



UNITED STATES CENTRAL COMMAND
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MACDILL AIR FORCE BASE, FLORIDA 33621-5101

9 September 2011

MEMORANDUM FOR Commander, United States Central Command, 7115 South Boundary Boulevard, MacDill Air Force Base, Florida 33621

SUBJECT: (b)(1)1.4a, (b)(1)1.4c Executive Summary (Crash of CH-47D Aircraft in Wardak Province, Afghanistan on 6 August 2011) (U)

1. ~~(S//REL USA, ISAF, NATO)~~ Investigation. On 7 August 2011, Commander, U.S. Central Command, General James N. Mattis, appointed me to investigate the circumstances surrounding the crash of a CH-47D helicopter in Wardak Province, Afghanistan on 6 August 2011, which resulted in the deaths of all 38 persons on board. My team of experts deployed to Bagram Airfield and Forward Operating Base (FOB) (b)(1)1.4a, (b)(1)1.4c in Afghanistan, inspected the aircraft wreckage, examined volumes of documents associated with the crash, reviewed several hours of aircraft gun-tape and surveillance video, and conducted over sixty interviews, including those who witnessed the shoot-down and its aftermath. The aviation experts were especially valuable in determining the actual cause of the crash, ruling out causes, and creating a visual model of the shoot-down sequence to aid in overall situational awareness of the operating environment during the crash. I determined that the CH-47D, call sign EXTORTION 17, was shot down with a rocket-propelled grenade (RPG) fired by a suspected Taliban fighter as the helicopter neared its landing zone. The final report of investigation was provided to the Commander, United States Central Command, for his consideration and approval on 7 September 2011. For the families, friends, and fellow warriors of the fallen, American and (b)(1)1.4a, (b)(1)1.4c the loss of these selfless and courageous men was a tragedy for which this report can provide little comfort. I offer my deepest condolences, personally and on behalf of my investigative team, to all of those who mourn the loss of these brave men.

2. ~~(S//REL USA, ISAF, NATO)~~ Background. In the past two years, Task Force (TF) (b)(1)1.4a, (b)(1)1.4c monthly pace of operations has dramatically increased from (b)(1)1.4a, (b)(1)1.4c missions in August 2009, to (b)(1)1.4a, (b)(1)1.4c missions in August 2010, to (b)(1)1.4a, (b)(1)1.4c missions in July 2011. TF (b)(1)1.4a, (b)(1)1.4c headquartered at FOB (b)(3), (b)(6) in Wardak Province, Afghanistan, is a subordinate regional task force of TF (b)(1)1.4a, (b)(1)1.4c TF (b)(1)1.4a, (b)(1)1.4c is further divided into two teams (Team (b)(3), (b)(6) & Team (b)(3), (b)(6) both comprised of (b)(1)1.4a, (b)(1)1.4c forces. TF (b)(1)1.4a, (b)(1)1.4c employs (b)(1)1.4a, (b)(1)1.4c forces to apply relentless pressure on enemy networks by conducting (b)(1)1.4a, (b)(1)1.4c principally by helicopter, to (b)(1)1.4a, (b)(1)1.4c and seize documents, communications devices, weapons and materiel for further intelligence exploitation. TF (b)(1)1.4a, (b)(1)1.4c a general purpose forces (GPF) aviation battalion task force, provides Team (b)(3), (b)(6) with dedicated assault (CH-47D) and attack (AH-64D) helicopter support. On 5 June 2011, during a mission to (b)(1)1.4a, (b)(1)1.4c Habib Ul-Rahman, a mid-level Taliban leader in the Tangi Valley, TF (b)(1)1.4a, (b)(1)1.4c killed Din Muhammad, the Taliban commander in the Tangi Valley. Din Muhammad's death elevated Qari Tahir to senior commander of Taliban forces in the Tangi

Derived from: (b)(1)1.4a, (b)(1)1.4c

Declassified on: 7 September 2036

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Valley, and TF (b)(1)1.4a, (b)(1)1.4c added him to its (b)(1)1.4a, (b)(1)1.4c on 19 June 2011. At 1856D¹ hours on 5 August 2011, TF (b)(1)1.4a, (b)(1)1.4c received geo-locational intelligence indicating that Qari Tahir was likely in a compound in the Tangi Valley, and TF (b)(1)1.4a, (b)(1)1.4c began planning a (b)(1)1.4a, (b)(1)1.4c to (b)(1)1.4a, (b)(1)1.4c him that night.

3. (U/~~FOUO~~) *Mission Planning.*

a. (~~S//REL USA ISAF NATO~~) Commander Team (b)(3), (b)(6), designated the 1st Platoon, B Company, (b)(1)1.4a, (b)(1)1.4c as the primary ground assault force for the operation to (b)(1)1.4a, (b)(1)1.4c Qari Tahir. Team 1/B was comprised of three rifle squads and one weapons squad (b)(1)1.4a, (b)(1)1.4c a Cultural Support Team member, and a Joint Terminal Attack Controller. Team 1/B was supported by an assault package of two CH-47D helicopters, fire support assets consisting of two AH-64 attack helicopters and an AC-130 gunship, as well as a relatively robust surveillance aircraft package. The two CH-47Ds from TF (b)(1)1.4a, (b)(1)1.4c would airlift Team 1/B, totaling 47 personnel, into a landing zone approximately 1200 meters from Qari Tahir's suspected location. Team 1/B would then conduct a foot movement to the target compound, clear and secure the compound, and conduct tactical questioning of detainees and collect items of intelligence value. The task organization for this mission also included an Immediate Reaction Force (IRF) comprised of the Team (b)(3), (b)(6) (b)(1)1.4a, (b)(1)1.4c force.

b. (~~S//REL USA ISAF NATO~~) At 1930D, TF (b)(1)1.4a, (b)(1)1.4c issued a warning order to the TF (b)(1)1.4a, (b)(1)1.4c aircrews supporting Team 1/B to be prepared to depart FOB (b)(1)1.4a, (b)(1)1.4c in three hours. TF (b)(1)1.4a, (b)(1)1.4c and 10th Combat Aviation Brigade (CAB) intelligence analysts assessed the threat in Tangi Valley as moderate to high due to historical enemy activities: RPG and small arms fire, an assessed early warning network, the lack of a coalition force presence in the valley, and the significance of the target (Qari Tahir). Due to near zero illumination conditions and the experience level of one crew chief, the CH-47D Air Mission Commander determined the mission to be high risk. Prior to departure, the AH-64 and CH-47D aircrews received an Air Mission Briefing. The mission was ultimately approved by the TF (b)(1)1.4a, (b)(1)1.4c and (b)(3), (b)(6) Commanders.

4. (U/~~FOUO~~) *Mission Execution.*

a. (~~S//REL USA ISAF NATO~~) On 5 August at 2258D, both CH-47Ds touched down simultaneously at helicopter landing zone (HLZ) (b)(1)1.4a, (b)(1)1.4c, off-loaded Team 1/B, and returned to FOB (b)(1)1.4a, (b)(1)1.4c to refuel and await further orders. Team 1/B began its foot movement to the target compound approximately 1200 meters away. During Team 1/B's approach, (b)(1)1.4a, (b)(1)1.4c assets observed and began tracking several personnel departing the target area. At 2326D, the AH-64s detected and positively identified suspected Taliban fighters walking single file armed with AK-47 rifles and RPG launchers, approximately 400 meters northwest of the target area. After receiving clearance from the Team 1/B platoon leader, one AH-64 conducted two

¹ All times are Afghanistan Standard Time (Time Zone "D" in standard military usage). Greenwich Mean Time (GMT) is annotated as ZULU (Z) Time Zone in the U.S. armed forces. Afghanistan is 4.5 hours ahead of GMT; Washington, D.C., in the Eastern Daylight Time Zone, is 4 hours behind GMT.

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engagements with its 30mm gun, ultimately resulting in six enemy killed. The two remaining armed enemy personnel disappeared into a grove of trees and were never located, while a separate group of suspected insurgents were continuously monitored by surveillance aircraft overhead.

b. ~~(S//REL USA, ISAF, NATO)~~ By 6 August at 0245D, Team 1/B had cleared and secured all buildings in the target area, detained several personnel, and were conducting tactical questioning. Throughout the execution of the mission, surveillance assets continued tracking the movement of the suspected insurgents who by 0215D numbered between 9-10 suspected Taliban fighters split into two groups. Approximately two kilometers from 1/B, three of them hid in a stand of trees, while the other six or seven remained inside a nearby building. As the number of suspected insurgents grew, the TF (b)(1)1.4a, (b)(1)1.4c Commander and IRF Commander, believing that Qari Tahir might be among them, discussed the tactical situation and initially agreed to employ a 17-man IRF.

5. ~~(U//FOUO)~~ IRF Employment

a. ~~(S//REL USA, ISAF, NATO)~~ At 0100D the TF (b)(1)1.4a, (b)(1)1.4c aviation planner received a warning order to insert the IRF by helicopter and began coordinated mission planning with the ground force liaison officer, to include route and landing zone selection. The TF (b)(1)1.4a, (b)(1)1.4c aviation planner and the IRF Commander selected HLZ (b)(1)1.4a, (b)(1)1.4c as the insertion point for the IRF because of its suitability for landing and its location relative to the suspected Taliban fighters. HLZ (b)(1)1.4a, (b)(1)1.4c was approved for a previous mission but was not used. The (b)(3), (b)(6) Commander approved the landing zone at 0150D. At 0200D, the TF (b)(1)1.4a, (b)(1)1.4c Commander and IRF Commander increased the passenger count from 17 to 32 personnel, consisting of three assault teams, a seven-man (b)(1)1.4a, (b)(1)1.4c, and a military working dog. The increase was a conscious decision that took into consideration the increased number of enemy personnel, the likelihood that the IRF would have to either conduct a deliberate callout or assault another compound, as well as the probability of a daylight movement out of the area to be picked up by helicopters the following night. With the addition of an interpreter, the IRF arrived at the aircraft with 33 passengers. According to the TF (b)(1)1.4a, (b)(1)1.4c commander, an informed decision was made to load all personnel on one aircraft because the IRF Commander wanted to mass troops quickly, and using one aircraft reduced the overall aircraft signature in the landing zone.

b. ~~(S//REL USA, ISAF, NATO)~~ At 0222D, both CH-47D helicopters (radio call signs (b)(1)1.4a, (b)(1)1.4c and EXTORTION 17) departed FOB (b)(1)1.4a, (b)(1)1.4c with EXTORTION 17 in the lead and headed northwest behind the mountains which enclose the Tangi Valley to its north. The helicopters flew (b)(1)1.4a, (b)(1)1.4c and the aircrew flew with night vision goggles in near zero percent illumination conditions (there was no moonlight). When both aircraft were six minutes away from the landing zone, the trail aircraft, (b)(1)1.4a, (b)(1)1.4c, began circling at a pre-determined holding point. EXTORTION 17 continued to the objective area and made a 3-minute out radio call to communicate its progress to (b)(1)1.4a, (b)(1)1.4c aircraft overhead. After making its

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1-minute out radio call at 0238D, EXTORTION 17 descended to approximately 100 – 150 feet above ground level and slowed to approximately (b)(1)1.4a, (b)(1)1.4c as it neared the landing zone from the northwest. Suspected Taliban fighters fired two or three RPGs in rapid succession at EXTORTION 17 from the tower of a two-story mud-brick building approximately 200 meters south of the helicopter. The first RPG missed the helicopter, but the second RPG struck a blade on the aft rotor system and exploded, severing just over 10 feet of the rotor blade. While the aircraft spun violently, the aft then forward rotor blade systems separated from the aircraft, and the main fuselage dropped vertically into a dry creek bed. The airframe was immediately engulfed in a large fireball, causing multiple secondary explosions of fuel and munitions until the aircraft burned out several hours later. Fire support and surveillance assets immediately shifted focus to the crash site, while one AH-64 fired 30 mm rounds just west of the suspected RPG point of origin to suppress any potential enemy activity in the vicinity of the crash site.

6. ~~(S//REL USA, ISAF, NATO)~~ *Recovery Operations.* Following the shoot-down, Team 1/B quickly destroyed all enemy military equipment, released eight detainees, and began a rapid foot movement to the crash site. At 0412D, Team 1/B was the first element to arrive at the crash site, secured it, and began searching for survivors. Team 1/B quickly discovered twelve friendly remains, but could not immediately continue recovery efforts due to secondary explosions from within the wreckage. A 20-man Pathfinder element from TF (b)(1)1.4a, (b)(1)1.4c joined Team 1/B to assist in site security and recovery of remains from the wreckage. By 1038D, eight hours after the crash, the Team 1/B (b)(6) had accounted for all 38 friendly remains, as well as the military working dog. At approximately 1625D, the remains of all 38 friendly casualties were driven away from the crash site to the security of (b)(1)1.4a, (b)(1)1.4c. During the afternoon of 6 August 2011, a flash flood swept through the creek bed to a depth of 4-5 feet, complicating recovery efforts by washing parts of the wreckage up to 200 meters downstream. On the night of 6 August, 3rd Platoon, D Company (b)(1)1.4a, (b)(1)1.4c, a four-man Combat Search and Rescue Team, and an Explosive Ordnance Disposal specialist relieved Team 1/B. The Pathfinders, 3/D, and elements from TF (b)(1)1.4a, (b)(1)1.4c continued to sanitize the crash site, completing the removal of crash debris on 9 August 2011.

7. ~~(U//FOUO)~~ *Cause of the Death.* As of the date of this report, the final autopsy reports for each of the EXTORTION 17 casualties are not complete. As a result of conversations with the Medical Examiner at Dover Air Force Base, however, I assess that the injuries sustained by all 38 personnel aboard EXTORTION 17 would have immediately incapacitated all of the individuals and were most likely rapidly fatal.

8. ~~(U//FOUO)~~ *Findings.*

a. ~~(S//REL USA, ISAF, NATO)~~ EXTORTION 17 was shot down by an RPG while conducting a direct action mission consistent with TF (b)(1)1.4a, (b)(1)1.4c's historically successful employment of (b)(1)1.4a, (b)(1)1.4c forces, supported by GPF aircrews, to pressure enemy networks.

b. ~~(S//REL USA, ISAF, NATO)~~ Because TF (b)(1)1.4a, (b)(1)1.4c's high pace of direct action missions exceeds the capacity of (b)(1)1.4a, (b)(1)1.4c assets, the use of GPF aircrews for TF (b)(1)1.4a, (b)(1)1.4c

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missions has become standard practice. The GPF aviators flying the mission on 6 August 2011 were fully qualified to perform all required tasks, and the aircraft was fully mission capable. The decision to load the IRF onto one CH-47D in order to mitigate risk by minimizing aircraft exposure to ground fire and to mass the assault force was tactically sound. The shoot down was not the result of a baited ambush but rather the result of the enemy being at a heightened state of alert due to 3 ½ hours of ongoing coalition force operations in the objective area prior to EXTORTION 17's arrival. Although supported by a layered aircraft surveillance package, the (U//~~FOUO~~) (b)(1)1.4a, (b)(1)1.4c Commander did not rapidly re-task these assets to cover the IRF insertion.

9. (~~S//REL USA, GBR~~) *Recommendations.* Six recommendations are relevant to this incident. The recommendations include pre-deployment joint training between GPF aircrews and (b)(1)1.4a, (b)(1)1.4c (b)(1)1.4a, (b)(1)1.4c in order to improve collaborative planning and risk mitigation practices; prioritizing the development of aircraft survivability equipment with improved detection of RPG and small arms fire; improved synchronization of fires and surveillance assets to avoid alerting the enemy to impending helicopter operations; improved re-tasking of fires and surveillance assets after a mission change; and the assignment of an Imagery Analyst to GPF aviation battalion task forces.

10. (U//~~FOUO~~) *Post Investigation Requirements.* I provided the investigation report to the Commander, US Central Command, for his further consideration and evaluation. Once approved, I will ensure relevant stakeholders are informed and will coordinate to provide a detailed family brief.

11. (U//~~FOUO~~) The point of contact for this action is the undersigned at (b)(2), (b)(6).


JEFFREY N. COLT
Brigadier General, U.S. Army
Investigating Officer