

CARLINO, MICHAEL A



SECTION 1

MS. HORTON

MONOGRAPH

30 JUNE 1993

As the 3d Brigade S-3 Air in the 101st Airborne Division (Air Assault) during Operation Desert Shield/Storm, I was directly responsible for the planning, coordination, and execution of the brigade air assault into the Euphrates River Valley, Iraq. This mission was the largest and deepest air assault in military history. Its success significantly contributed to the liberation of Kuwait.

On 8 August 1990, the 3d Brigade, 101st Airborne Division (Air Assault), commanded by COL Robert T. Clark, was alerted for deployment to Saudi Arabia in support of Operation Desert Shield. Immediately, the majority of the vehicles and equipment belonging to the brigade was sent to Jacksonville, Florida, for sea lift. On 4 September 1990, the personnel began to deploy via contract aircraft (See Map 1). The brigade closed in country on 17 September 1990 and, within three weeks, found itself in a defensive posture approximately 30 miles south of the Kuwaiti border. The brigade assumed a covering force mission (See Map 2). During this period, the brigade rehearsed its covering force role as well as various offensive operations based on the Iraqi disposition (See Map 3).

On 18 January 1991, one day after the air war commenced (Operation Desert Storm), the 3d Bde used C-130 aircraft and flew northwest from King Fahd International Airport to Rahfa, Saudi Arabia. The brigade occupied Tactical Assembly Area (TAA)

Campbell, a position on the Saudi-Iraqi border approximately 30 miles southeast of Rahfa (See Maps 4 and 5). For the next six weeks, the 3d Brigade, planned and rehearsed for offensive operations against Iraq. Under the guidance of MAJ Peter Kinney, the brigade operations officer (S-3), I planned and war gamed more than eight different brigade air assault operations which supported possible combat missions.

On 2 February 1991, three weeks prior to the commencement of the ground war (G-Day), the brigade staff finalized the order for Operation Shenandoah II, the combat mission that we eventually executed. It was a brigade air assault into the Euphrates River Valley in order to occupy a blocking position along Highway 8. My contribution to this product was the development of the air assault portion of the plan. At the time, G-Day was still unknown to us. This factor restricted my ability to set up and mark the pickup zones (PZs) that we would use because of continuing operations in our sector.

The mission statement of Operation Shenandoah II was that on G+1, the brigade would attack by air assault to establish battle positions in sector of Area of Operation (AO) Eagle (See Map 7). The brigade would defeat reinforcing or escaping Iraqi units which would isolate Iraqi forces in the Kuwaiti theater of operations (KTO). The brigade would block the use of lines of communications (LOCs) through the sector which would disrupt Iraqi combat

operations. The brigade would also attack, on order, to the east to destroy Republican Guard forces (See Opord, p. 3).

Operation Shenandoah II used a three-phased air assault 155 miles north in order to interdict the Iraqi main supply route between Baghdad and Kuwait. The brigade would establish a blocking position which cut off Highway 8 near Al Kadir, a small village approximately halfway between the Iraqi cities of As Samawah and An Nasiriyah (See Maps 6 and 7). Once established, this would deny the highway as a possible avenue of withdrawal for the Iraqi forces attempting to leave Kuwait (See Opord, p. 3 and 4).

The first phase was a G-Day insertion of a brigade scout element. The scouts were to reconnoiter an area known as Landing Zone (LZ) Sand. The second phase of the air assault was a G+1 insertion of the brigade vehicles into LZ Sand. This LZ, located approximately 100 miles into Iraq, was the insertion point for all the brigade vehicles which would be flown into sector. LZ Sand was the maximum range that the CH-47s (Chinooks) could fly to and return from without refueling. This was computed by 1LT Don Galli and 1LT Brad Grambo, the brigade aviation element (BAE). They were liaisons from 4-101 AVN who assisted me with some of the more technical aspects concerning aircraft. The final phase of the air assault was the G+1 insertion of the 3d Brigade dismounted soldiers directly into the Euphrates River Valley using UH-60

aircraft (See Opord, p. 4-5).

The planning of the mission itself was relatively easy. Because of the six-month period prior to the U.S. attack, the entire S-3 section had become quite proficient at producing a quality operations order. The troop buildup served as an extended, uninterrupted training period unavailable back at Fort Campbell during peacetime. Operation Shenandoah II was initially treated as another planning mission drill. It was not until we had actually completed the order that we were notified that it was the mission 3d Brigade would execute.

The only problem I encountered during planning was in the selection of the pickup zone (PZ) locations. The division plan had 1st Brigade conducting a two-phased air assault insertion on G-Day. The 1st Brigade was establishing the forward area rearming refueling point (FARRP) which was required to fly all the way to the Euphrates and have the helicopters return (See Map 6). Because 1st Brigade was executing a slingload and personnel operation similar to ours, division headquarters requested that we use the same PZs as 1st Brigade.

In my opinion, 1st Brigade's PZs were unsatisfactory. I did not think that they were large enough to handle the volume of aircraft which would be flying in the area. The biggest problem I observed while conducting air assault operations in the desert was

the brown-out which occurs as sand is drawn up into the rotor wash of a running helicopter. I conducted more than six brigade sized air assaults while the S-3 air, and I had more experience in that position than my contemporaries in the division. I voiced my concern to the S-3 and the 3d Brigade Commander. The commander decided that we would use our own PZ for personnel (UH-60s) but would use 1st Brigade's PZ for the heavy lift (CH-47s). LTC Wilmouth, Commander of 7-101 AVN, was also present and stated that his pilots had surveyed the area of 1st Brigade's heavy PZ and that it would accommodate our operation. At that point, I told him that their PZ would not work and pointed out that it is doctrinally incorrect for the supporting aviation unit to dictate a PZ location to the supported ground unit. However, this was to no avail. I had to accept the 1st Brigade's heavy PZ as the one I would use for the CH-47 portion of the air assault.

On 22 February 1991, we were told that G-Day would be on 24 February. Thus, it was now time for SSG Charlie Brown, the Bde S-3 Air NCO, and myself to set up the PZs. The scout mission was small and informal, requiring only four UH-1 aircraft. I deemed that no preparation of their area would occur. We then focused on PZ Heavy, for phase two, and PZ Light, for phase three.

PZ Heavy was to have thirty CH-47 aircraft making two turns into LZ Sand. It was a daylight mission since AH-64 attack helicopters could range far enough north to provide cover. I

split the PZ into eight serials, the seven having four aircraft each and the eighth having only three. The slingloaded vehicles for each serial (chalks) were positioned in column, while the serials themselves were abreast. Each chalk's position was marked with a sandbag which had the chalk number painted in fluorescent orange. Because of the lack of space I had identified earlier, my chalks were too close together. On G-Day, when 1st Brigade conducted its air assault, the CH-47's were browning each other out because the chalks were, in fact, too close together. Immediately after witnessing that fiasco, I positioned our chalks in their appropriate positions. COL Clark apologized for not trusting his S-3 Air, but it was too late to switch the plan.

PZ Light, the area we used for phase three of the operation, was set up in a similar fashion to PZ Heavy. This PZ Light operation was to be conducted during the hours of darkness. Instead of thirty chalks, now there were sixty-seven. Again, each chalk position was identified with a sandbag painted with a fluorescent orange marking on it. Additionally, a chemlight was attached to each bag so the pilots could fix on them under night vision goggles. The PZ was set up as nine serials with each chalk, in a row abreast, and serials in column. The serials were structured to maintain the tactical integrity of the ground element being inserted. This was critical because four different LZs were being used. On the second lift, two aircraft were required to change the serial they were flying with from the first

lift. Although complicated, they executed this mission without any difficulties. SSG Charlie Brown, the Brigade Air NCO, was essential during this period because I got tied up with operations at PZ Heavy, and he had to set up PZ Light entirely on his own. Without him, the brigade plan would have run into severe difficulties.

The first phase of the air assault began on 24 February 91 (G-Day). Team Jerry, the scout platoon, 1-187 IN, led by 1LT Jerry Biller, was the element selected for the mission (See Opord, p. 9). The air mission commander, 2LT Brian Blew, platoon leader for the four UH-1H aircraft in support of this mission, had the distinction of leading the deepest penetration into Iraq on G-Day in entire theater. They departed approximately 1500 hours enroute to LZ Sand. The scouts were successfully inserted into Sand, but there were problems returning for the UH-1s. While returning, the aircraft were caught in a dust storm as well as nightfall. One aircraft crashed, and one experienced significant mechanical problems. No one participating on the mission was injured, but two of the four UH-1s in support of our brigade were rendered mission incapable at the conclusion of phase one. I received the aircraft status report from 2LT Blew upon their return, and I immediately forwarded it along to MAJ Kinney. *

At 1100, on 25 February 1991 (G+1), the brigade initiated the second phase of our air assault. Using two lifts of thirty-one CH-

47 aircraft each, we were able to slingload TOW vehicles, artillery pieces, and command and control vehicles north into LZ Sand (See Opord, p. C-3-1 to C-3-2). After the conclusion of 1st Brigade's mission, each CH-47 positioned next to its appropriate slingload. This minimized confusion for the initial lift of the aircraft. As soon as the air assault began, brown out became a significant problem. The rotor wash from each aircraft interfered with those surrounding it just as I had suspected it would. The condition was bordering on a safety hazard.

I was located at the north end of the PZ and was working as the PZ Control for the operation. Over combat aviation net 1 (CAN), the radio net we used exclusively for ground to air communications, I informed LTC Wilmouth, the air mission commander (AMC), that we would have to hook up each slingload individually. Once hooked up, the chawks could assemble and fly out as serials on their route. He immediately agreed, and I implemented the plan. As I had originally feared, operations at PZ Heavy became a single ship scenario instead of the four aircraft serials as I had planned. This extended the mission time over two hours. The last chalk of the second turn hooked up and departed the PZ approximately 1630 hours.

Although this had little impact on my operation, it presented two problems. First, since the CH-47s overflew their crew day, they were limited on their next mission the following day. It

also delayed the vehicular force inserted into LZ Sand by those same two hours. If the dismounts inserted on the third phase of the operation faced heavy resistance, this would have proved significant. They would not have had sufficient capabilities to defend against any heavy armored forces. Although they possessed limited anti-armor capabilities, the majority of the TOW missile systems were arriving mounted on their vehicles which were inserted into LZ Sand. Luckily, no major threat was present and the delay did not prove harmful.

At 1700 hours on G+1, the brigade began the final phase of the air assault. It consisted of two lifts of 67 UH-60 aircraft each. LTC Robert Johnson was the AMC for this phase of the air assault. I arrived at the PZ only a few minutes prior to the first serial's departure. SSG Brown had done a magnificent job ensuring that all elements adhered to the plan. When I arrived, everything was in position, and I assumed duties as the PZ control officer (See Opord p. C-3-3 to C-3-7).

The first six serials departed exactly on schedule. Every aspect of the operation appeared to be running smoothly. However, when the seventh serial began to lift off, the first chalk within it, their flight lead, flipped over and crashed. The main drive to the tail rotor had snapped in two. The result was that the torque, without the power of the tail rotor to stabilize the aircraft, flipped the helicopter over. I directed the flight to

continue with the mission, and I headed to the accident site. The seventh serial did not depart as instructed and instead held its position on the ground. At this point, I became involved in a heated discussion with the acting flight lead. When I arrived at the accident sight, 1LT Todd Wilcox, the ranking soldier on the flight had taken charge of the site. He informed me that no one was critically injured although a few soldiers suffered breaks and sprains. The crew of the aircraft was also unharmed. As I sent serials eight and nine on schedule, 1LT Wilcox and his soldiers were able to move to a float aircraft that I had on standby. Serial seven became the trail element only several minutes behind the rest of the flight.

By 2100 hours, the first lift delivered portions of all three battalions in their respective battle positions. However, bad weather delayed the second lift of sixty-seven UH-60 aircraft until the next morning. Even so, the brigade cut Highway 8 and destroyed an Iraqi military convoy (See Map 7). The delay made the operations at the PZ fairly simple when the aircraft returned since they could shut down immediately next to where they needed to load up the next morning. At first light on G+2, the remainder of the brigade air assaulted into sector. The second lift air assaulted without incident and made it into sector. SSG Brown went flew out on the final serial. Since I was PZ control, I remained until all aircraft had departed before I flew with 2LT Blew in his UH-1 to link up with the brigade. The two UH-1s acted

as trail and flight following since they were not capable of the same assault speeds as the UH-60 Blackhawks.

At 0800 hours on G+4, the United States declared a cease fire throughout the Southwest Asia theater. The 3d Brigade successfully accomplished its interdiction mission. We redeployed to the United States approximately a month later, with the last elements closing on 8 April 1991.

In conclusion, I believe that I learned three major lessons from this operation. First, adequate time must be allotted to ensure thorough and well war gamed plans. Our brigade did this with tremendous success. Second, the maneuver unit's plan must dictate the supporting unit's actions. We failed to adhere to this doctrine with regard to our PZ selection. This led to problems which could have easily been avoided. Finally, aviation units must follow the published air movement table even if aircraft go down in flight. The overall plan is the priority. During our air assault, serial seven did not do this. It could have had serious results if we had faced a substantial Iraqi force.

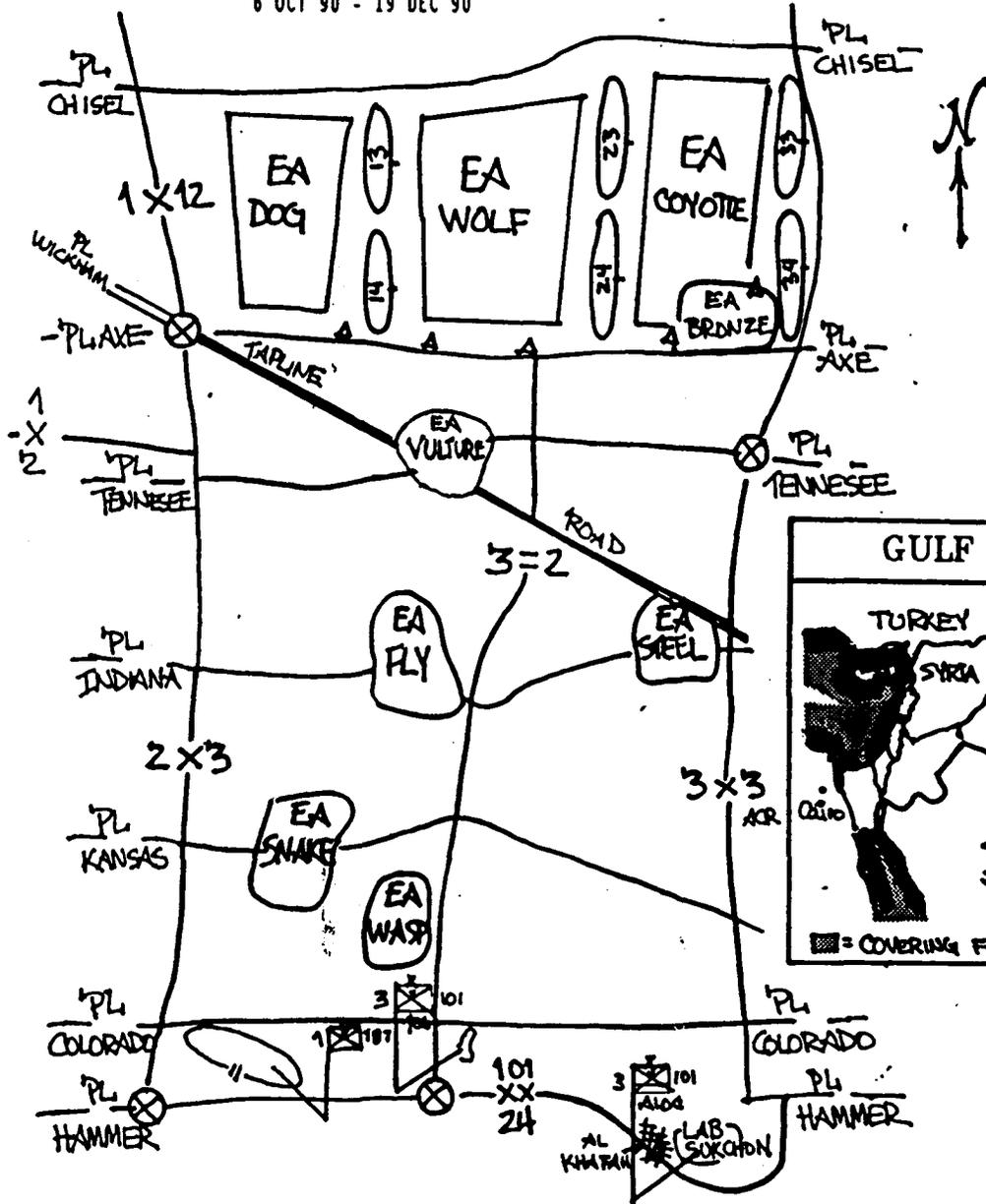
DEPLOYMENT



COVERING FORCE OPERATIONS

MISSION: On order, 3D BDE deploys to sector in AO NOMANDY while providing security for Camp Eagle II. Upon conduct of battle handover from 12th AVN BDE, disrupts and delays advance of Iraqi forces by destroying the lead enemy brigades and their CSS elements. On order, conducts passage of lines through 24th ID (M) to AO CARENTAN and guards the west flank of the XVIII ABN CORPS in sector. Prepares to counterattack or reinforce within CORPS sector in 4-6 hours of notification as corps/theater reserve.

6 OCT 90 - 19 DEC 90



* VIP visit- 11 OCT 90. GEN. NORMAN SCHWARZKOPF, CINC, visited BDE TOC

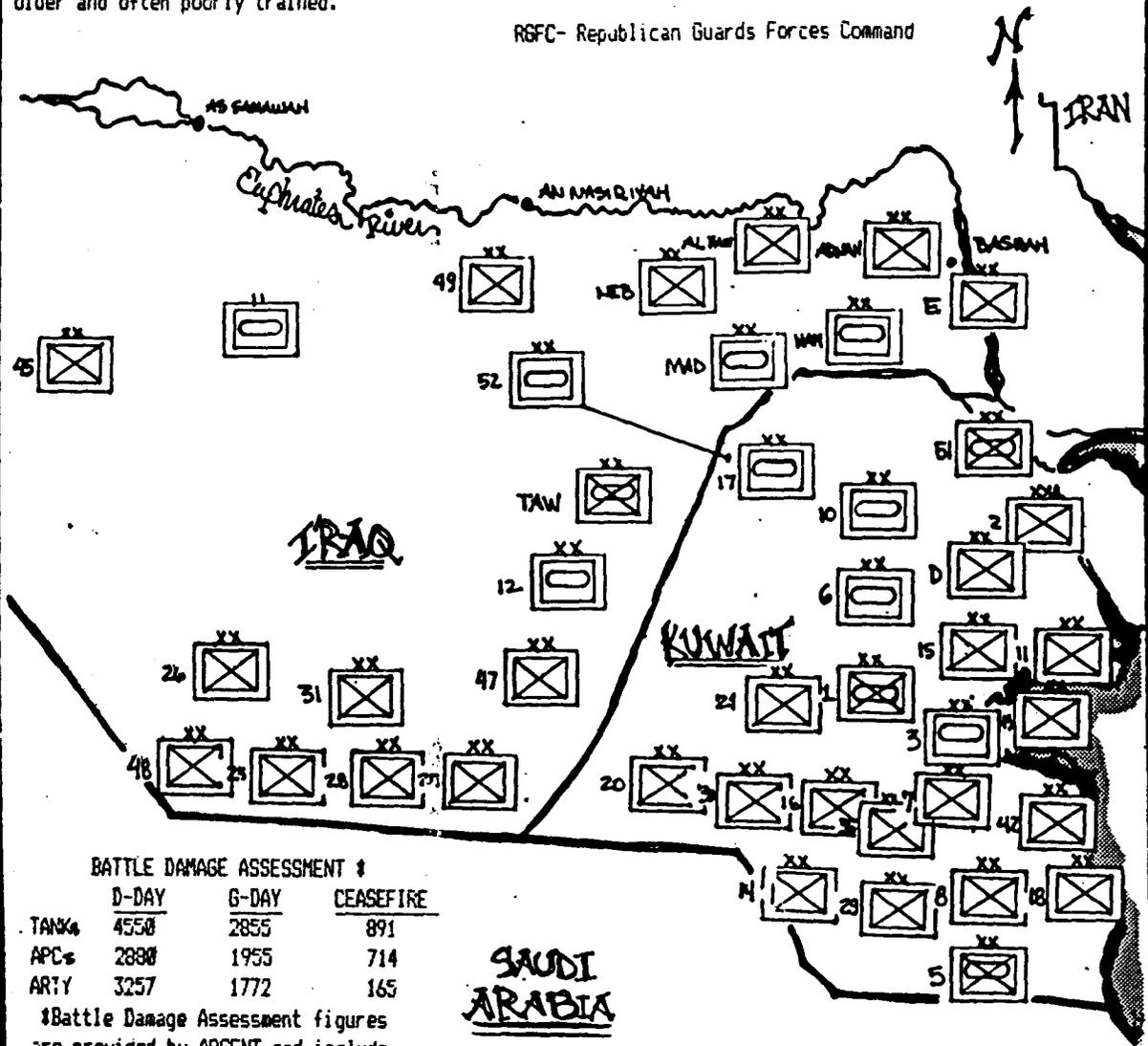
RAKKASANS

THE ENEMY SITUATION

Enemy forces in the Kuwaiti Theater of Operations (KTO) consisted of 42 divisions (8 armor, 4 mech, 30 inf) including all 8 RGFC divisions. Iraqi forces were concentrated primarily in and around Kuwait in multilayered defensive belts. The 1st belt consisted of dug-in infantry divisions behind antitank ditches, obstacles and minefields. A second belt of infantry/mechanized infantry divisions lay 20-30 km behind the 1st belt. A final layer of armored formations in N Kuwait and S Iraq was intended to be a strategic mobile reserve to blunt any Allied penetration. Elite RGFC divisions were dispersed along the critical Hwy 8 MSR to act as a final line of defense and secure communications to central Iraq. Only light screening forces were positioned to the west, where no major operations were envisioned.

Iraqi forces were equipped largely with 1960's era Soviet weaponry, but had a significant infusion of modern Soviet and Western weapons such as T-72 tanks, Austrian GHN-45 howitzers and Mig-29 fighters. The 450,000 man Regular Army was supplemented by 650,000 reservists and Popular Army soldiers, generally older and often poorly trained.

RGFC - Republican Guards Forces Command



BATTLE DAMAGE ASSESSMENT †

	D-DAY	6-DAY	CEASEFIRE
TANKs	4550	2855	891
APCs	2880	1955	714
ARTY	3257	1772	165

†Battle Damage Assessment figures are provided by ARCENT and include only KTO enemy units.

(figures reflect #'s remaining)

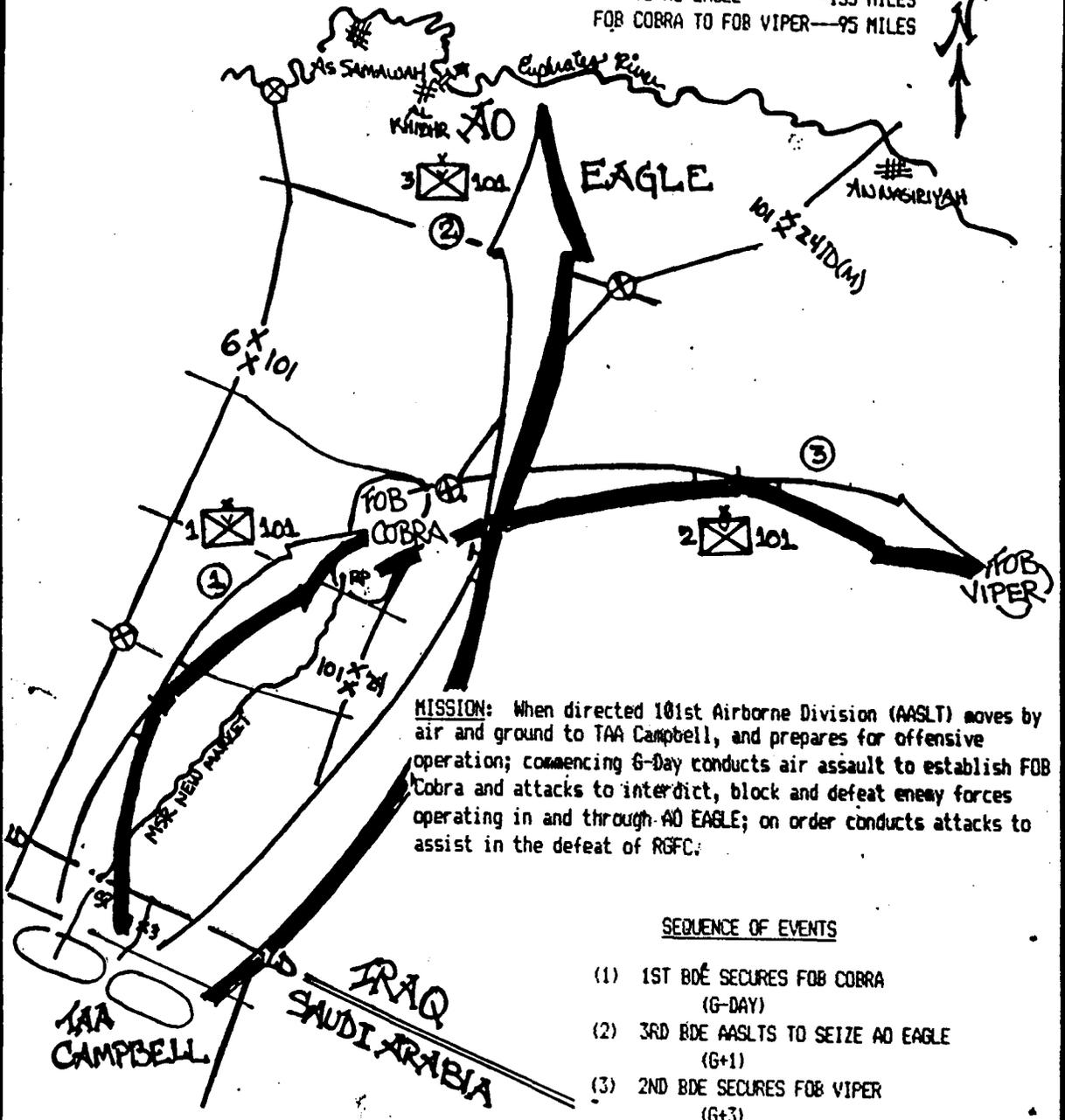
SAUDI ARABIA

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101st AIRBORNE DIVISION (AIR ASSAULT) PLAN

DISTANCES

TAA TO FOB COBRA-----93 MILES
 TAA TO AO EAGLE-----155 MILES
 FOB COBRA TO FOB VIPER---95 MILES



MISSION: When directed 101st Airborne Division (AASLT) moves by air and ground to TAA Campbell, and prepares for offensive operation; commencing 6-day conducts air assault to establish FOB Cobra and attacks to interdict, block and defeat enemy forces operating in and through AO EAGLE; on order conducts attacks to assist in the defeat of RGFC.

SEQUENCE OF EVENTS

- (1) 1ST BDE SECURES FOB COBRA (G-DAY)
- (2) 3RD BDE AASLTs TO SEIZE AO EAGLE (G+1)
- (3) 2ND BDE SECURES FOB VIPER (G+3)

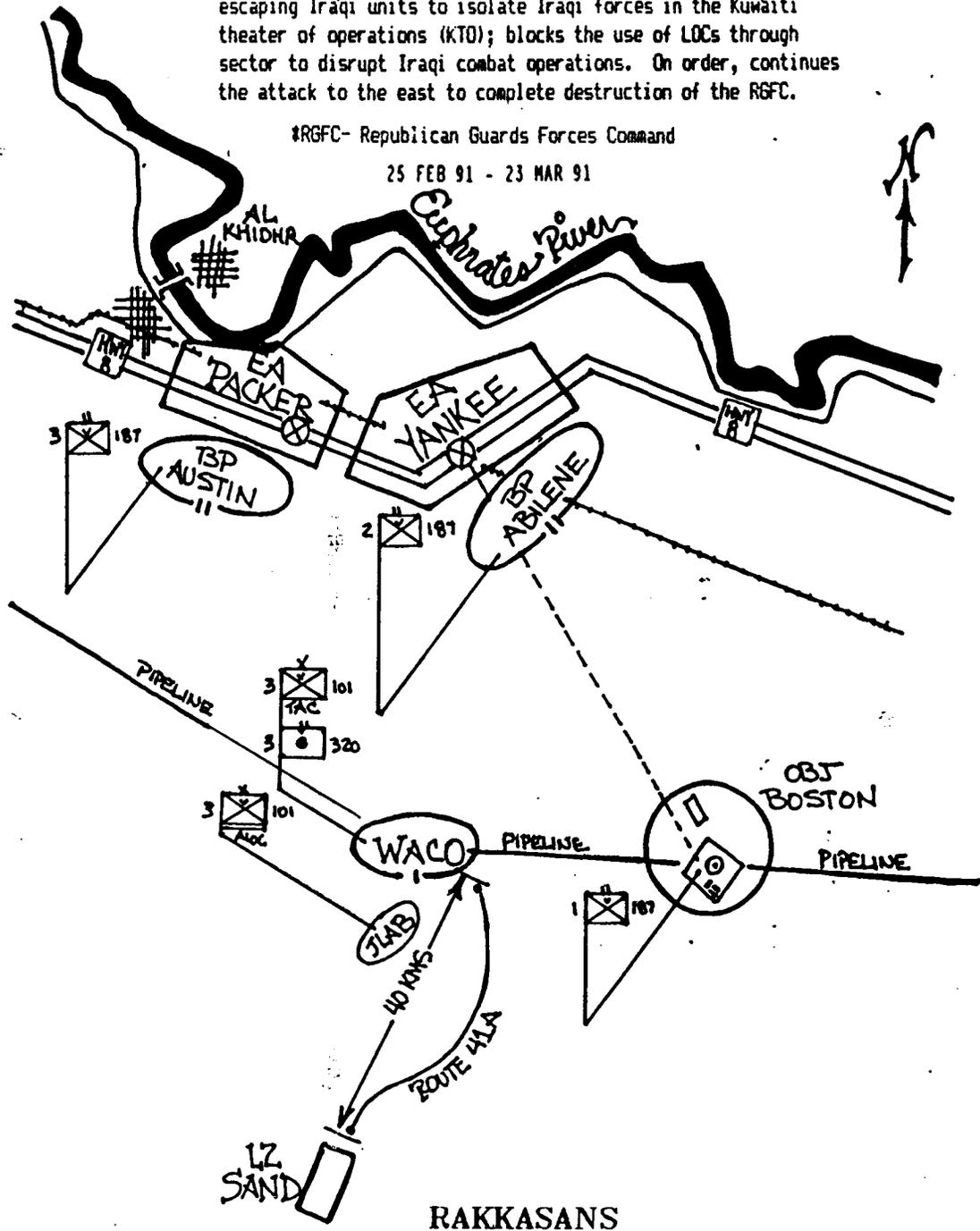
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OFFENSIVE OPERATIONS (AO EAGLE)

MISSION: At G+1, 3d BDE attacks by air assault to establish battle positions in sector of AO EAGLE; defeats reinforcing/escaping Iraqi units to isolate Iraqi forces in the Kuwaiti theater of operations (KTO); blocks the use of LOCs through sector to disrupt Iraqi combat operations. On order, continues the attack to the east to complete destruction of the RGFC.

#RGFC- Republican Guards Forces Command

25 FEB 91 - 23 MAR 91



[REDACTED]

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2 FEBRUARY 1991

187 AARCT, 101ST AIRBORNE DIVISION (AASLT) OPLAN 90-5, OPERATION SHENANDOAH II (U)

OFFENSIVE OPERATIONS IN IRAQ (S)

(U) REFERENCE: 101st Airborne Division (AASLT) OPLAN 90-5, Operation Desert Rendezvous II

(U) Task Organization: See Annex A (Task Organization)

1.(U) Situation.

a.(U) Enemy. See Annex B (Intelligence)

b.(U) Friendly.

(1)(S) When directed, 101st Airborne Division (Air Assault) moves by air and ground to TAA CAMPBELL, and prepares for offensive operations; commencing G-Day conducts air assault to establish FOB COBRA and attacks to interdict, block and defeat enemy forces operating in and through AO EAGLE; on order conducts attacks to the east to assist in the defeat of the RGFC forces.

(2)(U) Disposition of Friendly Forces.

(a)(S) 6th LT ABN DIV (FR), initially the Corps main effort, penetrates the Iraqi first echelon defense, attacks to seize As Salman (OBJ WHITE), establishes the Corps MSR TEXAS, and guards the Corps western flank.

(b)(S) 24th ID(M) attacks in zone east of the 101st ABN DIV on OBJ BROWN, OBJ GRAY, and OBJ RED, and clears Corps MSR GEORGIA and Corps MSR VIRGINIA in zone. The 24th ID(M) becomes the Corps main effort following seizure of OBJ WHITE. On order, 24th ID(M) continues the Corps main attack north of PL VIKING to position forces for operations against IRAQI forces vic OBJ GOLD.

[REDACTED]

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(c)(S) 327 AARCT attacks by air assault, G-Day, H-Hour, to seize and secure FOB COBRA. On order, recon and secure Division MSR in zone.

(d)(S) 502 AARCT repositions, on order, to FOB COBRA (G+2 after EENT). On order, attacks by air assault (G+4) to seize and secure OBJ STRIKE (PV 0524) in order to establish a Division base of operations for future operations to the northeast or northwest.

(e)(S) 101 AVN Regiment conducts an armed reconnaissance EENT G-Day in zone in AO EAGLE to locate enemy forces, and interdict enemy lines of communications in the Euphrates River valley. Provides air assault security to 3d Bde during air assault into AO EAGLE. Conducts combined arms attacks in zone in AO EAGLE.

(3)(S) Division Commander's Intent. FOB COBRA must be established as soon as possible to support combined operations in AO EAGLE. Protection of this base is vital, therefore, I expect the operations of the security and the support elements to be fully integrated and synchronized within the FOB. The mission to conduct attacks in AO EAGLE can not be accomplished unless the FOB is functioning and kept supplied. I want to commence offensive operations in AO EAGLE within 12 hours of establishing FOB COBRA. We will fight a combined arms operation in AO EAGLE using infantry, FA, CAS and attack helicopters to block and disrupt enemy operations. Our operations will focus on the ingress and egress routes along the Euphrates River valley. Operations will primarily be enemy oriented. We will avoid decisive engagement by taking advantage of long range fires, CAS, and attack helicopters. We achieve success by defeating reinforcing/escaping Iraqi forces, disrupting Iraqi CSS operations, and denying the LOCs in the Euphrates River Valley. We will ultimately reposition in AO EAGLE to posture for operations to the east orienting on Basrah and the destruction of the RGEC.

c.(U) Attachments and Detachments: See Annex A (Task Organization)

d.(U) Assumptions.

(1)(S) We can secure battle positions in AO EAGLE with only light opposition.

187 AARCT, 101ST AIRBORNE DIVISION (AASLT) OPLAN 90-5, OPERATION SHENANDOAH II (U)

road mobility. Enhance these obstacles with emplaced obstacles and claymores and force the enemy into the EAs. I want to destroy the enemy in the EAs by massing artillery and TOW fires, then use attack helicopters to destroy the enemy throughout the depths of his columns. Attack aviation will also provide early warning and will attack to defeat enemy forces forward of the infantry units. Success is defined as stopping movement of all enemy vehicles and dismounted units of platoon size or larger sector of AO EAGLE.

(2)(S) Maneuver. This is a five phase operation. During PHASE I (AASLT to LZ SAND) TF RAKKASAN air assaults the AARCTs anti-armor companies and artillery assets to LZ SAND. It begins with the air assault of Team JERRY into LZ SAND to recon ROUTE 41A and ends when the air assault is complete. During PHASE II (Ground Movement to AO EAGLE) TF RAKKASAN moves by ROUTE 41A to AO EAGLE. It begins with crossing the SP and ends when the TF occupies the BPs in AO EAGLE. During PHASE III (Air Assault to AO EAGLE) the regiment(-) attacks to secure battle positions in AO EAGLE. It begins with PZ posture and ends when the battle positions are secure. PHASE IV (Block) includes the link-up of TF RAKKASAN, the preparation and execution of the engagement areas, and link-up of the remainder of the AARCTs wheeled vehicles with their parent unit. During PHASE V (Future Operations) the regiment prepares to continue the attack to the east.

(a)(S) PHASE I (AASLT to LZ SAND). TM JERRY air assaults into LZ SAND on G DAY and conducts a reconnaissance of ROUTE 41A. TF RAKKASAN air assaults to LZ SAND beginning at sunrise at G+1.

(b)(S) PHASE II (Ground Movement to AO EAGLE). When all elements of TF RAKKASAN have arrived at LZ SAND, TF RAKKASAN will move on route 41A to RP vic NV 596310. On order, after the night air assault, TF RAKKASAN will move into AO EAGLE.

(c)(S) PHASE III (Air Assault to AO EAGLE). After EENT on G+1, 187 AARCT attacks by air assault into AO EAGLE and occupies BPs AUSTIN, ABILENE, and ALAMO. TF 2-187 (main effort) air assaults into LZ FESTUS and secures BP ABILENE. TF 1-187 air assaults on to LZ CROCKET and attacks to secure BP ALAMO. TF 3-187 air assaults on LZ CHESTER and attacks to secure BP AUSTIN. TF RAKKASAN moves into AO EAGLE, releases units to parent battalions, and moves to link up with TF 3-187 at BP AUSTIN.

187 AARCT, 101ST AIRBORNE DIVISION (AASLT) OPLAN 90-5, OPERATION SHENANDOAH II (U)

(d)(S) PHASE IV (Block). On order, infantry battalion task forces will link-up with their elements from TF RAKKASAN at link-up point 1. TF 2-187 (main effort) prepares EA YANKEE and destroys enemy forces moving from the east there. TF 3-187 prepares EA PACKER and destroys enemy forces there. TF 1-187 guards in sector to stop enemy penetrations along avenues of approach in their sector, and on order, to attacks to seize OBJ BOSTON. TF 2-17 establishes FARP/Laager in AA SHILOH; screens southeast and north western approaches into the AARCT sector; establishes deep engagement areas to defeat approaching Iraqi forces; prepares to engage and destroy Iraqi artillery systems threatening ground forces; assists in destruction of Iraqi forces in EAs PACKER and YANKEE. All elements of 187 AARCT not air assaulting in LZ SAND or AO EAGLE will form TF BENEDICT and move by GLOC from TAA CAMPBELL, through FOB COBRA, to AO EAGLE.

(e)(S) PHASE V (Future Operations). 187 AARCT prepares to assist 502 AARCT to attack and seize OBJ STRIKE.

(3)(U) Fires. See Appendix 4 (Fire Support) to Annex C (Operations)

(4)(S) Air Defense. PHASES I - IV. C/2-44 ADA provides low altitude air defense with priority to Aviation, C2, artillery and TOWs. Early warning provided by AWACS downlink and retransmitted, via SKYWATCH warning, over the Regimental Command Net.

(5)(S) Engineering. PHASE IV (Block). Priority of work is countermobility, survivability then mobility. Priority is to destroy highway 8 within engagement areas. Priority of effort is TF 2-187, then TF 3-187.

(6)(U) Electronic Warfare.

(a)(S) PHASES I and III. Quickfix is in direct support to 187 AARCT. Priority of direction finding and jamming is to Iraqi AAA nets.

(b)(U) PHASE IV.

1.(S) Three LLVI teams support collection, direction finding, and jamming. Priority is to Iraqi AAA, artillery, then C2 nets. A LLVI team is positioned in with each infantry battalion task force. Authority to jam is retained by the Regimental Commander.

187 AARCT, 101ST AIRBORNE DIVISION (AASLT) OPLAN 90-5, OPERATION SHENANDOAH II (U)

2.(S) Sensor (REMBASS) teams cover approaches from the southeast and northwest along highway 8 at NV 398553, NV 770467, and NV 813437.

(S) Tasks to Subordinate Units.

(1)(U) TF 1-187.

(a)(S) PHASE III (Air Assault to AO EAGLE)

1.(S) Air assault IAW Appendix 3 (Air Movement Table) to Annex C (Operations) on to LZ Crockett.

2.(S) Secure BP ALAMO.

3.(S) On order attack and seize OBJ BOSTON.

(b)(S) PHASE IV (Block).

1.(S) On order, link-up with D/1-187 (-).

2.(S) Guard southern and southeastern approaches into brigade sector.

3.(S) On Order, man CP/PP A to pass TF BENEDICT moving to the LAB.

4.(S) Position, secure and provide area support to TM 1/C&J/HHOC/311 MI (LLVI) IN BP ALAMO.

(2)(U) TF 2-187.

(a)(S) PHASE III (Air Assault to AO EAGLE)

(Main Effort)

1.(S) Air assault IAW Appendix 3 (Air Movement Table) to Annex C (Operations) into LZ FESTUS.

2.(S) Secure BP ABILENE.

(b)(S) PHASE IV (Block).

1.(S) On order, link-up with D/2-187 (-).

2.(S) Destroy Iraqi forces in EA YANKEE.

187 AARCT, 101ST AIRBORNE DIVISION (AASLT) OPLAN 90-5, OPERATION SHENANDOAH II (U)

3.(S) Be prepared to receive OPCON of AARCT Reserve to reinforce EA YANKEE from BP EL PASO.

4.(S) Position, secure and provide area support for TM 2/C&J/HHOC/311 MI (LLVI).

5.(S) Emplace and monitor sensors at NV 770467 and NV 813437.

6.(S) Block eastern approach into sector.

(3)(U) TF 3-187.

(a)(S) PHASE III (Air Assault to AO EAGLE)

1.(S) Air assault IAW Appendix 3 (Air Movement Table) to Annex C (Operations) on to LZ CHESTER.

2.(S) Secure BP AUSTIN.

(b)(S) PHASE IV (Block).

1.(S) On order, link-up with TF RAKKASAN at LP 1.

2.(S) Destroy Iraqi forces in EA PACKER.

3.(S) Block western approach into sector.

4.(S) Be prepared to receive OPCON of brigade reserve to support engagements at EA PACKER from BP EL PASO.

5.(S) Position, secure and provide area support for TM 3/C&J/HHOC/311 MI (LLVI).

6.(S) Emplace and monitor sensor at NV 398553.

(4)(U) TF RAKKASAN

(a)(S) PHASE I (Surge to LZ SAND)

1.(S) Air assault to LZ SAND IAW Appendix 3 (Air Movement Table) to Annex C (Operations).

2.(S) Conduct route reconnaissance of ROUTE 41A.

(b)(S) PHASE II (Ground Movement to AO EAGLE)

[REDACTED]

187 AARCT, 101ST AIRBORNE DIVISION (AASLT) OPLAN 90-5, OPERATION SHENANDOAH II (U)

1.(S) On completion of PHASE I, conduct ground movement along ROUTE 41A. Keep main body south of PL GRAMPA until EENT.

2.(S) After EENT move to and man RP vic NV 596310. On order, mark RP with flashing IR strobe and mark top of each vehicle with an IR chemlight.

3.(S) On order. proceed to AO EAGLE. On arrival, release attachments to PHASE IV task organization. Move to and occupy BP AUSTIN.

(5)(U) TF 2-17

(a)(S) PHASE I (Surge to LZ SAND)

1.(S) On G-day, armed reconnaissance of ROUTE 41A to pinpoint LZ SAND and determine trafficability of ROUTE 41A from LZ SAND to PL VIKING.

2.(S) On G-day, establish FARRP, and insert TM JERRY and provide coverage of ground recon of ROUTE 41A.

(b)(S) PHASE II (Ground Movement to AO EAGLE) Provide route security to ground movement of TF RAKKASAN from LZ SAND to AO EAGLE.

(c)(S) PHASE IV (Block)

1.(S) Establish a FARRP and Lager at LZ SAND.

2.(S) Screen avenues of approach to the southeast and northwest of infantry positions in AO EAGLE (day and night).

3.(S) Establish EAs to the east, southeast, west and northwest of infantry EAs to destroy approaching Iraqi forces.

4.(S) On order, support engagement of Iraqi forces on EAs PACKER and YANKEE.

5.(S) Be prepared to attack and destroy Iraqi artillery systems. (day only).

6.(S) On order, provide security for ground movement to TF BENEDICT from FOB COBRA to AO EAGLE.

187 AARCT, 101ST AIRBORNE DIVISION (AASLT) OPLAN 90-5, OPERATION SHENANDOAH II (U)

(6)(S) TM JERRY. PHASE I. Conduct reconnaissance of ROUTE 41A IAW Appendix 7 (LZ SAND Recon) of Annex C (Operations).

(7)(S) AARCT Reserve. PHASE IV. Position at BP WACO. Be prepared to reinforce in order TFS 2-187 or 3-187 from BP EL PASO.

c.(U) Tasks to Combat support units.

(1)(U) 3-320 FA. See Appendix 4 (Fire Support) to Annex C (Operations)

(2)(U) C/2-44 ADA.

(a)(S) PHASE I & II. Provide TF RAKKASAN six stinger teams (dismounted) and early warning down link. Provide air defense coverage from LZ SAND to AO EAGLE.

(b)(S) PHASE III. Provide three dismounted stinger sections (-) (three teams) to each infantry battalion task force air assaulting in AO EAGLE and one stinger team to Regimental TOC. Provide early warning and air defense to AO EAGLE.

(c)(S) PHASE IV. Provide air defense coverage with C/2-44 ADA (-) to TF BENEDICT from TAA CAMPBELL to AO EAGLE.

(3)(U) C/326 ENG.

(a)(S) PHASE I & II. Move CL IV & V and support vehicles (4 HMMWVs) with TF RAKKASAN.

(b)(S) PHASE III. Air assault dismounted engineer platoons with infantry battalion task forces as per task organization.

(c)(S) PHASE IV. Provide countermobility support for EAS YANKEE and PACKER.

(4)(U) HHOC/311 MI. PHASE IV.

(a)(S) Establish LLVI locations at BPs AUSTIN, ALAMO, and ABILENE.

(b)(S) Establish a TA with the AARCT TOC.

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(c)(S) Provide IPW and CI teams to the AARCT LAB.

(5)(U) 3/101 MP CO. PHASE IV

(a)(S) Provide escort and route security for TF BENEDICT between TAA CAMPBELL and AO EAGLE.

(b)(S) Upon closure to AO EAGLE, establish EPW and Civilian Detainee collection points at LAB.

(6)(U) 3/63 CML CO.

(a)(S) PHASE I and III. Provide smoke curtains for heavy and light PZs. Provide deceptive curtains beginning G-day.

(b)(S) PHASE I and II. Move decontamination squad with TF RAKKASAN and AARCT LAB. Include two SANATORS, water pump, blivets and decon materials.

(c)(S) PHASE IV. Provide hasty equipment decontamination support with priority to medical evacuation vehicles, artillery and TOW systems. Be prepared to support personnel decontamination. Be prepared to support decontamination of patients and human remains.

d.(S) Tasks to CSS Units. All unit trains and elements of 187 AARCT not air assaulting to LZ SAND or AO EAGLE will form TF BENEDICT commanded by the AARCT XO. Commencing G+2 TF BENEDICT will commence moving from TAA CAMPBELL, to FOB COBRA, and on order to AO EAGLE. See Annex F (Movement of TF BENEDICT).

e.(S) Coordinating Instructions

(1)(S) This OPLAN is effective for planning on receipt. Battalions will briefback AARCT Cdr at 021300 Feb 91 at the AARCT TOC. Briefings will be limited to 15 minutes with three charts (Tasks and Task Organization, Concept of Operations, and Concept of Logistical Support) the same briefing will be given to the Division Commander at 031900 Feb 91. Detailed brief backs will be scheduled for the AARCT commander 7 through 10 Feb 91.

(2)(S) NBC: Chemical/ Biological Threat - Amber. MOPP 1 effective on G-day. On order, initiate nerve agent pretreatment. Initiate automatic masking during enemy artillery and air attacks.

187 AARCT, 101ST AIRBORNE DIVISION (AASLT) OPLAN 90-5, OPERATION SHENANDOAH II (U)

(3)(S) Ground operations are not authorized north of Euphrates River.

(4)(S) Aircraft will not be destroyed without division approval.

(5)(S) Report all enemy obstacles.

(6)(S) Units will locate, secure, and report existing fuel storage sites.

(7)(S) Report all applicable codewords in the execution checklist - Appendix 6 to Annex C (Operations).

(8)(S) Task organization for Phase I is effective on order.

(9)(S) Battalions TF's are required to provide LNO's to the AARCT TOC at the objective.

(10)(S) Avoid populated areas and contact with local civilians. Warn away local civilian nationals using loud speaker teams and bull horns. Collect and evacuate displaced civilians (DC) who persist in entering AO to collection points. Every effort will be made to deny access into the AO without harming them.

(11)(S) Coordinate all DC control measures and request for local support or requisition with the AARCT S-5.

(12)(S) Report numbers of hostile local civilians detained and non-hostile local civilians collected and protected.

(13)(S) Keep local civilians separated from EPWs AARCT DC collection point is NV 565392.

(14)(S) AARCT EPW collection point is NV 565392.

(17)(S) PIR: See Annex B (Intelligence).

4.(U) SERVICE SUPPORT. See Annex D (Logistics) and Annex E (Personnel)

5.(U) COMMAND AND SIGNAL.

a.(U) Command.

187 AARCT, 101ST AIRBORNE DIVISION (AASLT) OPLAN 90-5, OPERATION SHENANDOAH II (U)

(1)(S) PHASE I & II. AARCT TOC will breakdown on G-day and prepare for movement. Jump TOC (Use Alternate Expander) will become operational at the current TOC location (MT 100655). AARCT TOC support vehicles will air assault to LZ SAND with TF RAKKASAN. 187 AARCT CDR is the air assault task force commander located in a console UH-60. CDR 7-101 AVN is the air mission commander.

(2)(S) PHASE III. AARCT TOC will air assault into AO EAGLE, link up with support vehicles, and establish TOC vic NV 567420. AARCT Commander move with the TOC and will be initially located there. 187 AARCT Commander is the air assault task force commander located in a console UH-60. CDR 4-101 AVN is the air mission commander.

(3)(S) PHASE IV. Jump TOC will move with TF BENEDICT.

(4)(S) Succession of Command. COL Clark, LTC Berdy, LTC Greco, LTC Kinnison.

b.(U) Signal.

(1)(U) SOI: Current SOI in effect. Changeover time is 0300C (local).

(2)(C) CRYPTO: Current keymat (USKAT 1019 IY) is in effect. Variables will be manually issued to subordinate units from the brigade COMSEC custodian. The following dates apply:

Segment 6	300300 JAN to 060300 FEB 91
Segment 8	060300 FEB to 130300 FEB 91
Segment 9	130300 FEB to 200300 FEB 91
Segment 10	200300 FEB to 270300 FEB 91
Segment 11	270300 FEB to 060300 MAR 91

(3)(S) Means. Primary means of communication within the brigade sector will be FM. Subordinate battalions are required to operate in the brigade command and O&I net. The brigade A&L net will be monitored for units to switch to as required. Long band communications back to brigade rear will be via AM.

(4)(U) Callsigns. All TAC CP's will use the suffix for the assault CP. All logistic CP's will use the suffix for the logistics readiness center.

**187 AARCT, 101ST AIRBORNE DIVISION (AASLT) OPLAN 90-5, OPERATION
SHENANDOAH II (U)**

**CLARK
COL**

OFFICIAL:

**KINNEY
S3**

ANNEXES:

- A - Task Organization**
- B - Intelligence**
- C - Operations**
 - Appendices 1 - AO EAGLE 1:50,000**
 - 2 - LZ SAND and ROUTE 41A 1:250,000**
 - 3 - Air Movement Table**
 - 4 - Fire Support**
 - 5 - Synchronization Matrix for EAs YANKEE and PACKER**
 - 6 - Execution Checklist**
 - 7 - LZ SAND Recon (TBP)**
 - 8 - FOB COBRA Staging Option**
 - 9 - Breaking Contact**
 - 10 - Rules of Engagement**
- D - Logistics**
- E - Personnel (Distributed by Reg S-1)**
- F - TF BENEDICT Movement (TBP)**
- Z- Distribution**

ANNEX A (TASK ORGANIZATION) TO 3D BDE, 101ST ABN DIV (AASLT)
OPLAN 90-5, OPERATION SHENANDOAH II (U)

PHASES I - III

TF 1-187

1-187 IN (-)
PLT/D/1-187 (DISMOUNTED)
FSE (-)
SEC(-)/C/2-44 ADA (S)
GSR (AN/PPS 5)
TM 1/C&J/HHOC/311 MI

TF 2-187

2-187 IN (-)
PLT/D/2-187 (DISMOUNTED)
FSE(-)
SEC(-)/C/2-44 ADA (S)
1&2/C/326 ENG
TM/REMBASS/HHOC/311 MI
TM 2/C&J/HHOC/311 MI
TM/GSR (AN/PPS 15)

TF 3-187

3-187 IN (-)
PLT/D/3-187 (DISMOUNTED)
FSE(-)
SEC/C/2-44 ADA (S)
3/C/326 ENG
TM/REMBASS/HHOC/311 MI
TM 3/C&J/HHOC/311 MI
TM/GSR (AN/PPS 15)

TF RAKKASAN

HHC/3-187 (-)
3-320 FA
REG TAC (-)
D/1-187 (-)
D/2-187 (-)
D/3-187 (-)
RIFLE CO/2-187 (MOUNTED)
RIFLE CO/3-187 (MOUNTED)
PLT/C/326 EN (MOUNTED)
6XTM/C/2-44 ADA (S)
C/326 ENG (-)
SEC/3/63 CML

BDE CONTROL

HHC, 3D BDE
PLT/A/6-101 CMD
C/2-44 ADA (-)
3/63 CML
C/326 ENG (-)
HHOC/311 MI (-)
3/B/501 SIG
TM/DET/5-507 TACW
TM 5TH WS
TM/9TH PSYOP
TM/CA
3D LAB
FASCO
TM/C/326 MED
TM/C/426 S&T
TM/C/801 MAINT
SEC/D/326 MED
SQ/1-187 (TOC SECURITY)
PLT/1-187 (LAB SECURITY)

TM JERRY

SCT/3-187
TM/3/B/501 SIG (TACSAT)

TF 2-17

2-17 CAV
PLT/3-187 (EFFECTIVE G-2)

ANNEX A (TASK ORGANIZATION) TO 3D BDE, 101ST ABN DIV (AASLT)
OPLAN 90-5, OPERATION SHENANDOAH II (U)

PHASE IV

TF 1-187

1-187 IN (-)
D/1-187
FSE
SEC/C/2-44 ADA (S)
TM/GSR (AN/PPS 5)

TF 2-187

2-187 IN
D/2-187
1&2/C/326 ENG
FSE
SEC/C/2-44 ADA (S)
TM/REMBASS/HHOC/311 MI
GSR (AN/PPS 15)

TF 3-187

3-187 IN (-)
D/3-187 (-)
FSE
SEC/C/2-44 ADA (S)
3/C/326 ENG
TM/REMBASS/HHOC/311 MI
GSR (AN/PPS 15)

TF 2-17

2-17 CAV
PLT/3-187
CO/1-101 ATK (OPCON)

BDE CONTROL

HHC, 3D BDE
PLT/A/6-101 CMD
C/2-44 ADA (-)
3/63 CML
C/326 ENG (-)
3-320 FA (DS)
BTRY/5-8 FA (155,T)
SEC/2FAD
HHOC/311 MI (-)
3/B/501 SIG
TM/DET/5-507 TACW
TM 5TH WS
TM/9TH PSYOP
TM/CA
3D LAB
FASCO
TM/C/326 MED
TM/C/426 S&T
TM/C/801 MAINT
SEC/D/326 MED
PLT/1-187 (TOC SECURITY)
PLT/1-187 (LAB SECURITY)

RESERVE

B/3-187 (RELEASED O/O)
2X PLT/D/3-187

████████████████████

ANNEX B (Intelligence) TO 187 AARCT OPLAN 90-5, OPERATION
SHENANDOAH II (U)

1. (U) SUMMARY OF ENEMY SITUATION: Per Appendix 1 (Intelligence Estimate).

2. (S) INTELLIGENCE REQUIREMENTS:

a. (S) PIR

(1) (S) Where are enemy regular units located in AO Eagle.

(2) (S) Where are the enemy reinforcing units located? How long will it take for them to reach the AO Eagle? What are the strengths, compositions and dispositions of these units?

(3) (S) What Popular Army units are in the AO Eagle? Where are these units located? What are their current strengths and dispositions?

(4) (S) Where are the enemy ADA and artillery units that can range the AO located? What type and how many of each system are in AO Eagle?

b. (S) IR

(1) (S) Will the Iraqi population resist US forces?

(2) (S) Are the Iraqis (civilian and military) vulnerable to Psyops?

(3) (S) Will the Iraqis surrender in large numbers?

(4) (S) Where is the ground trafficable for foot traffic, light wheeled vehicles, and tracked vehicles in the TF AO?

3.(U) INTELLIGENCE ACQUISITION TASKS: See Appendix 2 (Intelligence acquisition tasks) to this Annex.

4.(U) MEASURES FOR HANDLING PERSONNEL, DOCUMENTS, AND MATERIAL: Per 3d BDE TACSOP and Appendix 5 (Rules of Engagement) to Annex C (Operations) to OPLAN 90-4.

5.(S) DOCUMENTS AND/OR EQUIPMENT REQUIRED. Per 3d BDE TACSOP. Maps will be distributed as they become available. Each battalion will receive 30% of the available maps while HHC, 3d BDE will receive 10%. Required map sheets are as follows:

[REDACTED]

ANNEX B (Intelligence) TO 187 AARCT OPLAN 90-5, OPERATION
SHENANDOAH II (U)

a. (U) 1:250,000 map sheets: NG 39-5, 39-6, 39-9, 39-10,
NG 38-4, 38-8, 38-12.

b. (S) TAA 1:50,000 map sheets: 4749 II, 4849 II & III, 4748
I, 4848 II & III.

c. (S) AO Eagle 1:50,000 map sheets: 5052 I & III, 5152 I -
IV.

6.(U) COUNTERINTELLIGENCE: Per 3d BDE TACSOP.

7.(U) REPORTS AND DISTRIBUTION: Per 3d BDE TACSOP.

Appendices:

- 1 - Intelligence Estimate (DISTRIBUTED SEPERATELY)
- 2 - Intelligence Acquisition Tasks
- 3 - NAIs/ Responsibilities.

[REDACTED]

Appendix 2 (Intelligence Acquisition Tasks) to ANNEX B
(Intelligence) to 187 AARCT, OPLAN 90-5, OPERATION SHENANDOAH II
(U) Task/Request Unit

1	2	3	3	C	C	T	D	2
/	/	/	/	/	2	M	I	/
1	1	3	3	3	/		V	1
8	8	8	2	2	4	H		7
7	7	7	0	6	4			C
								A
								V

- | | | | | | | | | |
|---|---|---|---|---|---|---|--|-----|
| 1. (1) Provide continuous surveillance of all NAIs as listed in Appendix 3 TO Annex B. | X | X | X | | | | | |
| 2. (S) Report as obtained locations, strengths and equipment of enemy company or larger sized maneuver units operating within 5 kms of the TF AO (As Salman/ An Nasiriyah) | X | X | X | X | X | X | | X |
| 3. (S) Report as obtained locations, strengths and equipment of platoon or larger sized recon units operating within 5 kms of the TF AO. | X | X | X | X | X | X | | X |
| 4. (S) Report as obtained locations, strengths and equipment of enemy company or larger, maneuver or arty units and platoon or larger sized recon units operating between 5 and 20 kilometers of the TF AO. | | | | X | | | | X X |
| 5. (S) Report as obtained locations, strengths of squad or platoon sized paramilitary units operating in AO Eagle. Paramilitary forces include Popular Army and all police units. | X | X | X | X | X | X | | |
| 6. (S) Report as obtained locations, numbers and types of all AAA/ SAM systems operating within 10 kms of the TF AO and within 10 kms of all air routes leading to and from the Bde. | X | X | X | X | X | X | | X |
| 7. (S) Recon river banks and bottoms, to determine possible ford sites. | X | X | X | | X | | | X |

[REDACTED]

Appendix 2 (Intelligence Acquisition Tasks) to ANNEX B
(Intelligence) to 187 AARCT, OPLAN 90-5, OPERATION SHENANDOAH II
(U) Task/Request Unit

1	2	3	3	C	C	T	D	2
/	/	/	/	/	2	M	I	/
1	1	3	3	3	/		V	1
8	8	8	2	2	4	H		7
7	7	7	0	6	4			C
								A
								V

Report as obtained locations and widths of all ford sites.

8. (S) Recon canals, irrigation ditches and streams in sector to determine widths, depths, bank slopes and estimated speed of water. Provide an overlay to Bde showing locations of all canals, ditches and streams that can only be crossed at bridges and ford sites. Show locations and widths of all ford sites on this overlay.

X X X X

9) (S) Recon marshy areas in sector to determine what areas are no go and slow go for tracked and wheeled vehicles and foot movement. Show locations of slow go and no go areas on same overlay as the above task.

X X X X

[REDACTED]

Appendix 3 (NAIs/ Responsibilities) to ANNEX B (Intelligence) to
187 AARCT OPLAN 90-5, OPERATION SHENANDOAH II (U)

1. (S) NAIs:

- 3D - NV298662, Two intersections, center mass.
- 3E - NV376564, Road and creek intersection.
- 3K - NV275811, Road intersection.
- 3L - NV255763, Road intersection.
- 3N - NV248703, Candy stripe road near RR track.
- 3M - NV269275, Bridge.
- 3O - NV275610, Large intersection, center mass.
- 3P - NV306637, Road intersection.
- 3Q - NV455769, Road intersection.
- 3R - NV516605, Two intersections, center mass.
- 3S - NV544605, Two fording sites, center mass.
- 3T - NV469516, Road and RR Intersection.
- 3U - NV518518, Two bridges, center mass.
- 3V - NV505501, Road intersection.
- 3W - NV632459, Road and RR intersection.
- 3X - NV693492, Bridge.
- 3Y - NV692373, Airfield.
- 3Z - NV696354, Pump station, power plant and tower.
- 3AA - NV839439, Bridge.
- 3AB - NV935428, Road intersection.
- 3AC - NV936409, Road intersection.
- 3AD - NV911425, Ferry Crossing.
- 3AE - NV841439, Road Intersection.
- 3AF - NV833429, Road intersection; center mass.
- 3AG - NV799387, Road & ditch intersection; center mass.
- 3AH - NV604337, North/south road section; center mass.
- 3AI - NV486376, Secondary road & stream intersection; center mass.
- 3AJ - NV473438, Secondary road & pipeline intersection; center mass.
- 3AK - NV523508, Road intersection in Mahattat Al Khidr; center mass.
- 3AL - NV575420, Multiple road intersections; center mass.
- 3AM - NV733473, Road Intersection and point on Highway 8 east of Na if al Ajil.

2. (S) 1-187 NAIs: 3Y, 3Z, 3AI, 3AH.

3. (S) 2-187 NAIs: 3W, 3X, 3AG, 3AM.

4. (S) 3-187 NAIs: 3T, 3U, 3V, 3AJ, 3AK, 3AL.

[REDACTED]

Appendix 3 (NAIs/ Responsibilities) to ANNEX B (Intelligence) to
187 AARCT OPLAN 90-5, OPERATION SHENANDOAH II (U)

5. (S) 2-17 NAIs: 3D, 3E, 3K, 3L, 3M, 3N, 3O, 3P, 3Q, 3R, 3S.

6. (S) DIV NAIs: 3AA, 3AB, 3AC, 3AD, 3AE, 3AF.

[REDACTED]

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ANNEX C (OPERATIONS) to 187 AARCT OPLAN 90-5 OPERATION SHENANDOAH
II (U)

REFERENCES: See basic OPLAN.

1.(U) GENERAL.

a.(U) Purpose. This annex provides guidance for the conduct of combat and combat support operations.

b.(U) Mission. See basic OPLAN.

c.(U) Area of Operations. The area of operations encompassed by this plan includes the land and air space indicated by Appendix 1 and 2 (Operations Overlay).

2.(U) CONCEPT OF OPERATIONS. See basic OPLAN.

3.(U) CONDUCT OF OPERATIONS. See basic OPLAN.

a.(U) Readiness, Alert, Marshalling, Deployment. IAW TACSOP and AASLT SOP.

b.(U) Operations Overlay.

(1)(S) AO EAGLE (1:50,000). See Appendix 1.

(2)(S) LZ SAND and ROUTE 41A (1:250,000) See Appendix 2.

(3)(U) Air Movement Table. See Appendix 3.

(4)(S) LZ SAND and ROUTE 41A Reconnaissance. See Appendix 7.

c.(U) Fire Support. See Appendix 4.

d.(U) Contingency Operations.

(1)(S) FOB COBRA Staging Option. See Appendix 8.

(2)(S) Breaking Contact from AO EAGLE. See Appendix 9.

e.(U) Synchronization Matrix. Synchronization of combat systems to engage approaching enemy forces of battalion to brigade size mechanized/armor force to EAs YANKEE and PACKER. See Appendix 5.

f.(U) Execution Checklist. See Appendix 6.

g.(U) Rules of Engagement. See Appendix 10.

**ANNEX C (OPERATIONS) to 187 AARCT OPLAN 90-5 OPERATION SHENANDOAH
II (U)**

**CLARK
COL**

OFFICIAL:

**KINNEY
S-3**

Appendices:

- 1 - AO EAGLE 1:50,000
- 2 - LZ SAND AND ROUTE 41A 1:250,000
- 3 - Air Movement Table
- 4 - Fire Support
- 5 - Synchronization Matrix for EAs YANKEE and PACKER
- 6 - Execution Checklist
- 7 - LZ Sand Recon
- 8 - FOB COBRA Staging Option
- 9 - Breaking Contact
- 10 - Rules of Engagement

APPENDIX 3 (Air Movement Table) TO ANNEX C (Operations) TO 3D BDE, 101ST ABN DIV (AASLT), OPERATION SHENANDOAH II

CH-47 AIR MOVEMENT TABLE (LIFT 1)

AS OF: 092030C FEB 91

AVN UNIT	LIFTED UNIT	LIFT SERIAL	LOADS	PICK UP ZONE	LOADING TIME	TAKE OFF TIME	LANDING TIME	LANDING ZONE	REMARKS	
7-101	D/1-187 IN	1	1	01	HEAVY	H- 7:37	H- 7:27	H- 6:32	SAND	2XU966 (D50/D51)
	D/1-187 IN			02		H- 7:37	H- 7:27	H- 6:32	SAND	2XU966 (D52/D52)
	D/1-187 IN			03		H- 7:37	H- 7:27	H- 6:32	SAND	2XU966 (D40/D41)
	D/1-187 IN			04		H- 7:37	H- 7:27	H- 6:32	SAND	2XU966 (D42/D43)
7-101	D/1-187 IN	1	2	05	HEAVY	H- 7:33	H- 7:23	H- 6:28	SAND	2XU966
	D/1-187 IN			06		H- 7:33	H- 7:23	H- 6:28	SAND	2XU966
	D/1-187 IN			07		H- 7:33	H- 7:23	H- 6:28	SAND	2XU998
	REGT HQ			08		H- 7:33	H- 7:23	H- 6:28	SAND	2XU998 (H06/H03)
7-101	REGT HQ	1	3	09	HEAVY	H- 7:29	H- 7:19	H- 6:24	SAND	2XU998 (RAD:0/F50)
	REGT HQ			10		H- 7:29	H- 7:19	H- 6:24	SAND	2XU998 (017/H038)
	D/3-187 IN			11		H- 7:29	H- 7:19	H- 6:24	SAND	2XU966
	D/3-187 IN			12		H- 7:29	H- 7:19	H- 6:24	SAND	2XU966
7-101	D/3-187 IN	1	4	13	HEAVY	H- 7:25	H- 7:15	H- 6:20	SAND	2XU966
	D/3-187 IN			14		H- 7:25	H- 7:15	H- 6:20	SAND	2XU966
	D/3-187 IN			15		H- 7:25	H- 7:15	H- 6:20	SAND	2XU966
	D/3-187 IN			16		H- 7:25	H- 7:15	H- 6:20	SAND	2XU966
7-101	D/3-187 IN	1	5	17	HEAVY	H- 7:21	H- 7:11	H- 6:16	SAND	2XU966
	D/3-187 IN			18		H- 7:21	H- 7:11	H- 6:16	SAND	2XU966
	C/326 ENG			19		H- 7:21	H- 7:11	H- 6:16	SAND	2XU998
	B/3-187 IN			20		H- 7:21	H- 7:11	H- 6:16	SAND	2XU998 (1-187 U998s)
7-101	B/3-187 IN	1	6	21	HEAVY	H- 7:17	H- 7:07	H- 6:12	SAND	2XU998 (1-187 U998s)
	B/3-187 IN			22		H- 7:17	H- 7:07	H- 6:12	SAND	2XU998
	B/3-187 IN			23		H- 7:17	H- 7:07	H- 6:12	SAND	2XU998
	B/3-187 IN			24		H- 7:17	H- 7:07	H- 6:12	SAND	2XU998
7-101	B/3-187 IN	1	7	25	HEAVY	H- 7:13	H- 7:03	H- 6:08	SAND	2XU998
	B/3-320 FA			26		H- 7:13	H- 7:03	H- 6:08	SAND	1XU998/U102 (B11/BH11)
	B/3-320 FA			27		H- 7:13	H- 7:03	H- 6:08	SAND	1XU998/U102 (B12/BH12)
	B/3-320 FA			28		H- 7:13	H- 7:03	H- 6:08	SAND	2XU998 (B3/B6)
7-101	B/3-320 FA	1	8	29	HEAVY	H- 7:09	H- 6:59	H- 6:04	SAND	1XU998/U102 (B15/BH15)
	B/3-320 FA			30		H- 7:09	H- 6:59	H- 6:04	SAND	1XU998/U102 (B13/BH13)
	D/326MED 187 REGT			31		H- 7:09	H- 6:59	H- 6:04	SAND	1XU101 TRL (326 MED)

APPENDIX 3 (Air Movement Table) TO ANNEX C (Operations) TO 3D BDE, 101ST ABN DIV (AAST), OPERATION SHENANDOAH II

CH-47 AIR MOVEMENT TABLE (LIFT 2)

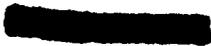
AVN UNIT	LIFTED UNIT	LIFT	SERIAL	LOADS	PICK UP ZONE	LOADING TIME	TAKE OFF TIME	LANDING TIME	LANDING ZONE	REMARKS
7-101	B/3-320 FA	2	1	01	HEAVY	H- 5:06	H- 4:56	H- 4:01	SAND	1XN998/W102 (B14/BH14)
	B/3-320 FA			02		H- 5:06	H- 4:56	H- 4:01		1XN998/W102 (B16/BH16)
	D/2-187 IN			03		H- 5:06	H- 4:56	H- 4:01		2XN966 (D11/D12) 15 PAX
	D/2-187 IN			04		H- 5:06	H- 4:56	H- 4:01		2XN966 (D13/D14) 15 PAX
7-101	D/2-187 IN	2	2	05	HEAVY	H- 5:02	H- 4:52	H- 3:57	SAND	2XN966 (D51/D52) 15 PAX
	D/2-187 IN			06		H- 5:02	H- 4:52	H- 3:57		2XN966 (D53/D54) 15 PAX
	D/2-187 IN			07		H- 5:02	H- 4:52	H- 3:57		2XN966 (D31/D32) 15 PAX
	D/2-187 IN			08		H- 5:02	H- 4:52	H- 3:57		2XN966 (D33/D34) 15 PAX
7-101	D/2-187 IN	2	3	09	HEAVY	H- 4:58	H- 4:48	H- 3:53	SAND	2XN966 (D41/D42) KL250 10 PAX
	D/2-187 IN			10		H- 4:58	H- 4:48	H- 3:53		2XN966 (D43/D44) 09 PAX
	D/2-187 IN			11		H- 4:58	H- 4:48	H- 3:53		2XN998 (AF1/HQ3) KL250 10 PAX
	HHC/3-187			12		H- 4:58	H- 4:48	H- 3:53		2XN998
7-101	HHC/3-287	2	4	13	HEAVY	H- 4:54	H- 4:44	H- 3:49	SAND	2XN998
	C/326 ENG			14		H- 4:54	H- 4:44	H- 3:49		2XN998
	C/2-187 IN			15		H- 4:54	H- 4:44	H- 3:49		2XN998 (D15/HQ85) 15 PAX
	C/2-187 IN			16		H- 4:54	H- 4:44	H- 3:49		2XN998 (A5/C5) 15 PAX
7-101	C/2-187 IN	2	5	17	HEAVY	H- 4:50	H- 4:40	H- 3:45	SAND	2XN998 (HQ56/86) 15 PAX
	C/2-187 IN			18		H- 4:50	H- 4:40	H- 3:45		2XN998 (1-187 N998s) 15 PAX
	C/2-187 IN			19		H- 4:50	H- 4:40	H- 3:45		2XN998 (1-187 N998s) 15 PAX
	C/2-187 IN			20		H- 4:50	H- 4:40	H- 3:45		2XN998 (HQ62/HQ66) 15 PAX
7-101	HHC/3-320	2	6	21	HEAVY	H- 4:46	H- 4:36	H- 3:41	SAND	1XN998/W102 (C15/CH15)
	C/3-320 FA			22		H- 4:46	H- 4:36	H- 3:41		1XN998/W102 (C11/CH11)
	187 REGT			23		H- 4:46	H- 4:36	H- 3:41		2XN998 (326 MED/63RD CHEM)
	C/3-320 FA			24		H- 4:46	H- 4:36	H- 3:41		1XN998/W102 (C12/CH12)
7-101	C/3-320 FA	2	7	25	HEAVY	H- 4:42	H- 4:32	H- 3:37	SAND	1XN998/W102 (C12/CH12)
	C/3-320 FA			26		H- 4:42	H- 4:32	H- 3:37		1XN998/W102 (C13/CH13)
	C/3-320 FA			27		H- 4:42	H- 4:32	H- 3:37		1XN998/W102 (C16/CH16)
	C/3-320 FA			28		H- 4:42	H- 4:32	H- 3:37		2XN998 (HQ6/HQ80)
7-101	C/3-320 FA	2	8	29	HEAVY	H- 4:38	H- 4:28	H- 3:33	SAND	2XN998 (HQ9/HQ15)
	C/3-320 FA			30		H- 4:38	H- 4:28	H- 3:33		1XN998/W102 (C14/CH14)

APPENDIX 3 (Air Movement Table) TO ANNEX C (Operations) TO 3D BDE, 101ST ABN DIV (AASLT), OPERATION SHENANDOAH 11

UH-60 AIR MOVEMENT TABLE (LIFT 1)

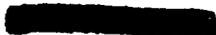
AS OF: 092030C FEB 91

AVN UNIT	LIFTED UNIT	LIFT	SERIAL	LOADS	PICK UP ZONE	LOADING TIME	TAKE OFF TIME	LANDING TIME	LANDING ZONE	REMARKS
101 AVN	2-187	1	1	01	LIGHT	H -2:00	H -1:17	H HR	FESTUS	
	2-187			02		H -2:00	H -1:17	H HR		
	2-187			03		H -2:00	H -1:17	H HR		
	2-187			04		H -2:00	H -1:17	H HR		
	2-187			05		H -2:00	H -1:17	H HR		
	2-187			06		H -2:00	H -1:17	H HR		
	2-187			07		H -2:00	H -1:17	H HR		
	2-187			08		H -2:00	H -1:17	H HR		
101 AVN	2-187	1	2	09	LIGHT	H -2:00	H -1:14	H + :03	FESTUS	
	2-187			10		H -2:00	H -1:14	H + :03		
	2-187			11		H -2:00	H -1:14	H + :03		
	2-187			12		H -2:00	H -1:14	H + :03		
	2-187			13		H -2:00	H -1:14	H + :03		
	2-187			14		H -2:00	H -1:14	H + :03		
101 AVN	2-187	1	3	15	LIGHT	H -2:00	H -1:11	H + :06	FESTUS	
	2-187			16		H -2:00	H -1:11	H + :06		
	2-187			17		H -2:00	H -1:11	H + :06		
	2-187			18		H -2:00	H -1:11	H + :06		
	2-187			19		H -2:00	H -1:11	H + :06		
	2-187			20		H -2:00	H -1:11	H + :06		
	2-187			21		H -2:00	H -1:11	H + :06		
	2-187			22		H -2:00	H -1:11	H + :06		
101 AVN	3-187	1	4	23	LIGHT	H -1:50	H -1:07	H + :10	CHESTER	
	3-187			24		H -1:50	H -1:07	H + :10		
	3-187			25		H -1:50	H -1:07	H + :10		
	3-187			26		H -1:50	H -1:07	H + :10		
	3-187			27		H -1:50	H -1:07	H + :10		
	3-187			28		H -1:50	H -1:07	H + :10		
	3-187			29		H -1:50	H -1:07	H + :10		
	3-187			30		H -1:50	H -1:07	H + :10		
101 AVN C&C	187 REGT	1	5	31	LIGHT	H -1:50	H -1:04	H + :13	CHESTER	
	187 REGT			32		H -1:50	H -1:04	H + :13		
	187 REGT			33		H -1:50	H -1:04	H + :13		
	3-187			34		H -1:50	H -1:04	H + :13		
	3-187			35		H -1:50	H -1:04	H + :13		
	3-187			36		H -1:50	H -1:04	H + :13		



APPENDIX 3 (Air Movement Table) TO ANNEX C (Operations) TO 3D BDE, 101ST ABN DIV (AASLT), OPERATION SHEKANDOAH II

3-187	37	H -1:50	H -1:04	H + :13	CHESTER
3-187	38	H -1:50	H -1:04	H + :13	CHESTER



[REDACTED]

APPENDIX 3 (Air Movement Table) TO ANNEX C (Operations) TO 3D BDE, 101ST ABN DIV (AASLT), OPERATIONS SHENANDOAH II

AVN UNIT	LIFTED UNIT	LIFT	SERIAL	LOADS	PICK UP ZONE	LOADING TIME	TAKE OFF TIME	LANDING TIME	LANDING ZONE	REMARKS
101 AVN	3-187	1	6	39	LIGHT	H -1:50	H -1:01	H + :16	CHESTER	
	3-187			40		H -1:50	H -1:01	H + :16		
	3-187			41		H -1:50	H -1:01	H + :16		
	3-187			42		H -1:50	H -1:01	H + :16		
	3-187			43		H -1:50	H -1:01	H + :16		
	3-187			44		H -1:50	H -1:01	H + :16		
	3-187			45		H -1:50	H -1:01	H + :16		
	3-187			46		H -1:50	H -1:01	H + :16		
101 AVN	1-187	1	7	47	LIGHT	H -1:40	H - :55	H + :22	CROCKET	
	1-187			48		H -1:40	H - :55	H + :22		
	1-187			49		H -1:40	H - :55	H + :22		
	1-187			50		H -1:40	H - :55	H + :22		
	1-187			51		H -1:40	H - :55	H + :22		
	1-187			52		H -1:40	H - :55	H + :22		
	1-187			53		H -1:40	H - :55	H + :22		
	1-187			54		H -1:40	H - :55	H + :22		
101 AVN	1-187	1	8	55	LIGHT	H -1:40	H - :52	H + :25	CROCKET	
	1-187			56		H -1:40	H - :52	H + :25		
	1-187			57		H -1:40	H - :52	H + :25		
	1-187			58		H -1:40	H - :52	H + :25		
	1-187			59		H -1:40	H - :52	H + :25		
	1-187			60		H -1:40	H - :52	H + :25		
	1-187			61		H -1:40	H - :52	H + :25		
101 AVN	1-187	1	9	62	LIGHT	H -1:40	H - :49	H + :28	CROCKET	
	1-187			63		H -1:40	H - :49	H + :28		
	1-187			64		H -1:40	H - :49	H + :28		
	1-187			65		H -1:40	H - :49	H + :28		
	1-187			66		H -1:40	H - :49	H + :28		
	1-187			67		H -1:40	H - :49	H + :28		

APPENDIX 3 (Air Movement Table) TO ANNEX C (Operations) TO 3D BDE, 101ST ABN Div (AASLT), OPERATION SHEKANDOAH II

UH-60 AIR MOVEMENT TABLE (LIFT 2)

AVN UNIT	LIFTED UNIT	LIFT	SERIAL	LOADS	PICK UP ZONE	LOADING TIME	TAKE OFF TIME	LANDING TIME	LANDING ZONE	REMARKS
101 AVN	2-187	2	1	01	LIGHT	H +2:00	H +4:00	H +5:17	FESTUS	
	2-187			02		H +2:00	H +4:00	H +5:17	FESTUS	
	2-187			03		H +2:00	H +4:00	H +5:17	FESTUS	
	2-187			04		H +2:00	H +4:00	H +5:17	FESTUS	
	2-187			05		H +2:00	H +4:00	H +5:17	FESTUS	
	2-187			06		H +2:00	H +4:00	H +5:17	FESTUS	
	2-187			07		H +2:00	H +4:00	H +5:17	FESTUS	
	2-187			08		H +2:00	H +4:00	H +5:17	FESTUS	
101 AVN	2-187	2	2	09	LIGHT	H +2:03	H +4:04	H +5:21	FESTUS	
	2-187			10		H +2:03	H +4:04	H +5:21	FESTUS	
	2-187			11		H +2:03	H +4:04	H +5:21	FESTUS	
	2-187			12		H +2:03	H +4:04	H +5:21	FESTUS	
	2-187			13		H +2:03	H +4:04	H +5:21	FESTUS	
	2-187			14		H +2:03	H +4:04	H +5:21	FESTUS	
101 AVN	3D LAB	2	3	15	LIGHT	H +2:06	H +4:08	H +5:25	KITTY	
	3D LAB			16		H +2:06	H +4:08	H +5:25	KITTY	
	3D LAB			17		H +2:06	H +4:08	H +5:25	KITTY	
	3D LAB			18		H +2:06	H +4:08	H +5:25	KITTY	
	3D LAB			19		H +2:06	H +4:08	H +5:25	KITTY	
	3D LAB			20		H +2:06	H +4:08	H +5:25	KITTY	
	3D LAB			21		H +2:06	H +4:08	H +5:25	KITTY	
	3D LAB			22		H +2:06	H +4:08	H +5:25	KITTY	
101 AVN	3-187	2	4	23	LIGHT	H +2:10	H +4:12	H +5:29	CHESTER	
	3-187			24		H +2:10	H +4:12	H +5:29	CHESTER	
	3-187			25		H +2:10	H +4:12	H +5:29	CHESTER	
	3-187			26		H +2:10	H +4:12	H +5:29	CHESTER	
	3-187			27		H +2:10	H +4:12	H +5:29	CHESTER	
	3-187			28		H +2:10	H +4:12	H +5:29	CHESTER	
	3-187			29		H +2:10	H +4:12	H +5:29	CHESTER	
	3-187			30		H +2:10	H +4:12	H +5:29	CHESTER	
101 AVN	3-187	2	5	31	LIGHT	H +2:13	H +4:16	H +5:33	CHESTER	
	3-187			32		H +2:13	H +4:16	H +5:33	CHESTER	
CIC				33		H +2:13	H +4:16	H +5:33	CHESTER	
	3-187			34		H +2:13	H +4:16	H +5:33	CHESTER	
	3-187			35		H +2:13	H +4:16	H +5:33	CHESTER	
	3-187			36		H +2:13	H +4:16	H +5:33	CHESTER	
	3-187			37		H +2:13	H +4:16	H +5:33	CHESTER	

[REDACTED]

APPENDIX 3 (Air Movement Table) TO ANNEX C (Operations) TO 3D BDE, 101ST ABN DIV (AASLT), OPERATION SHENANDOAH II

AVN UNIT	LIFTED UNIT	LIFT	SERIAL	LOADS	PICK UP ZONE	LOADING TIME	TAKE OFF TIME	LANDING TIME	LANDING ZONE	REMARKS
101 AVN	3D LAB	2	6	38	LIGHT	H +2:16	H +4:20	H +5:37	KITTY	
	3D LAB			39		H +2:16	H +4:20	H +5:37	KITTY	
	3D LAB			40		H +2:16	H +4:20	H +5:37	KITTY	
	3D LAB			41		H +2:16	H +4:20	H +5:37	KITTY	
	3D LAB			42		H +2:16	H +4:20	H +5:37	KITTY	
	3D LAB			43		H +2:16	H +4:20	H +5:37	KITTY	
	3D LAB			44		H +2:16	H +4:20	H +5:37	KITTY	
	3D LAB			45		H +2:16	H +4:20	H +5:37	KITTY	
101 AVN	1-187	2	7	46	LIGHT	H +2:22	H +4:26	H +5:43	KITTY	
	1-187			47		H +2:22	H +4:26	H +5:43	KITTY	
	1-187			48		H +2:22	H +4:26	H +5:43	KITTY	
	1-187			49		H +2:22	H +4:26	H +5:43	KITTY	
	1-187			50		H +2:22	H +4:26	H +5:43	KITTY	
	1-187			51		H +2:22	H +4:26	H +5:43	KITTY	
	1-187			52		H +2:22	H +4:26	H +5:43	KITTY	
	1-187			53		H +2:22	H +4:26	H +5:43	KITTY	
101 AVN	1-187	2	8	54	LIGHT	H +2:25	H +4:32	H +5:49	KITTY	
	1-187			55		H +2:25	H +4:32	H +5:49	KITTY	
	1-187			56		H +2:25	H +4:32	H +5:49	KITTY	
	1-187			57		H +2:25	H +4:32	H +5:49	KITTY	
	1-187			58		H +2:25	H +4:32	H +5:49	KITTY	
	1-187			59		H +2:25	H +4:32	H +5:49	KITTY	
	1-187			60		H +2:25	H +4:32	H +5:49	KITTY	
	1-187			61		H +2:25	H +4:32	H +5:49	KITTY	
101 AVN	1-187	2	9	62	LIGHT	H +2:28	H +4:38	H +5:55	KITTY	
	1-187			63		H +2:28	H +4:38	H +5:55	KITTY	
	1-187			64		H +2:28	H +4:38	H +5:55	KITTY	
	1-187			65		H +2:28	H +4:38	H +5:55	KITTY	
	1-187			66		H +2:28	H +4:38	H +5:55	KITTY	
	1-187			67		H +2:28	H +4:38	H +5:55	KITTY	

[REDACTED]

APPENDIX 4 (FIRE SUPPORT) to ANNEX C (OPERATIONS) to 187th AARCT, 101st ABN DIV (AASLT) OPLAN 90-5, OPERATION SHENANDOAH II.

References: See Basic OPLAN.

Time Zone Used Throughout the Order: Charlie.

1. SITUATION.

- a. Enemy forces. See Annex B (Intelligence).
- b. Friendly forces. See Basic OPLAN.
- c. Attachments and detachments. See Annex A (Task Organization).

2. MISSION. AT G+1, 187th AARCT fire support agencies provide fires to support establishment of LZ SAND (Phase I); to support ground movement of TF RAKKASAN from LZ SAND to AO EAGLE (Phase II); to support air assault to establish battle positions in sector of AO EAGLE (Phase III); and to defeat, isolate, and block Iraqi forces in the Kuwaiti Theater of Operations (KTO) (Phase IV). On order, provide fire support for continued attacks east to complete destruction of the RGFC.

3. EXECUTION.

a. Concept of Operations. This order assigns tasks in accordance with Phases I-IV of 187th AARCT OPLAN OPERATION ATLANTA II.

(1) Phase I (AASLT into LZ SAND): Attack aviation and CAS will support 187th AARCT's insertion into LZ SAND. Principal means of fire support initially will be attack aviation and CAS. Two artillery batteries (105mm, T) will be available once inserted. Field artillery must be integrated with TOW and other tank killing weapon systems. FSO's will use ICM against troops in the open and HE/VT against vehicles. Field Artillery in LZ SAND must provide 6400 mil capability. Attack aviation and CAS will attack ADA systems along air avenues of ingress.

(2) Phase II (Ground Movement into AO EAGLE): As TF RAKKASAN conducts ground movement into AO EAGLE, principal means of fire support will be attack aviation and CAS. Field Artillery batteries must be prepared to provide close and long range blocking fires to suppress attacking enemy forces. If TF

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APPENDIX 4 (FIRE SUPPORT) to ANNEX C (OPERATIONS) to 187th AARCT,
101st ABN DIV (AASLT) OPLAN 90-5, OPERATION SHENANDOAH II.

<u>UNIT</u>	Phase I	Phase II	Phase III	Phase IV
Reg. Control			30%	
TF RAKKASAN	100 %	100 %	70 %	
TF 1-187				20 %
TF 2-187				50 %
TF 3-187				30 %

(3) Miscellaneous.

(a) CENTAF will provide sorties for CAS and interdiction targets.

(b) AI/BAI targeting procedures will be IAW Joint USAF/USA doctrine. To maximize sorties and weapons effects, targets will be identified which will attrit, destroy, delay, or disrupt the enemy's military potential. AI/BAI targeting priorities are:

- (1.) ADA radar sites.
- (2.) ADA C2 network.
- (3.) C3 radio relay nodes.
- (4.) LOCs.
- (5.) Chemical storage facilities.
- (6.) Fixed ADA sites.
- (7.) Long range artillery.
- (8.) Reinforcing maneuver forces.

c. Chemical Support. Omitted.

d. Field Artillery Support.

(1) Provide conventional DS fires to 187th AARCT to support seizure and security of LZ SAND and AO EAGLE to block and defeat enemy maneuver forces. Upon arrival at AA WACO, be prepared to provide blocking fires into AO EAGLE. Orient fires primarily into EA's PACKER and YANKEE. Provide conventional DS fires to 187th AARCT to support future operations.

(2) Priority of fires.

████████████████████

APPENDIX 4 (FIRE SUPPORT) to ANNEX C (OPERATIONS) to 187th AARCT,
101st ABN DIV (AASLT) OPLAN 90-5, OPERATION SHENANDOAH II.

(a) Phases I-II (AASLT into LZ SAND; Ground Movement into AO EAGLE): TF RAKKASAN.

(b) Phase III (Air Assault into AO EAGLE): TF 2-187, TF 1-187, and TF 3-187, in order.

(c) Phase IV (Block): TF 2-187, TF 3-187, TF 2-17, and TF 1-187, in order.

(3) Organization for Combat (Phases I-IV):

1-320 FA (105mm, T)	DS 2d Bde
2-320 FA (105mm, T)	DS 1st Bde
3-320 FA (105mm, T)	DS 3d Bde
B/5-8 FA (155mm, T)	Attached 3-320 FA

e. Naval Gunfire Support. Omitted.

f. Nuclear Fire Support. Omitted.

g. Offensive Electronic Warfare Priorities.

- (1) Air Defense Radar.
- (2) Air Defense C2 Nodes.
- (3) C3 Nodes.
- (4) Counterbattery Radar.

h. Coordinating Instructions.

(1) High Payoff Targets.

<u>Priority</u>	<u>Target Type</u>
1.	Logistics Transport.
2.	Motorized Rifle/Tank Companies.
3.	Artillery Bn FDC, FA Batteries.
4.	C2, ADA Firing Systems.

(2) Attack Guidance Matrix:

<u>Target</u>	<u>When</u>	<u>How</u>
ADA Systems	I	S
C3 Nodes	A	N

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APPENDIX 4 (FIRE SUPPORT) to ANNEX C (OPERATIONS) to 187th AARCT,
101st ABN DIV (AASLT) OPLAN 90-5, OPERATION SHENANDOAH II.

Fire Support	A	N
Chemical Systems	I	D
Maneuver	A	30%
RSTA	A	N
Lift	A	N
LOG-POL	P	N
Ammo		
Maint		

I = Immediate - all other missions will be interrupted.

A = As acquired - target will be attacked as soon as acquired.

P = Planned - target attack will be included in fire support plan.

S = Suppress

N = Neutralized (10% effects)

D = Destroy (30% effects)

RSTA = Reconnaissance, Surveillance, Target Acquisition

(3) Target Numbering Assignment. See TAB A to this appendix.

(4) Fire Support Coordination Measures. XVIII Abn Corps FSCL established along PL RIPPER (FSCL #4), north of Euphrates river.

(5) Rules of Engagement. See Appendix , Annex C.

4. SERVICE SUPPORT.

a. General. See Annex D (Logistics).

b. RSR/CSR. TBP.

c. UBL. Each 105mm FA battery will initially take the following amount of Class V: TBD.

5. COMMAND AND SIGNAL.

a. Command. Omitted.

b. Signal. Target Information Reference System (TIRS): See TAB E (TIRS) to this appendix.

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APPENDIX 4 (FIRE SUPPORT) to ANNEX C (OPERATIONS) to 187th AARCT,
101st ABN DIV (AASLT) OPLAN 90-5, OPERATION SHENANDOAH II.

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TABS A - Target Numbering System.
 B - Laser Pulse Codes.
 C - Air Request Numbering System (Omitted)
 D - Target List
 E - Target Information Reference System (TIRS)
 F - Field Artillery Support Plan
 G - Fire Support Execution Matrix

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APPENDIX 4 (FIRE SUPPORT) to ANNEX C (OPERATIONS) to 187th AARCT,
101st ABN DIV (AASLT) OPLAN 90-5, OPERATION SHENANDOAH II.

TAB A (Target Numbering System) to Appendix 4 (Fire Support) to
Annex C (Operations) to 187th AARCT, 101st ABN DIV (AASLT) OPLAN
90-5, OPERATION SHENANDOAH II.

1. A target number is a six-character alphanumeric designator
which consists of a two-letter group followed by a four-digit
number.

2. The two-letter groups are assigned as follows:

101st ABN DIV (AASLT) FSE	WA
101st ABN DIV (AASLT) DIVARTY	WB
1st Bde	WC
2d Bde	WD
3d Bde	WE
101st AVN Bde	WF
DRC/RACK	WG
18th FA Bde	WL

3. The four-digit numbers are assigned as follows:

0001-1999	FSE	
2000-2999	FSO	(Lowest numbered maneuver
battalion)		
3000-3999	FSO	(2d lowest numbered maneuver
battalion)		
4000-4999	FSO	(3d lowest numbered maneuver
battalion)		
5000-5999	FSO	(Additional FSO)
7000-7999	FDC	(DS field artillery Bn)
6000-6999		(As required)
8000-8999		(As required)
9000-9999		(As required)

4. Within the Aviation brigade, target numbers are assigned as
follows:

0001-1999	Bde FSO	
2000-2999	FSO	1-101st AVN
3000-3999	FSO	2-229th AVN
4000-4999	FSO	3-101st AVN
5000-5999	FSO	2-17th CAV

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APPENDIX 4 (FIRE SUPPORT) to ANNEX C (OPERATIONS) to 187th AARCT,
101st ABN DIV (AASLT) OPLAN 90-5, OPERATION SHENANDOAH II.

TAB B (Laser Pulse Codes) to Appendix 4 (Fire Support) to Annex
C (Operations) to 187th AARCT, 101st ABN DIV (AASLT) OPLAN 90-5,
OPERATION SHENANDOAH II.

1. The following laser pulse codes are assigned to the 101st Abn
Div (AASLT):

111-118	231-238	311-318	411-418
121-128	241-248	321-328	421-428
131-138	261-268	331-338	431-438
141-148	271-278	341-348	441-448
151-158	281-288	351-358	451-458
		361-368	461-468
		371-378	471-478
		381-388	481-488

2. Attempt to use the lowest possible Laser Pulse Code
frequency.

APPENDIX 4 (FIRE SUPPORT) to ANNEX C (OPERATIONS) to 187th AARCT,
101st ABN DIV (AASLT) OPLAN 90-5, OPERATION SHENANDOAH .II.

TAB E (Target Information Reference System (TIRS)) to Appendix 4
(Fire Support) to Annex C (Operations) to 187th AARCT, 101st ABN
DIV (AASLT) OPLAN 90-5, OPERATION SHENANDOAH II.

1. TIRS Index

Number	UTM Grid	TIRS Index Number	UTM Grid
A1	NV 6354	C1	NV 6340
A2	NV 7054	C2	NV 6940
A3	NV 6150	C3	NV 6235
A4	NV 6750	C4	NV 6835
A5	NV 7351	C5	NV 7537
A6	NV 7952		
A7	NV 6346	D1	NV 4741
A8	NV 7547	D2	NV 4536
A9	NV 8449	D3	NV 5239
		D4	NV 5737
B1	NV 6945	D5	NV 5532
B2	NV 8045	D6	NV 5034
B3	NV 8645		
B4	NV 7442	E1	NV 4550
B5	NV 8040	E2	NV 5047
B6	NV 8540	E3	NV 4345
		E4	NV 5344
		E5	NV 5842
		E6	NV 5648
		E7	NV 5152
		E8	NV 5357

2. To standardize use of this TIRS system, give "Right" (east), "Left" (west), "Up" (north), or "Down" (south) directions from the TIRS reference point, and distances in kilometers. For example, if your location is 1,200 meters east and 800 meters north of TIRS reference point number E8, you would say "From E8, Right 1.2, Up .8".

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APPENDIX 4 (FIRE SUPPORT) to ANNEX C (OPERATIONS) to 187th AARCT,
101st ABN DIV (AASLT) OPLAN 90-5, OPERATION SHENANDOAH II.

TAB F (Field Artillery Support Plan) to Appendix 4 (Fire
Support) to Annex C (Operations) to 187th AARCT, 101st ABN DIV
(AASLT) OPLAN 90-5, OPERATION SHENANDOAH II.

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APPENDIX 4 (FIRE SUPPORT) to ANNEX C (OPERATIONS) to 187th AARCT,
101st ABN DIV (AASLT) OPLAN 90-5, OPERATION SHENANDOAH.II.

TAB G (Fire Support Execution Matrix) to Appendix 4 (Fire Support) to Anne
(Operations) to 187th AARCT, 101st ABN DIV (AASLT) OPLAN 90-5, OPERATION
SHENANDOAH II.

	Phase I (AASLT into LZ SAND)	Phase II (Ground Movement into AO EAGLE)	Phase III AASLT into AO EAGLE)	Phase IV (Block)
TF 1-187				WE 0032
TF 2-187				Grp W1E
TF 3-187				Grp W2E WE 0030
TF RAKKASAN	Priority of ----- CAS and ----- Atk Helo			
TF 2-17				WE 0031
Regimental Control				Bde Reserve: WE 0029
Priority of Fires	----- TF RAKKASAN -----		TF 2-187, TF 1-187, TF 3-187, in order	TF 2-187, TF 3-187, TF 2-17, TF1-187, in order
FPF/ Priority Tgts			TF 2-187: 2 FA PT TF 3-187: 2 FA PT	TF 2-187: 2 FA PT TF 3-187: 2 FA PT

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APPENDIX 4 (FIRE SUPPORT) to ANNEX C (OPERATIONS) to 187th AARCT,
101st ABN DIV (AASLT) OPLAN 90-5, OPERATION SHENANDOAH II.

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APPENDIX 5 (Synchronization Matrix to EAs YANKEE and PACKER) to Annex
(Operations) to 187 AARCT OPLAN 90-5, OPERATION SHENANDOAH II (U)

SYNCHRONIZATION MATRIX

	H-2 (DES PT)	H-1	H-.5 (DES PT)	H-HOUR
MANEUVER				
SCOUTS	ALERT	OBSERVE/ REPORT BDA	OBSERV FOLLOW- ON FORCES	OBSERV FOLLOW- ON FORCES
TOW/INF TEAMS	ALERT	PREPARE	PREPARE	ENGAGE
RESERVE	ALERT/PREP TO MOVE TO REINF.	DISPLACE TO BP/REINFORC	IN POSITUION	ENGAGE
SCREEN	ALERT	ENGAGE IN DEEP EAS	ENGAGE IN DEEP EAS	OBSERVE FOLLOW- ON FORCES
ATTACK AV	ALERT	ENGAGE IN DEEP EAS	REFUEL/ REARM	ENGAGE IN CLOSE EAS
FIRE SUPPORT				
ARTY/ MORTAR	ALERT		ATTACK COMMAND AND CONTROL	SUPPORT THE CLOSE FIGHT
CAS	REQUEST	ATTACK IN DEEP EAS	ATTACK IN DEEP EAS	ATTACK IN CLOSE EAS
INTELL				
SENSORS		DETECT ENEMY	DETECT FOLLOW- ON FORCES	DETECT FOLLOW- ON FORCES
INTERCEPT/DF	FIND/DF ARTY & AAA NETS		FIND/DF CMD & CONTROL	FIND/DF CMD & CONTROL
JAM	JAM ARTY & AAA NETS	JAM ARTY & AAA NETS	JAM CMD & CONTROL	JAM ARTY & AAA NETS
MOB/C-MOB/SERV	ALERT		BP TO EXECUTE CMD DET TARGET	EXECUTE TARGETS
CSS	1. TOP OFF CL V 2. DIVERT EXTERNAL RESUPPLY 3. ALERT MEDICAL			

[REDACTED]

APPENDIX 5 (Synchronization Matrix to EAs YANKEE and PACKER) to Annex
(Operations) to 187 AARCT OPLAN 90-5, OPERATION SHENANDOAH II (U)

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APPENDIX 6 (Execution Checklist) TO ANNEX C (Operations) TO 3D BDE, 101ST ABN DIV (AASLT)
 OPLAN 90-5, OPERATION SHENANDOAH II (U)

EVENT	CODEWORD	UNIT REPORTING FROM	UNIT REPORTING TO	NET PASSED	G-DAY H-HR (19:32 G+1)
PHASE I (LZ SAND)					
1. 1ST BDE EXECUTES MVNT TO COBRA	CHESTER	DTOC	1S BDE	FM 1	
2. FOB COBRA SECURE	CHALK	1ST BDE	DTOC	TACSAT	
3. FOB SITE OPERATIONAL	GLOWPLUG	1ST BDE	DTOC	TACSAT	
4. 2-17 ARMED RECON OF AO EAGLE/ LZ SAND	WETSTONE	2-17 CAV	DTOC	FM 1	
5. 2-17 CAV OPCON TO 3D BDE	WALK	DTOC	JTOC	FM 1/TACSAT	
6. TM JERRY PZ POSTURE	BLACKJACK	TM JERRY	JTOC	O&I	G-DAY (11:00)
7. LZ SAND COLD	BLIZZARD	TM JERRY	JTOC	TACSAT	G-DAY H-28:32 (15:00)
8. LZ SAND HOT	TEMPEST	TM JERRY	JTOC	TACSAT	
9. 2-17 CAV FARP ESTABLISHED	TYPHOON	2-17 CAV	JTOC	TACSAT	
10. PFDR TEAMS INSERTED	SQUALL	1-101 ATK	JTOC	FM 1	
11. LRSB IN POSITION AT AO EAGLE	WRATH	LRSB	DTOC	TACSAT	
12. AH-64 RECON OF AO EAGLE/ ROUTE 41A	HORATIO	JTOC	TM JERRY	TACSAT	
13. ROUTE 41A CLEAR AND TRAFFICABLE	CYCLONE	TM JERRY	JTOC	TACSAT	NLT G+1 (06:00)
14. ROUTE 41A NOT CLEAR	PYTHON	TM JERRY	JTOC	TACSAT	
15. TF RAKKASAN IN PZ POSTURE	RACE	TF RAK 7-101	JTOC	CMD	G+1 H-9:32 (10:00)
		REG TOC	DTOC	FM 1	
16. TF 2-17 SECURES LZ SAND	ONUS	2-17 CAV AATEC	AMC DTOC	CAN 1 TACSAT	H-8:02
17. EXECUTE MVNT AO EAGLE	RIFLE	DTOC	JTOC	FM 1	
18. PZ TIME HEAVY PZ	TIDE	AATEC	DTOC	FM 1	G+1 H-7:37

[REDACTED]

APPENDIX 6 (Execution Checklist) TO ANNEX C (Operations) TO 3D BDE, 101ST AEN DIV (AASLT)
 OPLAN 90-5, OPERATION SHENANDOAH II (U)

EVENT	CODEWORD	UNIT REPORTING FROM	UNIT REPORTING TO	NET PASSED	G-DAY	H-HR (19:32 G+1)
19. LZ TIME SAND	GITAR	AATFC	DTOC	TACSAT	G+1	H-6:32
		TM JERRY	JTOC	TACSAT		(13:00)
20. 2D LIFT HEAVY PZ CLEAN	REFUGE	AATFC	DTOC	FM 1		H-4:28
21. 2D LZ TIME SAND (LAST SERIAL)	SCOREBOARD	AATFC	DTOC	TACSAT		H-4:01
					(15:59)	H-3:33
PHASE II (GROUND MOVEMENT FROM LZ SAND)						
22. TF RAKKASAN CROSSES SP	SCORPION	TF RAK	AATFC/TAC	TACSAT		
23. TF RAK CROSSES GRAMPA	GRAMPA	TF RAK	AATFC/TAC	TACSAT	G+1	(EENT)
24. TF RAK CROSSES PL KROGER	KROGER	TF RAK	AATFC/TAC	TACSAT		
25. TF RAK AT PL SHONEY	MACHINE	TF RAK	AATFC/TAC	TACSAT	G+1	(NLT 19:00)
26. TF RAK IN CONTACT	BLASTER	TF RAK	AATFC/TAC	TACSAT		
27. PROGRESS HALTED ON 41A	JOKER	TF RAK	AATFC/TAC	TACSAT		
PHASE III (AASLT TO AO EAGLE)						
28. 1ST UH-60 LIFT IN PZ POSTURE	STEAMBOAT	TF 1-187 TF 2-187 TF 3-187 TF 4-101 TOC/LAB	AATFC/TAC	BDE CMD	G+1	H-3:00
		AATFC/TAC	DTOC	FM 1		(17:00)
29. 1ST UH-60 LIFT PZ TIME	COPPER	AATFC	DTOC	FM 1	G+1	H-1:17
					(18:15)	
30. 1-101 ATK SECURES AO	BRASS	1-101 ATK	AMC	CAN 1		H-0:30
31. INITIATED SIGNAL AT RP	SENTINEL	PEDR	AMC	CAN 1		H-0:15
32. LZ TIME AO EAGLE	SILVER	AMC	DTOC	TACSAT	G+1	H-HR
					(19:32)	
33. LZ HOT	POISON	TF 2-187	AATFC	CAN 1/		H-HR
LZ COLD	CANDY	TF 3-187		CMD		H+0:10
		TF 1-187				H+0:22
		TOC/LAB				
		AATFC/TAC	DTOC	TACSAT		

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APPENDIX 6 (Execution Checklist) TO ANNEX C (Operations) TO 3D BDE, 101ST AEN DIV (AASLT)
OPLAN 90-5, OPERATION SHENANDOAH II (U)

EVENT	CODEWORD	UNIT REPORTING		NET PASSED	G-DAY H-HR	
		FROM	TO		(19:32 G+1)	
48. 2D UH-60 LIFT LZ TIME (LAST SERIAL)	LIGHTNING	AMC TOC	TOC DIOC	CMD TACSAT	00:49 (01:27)	H+5:17 (H+5:55)
49. LAB ESTABLISHED	BORREGO	ALOC	TOC	CMD		

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APPENDIX 7 (ENGINEERING) TO ANNEX C (OPERATIONS) TO 3D BDE, 101ST
ABN DIV (ASSLT), OPLAN 90-5, OPERATION SHENANDOAH II

1.(U) SITUATION. See basic OPLAN.

2.(S) MISSION. C/326 ENG acting under brigade control will execute obstacles pending corps approval to deny enemy use of high speed avenues of approach in EAs PACKER and YANKEE. On order, engineer platoons will revert from DS to GS and occupy BP WACO.

3.(U) EXECUTION.

a.(S) Concept of Operations. Four C/326 HMMWV's will deploy with TF RAKKASAN during PHASES I and II. These vehicles will transport the class V for the road craters. An engineer platoon will deploy with TF 2-187 and TF 3-187 during PHASE III. During PHASE IV the brigade engineer will link-up with the engineer platoon in TF 2-187 sector to emplace the obstacles in EA YANKEE. The assistant brigade engineer will link-up with the engineer platoon in TF 3-187 sector to emplace the obstacles in EA PACKER. After obstacles are emplaced both engineer platoons will revert to a GS role and locate in BP WACO.

b.(U) Coordinating Instructions.

(1)(S) Obstacle List:

SECTOR	TYPE	LOCATION	EMPLACED BY
2-187	road crater	NV 632459	2/C/326 ENG
2-187	road crater	NV 663473	2/C/326 ENG
2-187	road crater	NV 664476	2/C/326 ENG
2-187	road crater	NV 593461	2/C/326 ENG
3-187	road crater	NV 562477	3/C/326 ENG
3-187	road crater	NV 542486	3/C/326 ENG
3-187	road crater	NV 553503	3/C/326 ENG

(2)(S) If directed by XVIII Abn Corps, surface laid minefields will be installed on both sides of highway 8. The minefields will tie into road craters and extend 250 m on both sides of the road. 3d Bde does not plan to lay mines but will be prepared to do so if directed.

(3)(S) Battalions will provide security to engineers in their sectors.

(4)(S) Battalions will provide input into actual site placement of road craters after recon of the EAs.

(5)(S) Authority to execute any obstacle rests with the brigade commander.

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APPENDIX 7 (ENGINEERING) TO ANNEX C (OPERATIONS) TO 3D BDE, 101ST
ABN DIV (ASLT), OPLAN 90-5, OPERATION SHENANDOAH II

(6)(S) Battalions may submit additional obstacles proposals through the brigade engineer or directly to brigade. All obstacles must be approved at corps level.

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