



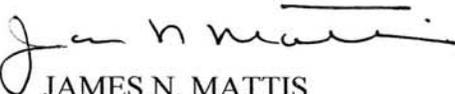
COMMANDER  
UNITED STATES CENTRAL COMMAND  
7115 SOUTH BOUNDARY BOULEVARD  
MACDILL AIR FORCE BASE, FLORIDA 33621-5101

13 September 2011

MEMORANDUM FOR THE RECORD

SUBJECT: Report of Investigation – Crash of a CH-47 Aircraft in Wardak Province, Afghanistan on 6 August 2011

1. I have reviewed the thorough Report of Investigation (RoI) dated 7 September 2011 and personally briefed to me by Brigadier General (BG) Jeffrey Colt. This report meets the requirements levied on BG Colt to investigate the circumstances surrounding the tragic loss of all-hands on board the aircraft. The Report of Investigation answers all my questions and meets the relevant legal requirements.
2. I approve the factual conclusions made in this report and specifically approve each of its itemized findings and recommendations. My Director of Operations (CCJ3) will ensure those recommendations that can be accomplished within this headquarters and by our subordinate commands are implemented. Recommendation #4 may require a higher degree of predictability than can be accommodated during predeployment training as general purpose forces and special operations forces may be subsequently shifted to deal with battlefield dynamics.
3. I specifically agree with the conclusions that the Army aviators flying this mission were fully qualified to perform all required tasks, that the aircraft was fully mission capable, and that loading the Immediate Reaction Force onto one aircraft in order to mass the assault force and minimize the infiltration profile was tactically sound. The aircrew, having flown into the valley only hours before to insert the initial force, was the most familiar aircrew available to effectively carry out this mission. I believe that the shoot down was not the result of a baited ambush by the enemy: instead the enemy was in a heightened state of alert due to 3½ hours of ongoing coalition force operations in the area prior to the CH-47's arrival.
4. I direct a complete copy of this RoI, within appropriate classifications, be provided to: the Joint Staff, U.S. Special Operations Command, each of U.S. Armed Services, NATO's International Security Assistance Force (ISAF), and appropriate ISAF troop contributing nations for review and implementation of lessons learned as they deem appropriate.
5. This report reinforces my appreciation and unbounded admiration for the courage and skill continuously shown by our Special Operations Forces, conventional forces, and our partner forces from the Government of the Islamic Republic of Afghanistan. I offer my deepest condolences to the families and friends of the fallen during a mission made in defense of both our nations. The ultimate sacrifice of the fallen, and the enduring loss and sacrifice of their loved ones, will be remembered by all of us who take this loss as a reason to focus even more strongly on our mission.
6. The point of contact for this investigation is my Acting Staff Judge Advocate, Colonel Bruce A. Pagel, (b)(6), (b)(2) or by e-mail at [bruce.pagel@centcom.mil](mailto:bruce.pagel@centcom.mil).

  
JAMES N. MATTIS  
General, U.S. Marines

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UNITED STATES CENTRAL COMMAND  
7115 SOUTH BOUNDARY BOULEVARD  
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: Investigation Findings and Recommendations (Crash of CH-47D Aircraft in Wardak Province, Afghanistan on 06 August 2011) (U)

1. (U//FOUO) On 7 August 2011, Commander, U.S. Central Command, General James N. Mattis, appointed me to investigate the circumstances surrounding the downing of a CH-47D helicopter, call sign EXTORTION 17, in Wardak Province, Afghanistan on 6 August 2011, which resulted in the deaths of all 38 persons on board. My team's investigation included two weeks in Afghanistan to interview numerous witnesses, including those who witnessed the shoot-down and its aftermath. We also inspected the recovered aircraft wreckage and reviewed the volumes of documents and video associated with the mission's development and its execution. After conducting my investigation, I have determined that this mission, and the tactics and resources employed in its execution, were consistent with previous U.S. special operations missions and the strike forces selected to execute the mission were appropriate. I have also determined that EXTORTION 17 was shot down with a rocket-propelled grenade (RPG) fired by a suspected Taliban fighter as the helicopter neared its landing zone. For the families, friends, and fellow warriors of the fallen, American and Afghan, the loss of these selfless and courageous men was a tragedy for which this report can provide little comfort. Beginning with a summary, including the final minutes of that flight, I report the facts, and my findings and recommendations, pursuant to my appointment order. I also 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. (U//~~FOUO~~) Summary.

a. (~~S//REL USA, ISAF, NATO~~) "*Pursue the Enemy Relentlessly.*" In the weeks leading up to this mission, Task Force (TF) <sup>(b)(1)1.4a, (b)(1)1.4c</sup> ~~(b)(1)1.4a, (b)(1)1.4c~~, a special operations task force consisting of Team (TM) <sup>(b)(1)1.4a, (b)(1)1.4c</sup> ~~(b)(1)1.4a, (b)(1)1.4c~~, conducted direct action missions nearly every other night to capture or kill leaders of the Taliban network in Wardak and surrounding provinces south of Kabul, Afghanistan. TF <sup>(b)(1)1.4a, (b)(1)1.4c</sup> ~~(b)(1)1.4a, (b)(1)1.4c~~, a general purpose force (GPF) aviation battalion task force, had provided more than 90% of TM <sup>(b)(3), (b)(6)</sup> ~~(b)(3), (b)(6)~~<sup>1</sup> helicopter transport and attack helicopter support since TF <sup>(b)(1)1.4a, (b)(1)1.4c</sup> ~~(b)(1)1.4a, (b)(1)1.4c~~ establishment 10 months prior. The high pace of operations supported the guidance from Commander, U.S. Forces, Afghanistan, (COMUSFOR-A) to "pursue the enemy relentlessly"<sup>2</sup> and increase pressure on the Taliban Network.

<sup>1</sup> (S)

<sup>2</sup> (U)

(b)(3), (b)(6)

Derived from: <sup>(b)(1)1.4a, (b)(1)1.4c</sup> ~~(b)(1)1.4a, (b)(1)1.4c~~

Declassified on: 7 September 2036

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b. (~~S//REL USA, ISAF, NATO~~) *Inbound from FOB [redacted]* At 0222D on 6 August 2011 (2152Z in Afghanistan on 5 August 2011<sup>3</sup>), two CH-47D helicopters, call signs [redacted] and EXTORTION 17, departed Forward Operating Base (FOB) [redacted] with EXTORTION 17 in the lead. EXTORTION 17 was carrying 38 Americans and [redacted], including five Army CH-47D aircrew, 17- U.S. Navy SEALs, five Navy Special Operations support personnel, three U.S. Air Force Special Tactics Airmen, seven [redacted], an Afghan civilian interpreter, and a military working dog. [redacted] was carrying five aircrew but no passengers because of its escort role for the mission. The EXTORTION flight headed behind the ridgeline which encloses the Tangi Valley to its north. The helicopters flew "blacked out" (without any visible lighting) and the aircrew flew with night vision goggles in near zero illumination conditions (there was no moonlight). When both aircraft were six minutes from the landing zone, the trail aircraft, [redacted], began circling at a pre-determined holding point. If all went as planned, EXTORTION 17 would land at helicopter landing zone (HLZ) [redacted] off-load the Immediate Reaction Force (IRF) of 33 passengers and the military working dog, and take-off again to rejoin [redacted] for the return flight to FOB [redacted]. The reaction force was tasked to pursue a force of 9-10 suspected Taliban fighters, two of whom had fled from a Ranger led assault on a compound approximately 4 kilometers southeast from HLZ [redacted]. Qari Tahir, the senior Taliban commander in the Tangi Valley was possibly among the 9-10 suspected Taliban fighters the IRF was tasked to pursue.

c. (U//FOUO) *The final minute of EXTORTION 17.* At approximately 0238D, [redacted], the pilot-in-command of EXTORTION 17, made a radio call: "one minute" out from HLZ [redacted]. EXTORTION 17 descended to approximately 100 – 150 feet about ground level (AGL), and slowed to approximately 50 knots (58 mph) as the aircraft neared the landing zone from the northwest. Taliban fighters fired two or three rocket-propelled grenades (RPGs) in rapid succession at EXTORTION 17 from the tower of a two-story *qalat*<sup>4</sup> approximately 220 meters south of the helicopter. The first RPG missed the helicopter, but the second RPG struck one of the blades on the aft rotor assembly and exploded, severing over 10 feet of the rotor blade. Within a matter of seconds, 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. The destruction of EXTORTION 17, from rocket impact until its crash into the creek bed, likely lasted less than 5 seconds. Although the final autopsy reports are not yet complete, I assess – based upon all of the information I have received from the Medical Examiner to date – that the 38 persons on-board EXTORTION 17 were likely incapacitated, or had died, by the time the helicopter began burning.

<sup>3</sup> (U) Except where noted, 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.

<sup>4</sup> (U) These Afghan traditional mud-brick buildings are called "qalats" (pronounced "kă-lăt"). Most *qalats* are simple single story dwellings, but some include a second floor; some *qalats* also include corner towers.

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SUBJECT: Investigation Findings and Recommendations (Crash of CH-47D Aircraft in Wardak Province, Afghanistan on 6 August 2011) (U)

3. (U) Facts and Circumstances Surrounding the Crash.

~~(S//REL USA, ISAF, NATO)~~

a. (U) *The Mission Units.* EXTORTION 17 included members of two units: Task Force (b)(1)1.4a, (b)(1)1.4c, the ground force component with its attached (b)(1)1.4a, (b)(1)1.4c, and TF (b)(1)1.4a, (b)(1)1.4c, the aviation component.<sup>5</sup> On 6 August 2011, EXTORTION 17 was in direct support of (b)(1)1.4a, (b)(1)1.4c operations in the Tangi Valley, Wardak Province to capture or kill Qari Tahir, a senior Taliban leader in the valley.<sup>6</sup>

~~(S//REL USA, ISAF, NATO)~~

(1) (U) (b)(1)1.4a, (b)(1)1.4c and (b)(1)1.4a, (b)(1)1.4c

(a) ~~(S//REL USA, ISAF, NATO)~~ TF (b)(1)1.4a, (b)(1)1.4c conducts (b)(1)1.4a, (b)(1)1.4c operations in Afghanistan to degrade Taliban, Al Qaeda and Haqqani networks to enable Coalition and Afghan Forces to expand designated security zones.<sup>7</sup> TF (b)(1)1.4a, (b)(1)1.4c mission supports Commander, U.S. Forces, Afghanistan priorities.<sup>8</sup>

~~(S)~~

(b) ~~(S//REL USA, AUS, CAN, GBR)~~ TF (b)(1)1.4a, (b)(1)1.4c headquartered at FOB (b)(1)1.4a, (b)(1)1.4c in Wardak Province, Afghanistan, is one of four regional task forces under TF (b)(1)1.4a, (b)(1)1.4c<sup>9</sup> TF (b)(1)1.4a, (b)(1)1.4c conducts special operations in Regional Command (RC) East, which encompasses 14 provinces in eastern Afghanistan, surrounding the capital, Kabul (which is a separate regional command – RC Capital).<sup>10</sup> TF (b)(1)1.4a, (b)(1)1.4c implements TF (b)(1)1.4a, (b)(1)1.4c mission and priorities in the RC East area of operations (AO).<sup>11</sup> TF (b)(1)1.4a, (b)(1)1.4c AO includes elements of the Taliban, Al Qaeda and Haqqani Networks, with evidence of increasing cooperation between the Haqqani Network and the Taliban south of RC Capital.<sup>12</sup> Wardak Province borders RC Capital.<sup>13</sup> TF (b)(1)1.4a, (b)(1)1.4c composition at the time of this mission spanning 5-6 August 2011 was:

- One (b)(1)1.4a, (b)(1)1.4c squadron headquarters, commanded by a (b)(1)1.4a, (b)(1)1.4c CDR (O-5); this squadron assumed its (b)(1)1.4a, (b)(1)1.4c responsibilities on 1 July 2011.
- Team (TM) (b)(3), (b)(6) leads two strike forces, one comprised primarily of a (b)(1)1.4a, (b)(1)1.4c and the other comprised primarily of an Army Ranger platoon, located at FOB (b)(1)1.4a, (b)(1)1.4c commanded by (b)(3), (b)(6)
- TM (b)(3), (b)(6), leads two strike forces: a (b)(1)1.4a, (b)(1)1.4c and a Ranger platoon, located at FOB (b)(3), (b)(6), commanded by another (b)(1)1.4a, (b)(1)1.4c commander.

<sup>5</sup> (U) Ex. 1, pgs. 106-7, 114 (~~S//NF~~); Ex. 2, pgs. 24-25. (S).  
<sup>6</sup> (U) Ex. 1, pg. 16 (~~S//NF~~); Ex. 2, pg. 3 (S); Ex. 3, slide 2. (~~S//REL FVEY~~).  
<sup>7</sup> (U) Ex. 4, slide 3 (~~S//NF~~).  
<sup>8</sup> (U) Ex. 4, slide 5 (~~S//NF~~).  
<sup>9</sup> (U) Ex. 4, slide 5 (~~S//NF~~).  
<sup>10</sup> (U) Ex. 4, slide 4 (~~S//NF~~).  
<sup>11</sup> (U) Ex. 4, slide 5 (~~S//NF~~).  
<sup>12</sup> (U) Ex. 4, slide 4 (~~S//NF~~).  
<sup>13</sup> (U) Ex. 4, slide 4 (~~S//NF~~).

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- Five (b)(1)1.4a, (b)(1)1.4c squads split between (b)(3), (b)(6)

(c) (S//REL USA, ISAF, NATO) Accelerating Operational Tempo (OPTEMPO). TF (b)(1)1.4a, (b)(1)1.4c operations to degrade Al Qaeda, Taliban and Haqqani Networks are target-focused and intelligence-driven, rather than focused upon holding or securing terrain.<sup>15</sup> The task force operates under a continuous targeting cycle relying heavily on interrogations of suspected insurgents and analysis of the materiel collected at the point of their capture.<sup>16</sup> The process is fed by direct action operations to capture or kill insurgents and seize documents, communications devices, weapons and materiel for further intelligence exploitation.<sup>17</sup> From 1 August 2010 to 1 August 2011, (b)(1)1.4a, (b)(1)1.4c conducted (b)(1)1.4a, (b)(1)1.4c total missions in Afghanistan.<sup>18</sup> In the past two years, (b)(1)1.4a, (b)(1)1.4c monthly objectives increased from 54 objectives in August 2009, to 186 objectives in August 2010, to 335 objectives in Jul 2011.<sup>19</sup> During this period, (b)(1)1.4a, (b)(1)1.4c staged three additional Ranger strike forces from the United States.<sup>20</sup> The increase in missions was directly aligned with the guidance from COMUSFOR-A to increase pressure on enemy networks.<sup>21</sup> The Deputy Commander, RC East, reinforced COMUSFOR-A's guidance the week prior to the EXTORTION 17 downing.<sup>22</sup> This increased pace of operations coupled with the challenging terrain in which many of the objectives are located resulted in increased demand for aviation assets to fly more strike forces to more objectives more frequently.<sup>23</sup>

(2) (S//REL USA, ISAF, NATO) TF (b)(1)1.4a, (b)(1)1.4c. TF (b)(1)1.4a, (b)(1)1.4c, stationed at FOB (b)(1)1.4a, (b)(1)1.4c Province, Afghanistan, is an aviation battalion task force comprised of active duty, U.S. Army Reserve (USAR) and Army National Guard (ARNG) helicopter crews. They had maintained a habitual support relationship with TF (b)(1)1.4a, (b)(1)1.4c and TM (b)(3), (b)(6) over the 10 months prior to this mission, despite several rotations of (b)(1)1.4a, (b)(1)1.4c and Ranger strike forces.<sup>24</sup> The subordinate CH-47D units assigned to TF (b)(1)1.4a, (b)(1)1.4c changed several times over the course of those 10 months. The Army Reserve and Army National Guard crews in (b)(3), (b)(6) and 17 were the third rotation of Reserve Component aircrews in TF (b)(1)1.4a, (b)(1)1.4c; previous rotations included elements from Washington, Oregon and Hawaii.<sup>25</sup> The Colorado and Nebraska Army National Guard aircrews were placed under TF (b)(1)1.4a, (b)(1)1.4c Operational Control (OPCON) in July 2011.<sup>26</sup> Except for the Air Mission Commander (AMC), the crewmembers of (b)(3), (b)(6) EXTORTION 17 were all mobilized soldiers of the Army Reserve or

<sup>14</sup> (U) Ex. 5, slide 2 (S//REL ACCU).  
<sup>15</sup> (U) Ex. 1, pg. 16, 19 (S//NF).  
<sup>16</sup> (U) Ex. 4, slide 8 (S//NF).  
<sup>17</sup> (U) Ex. 4, slide 8 (S//NF); Ex. 1, pg. 23 (S//NF).  
<sup>18</sup> (U) Ex. 5, slide 7 (S//REL ACCU); Ex. 1, pg. 31 (S//NF).  
<sup>19</sup> (U) Ex. 5, slide 6 (S//REL ACCU); Ex. 1, pg. 54 (S//NF).  
<sup>20</sup> (U) Ex. 1, pg. 53-54 (S//NF).  
<sup>21</sup> (U) Ex. 1, pgs. 54-55 (S//NF).  
<sup>22</sup> (U) Ex. 1, pg. 46 (S//NF).  
<sup>23</sup> (U) Ex. 1, pg. 54 (S//NF).  
<sup>24</sup> (U) Ex. 9, pg. 6 (S).  
<sup>25</sup> (U) Ex. 9, pg. 2 (S).  
<sup>26</sup> (U) Ex. 9, pg. 2 (S).

SUBJECT: Investigation Findings and Recommendations (Crash of CH-47D Aircraft in Wardak Province, Afghanistan on 6 August 2011) (U)

Army National Guard.<sup>27</sup> Each crewmember flying the mission was fully qualified to perform the aircrew duties to which he was assigned, and all were in compliance with Army, theater specific, and unit qualification and training requirements.<sup>28</sup> Additionally, a thorough review of the aircraft's historical records found that the EXTORTION 17 aircraft was maintained and equipped in accordance with all applicable Army and theater regulations, and maintenance directives.<sup>29</sup>

c. (U) *The Target: Taliban Leadership in Tangi Valley.*

(1) ~~(S//REL USA, ISAF, NATO)~~ *The Tangi Valley.*

(b)(1)1.4a, (b)(1)1.4c (b)(1)1.4a, (b)(1)1.4c (b)(1)1.4a, (b)(1)1.4c  
Tangi in April 2011, the Tangi Valley Taliban experienced increased security due to infrequent coalition forces activity in the valley.<sup>31</sup> Tangi Valley provides the Taliban with a safe haven within Wardak Province from Baraki Barak at the southeastern end of the valley to Sayyid Abad at the northwestern end.<sup>32</sup> Within this safe haven, senior Taliban leaders are able to move freely, meet and be seen by the general population because of the lack of persistent coalition force presence.<sup>33</sup>

(2) ~~(S//REL USA, ISAF, NATO)~~ *Target Development.*

(b)(1)1.4a, (b)(1)1.4c (b)(1)1.4a, (b)(1)1.4c

(3) ~~(S//REL USA, ISAF, NATO)~~ *Target Approval.* (b)(1)1.4a, (b)(1)1.4c Operations and intelligence officers conduct weekly Joint Targeting Boards (JTB) to consider all target nominations from subordinate task forces, such as (b)(1)1.4a, (b)(1)1.4c.<sup>37</sup> The JTB is a vetting process to assess the value of each target's significance within enemy networks, and ensure targets are also evaluated and approved based on the measure of risk to force and risk of strategic setbacks as a result of mission failure.<sup>38</sup> The JTB's approved targets are then placed on the Afghanistan Joint Targeting

<sup>27</sup> (U) Ex. 6 ~~(S//REL USA, ISAF, NATO)~~, Ex. 7 (U//FOUO).  
<sup>28</sup> (U) Ex. 7 (U//FOUO).  
<sup>29</sup> (U) The aircraft's historical records can be found in Exhibit 18.  
<sup>30</sup> (U) Ex. 5 ~~(S//REL ACQU)~~; Ex. 1, pg. 13 ~~(S//NF)~~.  
<sup>31</sup> (U) Ex. 5 ~~(S//REL ACQU)~~; Ex. 1, pg. 12 ~~(S//NF)~~.  
<sup>32</sup> (U) Ex. 5 ~~(S//REL ACQU)~~; Ex. 20, pg. 7 (S).  
<sup>33</sup> (U) Ex. 5 ~~(S//REL ACQU)~~; Ex. 21, pg. 7 (S).  
<sup>34</sup> (U) Ex. 5, slide 13 ~~(S//REL ACQU)~~; Ex. 1, pg. 71 ~~(S//NF)~~; Ex. 21, pgs. 3-4. (S).  
<sup>35</sup> (U) Ex. 1, pg. 16, 70 ~~(S//NF)~~; Ex. 2, pgs. 3-4 (S); Ex. 5, slide 13 ~~(S//REL ACQU)~~; Ex. 21, pg. 4 (S); Ex. 22, pg. 2 (S).  
<sup>36</sup> (U) Ex. 22, pgs. 4-5 (S).  
<sup>37</sup> (U) Ex. 1, pg. 64 ~~(S//NF)~~.  
<sup>38</sup> (U) Ex. 1, pgs. 64-65 ~~(S//NF)~~.

SUBJECT: Investigation Findings and Recommendations (Crash of CH-47D Aircraft in Wardak Province, Afghanistan on 6 August 2011) (U)

List for further refinement and action by the subordinate task forces.<sup>39</sup> On 19 June 2011, the TF (b)(1) ~~(S//REL USA, ISAF, NATO)~~ placed Tahir on the Afghanistan Joint Targeting List.<sup>40</sup>

(4) (U) *Threat Assessment.*

(a) ~~(S//REL USA, ISAF, NATO)~~ The Tangi Valley was assessed as a moderate to high threat to coalition forces based on reported enemy activities, historical surface-to-air fire reports by coalition forces aircraft, and the lack of coalition forces presence in the valley.<sup>41</sup> On 5 August 2011, TF (b)(1) ~~(S//REL USA, ISAF, NATO)~~ and 10th Combat Aviation Brigade (10th CAB) intelligence analysts assessed the threat in the valley as high risk due to: historical enemy activities including RPG and small arms fire, an assessed early warning network, the lack of a coalition force presence in the valley, the significance of the target (Qari Tahir), and the corresponding actions the Tangi Valley Taliban would likely take to prevent his capture.<sup>42</sup>

(b) ~~(S//REL USA, ISAF, NATO)~~ Taliban insurgents operating in the Tangi Valley maintain an early warning network in order to detect coalition forces' ground and air movements within the valley.<sup>43</sup> Forty-five days prior to the EXTORTION 17 shoot-down, coalition forces aircraft reported three surface-to-air incidents within the Tangi Valley. On 06 June 2011, two CH-47D Chinook helicopters aborted a mission to insert a TF (b)(1) ~~(S//REL USA, ISAF, NATO)~~ strike force into Tangi Valley after they were engaged with multiple RPGs from several locations in the valley; the helicopters returned to FOB (b)(1) ~~(S//REL USA, ISAF, NATO)~~ without further incident. Later that evening, an MH-47G Army Special Operations Aviation (ARSOA) Chinook helicopter was engaged with RPGs from multiple locations while inserting the same TF (b)(1) ~~(S//REL USA, ISAF, NATO)~~ strike force for the same mission; no damage to the aircraft was reported.<sup>44</sup> Seventeen days prior to the shoot-down of EXTORTION 17, another MH-47G was engaged by small arms fire and two RPGs, and reported small caliber bullet damage to the aircraft.<sup>45</sup> These surface-to-air fire events indicated insurgent capability and intent to engage coalition forces aircraft operating in the Tangi Valley.<sup>46</sup>

d. (U) *Tangi Valley Mission Planning.*

(1) ~~(S//REL USA, ISAF, NATO)~~ Mission: *Qari Tahir (Objective LEFTY GROVE)*. At 1856D on 5 August 2011, Task Force (b)(1) ~~(S//REL USA, ISAF, NATO)~~ and its TM (b)(3), (b)(6) received geo-locational intelligence indicating the likely presence of Tahir in a compound in the Tangi Valley.<sup>47</sup> The strike forces

<sup>39</sup> (U) Ex. 1, pg. 65 ~~(S//NF)~~.  
<sup>40</sup> (U) Ex. 1, pg. 54; Ex. 22 (S).  
<sup>41</sup> (U) Ex. 20, pg. 7 (S).  
<sup>42</sup> (U) Ex. 20, pg. 17 (S); Ex. 21, pg. 18 (S); Exs. 62 ~~(S//REL FVEY)~~, 63 ~~(S//REL FVEY)~~, 64 ~~(S//REL USA, ISAF, NATO)~~.  
<sup>43</sup> (U) Ex. 20, pgS. 11, 17, 66 (S); Ex. 24, pg. 5 (S); Exs. 62 ~~(S//REL FVEY)~~, 63 ~~(S//REL FVEY)~~, 64 ~~(S//REL USA, ISAF, NATO)~~.  
<sup>44</sup> (U) Exs. 25 ~~(S//REL USA, ISAF, NATO)~~, 26 ~~(S//REL USA, ISAF, NATO)~~, 27 ~~(S//REL ACGLU)~~.  
<sup>45</sup> (U) Exs. 25 ~~(S//REL USA, ISAF, NATO)~~, 26 ~~(S//REL USA, ISAF, NATO)~~, 27 ~~(S//REL ACGLU)~~.  
<sup>46</sup> (U) Exs. 25 ~~(S//REL USA, ISAF, NATO)~~, 26 ~~(S//REL USA, ISAF, NATO)~~, 27 ~~(S//REL ACGLU)~~.  
<sup>47</sup> (U) Ex. 2, pg. 4 (S).

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and their supporting aircrews began mission planning and developed a concept of operations to conduct a helicopter assault to capture or kill Tahir.<sup>48</sup> The TM (b)(3), (b)(6) Commander (b)(3), (b)(6) (b)(3), (b)(6) designated his Ranger strike force (1/B) as the primary ground assault force for the operation.<sup>49</sup> The concept of the operation was staffed through TF (b)(1)1.4a, (b)(1)1.4b and 10th CAB for the helicopter mission planning and landing zone selection – and was approved for execution by the (b)(1)1.4a, (b)(1)1.4b and (b)(3), (b)(6) commanders.<sup>50</sup>

(2) (U) Air Support.

(a) ~~(S//REL USA, ISAF, NATO)~~ *Helicopter and Tilt-Rotor Packages: a Mixed Fleet.* On 5 August 2011, TF (b)(1)1.4a, (b)(1)1.4c strike forces<sup>51</sup> were supported by 11 helicopter or tilt-rotor (CV-22 Osprey) troop-carrying assault aircraft packages and 11 helicopter fire support packages.<sup>52</sup> Six of the 11 assault aircraft packages were supported from GPF aviation units. The remaining five packages were Army or Air Force special operations aircraft.<sup>53</sup> Nine of the 11 helicopter fire support packages, were supported by GPF aviation units. Headquarters, International Security Assistance Force Joint Command (IJC) directed GPF aircrews to be able to plan on a condensed timeline for a time-sensitive targeting cycle to take off within three hours of notification<sup>54</sup> and minimize crew rotations to develop a habitual relationship and improve effectiveness of the assigned aircrews and assault forces.<sup>55</sup>

(b) ~~(S//REL USA, ISAF, NATO)~~ *Risk and GPF Aviation Support.* The TF (b)(1)1.4a, (b)(1)1.4c Commander was responsible for the initial risk assessment for the CH-47Ds and AH-64Ds in direct support of (b)(1)1.4a, (b)(1)1.4c. He assessed all missions with (b)(1)1.4a, (b)(1)1.4c high risk based on the compressed planning timeline required to support their high pace of operations.<sup>56</sup> His TF (b)(1)1.4a, (b)(1)1.4c helicopters had conducted (b)(1)1.4a, (b)(1)1.4c missions in support of (b)(1)1.4a, (b)(1)1.4c over the previous 10 months, all of which were assessed as high risk for CH-47D aircrews.<sup>57</sup> In contrast, (b)(1)1.4a, (b)(1)1.4c categorized approximately 28% (b)(1)1.4a, (b)(1)1.4c of all missions conducted in the Afghanistan Theater of Operations from 1 August 2010 to 1 August 2011 as “high risk” missions.<sup>58</sup> In the six weeks prior to the EXTORTION 17 shoot-down, TM (b)(3), (b)(6) employed TF (b)(1)1.4a, (b)(1)1.4c aviation

<sup>48</sup> (U) Ex. 16 (S//NF).

<sup>49</sup> (U) Ex. 1, pg. 76 (S//NF); Ex. 2, pg. 4 (S).

<sup>50</sup> (U) Ex. 1, pg. 123 (S//NF).

<sup>51</sup> (S//NF) The loss of the (b)(1)1.4a, (b)(1)1.4c onboard EXTORTION 17 reduced the number of strike forces to 19. The imminent redeployment of the three surged Ranger platoons surged will reduce the number of (b)(1)1.4a, (b)(1)1.4c strike forces to 16 until deployment of a replacement strike force. (Ex. 1, pgs. 7, 9, 18-19 (S//NF)).

<sup>52</sup> (U) Ex. 1, pg. 39 (S//NF); Ex. 5, slide 4 (S//REL ACQU).

<sup>53</sup> (U) Ex. 29 (S//REL ACQU).

<sup>54</sup> (U) Exs. 30 (NATO/ISAF SECRET), 32 (NATO/ISAF SECRET). According to the Task Force (b)(1)1.4a, (b)(1)1.4c Joint Special Operation Aviation Detachment Director, four to five hours is the norm. (Ex. 1, pg. 54 (S//NF)).

<sup>55</sup> (U) Exs. 30 (NATO/ISAF SECRET), 32 (NATO/ISAF SECRET).

<sup>56</sup> (U) Ex. 9, pgs. 9-10 (S).

<sup>57</sup> (U) Ex. 9, pgs. 9-10 (S).

<sup>58</sup> (U) Ex. 34 (S).

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elements for over 90% of its missions, indicative of the high level of integration between TM (b)(3),(b)(6) and TF (b)(1)1.4a, (b)(1)1.4c.<sup>59</sup>

(3) (U) *Aircrew Pre-Mission Planning.*

(a) ~~(S//REL USA, ISAF, NATO)~~ *Primary Route and HLZ Selection.* 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 TM (b)(3),(b)(6).<sup>60</sup> The order designated Tahir as the target and directed mission planning for an insertion time of 2300D.<sup>61</sup> The TF (b)(1)1.4a, (b)(1)1.4c Tactical Operations Officer (TACOPS) served as one of two planners for the CH-47Ds supporting the mission.<sup>62</sup> The 1/B Sniper Team Leader recommended possible HLZs to the CH-47D pilots planning the air routes.<sup>63</sup> For this mission, (b)(3),(b)(6), EXTORTION 17's Pilot in Command and Flight Lead, planned the insertion and exfiltration routes.<sup>64</sup> The TACOPS and the Air Mission Commander developed the concept of operations Air Mission Briefing (AMB) and selected the landing zones.<sup>65</sup>

(b) ~~(S//REL USA, ISAF, NATO)~~ *Risk Assessment, Risk Management.* The CH-47D Air Mission Commander completed an Electronic Risk Assessment Worksheet (ERAW) and determined the mission to be high risk based on low illumination conditions and one crew chief's relatively low experience level.<sup>66</sup> The AH-64D Air Mission Commander also completed an independent risk assessment for his element and determined their risk to be moderate because of crew experience, and because the AH-64D aircrews used the Modern Target Acquisition and Detection System, which mitigated the low illumination.<sup>67</sup> Both assessments were reviewed and approved by the TF (b)(1)1.4a, (b)(1)1.4c Commander.

(c) ~~(S//REL USA, ISAF, NATO)~~ *Mission Brief.* At approximately 2100D, the AH-64 and CH-47D aircrews conducted a combined mission brief covering the operation. Following the combined aircrew brief, the Air Mission Commander conducted a crew brief specifically for the CH-47D aircrews.<sup>68</sup>

~~(S//REL USA, ISAF, NATO)~~

(d) *Air Mission Approval.* TF (b)(1)1.4a, (b)(1)1.4c submitted the concept of operations for final review and approval by the (b)(3),(b)(6) Commander, who subsequently approved the air mission.<sup>69</sup>

<sup>59</sup> (U) Ex. 1, pg. 37 (~~S//NF~~).  
<sup>60</sup> (U) Ex. 36 (~~S~~), 38 (U//~~FOUO~~).  
<sup>61</sup> (U) Ex. 36 (~~S~~), 38 (U//~~FOUO~~).  
<sup>62</sup> (U) Ex. 9, pgs. 20-21 (~~S~~); Ex. 38 (U//~~FOUO~~); Ex. 46, pgs. 7-8 (~~S~~).  
<sup>63</sup> (U) Ex. 2, pg. 26 (~~S~~); Ex. 38 (U//~~FOUO~~).  
<sup>64</sup> (U) Ex. 46, pg. 8 (~~S~~).  
<sup>65</sup> (U) Ex. 9, pg. 25 (~~S~~).  
<sup>66</sup> (U) Ex. 35, slide 3 (~~S//REL USA, AUS, CAN, GBR, NZL, POL~~); Ex. 78 (~~S~~); Ex. 79 (U//~~FOUO~~).  
<sup>67</sup> (U) Ex. 35, slide 3 (~~S//REL USA, AUS, CAN, GBR, NZL, POL~~); Ex. 80 (~~S//REL USA, ISAF, NATO~~).  
<sup>68</sup> (U) Ex. 37 (U//~~FOUO~~).  
<sup>69</sup> (U) Ex. 38 (U//~~FOUO~~); Ex. 49, pg. 35 (~~S~~).

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(4) (U) *Ground Pre-Mission Planning.*

(a) ~~(S//REL USA, ISAF, NATO)~~ *Task Organization and Concept of Operations.* The assault force consisted of TM (b)(3), (b)(6) platoon (1/B), organized into three rifle squads, one weapons squad, with a TF (b)(1)1.4a, (b)(1)1.4c Battlespace Owner (BSO) liaison, a Cultural Support Team (CST) member and a seven-man (b)(3), (b)(6) (b)(1)1.4a, (b)(1)1.4c team.<sup>71</sup> The plan called for a CH-47D helicopter assault approximately 1200 meters southeast of a group of mud brick buildings associated with Tahir's location in Tangi Valley.<sup>72</sup> Two CH-47D Chinook helicopters, call signs (b)(3), (b)(6) EXTORTION 17, would deliver the 1/B assault force into the planned helicopter landing zone named HLZ (b)(1)1.4a, (b)(1)1.4c.<sup>73</sup> Following their insertion, the assault force would walk to the target area, surround the perimeter of the target buildings, and begin tactical callout procedures<sup>74</sup> led by the (b)(1)1.4a, (b)(1)1.4c.<sup>75</sup> Once tactical callout procedures were complete and all personnel were detained outside of the compound, the assault force would clear and secure the compound. They would then conduct tactical questioning of the detainees and search the compound for any other information that could aid in future targeting and operations.<sup>76</sup> If necessary, the assault force was prepared to move to subsequent compounds and repeat the process of tactical callout, detention, clearing and securing.<sup>77</sup> For exfiltration, the assault force planned a foot movement to another preplanned helicopter pickup zone, named HLZ (b)(1)1.4a, (b)(1)1.4c approximately 600 meters to the southwest of the objective area.<sup>78</sup> The concept of operations also identified the TM (b)(3), (b)(6) (b)(1)1.4a, (b)(1)1.4c as the IRF, standing by at FOB (b)(1)1.4a, (b)(1)1.4c to fly into the Tangi Valley and support the Ranger led assault force if deemed necessary by the TF (b)(1)1.4a, (b)(1)1.4c Commander.<sup>79</sup> If employed, the IRF would use the same CH-47D helicopters employed by the 1/B assault force.

(b) ~~(S//REL USA, ISAF, NATO)~~ *Fire Support Coverage and Taskings.* Two AH-64D Apache attack helicopters, call signs (b)(3), (b)(6) and (b)(3), (b)(6), would provide dedicated fires, when necessary.<sup>80</sup> An AC-130 gunship, call sign (b)(3), (b)(6) was also tasked

<sup>70</sup> (U) (b)(1)1.4a, (b)(1)1.4c organized around 4th Brigade, 10th Mountain Division. TF (b)(1)1.4a, (b)(1)1.4c is the "Battlespace Owner" responsible for conducting military operations - and approving (b)(1)1.4a, (b)(1)1.4c operations - within its battlespace in the (b)(1)1.4a, (b)(1)1.4c and Wardak Provinces. TF (b)(1)1.4a, (b)(1)1.4c (2nd Battalion, 4th Infantry Regiment, 4th Brigade, 10th Mountain Division) is the subordinate battalion task force responsible for the (b)(1)1.4a, (b)(1)1.4c battlespace that includes the Tangi Valley.

<sup>71</sup> (U) Ex. 28, slide 8 (~~S//REL FVEY~~).

<sup>72</sup> (U) Ex. 28 (~~S//REL FVEY~~).

<sup>73</sup> (U) Ex. 28, slide 20 (~~S//REL FVEY~~).

<sup>74</sup> (b)(1)1.4a, (b)(1)1.4c

<sup>75</sup> (U) Ex. 28, slide 5 (~~S//REL FVEY~~); Ex. 48, pg. 9 (S).

<sup>76</sup> (U) Ex. 28, slide 4 (~~S//REL FVEY~~).

<sup>77</sup> (U) Ex. 28 (~~S//REL FVEY~~).

<sup>78</sup> (U) Ex. 28, slide 7 (~~S//REL FVEY~~).

<sup>79</sup> (U) Ex. 28, slide 3 (~~S//REL FVEY~~).

<sup>80</sup> (U) Ex. 28, slide 23 (~~S//REL FVEY~~).

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to support the operation.<sup>81</sup> Initial taskings for the AH-64 AWT were: prepare to provide armed escort for the EXTORTION flight to its landing zone, hold no closer than 5 kilometers to the target unless otherwise directed, and be prepared to provide containment fires in support of the assault force.<sup>82</sup> The AC-130's initial taskings were: to hold no closer than 7 miles to target, expect to conduct surveillance of foot patrol routes and the objective, track enemy personnel and provide fires when directed, and be prepared to illuminate, or "sparkle," HLZs with an infrared light.<sup>83</sup>

(c) ~~(S//REL USA, ISAF, NATO)~~ *ISR Coverage and Taskings.*

(b)(1)1.4a, (b)(1)1.4c

(b)(1)1.4a, (b)(1)1.4c

(b)(1)1.4a, (b)(1)1.4c

(d) ~~(S//REL USA, ISAF, NATO)~~ *Command and Control.* The Ground Force Commander (GFC) for the assault force was the (b)(1)1.4a, (b)(1)1.4c (1/B) Platoon Leader.<sup>86</sup> The TF (b)(1)1.4a, (b)(1)1.4c Commander exercised overall command of the operation from the TF (b)(1)1.4a, (b)(1)1.4c JOC at FOB (b)(1)1.4a, (b)(1)1.4c.<sup>87</sup> The U.S. Air Force Joint Terminal Attack Controller (JTAC) co-located with the Ranger assault force, call sign (b)(3), (b)(6), would control ISR and fire support aircraft on behalf of the GFC during the operation.<sup>88</sup>

e. (U) *Mission Execution*

(1) ~~(S//REL USA, ISAF, NATO)~~ (b)(1)1.4a, (b)(1)1.4c *Assault Force (1/B) Insertion.* At 2230D the Attack Weapons Team (AWT) consisting of two AH-64Ds departed FOB (b)(1)1.4a, (b)(1)1.4c to provide landing zone reconnaissance and security for the EXTORTION flight that departed FOB (b)(1)1.4a, (b)(1)1.4c.

<sup>81</sup> (U) Ex. 40, pg. 4-5 (~~S~~); Ex 28, slide 23 (~~S//REL FVEY~~).

<sup>82</sup> (U) Ex. 28, slide 23 (~~S//REL FVEY~~).

<sup>83</sup> (U) Ex. 28, slide 23 (~~S//REL FVEY~~). When an aircraft "Sparkles" (or illuminates) an object, it directs an infrared beam of light onto the target. The beam can also be seen through night vision goggles, and can be a laser with embedded code, which allows the AH-64 airborne laser tracker to find the spot on the ground and direct its targeting systems onto the spot.

<sup>84</sup> (U) Ex. 42, 52 (~~S//REL ACGU~~).

<sup>85</sup> (U) Ex. 42, 52 (~~S//REL ACGU~~).

<sup>86</sup> (U) Ex 28, slide 26 (~~S//REL FVEY~~).

<sup>87</sup> (U) Ex 28, slide 26 (~~S//REL FVEY~~).

<sup>88</sup> (U) Ex. 45, pg. 9 (~~S//REL ACGU~~); Ex. 28, slide 23 (~~S//REL FVEY~~).

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with the 1/B assault force.<sup>89</sup> After a brief stop at FOB (b)(1)1.4a, (b)(1)1.4d to pick up the battlespace owner liaison, the EXTORTION flight, using an insertion route west and south of the Tangi Valley, touched down at HLZ (b)(1)1.4a, (b)(1)1.4d at 2258D.<sup>90</sup> The two CH-47Ds off-loaded the 1/B assault force and returned to FOB (b)(1)1.4a, (b)(1)1.4d refueled, shut down engines, and remained at the aircraft to extract the assault force, or to perform casualty evacuation (CASEVAC) as planned.<sup>91</sup> As the assault force began its foot movement to the target area, ISR aircraft observed a small group of suspected Taliban fighters moving in the general direction of the 1/B assault force. (b)(3), (b)(6) directed the AWT towards the fighters' location.<sup>92</sup> Once the AWT was near their location, the suspected Taliban fighters dispersed to the northwest, away from 1/B assault force. However, ISR aircraft lost contact with this element due to heavy overhead vegetation. At 2326D, the AWT detected and positively identified another group of suspected Taliban fighters: eight armed personnel walking single file armed with AK-47 rifles and RPG launchers, approximately 400 meters northwest of the target area.<sup>93</sup> (b)(3), (b)(6) directed the AWT to engage the enemy personnel; the AWT fired on the enemy with its 30mm gun, resulting in an estimated five enemy killed in action (EKIA) and one enemy wounded.<sup>94</sup> (b)(3), (b)(6) then approved the AWT to re-attack, resulting in one additional suspected EKIA. Following the second engagement, ISR aircraft observed the remaining two enemy personnel flee the AWT engagement area towards the west. Again, ISR aircraft failed to maintain contact with these two Taliban fighters due to the dense vegetation in the area.

(2) (~~S//REL USA ISAF NATO~~) *Additional Suspected Taliban Fighters Withdraw to the North.* At approximately 2340D, the ISR aircraft and the AC-130 gunship identified two additional personnel fleeing from 1/B's target area heading north-northwest along a road.<sup>95</sup> (b)(3), (b)(6) designated these two personnel as target reference "280."<sup>96</sup> Between 0100D and 0230D, the ISR aircraft observed that seven or eight personnel, suspected Taliban fighters, had joined the "280" individuals.<sup>97</sup> By 0215D the 9 or 10 suspected Taliban fighters had split into two groups. Approximately two kilometers from 1/B, three of the suspected fighters hid in a stand of trees, while the other six or seven remained inside a nearby building.<sup>98</sup> (b)(3), (b)(6) renamed the group in the building as "280A," and the group in the trees as "280B."<sup>99</sup> At this

<sup>89</sup> (U) Ex. 46, pg. 16 (S).

<sup>90</sup> (U) Exs. 81E (U//~~FOUO~~), 81F (U//~~FOUO~~).

<sup>91</sup> (U) Ex. 46, pg. 20 (S).

<sup>92</sup> (U) Ex. 2, pgs. 21-22 (S); Ex. 45, pg. 7 (S).

<sup>93</sup> (U) Ex. 47 (S); Ex. 67, 19:00:00 (S).

<sup>94</sup> (U) Ex. 47 (S); Ex. 67, 19:08:50 - 19:09:00 (S).

<sup>95</sup> (U) Ex. 67, 21:10:00 (S).

<sup>96</sup> (U) Ex. 67, 21:25:00 (S); Ex. 45, pg 8(S); Ex. 40, pg. 14 (S). "280" refers to the 280-series buildings designated on the grid referenced graphic GRG developed prior to the mission. The GRG is a method that the ground forces employ to identify buildings in the target area. (Ex. 28, slides 13-14 (~~S//REL FVEYX~~)). For this mission, the primary set of buildings of interest within the target area were labeled "10-series buildings," and numbered 11 - 19. All of the buildings in the target area were similarly labeled. The "280-series buildings" are located northwest of the 10-series buildings.

<sup>97</sup> Ex. 67, 23:06:00 (S).

<sup>98</sup> Ex. 67, 23:53:00 (S).

<sup>99</sup> Ex. 67, 23:53:00 (S).

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point in the mission TF (b)(3), (b)(6) Commander's focus shifted to these 9 or 10 suspected Taliban fighters.

(3) ~~(S//REL USA, ISAF, NATO)~~ (b)(3), (b)(6) (1/B) *Assault*. At 0008D, the 1/B assault force surrounded their primary target buildings, and commenced tactical callout procedures four minutes later.<sup>100</sup> The 1/B Platoon Leader also sent an element to attempt to interdict the two enemy personnel who had escaped the AH-64 AWT engagement. Unable to locate these two enemy personnel, the Ranger element next maneuvered to the reported location of the six EKIA. As this 1/B element approached the enemy location to conduct a battle damage assessment (BDA),<sup>101</sup> they engaged and killed one previously wounded Taliban fighter armed with an AK-47.<sup>102</sup> About one hour later, the 1/B assault force had cleared and secured their primary target buildings, and had begun tactical questioning and site exploitation. They had also surrounded a secondary group of buildings designated in their pre-mission planning as the "60-series buildings" and began callout procedures.<sup>103</sup> At 0238D, 1/B's (b)(1)1.4a, (b)(1)1.4c team entered the secondary target buildings, and quickly declared them clear and secure.<sup>104</sup>

f. (U) *IRF Employment*.

(1) ~~(S//REL USA, ISAF, NATO)~~ (b)(7)(F) (4a), (b)(7)(F) (4a), (b)(7)(F) (4a), (b)(7)(F) (4a) Commander *Monitoring the 1/B Operation*. Throughout the 1/B assault force mission, ISR aircraft, the AC-130 gunship, and the AH-64 Attack Weapons Team continued tracking the movement of the enemy personnel previously identified as 280. (b)(3), (b)(6) the SEAL IRF Commander, also monitored 1/B's movement to the target compound and the subsequent movement of the withdrawing "280" enemy personnel to the northwest.<sup>105</sup> As the number of assessed enemy personnel continued to grow to nine or ten, the (b)(7)(F) (4a), (b)(7)(F) (4a), (b)(7)(F) (4a), (b)(7)(F) (4a) Commander and IRF Commander discussed the tactical situation.<sup>106</sup> The (b)(7)(F) (4a), (b)(7)(F) (4a), (b)(7)(F) (4a), (b)(7)(F) (4a) Commander believed that Tahir could be among the group of men who had escaped the target area and were now beyond 1/B's reach.<sup>107</sup> The (b)(7)(F) (4a), (b)(7)(F) (4a), (b)(7)(F) (4a), (b)(7)(F) (4a) Commander also assessed that capturing or killing (if necessary) the group of suspected Taliban fighters northwest of 1/B would generate additional valuable intelligence on the Tangi Valley Taliban network, and could result in Tahir's capture or death.<sup>108</sup> The (b)(7)(F) (4a), (b)(7)(F) (4a), (b)(7)(F) (4a), (b)(7)(F) (4a) Commander considered his options, including a strike by AC-130 or the AWT, but was unable to determine whether the group was armed and therefore could not authorize the strike.<sup>109</sup> Ultimately, the (b)(7)(F) (4a), (b)(7)(F) (4a), (b)(7)(F) (4a), (b)(7)(F) (4a) Commander decided to employ a 17-man IRF to capture – or if they resisted, to assault – the gathering of suspected

<sup>100</sup> (U) Ex. 47 ~~(S)~~.

<sup>101</sup> (U) Ex. 2, pg. 27 ~~(S)~~; Ex. 45, pg. 20 ~~(S)~~.

<sup>102</sup> (U) Ex. 2, pg. 27 ~~(S)~~.

<sup>103</sup> (U) Ex. 47 ~~(S)~~.

<sup>104</sup> (U) Ex. 47 ~~(S)~~.

<sup>105</sup> (U) Ex. 48, pg. 5 ~~(S)~~.

<sup>106</sup> (U) Ex. 48, pg. 5 ~~(S)~~.

<sup>107</sup> (U) Ex. 48, pgs. 3, 5, 7-8 ~~(S)~~.

<sup>108</sup> (U) Ex. 48, pg. 3 ~~(S)~~.

<sup>109</sup> (U) Ex. 48, pg. 3 ~~(S)~~.

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enemy fighters northwest of the original target area.<sup>110</sup> At 0030D ~~(S)~~ ~~(b)(1)1.4a, (b)(1)1.4c~~ issued a warning order to insert the IRF by helicopter to interdict the enemy personnel.<sup>111</sup>

(2) ~~(S//REL USA, USAF, NATO)~~ *IRF Planning and Coordination.* The ~~(S)~~ ~~(b)(1)1.4a, (b)(1)1.4c~~ Commander's decision to employ the IRF required multilateral planning and coordination to ensure the IRF was inserted before dawn.<sup>112</sup> The SEAL ~~(S)~~ ~~(b)(1)1.4a, (b)(1)1.4c~~ immediately began planning for the follow-on operation and increased the size of the IRF from 17 to 32. The increase was a conscious decision that took into consideration the growing 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.<sup>113</sup> The aviation planner and the IRF Commander selected HLZ ~~(S)~~ ~~(b)(1)1.4a, (b)(1)1.4c~~ as the insertion point for the IRF. HLZ ~~(S)~~ ~~(b)(1)1.4a, (b)(1)1.4c~~ was previously considered and approved for a different operation, but was not used.<sup>114</sup> HLZ ~~(S)~~ ~~(b)(1)1.4a, (b)(1)1.4c~~ was located approximately 700 meters northwest of the suspected 280 A/B enemy location. The IRF conducted an operations order briefing, and at 0150D conducted radio checks and moved to the aircraft.

(3) ~~(S//REL USA, ISAF, NATO)~~ *Immediate Reaction Force (IRF) Mission and Concept of Operations.* The IRF's mission was to interdict the suspected 280 A/B enemy personnel who had now moved to a location approximately 2.25 kilometers northwest of 1/B's target area. The IRF consisted of three assault teams, and also included a military working dog, an interpreter, and a seven man ~~(S)~~ ~~(b)(1)1.4a, (b)(1)1.4c~~. All would be delivered by helicopter into HLZ ~~(S)~~ ~~(b)(1)1.4a, (b)(1)1.4c~~ when maneuver on foot to the vicinity of the enemy personnel, and conduct a tactical callout led by the ~~(S)~~ ~~(b)(1)1.4a, (b)(1)1.4c~~.<sup>115</sup> Once the IRF completed its actions, they and any detainees would move by foot to an offset HLZ and exfiltrate on two CH-47D helicopters, later during daylight or, more likely, during the next period of darkness.<sup>116</sup>

~~USA, ISAF, NATO~~

(4) ~~(S//REL)~~ *IRF Aviation Planning and Coordination.* At 0100D the TF ~~(S)~~ ~~(b)(1)1.4a, (b)(1)1.4c~~ aviation planner received a warning order from the TM ~~(S)~~ ~~(b)(3), (b)(6)~~ Operations Officer for a possible IRF insertion of 17 personnel, subsequently increased to 32.<sup>117</sup> At approximately 0110D, the TF ~~(S)~~ ~~(b)(1)1.4a, (b)(1)1.4c~~ commander discussed mission specifics, including the approach direction, with TM ~~(S)~~ ~~(b)(1)1.4a, (b)(1)1.4c~~ planners.<sup>118</sup> For the TF ~~(S)~~ ~~(b)(1)1.4a, (b)(1)1.4c~~ commander, the decision to load the entire IRF on just one Chinook conformed to the mission constraints as he understood them: the IRF commander wanted to mass troops quickly, and using one helicopter reduced aircraft exposure on the HLZ.<sup>119</sup> According to the TF ~~(S)~~ ~~(b)(1)1.4a, (b)(1)1.4c~~ Operations Officer, the TF ~~(S)~~ ~~(b)(1)1.4a, (b)(1)1.4c~~ planners told

<sup>110</sup> (U) Ex. 2, pg. 24 ~~(S)~~; Ex. 48, pg. 3 ~~(S)~~.

<sup>111</sup> (U) Ex. 48, pg. 13 ~~(S)~~.

<sup>112</sup> (U) Ex. 48, pgs. 9-11 ~~(S)~~.

<sup>113</sup> (U) Ex. 48, pgs. 6, 7, 9-10 ~~(S)~~.

<sup>114</sup> (U) Ex. 2, pg. 26 ~~(S)~~.

<sup>115</sup> (U) Ex. 48, pg. 9 ~~(S)~~.

<sup>116</sup> (U) Ex. 48, pgs. 16-17 ~~(S)~~.

<sup>117</sup> (U) Ex. 38 (U//FOUO).

<sup>118</sup> (U) Ex. 9, pg. 25 ~~(S)~~.

<sup>119</sup> (U) Ex. 9, pg. 34 ~~(S)~~.

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him they were only approved for a one-ship insertion into the HLZ, in order to avoid exposing a second aircraft in the landing zone.<sup>120</sup> The aviation planner radioed a comprehensive warning order to EXTORTION (b)(1), (b)(1.4a), (b)(1.4c)<sup>121</sup>; EXTORTION 17 relayed this warning order to the AH-64 Attack Weapons Team.<sup>121</sup> The AWT further relayed the warning order to (b)(3), (b)(6), the 1/B Joint Terminal Attack Controller (JTAC).<sup>122</sup> The JTAC then approved the AH-64s to refuel at FOB (b)(1), (b)(1.4a), (b)(1.4c) and return to the 1/B area of operations prior to the IRF's insertion. At 0200D, the EXTORTION element repositioned to load the IRF onto EXTORTION 17.<sup>123</sup> When the IRF arrived at the aircraft, the total number of passengers had increased to 33, due to the addition of an interpreter. The aviation planner sent a runner to EXTORTION 17 with the landing diagram for HLZ (b)(1), (b)(1.4a), (b)(1.4c). The EXTORTION 17 aircrew selected the flight route to HLZ (b)(1), (b)(1.4a), (b)(1.4c) choosing to approach from the northwest as the (b)(1), (b)(1.4a), (b)(1.4c) Commander had requested.<sup>124</sup> The AH-64 AWT flight lead directed the EXTORTION flight to delay their takeoff to allow the AWT adequate time to refuel, then conduct a thorough reconnaissance of the target area and HLZ (b)(1), (b)(1.4a), (b)(1.4c). When refueling was complete, the AWT took off from FOB (b)(1), (b)(1.4a), (b)(1.4c) 0214D.<sup>125</sup>

(5) ~~(S//REL USA, ISAF, NATO)~~ *Intelligence, Surveillance and Reconnaissance (ISR) Support of the IRF Infiltration.* Once (b)(3), (b)(6) was notified of the IRF insertion plan, and the AWT had returned from FOB (b)(1), (b)(1.4a), (b)(1.4c) (b)(3), (b)(6) directed the AH-64 AWT to reconnoiter HLZ (b)(1), (b)(1.4a), (b)(1.4c).<sup>126</sup> The AC-130 gunship oriented one sensor on the IRF's landing zone, HLZ (b)(1), (b)(1.4a), (b)(1.4c) and its other sensor on the location of suspected 280 A/B enemy personnel.<sup>127</sup> The other surveillance and reconnaissance aircraft in support of 1/B assault force focused on the original target area and on the IRF's target area, the enemy personnel two kilometers north of 1/B.<sup>128</sup> The TF (b)(1), (b)(1.4a), (b)(1.4c) operations center at FOB Shank monitored ISR and fire support activities throughout 1/B's operations, but did not exercise control or otherwise re-task those aircraft prior to, or during, the IRF's flight to HLZ (b)(1), (b)(1.4a), (b)(1.4c).<sup>129</sup>

(6) ~~(S//REL USA, ISAF, NATO)~~ *IRF Concept of Operation Approval.* The (b)(1), (b)(1.4a), (b)(1.4c) Commander considered the greatest risk to the IRF helicopter landing was a repeat of the insertion route that 1/B had used earlier in the evening.<sup>130</sup> He believed the enemy would likely be focused towards the 1/B assault force, and decided that the IRF would enter the valley from the northwest.<sup>131</sup> The (b)(1), (b)(1.4a), (b)(1.4c) Commander briefed the initial IRF concept of operations to the (b)(1), (b)(1.4a), (b)(1.4c) Commander via telephone, and then called him back after deciding to employ the

<sup>120</sup> (U) Ex. 2, pg. 28 (S).  
<sup>121</sup> (U) Ex. 9, pg. 32 (S); Ex. 7 (U//FOUO).  
<sup>122</sup> (U) Ex. 45, pg. 8 (S).  
<sup>123</sup> (U) Exs. 37 (U//FOUO), 38 (U//FOUO).  
<sup>124</sup> (U) Ex. 46, pg. 8 (S).  
<sup>125</sup> (U) Ex. 54, 21:44:40 (S).  
<sup>126</sup> (U) Ex. 45, pg. 21 (S).  
<sup>127</sup> (U) Ex. 45, pg. 21 (S).  
<sup>128</sup> (U) Ex. 45, pg. 23 (S).  
<sup>129</sup> (U) Ex. 48, pgs. 20-21 (S).  
<sup>130</sup> (U) Ex. 48, pgs. 12-13 (S).  
<sup>131</sup> (U) Ex. 48, pg. 13 (S).

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IRF.<sup>132</sup> The ~~(b)(7)(F), (b)(7)(G)~~ Commander did not discuss his risk assessment with the ~~(b)(1)1.4a, (b)(1)1.4c~~ Commander during either telephone call.<sup>133</sup> The ~~(b)(7)(F), (b)(7)(G)~~ Commander approved the operation during the second telephone call, at approximately 0135D.<sup>134</sup> At 0150D, the ~~(b)(1)1.4a, (b)(1)1.4c~~ Commander and the ~~(b)(3), (b)(6)~~ Commander discussed the IRF insertion.<sup>135</sup> The ~~(b)(3), (b)(6)~~ Commander subsequently approved HLZ ~~(b)(1)1.4a, (b)(1)1.4c~~ and the IRF's air mission.<sup>136</sup>

g. ~~(S//REL USA, ISAF, NATO)~~ "EXTORTION is down." For clarity and precision, the following chronology<sup>137</sup> describes EXTORTION 17's flight towards HLZ ~~(b)(1)1.4a, (b)(1)1.4c~~ with the IRF on-board:

- 0214 AWT depart FOB ~~(b)(1)1.4a, (b)(1)1.4c~~ for HLZ ~~(b)(1)1.4a, (b)(1)1.4c~~
- 0222 EXTORTION 17 departs FOB ~~(b)(1)1.4a, (b)(1)1.4c~~ for infil of IRF at HLZ ~~(b)(1)1.4a, (b)(1)1.4c~~
- 0225 EXTORTION 17 reports 6 minutes out from HLZ ~~(b)(1)1.4a, (b)(1)1.4c~~ ~~(b)(3), (b)(6)~~ enters holding pattern
- 0232 EXTORTION 17 reports '4 minutes out' from HLZ ~~(b)(1)1.4a, (b)(1)1.4c~~
- 0233 ~~(b)(3), (b)(6)~~ establishes orbit in vicinity of (IVO) HLZ ~~(b)(1)1.4a, (b)(1)1.4c~~
- 0233 ~~(b)(3), (b)(6)~~ continues to monitor the suspected compound where the insurgents fled
- 0233 EXTORTION 17 reports 3 minutes out from HLZ ~~(b)(1)1.4a, (b)(1)1.4c~~ ~~(b)(3), (b)(6)~~ notifies EXTORTION 17 ~~(b)(3), (b)(6)~~ determines HLZ ~~(b)(1)1.4a, (b)(1)1.4c~~ to have no enemy activity ("ICE")
- 0236:47 EXTORTION 17 requests ~~(b)(3), (b)(6)~~ (AC-130) illuminate ("sparkle") HLZ ~~(b)(1)1.4a, (b)(1)1.4c~~ with Infrared (IR) designator
- 0236:58 ~~(b)(3), (b)(6)~~ (AC-130) notifies EXTORTION 17 that HLZ is illuminated with IR designator ("burn is on")
- 0237:03 EXTORTION 17 reports IR designator on HLZ ~~(b)(1)1.4a, (b)(1)1.4c~~ in sight ("Burn in Sight")
- 0238:36 EXTORTION 17 reports "One Minute, one minute" out from HLZ ~~(b)(1)1.4a, (b)(1)1.4c~~
- 0238:47 ~~(b)(3), (b)(6)~~ acknowledges EXTORTION 17's one minute out call and informs EXTORTION 17 the HLZ is still illuminated with the Infrared (IR) designator: "Copy, 1 minute. Burn is still on"
- 0238:59 ~~(b)(3), (b)(6)~~ reconfirms to EXTORTION 17 that there is no enemy activity noted on HLZ ~~(b)(1)1.4a, (b)(1)1.4c~~ "HLZ is still Ice"
- 0239:15 ~~(b)(3), (b)(6)~~ element positively identifies EXTORTION 17 inbound for HLZ ~~(b)(1)1.4a, (b)(1)1.4c~~
- 0239:22 ~~(b)(3), (b)(6)~~ passes HLZ conditions, EXTORTION 17 acknowledges

<sup>132</sup> (U) Ex. 48, pgs. 13-14 ~~(S)~~.

<sup>133</sup> (U) Ex. 48, pg. 14 ~~(S)~~.

<sup>134</sup> (U) Ex. 52 ~~(S)~~.

<sup>135</sup> (U) Ex. 38 (U//~~FOUO~~); Ex. 49, pg. 45 ~~(S)~~.

<sup>136</sup> (U) Ex. 38, 49, pg. 46 (U//~~FOUO~~).

<sup>137</sup> (U) This chronology, and the complete chronology at Enclosure H, is the result of an exhaustive comparison of unit JOC and TOC logs, recorded ISR FMV, ~~(b)(3), (b)(6)~~ (AH-64D AWT) recorded audio and sensor video, and interviews. Using the various aircraft audio and video recordings as a baseline for establishing the most accurate timeline, the team then pulled the log entries in the JOC and TOC logs – cross-referenced against the interview transcripts – to develop the chronology presented in this report. All references supporting each item in the chronology are documents in Enclosure H, but are not included here for clarity.

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- 0239:48 (b)(3), (b)(6) states "There's an explosion, there's another... explosion." Further states: "EXTORTION is down."  
0240:17 (b)(3), (b)(6) makes "Fallen Angel" NET call to all elements in the Objective area indicating EXTORTION 17 has been shot down

While EXTORTION 17 was on final approach to the HLZ, all AH-64 Attack Weapons Team crewmembers identified a distinctive flash from a point of origin southeast of EXTORTION 17.<sup>138</sup> Two AWT crewmembers immediately observed a second flash.<sup>139</sup> The AC-130 reported seeing three RPG launches in quick succession. The AC-130 and the AWT both reported seeing the second RPG strike EXTORTION 17.<sup>140</sup> At 0239D, while flying southeast at an airspeed of approximately 50 knots and an altitude of 100-150 feet AGL, EXTORTION 17 was struck by an RPG and crashed. The entire event (from weapon impact to crash) likely lasted less than 5 seconds. EXTORTION 17 impacted the ground approximately 740 meters from HLZ (b)(1).4a, (b)(1).4c. Fire support and ISR aircraft immediately shifted focus to securing the crash site. At 0241:19D, (b)(3), (b)(6) fired 30mm rounds into a field just west of the suspected point of origin to suppress any possible enemy activity in the vicinity of the crash site.<sup>141</sup>

(U)  
h. ~~(S//REL USA, ISAF, NATO)~~ Shoot-Down Response  
~~(S//REL USA, ISAF, NATO)~~

(1) *Recovery Operations.* Following the shoot-down, the AWT and AC-130 radioed that EXTORTION 17 was down, likely due to an RPG strike.<sup>142</sup> The AWT, AC-130, and ISR platforms began scanning the area surrounding the crash site, both searching for survivors and ensuring that no enemy personnel approached the crash site.<sup>143</sup> At the time of the crash the 1/B assault force was in the process of clearing their secondary target buildings; shortly after the crash they were directed to move to the crash site as soon as possible.<sup>144</sup> 1/B quickly destroyed all enemy military equipment, released eight detainees, and at 0304D began their foot movement to the crash site.<sup>145</sup> TF (b)(1).4a, (b)(1).4d alerted their Pathfinder element (RC East's downed aircraft recovery team, based at FOB (b)(1).4a, (b)(1).4e) to prepare to enter the valley and secure the site, or assist in recovery efforts as required.<sup>146</sup> Nearly one hour after the crash, the AWT identified friendly killed-in-action (FKIA) within the vicinity of the crash site.<sup>147</sup> At 0412D, 1/B assault force arrived at the crash site. They secured the site and began searching for survivors.<sup>148</sup> 1/B soon discovered twelve FKIA but could not identify or recover additional FKIA due to the

<sup>138</sup> (U) Ex. 53, pgs. 37, 41, 47 (S); Ex. 67, 22:09:47 (S); Ex. 51, 22:09:46 (S).

<sup>139</sup> (U) Ex. 53, pgs. 37, 41, 47 (S); Ex. 67, 22:09:47 (S); Ex. 51, 22:09:54 (S).

<sup>140</sup> (U) Ex. 40, pg. 24-25 (S).

<sup>141</sup> (U) Ex. 53, pg. 39 (S); Ex. 67, 22:10:24 (S).

<sup>142</sup> (U) Ex. 54 (S).

<sup>143</sup> (U) Ex. 40, pg. 27 (S); Ex. 53, pg. 43 (S).

<sup>144</sup> (U) Ex. 48, pg. 24 (S).

<sup>145</sup> (U) Ex. 48, pg. 24 (S); Ex. 50 (S).

<sup>146</sup> (U) Ex. 57 (U//FOUO).

<sup>147</sup> (U) Ex. 54 (S).

<sup>148</sup> (U) Ex. 50 (S).

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intensity of the flames and the ammunition still exploding within the wreckage.<sup>149</sup> They found no evidence of survivors. Minutes later, the 20-man Pathfinder element inserted on two UH-60 helicopters to a landing zone near HL (b)(1)1.4a, (b)(1)1.4c, southeast of the crash site. The Pathfinders moved northwest and joined up with 1/B.<sup>150</sup> 1/B and the Pathfinders maintained security on the site and worked to recover friendly remains from the wreckage.<sup>151</sup> Throughout this entire period the AWT maintained constant surveillance over the crash site, reported numerous secondary explosions, and confirmed no indications of survivors.<sup>152</sup> By 1038D on 6 August, the 1/B platoon leader had accounted for all 38 friendly personnel killed in action, as well as the military working dog.<sup>153</sup> TF (b)(1)1.4a, (b)(1)1.4c, the battlespace owner, directed its subordinate battalion task force, TF (b)(1)1.4a, (b)(1)1.4c, to send a ground convoy to the crash site. The TF (b)(1)1.4a, (b)(1)1.4c element cleared several roadside improvised explosive devices before it arrived at the crash site, established security, and assisted in the recovery of friendly remains.<sup>154</sup> At approximately 1625D, the remains of all 38 friendly personnel killed in action, including the remains of the military working dog, were driven out of Tangi Valley by TF (b)(1)1.4a, (b)(1)1.4c to Combat Outpost (COP) (b)(3), (b)(6).<sup>155</sup> The TF (b)(1)1.4a, (b)(1)1.4c Commander directed 1/B and Pathfinders to completely "sanitize" the crash site, removing all portions of the helicopter and its associated equipment. The effort to dismantle the aircraft (because of the terrain, aircraft parts had to be carried out to the nearest road by hand) required saws, cutting torches, and explosives.<sup>156</sup> Recovery efforts were complicated on 6 August by a flash flood that swept through the creek bed at a depth of 4-5 feet. Aircraft wreckage was washed up to 200 meters downstream.<sup>157</sup> On the night of 6 August, 3rd Platoon, D Company, (b)(3), (b)(6) (3/D), a four-man Combat Search and Rescue (CSAR) element, and an Explosive Ordnance Disposal (EOD) NCO from TM (b)(3), (b)(6) landed two kilometers away via MH-47s, moved to the crash site, and at 0300D relieved 1/B in place.<sup>158</sup> The original Ranger assault force, 1/B, departed Tangi Valley by MH-47 and returned to FOB (b)(1)1.4a, (b)(1)1.4c.<sup>159</sup> 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.<sup>160</sup> The TF (b)(1)1.4a, (b)(1)1.4c Commander and the 3/D platoon leader personally verified that the crash site was completely sanitized, and all American military forces departed Tangi Valley by helicopter at 2000D on 9 August 2011.<sup>161</sup> The entire crash recovery response was a combined effort between TF (b)(1)1.4a, (b)(1)1.4c, TF (b)(1)1.4a, (b)(1)1.4c, 10th CAB, the Pathfinders, TF (b)(1)1.4a, (b)(1)1.4c, and TF (b)(1)1.4a, (b)(1)1.4c.

<sup>149</sup> (U) Ex. 50 (S).  
<sup>150</sup> (U) Ex. 33, pg. 4 (S); Ex. 65, pgs. 6-7 (S).  
<sup>151</sup> (U) Ex. 2, pg. 31 (S); Ex. 33, *passim* (S).  
<sup>152</sup> (U) Ex. 54 (S).  
<sup>153</sup> (U) Ex. 50 (S).  
<sup>154</sup> (U) Ex. 50 (S).  
<sup>155</sup> (U) Ex. 57 (U//FOUO).  
<sup>156</sup> (U) Ex. 2, pg. 6 (S); Ex. 65, pg. 8, 12 (S).  
<sup>157</sup> (U) Ex. 65, pg. 6, 16 (S).  
<sup>158</sup> (U) Ex. 55, slide 4 (S//REL USA, ISAF, NATO); Ex. 2, pg. 44 (S).  
<sup>159</sup> (U) Ex. 55, slide 4 (S//REL USA, ISAF, NATO); Ex. 33, pg. 8 (S).  
<sup>160</sup> (U) Ex. 55, slide 4 (S//REL USA, ISAF, NATO); Ex. 56 (S).  
<sup>161</sup> (U) Ex. 56 (S).

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~~(S)//REL USA, ISAF, NATO~~

(2) *Repatriation of Remains.* At 2321D on 6 August 2011, two MH-47s transported the remains from COP (b)(1)1.4a, (b)(1)1.4c to FOB (b)(1)1.4a, (b)(1)1.4c<sup>162</sup>. Later that evening the remains were flown from FOB (b)(1)1.4a, (b)(1)1.4c to Bagram Air Base in two lifts by an MC-130. Following a dignified transfer ceremony onto C-17 transport aircraft, at 2311D on 8 August 2011 the remains were evacuated through Germany to Dover Air Force Base, Delaware.<sup>163</sup>

4. (U) Cause of the Crash.

a. ~~(S)~~ The investigation team received substantial assistance and technical support from the Joint Combat Assessment Team (JCAT), including the U.S. Army Aircraft Shoot Down Assessment Team. The following<sup>164</sup> summarizes JCAT's assessment of the cause of the crash of EXTORTION 17:

~~(S)~~ At approximately 0239:40D on 6 August 2011, EXTORTION 17 was engaged by a volley of a minimum of two and a maximum of three Rocket Propelled Grenades (RPGs). (b)(3), (b)(6) later described the point of origin as an enemy position in the *qalats* to the south of EXTORTION 17. At approximately 0239:45D the second RPG in the volley impacted EXTORTION 17 on the underside of one of the aft rotor blades. At the time of impact, the blade was located within the retreating half of rotation relative to the longitudinal axis of the aircraft (right side). The RPG warhead, an antipersonnel variant of the RPG-7<sup>165</sup> detonated 5.5 inches from the leading edge and 121 inches inboard of the blade tip on the bottom of the rotor blade. The RPG detonated on contact and immediately compromised the structural integrity of the blade spar box (comprised of a steel rod surrounded by a titanium and fiberglass box). As the spar box distorted due to weapon and flight dynamics, a 10-foot portion of the blade body (behind the spar box and constructed of lightweight fiberglass and honeycomb) was severed from the rotor blade. Immediately following the failure of the blade body the adjoining spar buckled and was sheared off by one of the forward blades as they made contact with the aft rotor system. The resultant imbalance affected the entire airframe and drive-train subsystem. A sudden and violent ~3.5 Hz oscillation of the entire aft rotor system led to the separation of the aft pylon within 2 seconds. This caused an immediate loss in lift as well as an unrecoverable clockwise spin. The forward rotor system, unable to compensate for the loss of lift and stability throughout the airframe, was stressed beyond design limits and separated in flight. The fuselage then impacted the ground. The entire event (from weapon impact to crash) likely lasted less than 5 seconds.

<sup>162</sup> (U) Ex. 52 ~~(S)~~, 58 (U//~~FOUO~~).

<sup>163</sup> (U) Ex. 59 ~~(S)~~.

<sup>164</sup> (U) Ex. 60, slide 12 ~~(S)~~.

<sup>165</sup> ~~(S)~~ OG-7 anti-personnel RPG. Introduced in 1970 and produced by Russia, Bulgaria, Romania, Iran, and Egypt. The OG-7 was developed to provide RPG-7-equipped forces an accurate direct-fire fragmentation round out to 170 meters and an indirect-fire fragmentation round capable of reaching nearly 1 kilometer. The warhead is a fragmentation body, which is little more than a hollow steel pipe filled with explosive. On impact more than 65% of the warhead body is converted into fragments. (Ex. 60, slide 37 ~~(S)~~).

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b. (U//~~FOUO~~) *Cause of Death.* As of the date of this report, the final autopsy reports for each of the EXTORTION 17 casualties were not complete. As a result of my conversations with the Medical Examiner at Dover Air Force Base, however, I am confident that the final autopsy reports will not contradict the following assessments:

(1) All 30 U.S. service members were positively identified by fingerprint, dental and/or DNA comparisons; the 8 [b)(1)1.4a, (b)(1)1.4c] and one civilian interpreter were positively identified by fingerprint and/or DNA comparisons.

(2) Of the five U.S. service members and three [b)(1)1.4a, (b)(1)1.4c] whose bodies did not receive burn damage, all had received lethal injuries of the head and neck in addition to other internal organ injuries (lacerations of the heart, lung, liver, spleen and/or major blood vessels).

(3) The 25 U.S. service members and five [b)(1)1.4a, (b)(1)1.4c] whose bodies received substantial burn damage had multiple fractures of the head, spine, pelvis and/or other extremities.

(4) There is no evidence of either gunshot wounds or significant ballistic injury in any of the casualties.

(5) The injuries noted would have immediately incapacitated all of the individuals and were most likely rapidly fatal.<sup>166</sup>

5. (~~S//REL USA, ISAF, NATO~~) *Findings.* Based on our extensive investigation, I am highly confident that the facts and circumstances captured in paragraphs 3 and 4 of this report and the detailed chronology at Enclosure H represent a clear and accurate depiction of events that occurred in the Tangi Valley on the night of 5-6 August 2011. With respect to the direction in my appointment memorandum, I make the following findings:

a. (~~S//REL USA, ISAF, NATO~~) *Finding #1.* TF [b)(1)1.4a, (b)(1)1.4c] operations against Qari Tahir during the night of 5-6 August 2011 were consistent with previous [b)(1)1.4a, (b)(1)1.4c] operations against Taliban networks; the employment of U.S. Special Operations Forces, including Navy SEALs and Army Rangers, was appropriate given the agility required to maintain pressure on Taliban leaders generally, and Tahir's relative importance to Taliban operations in Wardak Province. For the previous 12 months, TF [b)(1)1.4a, (b)(1)1.4c] missions had resulted in capturing or killing 49% of the intended targets and only 11% of those [b)(1)1.4a, (b)(1)1.4c] missions resulted in gunfire. The tactics TM [b)(1)1.4a, (b)(1)1.4c] employed on 5-6 August 2011 were validated by the success of those previous missions in maintaining pressure on the Taliban networks in support of COMUSFOR-A's priorities.

b. (~~S//REL USA, ISAF, NATO~~) *Finding #2.* At approximately 02:39:45D on 6 August 2011 (22:09:45Z on 5 August 2011 in Afghanistan) a Taliban fighter shot-down the CH-47D Chinook helicopter, call sign EXTORTION 17, in Wardak Province, Afghanistan, with a rocket propelled grenade.

<sup>166</sup> Ex. 61 (U//~~FOUO~~).

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- (1) ~~(S//REL USA, ISAF, NATO)~~ The rocket-propelled grenade exploded on the leading edge of a rotor blade on the aft rotor assembly, causing the helicopter to crash. Given the catastrophic destruction of the aft main rotor blade in flight, I assess no variant of the CH/MH-47 would have maintained its structural integrity and capability for controlled descent.
- (2) ~~(S//REL USA, ISAF, NATO)~~ The shoot-down was not a deliberate ambush, but due to the close proximity (4 kilometers south) of 1/B's ongoing operation at the original target area, it is likely that the enemy was at a heightened state of alert. Prior to the shoot-down of EXTORTION 17, operations in pursuit of Tahir had been underway for over 3 ½ hours. Post-mission analysis of enemy communications indicated their awareness of the presence of coalition forces in the Tangi Valley. The enemy killed-in-action (EKIA) near the original target area (by the AWT and 1/B assault force) were armed with RPGs and AK-47s, and were wearing chest racks filled with grenades and AK-47 magazines, indicating that they were preparing to respond to coalition operations. Additionally, the assault force discovered two VHF handheld radios on the bodies of the EKIA which could be used for command and control and as part of an active early warning network reporting on coalition forces in the Tangi Valley. In addition to the EKIA, eight or nine other individuals – suspected Taliban fighters, included the two who had departed the target area towards the northwest – gathered near the planned insertion point of the IRF. The AC-130 and ISR aircraft had centered their orbits near HLZ ~~(b)(1), (b)(4a), (b)(1), (b)(4c)~~ and the AWT was on station in the area approximately 15 minutes prior to EXTORTION 17's planned landing time at HLZ ~~(b)(1), (b)(4a), (b)(1), (b)(4c)~~. I conclude that the persistent presence of multiple aircraft over the northwestern portion of the valley provided the enemy with indicators of imminent ground operations in this area, and that the enemy was probably at a heightened state of alert.
- (3) ~~(S//REL USA, USAF, NATO)~~ There is no definitive evidence that indicates the enemy utilized night vision goggles to shoot down EXTORTION 17. The low illumination conditions that night and the accuracy of the RPG engagement, however, prevent me from entirely discounting the possibility that the enemy used night vision goggles during the shoot-down.
- (4) (U) Two members of the AC-130 aircrew providing fire support to 1/B and the IRF, both of whom were well positioned to observe EXTORTION 17's flight towards HLZ ~~(b)(1), (b)(4a), (b)(1), (b)(4c)~~ state that they saw three distinct flashes from the *qalat* and the RPG explosion as it impacted EXTORTION 17. This testimony was inconsistent with accounts from AH-64 crewmembers who witnessed only two flashes. Due to the conflicting testimony and a lack of video depicting the actual shoot down, I am unable to determine with absolute certainty whether two or three RPGs were fired at the aircraft. Both AC-130 the AWT crews agree that the second RPG struck EXTORTION 17.

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c. ~~(S//REL USA, ISAF, NATO)~~ **Finding #3.** *The CH-47D aircrews participating in this operation were fully qualified to perform their mission tasks, and the aircraft was fully mission capable.*

(1) ~~(S//REL USA, ISAF, NATO)~~ **Aircrews.** [redacted] (b)(3), (b)(6) were the pilots on board the downed CH-47D aircraft, with [redacted] (b)(3), (b)(6) serving as the Pilot-in-Command (PC) that night. Although recently appointed as a CH-47D PC, [redacted] (b)(3), (b)(6) was a well-respected and experienced pilot with over 670 hours of total time and nearly 100 hours of combat time in the previous two months, all of which were in support of TF [redacted] (b)(1)1.4a, (b)(1)1.4c operations. [redacted] (b)(3), (b)(6) was also paired with a highly experienced CH-47D Standardization Instructor Pilot (SP). Although not conclusive, the evidence suggests [redacted] (b)(3), (b)(6) was flying the aircraft. [redacted] (b)(3), (b)(6) was among the Army National Guard's most experienced aviators with over 1,400 hours of total night vision goggle time, and over 4,600 hours of total flight time in various aircraft systems, including 2154.3 hours in CH-47D Chinook helicopters. [redacted] (b)(3), (b)(6) was also a seasoned combat pilot assigned as the unit's Senior Instructor Pilot in 2006-07 in support of OIF, where he accumulated 719 hours of combat time. Each crewmember was fully qualified to perform the aircrew duties to which he was assigned and were in compliance with Headquarters, Department of the Army, theater specific, and unit qualification and training requirements. The crew pairing reflected a conscious command effort to mitigate risk by using the best possible crews available rather than adhering to unit or component (Army Reserve or Army National Guard) alignment. This mitigation measure also provided greater long-term stability and allowed for the continuity of support relationships between [redacted] (b)(1)1.4a, (b)(1)1.4c aircrews and TM [redacted] (b)(3), (b)(6)

(2) (U) **Aircraft.** (1) (U) **CH-47D Chinook Helicopter, Tail Number 84-24175 (Call Sign EXTORTION 17).** The aircraft was Fully Mission Capable (FMC) on the night of 5 – 6 August 2011. EXTORTION 17 was equipped with all of the theater-required Threat Countermeasures Systems/Aircraft Survivability Equipment (ASE). Aircraft performance and fuel was adequate to complete the assigned mission. Further, EXTORTION 17's aircrew had sufficient power margin available to safely land into HLZ [redacted] (b)(1)1.4a, (b)(1)1.4c loaded with 33 passengers onboard.

d. ~~(S//REL USA, ISAF, NATO)~~ **Finding #4.** *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 Air Mission Commander and TF [redacted] (b)(1)1.4a, (b)(1)1.4c air planner for TM [redacted] (b)(3), (b)(6) initially planned to insert an IRF consisting of 17 personnel. At approximately 0130D, the [redacted] (b)(1)1.4a, (b)(1)1.4c Commander informed the air planner of his intent to insert a minimum force of 32 personnel. The AMC confirmed that EXTORTION 17 had adequate power available to carry 32 (and later 33) passengers. The use of only one aircraft for helicopter insertion was an accepted practice in the 10th Combat Aviation Brigade and [redacted] (b)(1)1.4a, (b)(1)1.4c to reduce the risk to subsequent aircraft and quickly mass ground assault forces.

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e. ~~(S//REL USA)~~ **Finding #5.** *The Attack Weapons Team (AWT) likely alerted the insurgents to an impending helicopter operation by establishing a pattern of arriving in the target area well ahead of the assault aircraft.* Taliban fighters maintained an early warning network in the Tangi Valley in order to monitor and track coalition forces movements within the valley. Post-mission enemy communications indicated that Taliban fighters were alerted to the presence of coalition forces operating in the Tangi Valley. At 2218D, the AWT departed from FOB [redacted] arriving in the vicinity of the target area at 2240D. Pursuant to TF [redacted] standard operating procedures, the AWT was required to escort troop-carrying helicopters into their HLZs. The AWT remained on station for 20 minutes prior to EXTORTION [redacted] 17 arriving at HLZ [redacted]. After the EXTORTION flight departed HLZ [redacted] the AWT remained on station providing over-watch for the ground force. The AH-64's GPS tracking system depicted that the AWT overflew the vicinity of HLZ [redacted] numerous times throughout the mission, and for at least 15 minutes before EXTORTION 17 made the "one minute" out call. The AWT's early arrival at both HLZ [redacted] and [redacted] coupled with their earlier kinetic engagements of enemy elements, likely provided early warning to Taliban fighters that additional helicopters may be inbound to the area.

f. ~~(S//REL USA, ISAF, NATO)~~ **Finding #6.** *The [redacted] Commander failed to re-task ISR and fire support aircraft to the Immediate Reaction Force assault mission.* The [redacted] Commander decided to employ the IRF approximately 50 minutes prior to the IRF's departure. There was no evidence indicating that he issued guidance to establish a new priority of fires or sensor allocation. In spite of a lack of guidance from the [redacted] Commander, [redacted] the I/B JTAC, fell back on his training and experience and took the initiative to direct the AWT and AC-130 gunship to reconnoiter the HLZ, while retaining the other reconnaissance aircraft focused on the original objective area and the area of enemy personnel 2 kilometers to the north (the IRF's target). There were adequate reconnaissance and fire support aircraft flying in support of the mission in Tangi Valley on 5-6 August 2011.

g. ~~(S//REL, USA)~~ **Finding #7.** *[redacted] operational tempo exceeds the capacity of organic SOF aviation.* COMUSFOR-A guidance to "pursue the enemy relentlessly" has resulted in a significant increase in the number of [redacted] strike forces and requires the use of GPF aircraft to accomplish the mission. In order to meet COMUSFOR-A intent, [redacted] recommended (and COMUSFOR-A approved) surging additional forces from the United States and increasing its number of subordinate strike forces. As of July 2011 the Task Force had 20 strike forces aligned within four Regional Commands. Additional mission analysis identified the need for a total of

[redacted]  
(b)(1)1.4a, (b)(1)1.4c

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6. (U) Recommendations.

- a. ~~(S)~~ **Recommendation #1.** *Synchronize the employment of AWT and available ISR aircraft to minimize enemy reaction time.* The air and ground commander should coordinate aircraft timing and vary aircraft tactics to avoid creating a predictable operational signature that may inadvertently alert the enemy to impending helicopter operations. The AWT should plan and execute objective and HLZ reconnaissance and security by using greater standoff and positioning themselves appropriately for armed escort. Planners should also leverage the capabilities of manned and unmanned ISR aircraft to provide surveillance and reconnaissance of objectives and HLZs, allowing the AWT to perform route reconnaissance and armed escort while minimizing the presence of aviation forces in the objective area prior to the infiltration. Tactics, techniques and procedures must be constantly reevaluated and varied to reduce the possibility of early insurgent cueing.
- b. ~~(S//REL, USA)~~ **Recommendation #2.** *Fire support and ISR tasking.* ~~(b)(7)(F), (b)(7)(A), (b)(7)(C)~~ should ensure all members of the task force, as well as attached or direct support elements, are briefed on the necessity of clearly and rapidly re-tasking reconnaissance and fire support aircraft when there is a change in mission.
- c. ~~(S//REL, USA)~~ **Recommendation #3.** *Improve the collaborative planning processes between SOF and the aircrews.* Due to the compressed planning timelines required for ~~(b)(7)(F), (b)(7)(A), (b)(7)(C)~~ operations, collaborative planning between aircrews and SOF personnel is critical to the successful outcome of the operation. The IJC Fragmentary Order, paragraph 3d(5) specifies the requirement to minimize crew rotations to develop a habitual relationship between assigned aircrews and assault forces. This mandate is essential to ensure aircrews are able to plan and execute missions on a condensed timeline. Intelligence analysts and tactical planners must also be engaged in all facets of operations in order to provide timely updates and advice to the commander. Although the initial risk assessment is conducted by the flight crews, the commander is ultimately responsible for risk mitigation and management. The commander or his designated representative must remain engaged throughout the planning and execution phases of the mission to ensure risks are appropriately identified and mitigated. This level of scrutiny must be maintained in the planning and execution of contingencies such as IRF and QRF employment.
- d. ~~(S//REL, USA)~~ **Recommendation #4.** *CENTCOM issue guidance to deploying CABs to identify the aircrews that will be supporting ~~(b)(7)(F), (b)(7)(A), (b)(7)(C)~~ early in the pre-deployment training cycle IOT facilitate integration and joint training with SOF elements while still in CONUS.* This would provide an opportunity for the GPF crews to train together as a team and participate in SOF pre-mission training exercises. The ~~(b)(7)(F), (b)(7)(A), (b)(7)(C)~~ targeting methodology results in the ground force and aviation elements planning and executing complex and dynamic missions on a compressed timeline. Additionally, the dissimilar deployment and force generation cycles create additional challenges for maintaining continuity among the different units. Successfully

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executing missions of this nature requires a mature level of interoperability and cannot be achieved with units meeting on the battlefield for the first time.

e. ~~(S//REL USA)~~ *Recommendation #5. Prioritize development of aircraft survival equipment (ASE) that improves detection and survivability against RPG fire and small-arms.* The CH-47D has a robust ASE suite that adequately protects the aircraft against infrared guided surface-to-air missile threats. The predominant cause of aircraft shoot-downs in theater, however, is RPG and small arms fire. Currently the CH-47D aircraft has no systems to detect, alert, and cue the aircrew to RPG and small arms fire. Although I assess no aircraft survivability system would have altered the outcome of this engagement, the inability of aircrews to accurately identify enemy RPG and small arms fire significantly increases the risk to both the force and the mission. Increased emphasis should be placed on the rapid development, testing, qualification and installation of a viable Hostile Fire Detection System to improve helicopter survivability on the battlefield. EXTORTION 17's shoot-down illustrates the urgency of this requirement, and warrants the prioritization of funds and effort.

f. ~~(S//REL, USA)~~ *Recommendation #6. Assign a direct support Imagery Analyst to the aviation battalion task forces to facilitate a more timely selection of viable helicopter landing zones and decrease the time required to obtain mission approval by the aviation commander.* An Imagery Analyst assigned at the battalion task force level that can collaborate directly with the battalion All-Source Analyst to analyze and select helicopter landing zones will improve the quality of HLZ selection and also expedite the planning and approval process. The integration of an Imagery Analyst at the tactical planning level coupled with the battalion All-Source Analyst threat assessment is essential to quickly refine and distribute imagery products within a compressed planning timeline.

7. (U) *Other Matters.*

a. (U) During a review of the TF ~~(b)(1), (b)(4a), (b)(1), (b)(4d)~~ TOC logs the team discovered an entry (Exhibit 70, item 244, 0339D) indicating two strobe lights associated with possible survivors southwest of the crash site. This report originated from an MQ-1 Predator remotely piloted aircraft (call sign ~~(b)(3), (b)(6)~~) that arrived over the target area at approximately 0256D. I reviewed the full motion video tapes and noted two heat sources that appeared to be moving towards the burning aircraft at 0319D (time indicated on the tape). After multiple follow up interviews and careful examination of the tapes by multiple members of the investigation team, we determined the heat sources were floating debris caused by secondary explosions of fuel and munitions onboard EXTORTION 17. I also spoke personally with the Medical Examiner, and he definitively concluded that it was medically inconsistent, given the traumatic nature of the injuries of the aircraft occupants, that any of them would be ambulatory forty minutes after the crash occurred.

b. (U) The investigation team relied on multiple sources, including interviews, logs, full-motion video, briefing materials, and inspection of aircraft wreckage to assemble a detailed

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chronology of the events surrounding the EXTORTION 17 shoot-down. To the extent these sources differed, the disparities were minor and were systematically resolved through multiple corroborating sources and our best judgment. The investigation team initially deployed to Bagram Air Base and then further deployed an element to FOB ~~(b)(1)1.4a, (b)(1)1.4c~~. After consideration of on-going ~~(b)(1)1.4a, (b)(1)1.4c~~ and TF ~~(b)(1)1.4a, (b)(1)1.4c~~ operations, the threat in the Tangi Valley, and the significant air and ground forces that would be required to secure the crash site for the investigation team's inspection, I determined that the investigation team would not conduct a site visit. I also concluded that the Joint Combat Assessment Team representative's onsite investigation and photography provided sufficient context and clarity to what occurred the evening of 5-6 August.

c. ~~(S//REL USA)~~ The joint team composition implemented for this investigation was essential for gaining required subject matter expertise. The importance of rapid identification and sourcing of this team with senior Field Grade officers and Warrant Officers with Special Operations, General Purpose Aviation, and National Guard Bureau experience cannot be overstated. Also, the provisioning of a three-person court-reporter team to collect the timely and accurate testimony transcription was critical. Worthy of special recognition was the technical assistance of the Joint Combat Assessment Team (JCAT) and the Aircraft Shoot-Down Assessment Team (ASDAT). These experts were invaluable in determining the actual cause of the downing, and ruling out alternatives. I appreciate the support provided by USFOR-A and its subordinate units on short notice.

d. ~~(S//REL USA)~~ Throughout this entire investigation the members of ~~(b)(1)1.4a, (b)(1)1.4c~~ and the 10th CAB, and all of their subordinate units contacted during this investigation, were forthright and transparent in their interviews and in their timely delivery of all products requested by my team. During my investigation I uncovered numerous organizational and individual decisions and actions worthy of praise, but none were greater than the post-crash actions of the 1/B Ranger assault force and its ~~(b)(1)1.4a, (b)(1)1.4c~~, and the TF ~~(b)(1)1.4a, (b)(1)1.4c~~ Pathfinder element. Already in the midst of a complex, ongoing operation, 1/B and their ~~(b)(1)1.4a, (b)(1)1.4c~~ partners moved rapidly over difficult and dangerous terrain to the crash site to secure the area and search for possible survivors. The Pathfinder element, alerted only minutes after the shoot-down, quickly prepared for combat, and, once inserted, moved rapidly and expertly in challenging conditions of darkness to join the 1/B element. In complete unity of effort, the Pathfinder element took direction from 1/B leadership and provided invaluable support including crash site security and coordination for logistic resupply. Later, the 3/D Ranger platoon and elements of ~~(b)(1)1.4a, (b)(1)1.4c~~ (4th Brigade, 10th Mountain Division) arrived to aid in security and crash site debris evacuation. The remarkable cooperation of all of these units in the wake of this tragic event permitted the successful and dignified recovery of all 38 U.S. and ~~(b)(1)1.4a, (b)(1)1.4c~~ servicemen.

e. (U) The courage, skill, valor and selflessness of those lost in this tragic event and those charged with continuing the fight cannot be overlooked. The commitment and sacrifice of these 30 U.S. Servicemen and their ~~(b)(1)1.4a, (b)(1)1.4c~~ partners and their families will never be forgotten by any member of the investigative team.

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

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

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