 21-204 does permit mixed storage as long as the unit "delineates" the
 separate loads.
- (U) Change AFI 21-204, Nuclear Weapons Maintenance Procedures, which guide our units on the procedures for labeling or delineating nuclear-inert loads; in this case, tactical ferry packages. The instruction directs in paragraph 4.1.2 to, "Identify non-operational weapons (i.e., placard or rope-off) to prevent inadvertent use...make identification readily visible and do not remove until status is changed..." The procedures identifying (i.e., 'placarding') a nuclear-inert load should be the same. Likewise, change AFI 91-111, Safety Rules for US Strategic Bomber Aircraft. Chapter 6 on "Nuclear Identification" is equally vague. It directs units to, "Develop procedures to...distinguish nuclear bombs from test or training shapes...identify containers that contain nuclear warheads."
 - (U) It was readily apparent that the wing's interpretation led to a simple set of 8 ½ X 11 inch pieces of paper taped on the side of the pylon. The paper signs indicated "TAC FERRY PACKAGE" or "TAC FERRY LOAD."
 - (U) They were never consistent as to placement on the pylon, the number of paper placards or procedures for who should and should not remove them prior to flight. In essence, there wasn't a "REMOVE BEFORE FLIGHT" red streamer or well designed placard that showed this to be a tactical-ferry prepared load.
 - (U) Adopt a single placard that "shouts" to all personnel...and, not easily removed without a work order.

(b)(1) ACC

- (U) Perhaps, an automated tracking system for the future might be beneficial. If for anything, it can act as a real-time GPS tracking tool for leadership at all levels.
- (U) Review, then change our manuals and checklists to precisely tell each crew how to verify every item on the "Bill of Lading" and confirm that the "Bill of Lading" matches the load.



(b)(1) ACC	
	·
• (U) Ironically, there is an AF FORM 504, Weapons Custody Transfe (Aircraft) that is available on the AF FORM web site. It is a 1978 fo	
• (U) The AF FORM 504 is not used that we are aware of. This shoul same standard as the AF FORM 514, or adopt the 514 as the transfer nuclear transfers.	
(U) Establish a Blue-Ribbon panel to review all nuclear training procedures should be comprehensive and done in coordination with DoD, COCOM and if necessary. It should focus on the full spectrum of nuclear procedures from maintenance.	inter-agency support
• (U) For example, aircrews generally do not have a firm grasp of their equally as they do their conventional munitions. The USAF Weapon appears not to emphasize nuclear weapons. Weapons School graduate first line of defensethe ones who should teach nuclear weapons and fighter, bomber and missile crews. Testimony of the B-52 crew revenever physically touched or been near a real nuclear weapon except for They had never touched an ACM or ALCM. Beyond a curricular evitake a very hard look at the training approach starting at the centers of proceed through our formal training units.	tes should be the d tactics to their aled that they had for generations.
(b)(1) ACC, (b)(3) DOE	
(U) Any review may require the AF/IG and AF/SE for oversight.	
(b)(1) ACC	

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(b)(1) ACC

- (U) Regardless, from "boom" to ballast payloads, the nuclear handling procedures should be the same for training testing and actual operations.
- (U) Treat everything nuclear with the same <u>nuclear</u> surety, safety and reliability. In short, train the way we fight.
- (U) Consider re-implementing a no-notice Nuclear Surety Inspection regime that triumphs the Air Force's focus on 24/7/365 nuclear preparedness posture. This is a tough measure in our current environment.
 - (U) Therefore, review the scope, scale and duration of Nuclear Surety Inspections and Nuclear Operational Readiness Inspections.
 - (U) Most units adequately prepare and stand poised when the NSI or NORI team arrives. They have trained the "A Team" to meet the inspectors and the "B Team" to be in the shadows when possible. All nuclear qualified and certified personnel from the youngest Airman to the Wing Commander ought to be subject to a no-notice inspection.

Command and Control Procedures

- (U) Initiate a review of Air Force guidance on installation-level nuclear command and control procedures from scheduling monthly, weekly to daily maintenance (and operations) requirements to the actual oversight for accomplishing those requirements. So far, the Air Force and DoD instructions governing command and control of nuclear weapons appear to properly guide the unit. However, we found both Minot and Barksdale AFBs adopted their own techniques and in some cases, procedures for executing the instructions. The Air Force does not have a standard command and control procedure for nuclear operations within the Weapon Storage Areas.
 - (U) Specify control procedures for Nuclear Munitions scheduling in AFI 21-204. Detail how the squadron munitions schedule will be developed and approved.
 - (U) Specify a rigid process for changing the schedule, make it similar to the change process used for the wing flying schedule (AFI 21-165) and require the munitions squadron commander and the maintenance group commander to approve changes.
 - (U) Use <u>one</u> document, to create and manage the maintenance schedule. The schedule should include <u>every</u> maintenance task and JCN on the spreadsheet (use different tabs for schedule, spare missiles, training, etc.).
 - (U) Establish security controls in the scheduling process to limit those with authority to make changes. This preserves the integrity of the information and ensures Missile Analysis Section is the focal point of information within the Special Weapons Maintenance Flight.

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- (U) Require the nuclear munitions maintenance schedule be part of the wing maintenance and operations plan and to be briefed to the wing commander in the same detail as the flying schedule.
- (U) Track Munitions scheduling deviations and brief them to the squadron commander and group commander weekly.
- (U) Specify the minimum requirements for daily munitions production meetings. Show
 work scheduled, work complete, and any production delays. Develop minimum
 requirements for daily munitions updates and detail minimum items that must be
 reviewed daily by the Munitions Operations Officer and Munitions Squadron
 Superintendent.
- (U) Require a "Geiger-counter" or similar radiation-detection checks on any missile being transported out of the Weapons Storage Area.

Leadership Training

- (U) Our future senior wing leaders are less inclined to have nuclear experience. They need help. From the squadron to wing commanders, there is a contrived view of how nuclear operations need to be executed. In some cases, wing leadership disregarded the importance of conducting regularly scheduled nuclear exercises and other preparation for their nuclear commitments. I propose for consideration a way of re-capturing the mission focus starting with the leadership.
- (U) I recommend that commanders at all levels attend a joint-oriented, nuclear-certified course for those in the direct chain of nuclear weapons operations; regardless of whether they are directly or indirectly responsible for an operational nuclear stockpile. Unlike Admiral Hyman Rickover's nuclear submarine force, where "boomers" had the legend of technical prowess, the Air Force needs to simply ingrain the fundamentals in our force, their leaders and their training.
- (U) Leaders need mentors. Therefore, I would recommend the establishment of a senior-mentor program that provides direct training to those put in the position of responsibility of our nuclear operations....fighter, bomber, ICBM and space. These "grey-beards" should be a part of the joint nuclear training course.
 - (U) Recommend that the Air Force establish a short, poignant course at Maxwell AFB Air University for a commander that addresses the doctrinal, procedural and operational arts of all things nuclear.
 - (U) Use the existing Air Force Senior Mentors to teach our nuclear-certified leaders.

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Commander's Custody of Nuclear Weapons

(U) Senior leadership ownership of nuclear weapons is <u>not</u> "inherent." We should make ownership a part of command for the Munitions Squadron Commander and the Wing Commander.

•	(U) Nuclear stockp:	iles are owned by the lieutenants. I don't intend that to be a f	llippant
	remark, it's a fact.	(b)(6) ACC	
		(b)(6) ACC	

- (U) I sat with him to carefully audit his signed appointment letter, inventory and actual
 written "contract." Additionally, I reviewed his past six-month's stockpile verifications
 to include the 'quarantined' hard drives from the Defense Integration and Management of
 Nuclear Data Services (DIAMONDS) computer program that he keeps to prove the
 voracity of the verification process.
- (U) The MASO indicated that he is the only one who is held to account for the nuclear warheads. Commanders are not.
- (U) Give the Munitions Squadron Commander and the Wing Commander ownership of the unit's nuclear stockpile; the same way a young officer accepts his duties as a MASO. It will change the calculus if both commanders in the direct command of the nuclear weapons have to accept 'custody' of their ordnance. This has never been done in the Air Force.
 - (U) The MASO was trained at Sheppard AFB. According to his testimony, he did not get trained on an actual DIAMONDS computer system; perhaps, a classification issue. Regardless, the two respective commanders ought to receive some training on how to accept custody of the nuclear munitions.
 - (U) The nuclear course for commanders should include a block of instruction on nuclear weapons accountability and custody.
 - (U) Similar to the way the command echelon certifies a new commander for PRP prior to the change of command; I recommend the chain of command also have a formal nuclear weapons munitions and mission handover prior to taking the flag of command responsibility.
 - (U) In short, formally document and dissolve the outgoing commander's custody and inaugurate the new commander's custody. The MASO should be held accountable to both commanders for all changes to their aligned "contract." This will force inherent ownership and custody of the nuclear stockpile at all echelons of command.

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Air Expeditionary Force Alignment

- (U) Assign nuclear units to AEF duty. This is a difficult issue, but one for consideration. If there is a nuclear focus problem, then it may be worthwhile to formally assign a unit to an AEF vulnerability period. That would be the unit's specified task during the AEF cycle. The implied task is the unit will have a full 120-day workup to full combat capability prior to assuming the AEF duty for STRATCOM. When the unit completes its in-garrison assigned cycle, it can easily prepare for other AEF requirements.
 - (U) The AEF construct better fits a dual-DOC bomber wing's scheduling.
 - (U) Consolidating a wing's commitments on a planning order will also give the commanders little latitude but to prepare for the nuclear mission set. It may come with a cost for limiting a unit's availability for conventional operations, COCOM Theater Support Plans and other potential engagements. However, this will put rigor in the system. It will give the wing some flexibility to prepare for other requirements.

Additional Air Force-Level Recommendations

- (U) Requisition a Defense Integration and Management of Nuclear Data Services (DIAMONDS) terminal for the Nuclear Munitions Officer Course in AETC. Expand training on the duties of the Munitions Accounting Systems Officer (MASO).
- (U) Change the appointing official for the MASO to be the installation commander. Require the MASO to be certified by the wing commander prior to assuming his duties. Change AFI 21-204 to require MASO to brief the Wing Commander when they assume command and the results of each inventory.
- (U) Change the weapons loading technical orders and checklists that will require the load crew to accomplish a Missile Safe Status Check prior to commencing a load and after completing the missile system checkout.
- (U) Reassign the maintenance scheduler back into the nuclear munitions squadron. The Plans and Scheduling personnel in the Maintenance Operations Squadron appear to be disconnected from the detailed scheduling requirements for nuclear operations. This will assure continuity of effort and planning.
- (U) Establish one software system for munitions control and standardize it across the Air Force. Wings use various software programs similar to the MUNSCON software used at Minot.
- (U) Require mandatory Quality Assurance evaluations for munitions controllers. The periodic evaluation should be an over-the-shoulder observation of the controller's duty in the course of their daily activities and responsibilities.

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CORET/FDD//MD

- (U) Emphasize munitions scheduling processes as a focus item of an NSI. Review schedule development and production as well as change tracking and scheduling effectiveness.
- (U) Standardized the duties of munitions controllers. Develop a MAJCOM standard training and certification plan for Munitions Control Center controllers.
- (U) Submit AF Form 847 to change T.O. 1B-52H-30-4, *Aircrew Weapon Delivery Manual*, pg 2-4, 2nd paragraph under TACTICAL FERRY to read: "...accomplish all normal procedures from Before Exterior Inspection through <u>step 1b of After Engine Start</u> and all Prelanding Procedures and After Landing Procedures."
- (U) Submit AF Form 847 to ACCI 10-450V2, para 3.5.3., modifying 2nd to last sentence to read: "Requirements include...command and control procedures, EWO communications training, actual weapons preflight, tactics,"
- (U) Submit AF Form 847 to add to AFI 11-2B-52V1, RAP tasking message, pg 10, Para 5g "Nuclear Functional Training":

Subject/Event Code Frequency Reference Directive Grounding Affect CMR Nuclear Weapons Annual ACCI 10-450V2 No Yes

Preflight

- (U) Submit AF Form 847 adding the following NOTE after existing NOTE on pg 2-8 to T.O. 1B-52H-30-1 reading: "Regardless of missile payload, two weapons qualified personnel must preflight all missiles prior to aircraft acceptance and annotate completion of missile preflight to include payload type verification and status in AFTO 781."
- (U) Task Air Combat Command to re-evaluate B-52 nuclear training requirements and currencies. Delineate which organization is responsible for nuclear training requirements (FTU vs. gaining unit).

Minot AFB

- (U) Incorporate the Special Weapons Handling Section's schedule requirements into the Special Weapons Maintenance Flight overall scheduling process. Currently, the weapons handlers do their own job control numbers based on the flight's schedule. They should be driven by and integral to the flight's scheduling process.
- (U) Develop minimum training for munitions controllers and specify their duties in detail. Formally certify munitions controllers for their duties.
- (U) Re-train all Munitions Control personnel on their responsibilities to track, <u>control</u>, identify and verify the status of nuclear and nuclear-inert assets.
- (U) Completely revise the Munitions Squadron morning status briefing. Show work scheduled, work complete, and any production delays. Ensure that these items are reviewed daily by the Munitions Operations Officer and Munitions Squadron Superintendent.

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- (U) Decertify and train all Special Weapons Handling personnel on all their duties relative to weapons transport. Retrain, qualify and certify each individual.
- (U) Retrain all Munitions Control Center personnel to promptly update and document firefighting line numbers following any change in status or location of nuclear munitions.
- (U) Immediately develop a process to coordinate all schedule changes through all sections in the Munitions Squadron.
- (U) Immediately ensure section supervisors bring schedules to the section production meetings and eliminate the use of note books as the vehicle for controlling work.
- (U) Ensure the production superintendent uses the schedule as his basis for tracking and controlling maintenance.
- (U) Limit those with authority to make changes to any munitions, maintenance or flight schedule. The wing should adhere to Air Force procedures for schedule changes.
- (U) Include payload-identification training in munitions training lesson plans. Ensure all munitions personnel are trained.

Barksdale AFB

- (U) Review B-52 FTU syllabus to ensure nuclear mission training is accomplished.
- (U) Review B-52 Weapons School course syllabus to ensure adequate instruction is provided to Weapons School students preparing them to be nuclear weapons subject matter experts.
- (U) Barksdale leadership must make every attempt to develop robust nuclear mission exercise scenarios and ensure at least two nuclear exercises per year in accordance with ACCI 10-450 Vol 5 Strategic Committeed Aircraft Exercises.
- (U) Develop a weapons preflight training program to ensure Tech Order procedures and applicable instructions are understood, standardized, practiced, and certified. Special emphasis must be placed on nuclear munitions.

Personnel Reliability Program

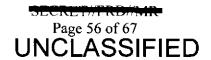
Personal Reliability Program (PRP)
Source: DOD 5210.42-R_AFMAN 10-3902
NUCLEAR WEAPONS PERSONNEL RELIABILITY PROGRAM (PRP)

(U) The Personnel Reliability Program exists because... "Nuclear weapons require special consideration because of their policy implications and military importance, their destructive

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power, and the political consequences of an accident, loss of a weapon, or an unauthorized act. The safety, security, control, and effectiveness of nuclear weapons are of paramount importance to the security of the United States."

- (U) PRP intent is ... "to select and maintain only the most reliable people to perform duties associated with nuclear weapons." PRP is not intended to act as a quality control tool to decertify/disqualify individuals solely for assignment purposes or risk avoidance. Denial of eligibility or the revocation of certification for assignment to PRP positions is neither a punitive measure nor the basis for disciplinary action. Failure of an individual to be certified for assignment to PRP duties does not necessarily reflect unfavorably on the individual's suitability for assignment to other duties.
- (U) DL.18. Decertification: An action based on the receipt of adverse information leading to removal from the PRP of an individual who has been screened, determined reliable, and certified capable of performing duties involving nuclear weapons. There are two types:
- (U) DL.18.1. Temporary Decertification: An action taken when the certifying official has information that could be expected to affect an individual's job performance or reliability and suspension is not appropriate.
- (U) DL.18.2. Permanent Decertification: An action taken when the certifying official has determined an individual no longer meets the reliability standards specified in this Regulation. When the permanent decertification is approved by the reviewing official, the individual will be removed (Added) (AF) (unless reinstated as defined by procedures in this Regulation and Supplement) from positions requiring PRP certification and the action shall be made a matter of permanent record.
- (U) Specifically in making the following PRP recommendations the following guidance was considered:
- (U) C5.1.4. Negligence or Delinquency in Performance of Duty. If the certifying official's review of the PRP candidate's or certified member's job or duty history reveals a lack of dependability, flexibility, good attitude or good judgment, the member should not be certified, or should be decertified. In determining reliability, the certifying official must evaluate all aspects of an individual's actions.
- (U) C5.1.7. Poor Attitude or Lack of Motivation. Poor attitude or lack of motivation as evidenced by aberrant attitude or irrational behavior, inappropriate behavior or mood may be grounds for decertification.
- (U) C5.1.9. Loss of Confidence. If for any reason the certifying official loses trust or confidence in a member's ability to perform PRP duties, the certifying official shall decertify the member.
- (U) Over 90 individuals from the 2nd and 5th Bomb Wings were suspended from PRP duties until their roles in the incident could be determined. During the course of the CDI it became evident



that many individuals should be considered for permanent, or at least temporary, PRP decertification while many others can be returned to full PRP duty status.

Permanent Decertification

Based on the findings of this CDI the following are recommended to be PRP Permanently Decertified:

-MASKED-

Masked information consisted of personnel names; therefore, would

have been exempt under exemption (b)(6) **Temporary Decertification**

Based on the findings of this CDI the following are recommended to be PRP Temporarily Decertified:

-MASKED- Masked information consisted of personnel names; therefore, would have been exempt under exemption (b)(6)

Immediate Reinstatement

Based on the findings of this CDI the following are recommended to be reinstated in PRP:

-MASKED- Masked information consisted of personnel names; therefore, would have been exempt under exemption (b)(6)

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Recommendations for Consideration of Disciplinary Action

(U) During the investigation, it was apparent the unauthorized transfer of nuclear weapons would not have occurred if those involved had performed their assigned duties. During August 2007, several military members failed to live up to the standards expected of Airmen. Degree of culpability among this list of Airmen obviously will vary. The purpose of this paragraph is not to list everyone who failed. The table below lists those whose culpability ostensibly rises to the level of a violation of the Uniform Code of Military Justice. These individuals are suspected of dereliction of duty for their failure to follow standard procedures and should be considered for some type of disciplinary action.

- MASKED- Masked information consisted of personnel names; therefore, would have been exempt under exemption (b)(6)

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- (U) Commanders at all levels can direct removal of personnel directly under their chain of command when the Commander has lost confidence of their subordinate commanders/supervisors. Some of these actions may have already occurred but it is the recommendation of this CDI to remove the following individuals from Command/Supervisory Positions:
- MASKED Masked information consisted of personnel names; therefore, would have been exempt under exemption (b)(6)

Removal from Instructor/Evaluator Orders

- MASKED - Masked information consisted of personnel names; therefore, would have been exempt under exemption (b)(6)

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Tab F

Tab F: Witness Index

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Tab G

Tab G: Evidence

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Tab H

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Tab H: Technical Reviews

Actions Required for Selected Missile Capabilities Talking Paper (TO 1B-52H-30-1)

- (U) The following narrative explains what aircrew actions are required to carry out certain missile capabilities onboard the B-52, to include missile communication, jettison (both required by the Tac Ferry Program), payload identification, pre-arming, and launching.
- (U) During Tac-Ferry missions the missiles do not have power applied and are in an OFF/SAFE or dormant state. The crew had limited options available to "communicate" with the missiles. They could jettison a single missile from the pylons, all missiles from the pylons, or jettison the entire pylon with all missiles attached. The crew did not have the option to pre-arm the ACM and therefore could not launch the missile at any time.

(U) In order for an aircrew to establish missile communication with the B-52, the following		
actions must occur.	(b)(1) mosaíc ACC	

mission accomplished all of these steps.

(U) After the computer is powered and loaded, the RN must turn on the Missile Interface Unit (MIU) on each pylon in order to enable direct communication, assignment and monitoring for all the missiles. One MIU is associated with each missile-loaded pylon and it acts like a computer router that enables the primary OAS computer to talk to the circuitry of each missile. It sends continuous missile/warhead status updates from each missile back to the OAS.

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Tab I

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Tab I: Appointing Authority Approval and Actions



DEPARTMENT OF THE AIR FORCE

HEADQUARTERS AIR COMBAT COMMAND (ACC)
LANGLEY AIR FORCE BASE, VIRGINIA

MEMORANDUM FOR RECORD

FROM: ACC/CC

SUBJECT: Appointing Authority Approval

I reviewed the commander directed investigation completed by Major General Douglas L.

Raaberg and the accompanying legal review concerning the facts and circumstances surrounding the unauthorized transfer of nuclear warheads on 30 August 07. I approve the findings and conclusions of the Investigating Officer.

JOHN D.W. CORLEY General, USAF Commander

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(PERSONNEL DATA REDACTED)

Tab J

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Tab J: Administrative Documents

Index of Administrative Documents

J1	Access To IMF or W80 Igloos	MASKED
J2	Removal From Command Letter	
J3	Privacy Act Statements J(3.1) through J(3.63)	Documents 1 through 63
J4	CSAF Hand-Off Policy J(4.1) through J(4.15)	Documents 1 through 15
J5	96 BS Flying Schedule Strawman	
J6	Aircraft Commander Letter of Certification (Letter of Xs)	
J7	Addendum to Appointment Letter	
J8	Affidavit Placarding procedure statement	MASKED
J9	DoD IG Oversight Memorandum, September 17, 2007	

Toxicology Reports

Barksdale and Minot personnel involved in this incident were administered toxicology test. According to the DoD Armed Forces Institute of Pathology, all 77 reports were negative.

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