The Cross-FLOT Raid

Engineers in the Deep Battle

by LTC Larry Izzo

One of our Army's goals is to train as we intend to fight. AirLand Battle doctrine tells us how we think we are going to fight. It postulates a battlefield on which disruption of enemy activities in depth will be a routine feature of both offensive and defensive operations.

Unfortunately, little attention has been devoted to the use of engineer strike operations to support the main battle. In an effort to revitalize this capability, the 307th Engineer Battalion, 82nd Airborne, stages monthly night raids to destroy targets behind enemy lines. They provide tough, realistic professional development opportunities for platoon leaders and exciting training for soldiers. These raids capture the essence of the four tenets of AirLand Battle doctrine:

- ***Initiative***—setting or changing the terms of the battle.
- ***Agility***—reading the battlefield and acting faster than the enemy.
- ***Synchronization***—arranging combat activities in time and space to maximize combat power.
- ***Depth***—extension of the battlefield; planning for rear and deep operations that support the close battle.

Training Scenarios

The battalion has developed several Cross-FLOT scenarios including some in cooperation with the Corps of Engineer District in Wilmington, NC, and civilian industries: Targets include:

- The Philpott and John H. Kerr Dams—raid the power station and deny electrical generating capability to the enemy without destroying the dam.
- The AMOCO oil storage facility at Greensboro—attack the enemy POL distribution point without destroying the fuel that friendly forces plan to capture at a later date.
- Bridges and communications bunkers at Fort A.P. Hill and Camp LeJeune—demolish a native timber bridge or other structures constructed for the exercise.

Each month the battalion rotates a new platoon through one of the scenarios, giving the platoon leader a chance to plan and lead an air assault engineer raid. Time fuzes and blasting caps add realism to simulated demolitions at civilian facilities. Actual demolitions are used at Fort A.P. Hill and Camp LeJeune. An aggressor detail from the battalion is at the target to provide realism, control and cleanup assistance.

Combined Arms Team

Although the engineer battalion plans the exercise, the training is a division combined arms operation. The 33-man patrol is a representative slice of the division's combat power. Three UH-60 Blackhawk helicopters from the aviation battlion provide transportation for the patrol which typically consists of:

- An air defense artillery stinger team.
- A tactical satellite (TACSAT) communications radio team from the signal battalion to communicate with home station.
- An infantry squad for security.



SP4 Donald Wayne and SP4 Richard Whitke, 307th Engineer Battalion, storm the John H. Kerr Dam control room.

Photo by 1LT Peter F. Taylor

- Engineer elements to carry out the demolitions missions.

Pathfinders and teams from the division reconnaissance platoon are inserted near the objective a few hours to a day early. Pathfinders mark the landing zone (LZ) for the night landing and orient the patrol leader towards the objective. The reconnaissance team maneuvers close to the objective and keeps it under surveillance. They send intelligence back to home station for the patrol leader, both before and after he reaches the LZ. When available, Cobra helicopters provide fire support.

Planning Considerations

As simple as the Cross-FLOT concept sounds, the raid is challenging and complicated. As with all air assault operations, the engineer raid has four basic steps:

- The ground tactical phase.
- The landing phase.
- The enroute phase.
- The loading phase.

Planning considerations are shown in Figure 1.[1] The patrol leader also plans the engineer portion of the mission. The Cross-FLOT aspect adds to the difficulty:

- How can the patrol survive getting through the FLOT?
- What fire support can it rely on?
- What are the escape and evasion plans if aircraft are lost across the FLOT?[2]

The Mission

The exercise begins when the platoon leader and his company commander receive the battalion operations order.

Although Cross-FLOT is primarily a platoon leader's training exercise, the company commander plays an essential role. He selects the platoon and times the operation so it is compatible with the company training plan. When the operations order arrives, he coaches the platoon leader through the planning phase. During the exercise, he may accompany the patrol as an observer or evaluator. Thorough evaluation is essential to get maximum benefit from the exercise.

The decision on how much time the patrol leader will have to plan the operation is a compromise between two competing factors. On the one hand, the platoon needs time to plan and rehearse; on the other, it must be realistic in terms of what the unit would experience in battle.

The battalion found that 24 to 36 hours allows time to assemble the team, plan, rehearse, hold the air mission conference, backbrief, and insert the reconnaissance elements. It also places realistic pressure on the patrol leader and patrol. Of course, the battalion staff must coordinate use of the target facility and participation by division assets in advance.

The mission consists of:

- Pickup at a friendly pickup zone (PZ).
- Night aerial navigation to a LZ that is 20 to 100 miles off post.
- Linkup with the pathfinders on the LZ.
- Navigation to the objective.
- Reconnaissance and the assault.
- Demolition of the target.
- Movement to a nearby PZ for extraction.

The helicopters either laager in the vicinity or refuel at a nearby airport. A tactical arming and refueling point (FARP) is sometimes used. While this adds realism, it demands a great deal more planning, coordination and aviation assets.

Lessons Learned

Cross-FLOT proves Clausewitz was correct: "Everything in war is very simple, but the simplest thing is difficult."[3]

In every raid, Clauswitz's concept of *friction*—those countless, unforeseen, minor incidents which make the real battlefield so different from war on paper—is clearly demonstrated. Sure enough, patrol leaders are continually surprised by unexpected difficulties associated with air assault operations attempted at night in unfamiliar terrain.

Important lessons learned during Cross-FLOT raids include:

- Despite the use of the UH-60's Doppler system and night vision goggles, pilots frequently experienced difficulty navigating at night when traveling long distances over unknown terrain. Carefully selected routes are essential to find the correct LZ.
- Maintaining communications between the patrol on the ground and the UH-60's is difficult but imperative to correctly time the extraction.
- Detailed rehearsals are mandatory for a night operation. Without them, coordinated patrol action is impossible.
- Land navigation at night in enemy territory always takes longer than planned.
- Intelligence preparation is critical. The patrol needs reliable information regarding enemy strength at the target, nearby relief forces, and the locations of air defense enroute to and at the objective.
- Use of pathfinders and reconnaissance teams is beneficial, but they must be carefully briefed to avoid compromising the patrol early.
- Planning must be meticulous and comprehensive. It must cover aspects such as:
  - actions upon encountering enemy or civilian personnel enroute to the objective;

307th Engineers Blow Up Dam

by 1LT Peter F. Taylor



Company A of the 307th Engineer Battalion blew-up the John H. Kerr Dam on the North Carolina and Virginia border last fall during a Cross-Forward Line of Own Troops (Cross-FLOT) engineer raid.

Cross-FLOT raids train and test engineers for operations behind enemy lines.

The dam raid began when airborne engineers were inserted on a landing zone (LZ) several miles from their target by Blackhawk helicopters from the 1st Battalion, 17th Air Cavalry. From the LZ they maneuvered with reconnaissance and pathfinder support to the dam. Friendly partisans left an access door open into the guarded power station.

The engineers entered the facility and moved undetected to their objective—the dam's control room. Using simulated demolitions, they rigged and blew up the facility. They were picked up at a prearranged time by Blackhawk helicopters at a pick-up zone adjacent to the dam.

1LT Peter F. Taylor is the S-2 for the 307th Engineer Battalion.

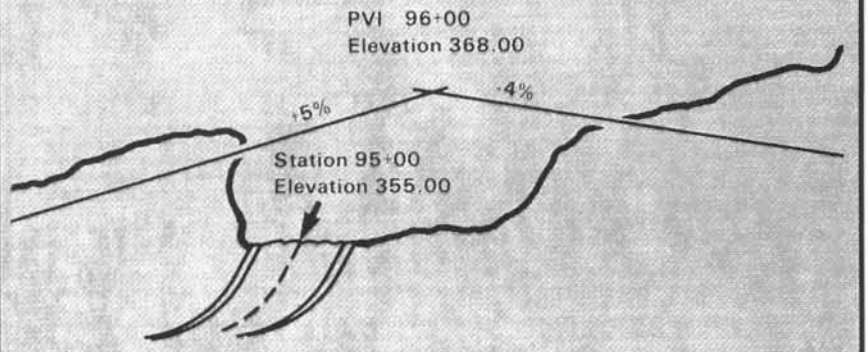
RAID PHASES

Ground Tactical Phase	How many troops will be going in? What deception plans are part of the operation (CAS, joint air attack team, feints or demonstrations elsewhere)? What time of day (or night) will the landing occur? How long will the force be on the ground? What are the contingency plans if aircraft are lost en route or at the objective?
Landing Phase	Will landing be on or away from the objective? Does the commander want to use one or multiple landing zones (LZs)? Do you want to use attack helicopters or Air Force assets to prepare the LZs? Do you want to use pathfinders to assist in landing? How many aircraft can be diverted to make false insertions, or do you want to make a series of false insertions en route?
En Route Phase	What flight corridors will be established? Can you arrange for escort aircraft (Air Force or attack helicopters)? What are the refueling and rearming requirements en route or at the objective? How are smoke and chaff used to assist in deception? Where will passage points, pilot pickup points and air control points be established?
Loading Phase	How many pickup zones (PZs) are requested? Are the air movement tables (to include the bump plan) complete? If the flight is larger than the PZ will permit at one time, where will the aircraft meet for the initial point?

Figure 1.

Engineer Problem

A new road with a PVI (point of vertical intersection) at station 96+00 and elevation 368.00 feet is to intersect an existing road whose centerline crosses the new road at station 95+00 and elevation 355.00 feet as shown below. The vertical curve of the new road must be selected to pass through the centerline elevation of the existing road.



Determine the length of vertical curve required to pass through the fixed point.

Problem/Solution submitted by Robert D. Baldwin, P.E., Roads and Airfields Branch, Department of Military Engineering.

— what to do with prisoners;
— extraction of wounded;
— fire support crossing the FLOT and at the objective.

- A thorough air mission conference is critical to success. The patrol leader should not view the helicopters as taxis, but as an integral part of the patrol. He should rely heavily on the air mission commander's expertise.

Conclusion

The 307th Engineer Battalion's Cross-FLOT raids are excellent professional development exercises for the platoon leaders who lead the patrols and great training for patrol soldiers. Combat engineers will be called upon to execute such missions as part of a total combined arms team on the AirLand battlefield. The projection of this combat power deep across the FLOT on a well-timed operation in support of the main battle ties together all four tenets of AirLand Battle doctrine.

LTC Larry Izzo is in the U.S. Army War College Advanced Operational Studies Fellowship Program associated with the School of Advanced Military Studies at Fort Leavenworth, KS. He previously commanded the 307th Engineer Battalion at Fort Bragg, NC. LTC Izzo, a 1967 USMA graduate, has a master's degree in Nuclear Engineering from MIT and an MBA from Long Island University. He is a registered professional engineer in Virginia.

Notes:

[1]CPT Ron Klein, "Aviation Employment in Special Purpose Operations," *U.S. Army Aviation Digest*, September 1984, p. 6.

[2]MAJ Charles L. Berry, "Planning Aviation Cross-FLOT Operations," *Military Review*, January 1984, pp. 34-45. This article provides an excellent introduction to planning considerations for cross-FLOT attacks.

[3]Carl von Clausewitz, *On War*, edited and translated by Michael Howard and Peter Paret, Princeton, 1984, p. 119.

Command Update:
130th Engineer Battalion
Vega Baja, Puerto Rico
LTC Luis M. Carrillo-Rivera
CSM Angel Birriel-DeJesus