

REMARKS ABOUT THE USE OF U.S. ARMY HELICOPTERS AND OTHER LIGHT
AIRCRAFT IN A NON-PERMISSIVE ENVIRONMENT

Beginning with the combat assault establishing LZ Hardcore on 3 February, the entire area was "non-permissive" to helicopters and light aircraft due to the presence of 12.7 antiaircraft fire, .30 cal automatic weapons and sniper fire. On the day of the combat assault one gunship was downed and several other UH1's received hits and were rendered non-flyable; one CH47 was struck causing a fire which fortunately was extinguished by a crewman. Of the 11 troop carrying aircraft, 6 were rendered inoperative by enemy fire.

On 7 February, the battalion C&C aircraft was shot down in the A Company area. The aircraft commander of the C&C aircraft was killed and one other crew member wounded. A Dustoff aircraft entered the same area about an hour later (when the area was considered secure) and was also shot down.

On 9 February, while operating in support of a Dustoff mission for B and D Companies, a gunship was hit by automatic weapons fire from the plains area to the north of the battalion OP. The pilot fought the aircraft to the ground, but crashed. Immediately his wingman covered him, and eventually picked up all crewmembers, none seriously hurt. Also, during the same day's activities, another gunship was damaged to the extent it had to set down at Hardcore. The damaged gunship was evacuated on the following day.

On 13 February, an OH23 from the Brigade Aviation Section was downed by automatic weapons fire while flying an aerial fire support mission for Alpha Company, operating to the northwest of Hardcore at the time. The crew was

rescued and the aircraft secured by Charlie Company, which happened to be about 800 meters from the crash site. The aircraft was later recovered.

A troop carrying UH1 was hit by automatic weapons fire on 18 February while participating in the combat assault of Charlie Company from their operating location to the north of Hardcore to a LZ near Alpha Company in the vicinity of Minibase Fox. When hit, the aircraft was gaining altitude after leaving the pickup zone. It was believed that the pilot was wounded or killed; the aircraft lost altitude, rapidly went out of control, crashed and burned. All the crew and troops aboard were killed. The aircraft was a total loss.

Later, on 22 February, a Dustoff aircraft, while trying to insert a jungle penetrator to Alpha Company at a location south-southeast of Minibase Fox, was struck by automatic weapons fire and forced to land about 2.5 km away. The area was near Delta Company and they secured the aircraft. A companion Dustoff aircraft rescued the crew. The engine of the UH1 was damaged by the AW fire, however, the aircraft was evacuated without incident.

On 23 February, while operating on a visual reconnaissance mission for the battalion commander and for the D Company commander, a U.S. Army observation "Bird dog" aircraft crashlanded on the side of the large mountain to the southeast of Minibase Fox. Fortunately the plane was observed by the battalion commander from the battalion OP as it went down. It was located on the ground by OH23 and Air Force 01 aircraft and eventually the crew was rescued by the battalion utility aircraft under the control of the S3.

The crew was slung out one at a time by nylon rope and deposited in the D Company area after a fresh air ride of about 3.5 km. The aircraft was recovered.

Later, on 25 February, a U.S. Air Force aircraft (O1), piloted by Major Severtson (Helix 52) was suffering apparent oil pressure loss. Major Severtson believed it could possibly be instrument trouble and after orbiting Hardcore for an appropriate time, departed for LZ Baldy. About 5 km out, the engine broke down. Air progress was observed at all times by personnel at the battalion CP, and by observers at Hardcore. He glided back, crash landed on the valley floor northeast of Hardcore, and was rescued shortly thereafter by UH1. The O1 was later picked up by CH47 aircraft, but enroute to Da Nang it was engaged by .50 cal ground/air fire. Either the Bird Dog aircraft or its marking rockets were struck by ground fire; in any event the load dropped to the ground and was demolished.

The valley floor and plains area surrounding Hardcore contained many dispersed automatic weapons positions of the circular type, with a platform in the center of the circle. It was obvious that the area with numerous alternate and supplementary positions was organized for ground to air fire. The positions allowed for enemy flexibility in manning and prevented total destruction of positions due to the difficulty in finding them. Also, much of the automatic weapons fire was from AK type weaponry which needed no fixed positions from which to fire. Most of the aircraft were hit while maneuvering at slow speeds either in and around landing zones, or while making low firing passes. None were hit soundly enough to cause loss of control at altitudes of 1500 + 2000 feet or during "low level" flight except those associated with LZ's or firing passes.

It is believed that the use of smoke to mark landing zones assisted the enemy in selecting firing positions and in organizing antiaircraft defense.

Additionally, the enemy hit LZ's with mortar fire, causing personnel casualties (but no aircraft losses). As a countermeasure, all aircraft were required to check into the battalion air/ground net when operating in the area of the committed companies. The battalion OP operated as an air control element and gave instructions to pilots as to safe approaches and "hot" areas. The control was then passed to the company being serviced; smoke was not used. Activities (resupply and medevac) were planned under cover of some other fire whenever possible -- either artillery, close air support, or protective direct fire from the ground elements. Among the obstacles to be overcome was the inherent desire of the pilots to fly at altitudes of 1500-2000 feet which either shut off the protective artillery or advertised their presence in the area. Tree top flying in the operational area was encouraged. The operational use of the helicopters was further complicated by the mountainous terrain in the south and the excellent observation available (weather permitting) to the enemy.

Gunships were employed extensively in situations where contact was too close for artillery or close air support. The control was decentralized to company commanders and platoon leaders. The gunships entered the company command net. This is the only satisfactory solution, although in the heat of battle the company net is already overcrowded. However, no other method of control is satisfactory. On occasion, colored smoke was used to mark friendly front lines while another color (red) located the enemy.

Gunships were often rotated with airstrikes against important targets. On these occasions, with the approval of the battalion commander, the gunships were controlled by the Airborne FAC, usually on the battalion air/ground net or on the FAC organic net. On one occasion, an occupied enemy cave guarded

by a wooden structure was discovered by the Airborne FAC. The complex was located on the near perpendicular face (AT981438) of the large mountain (BM 848) to the southeast of Minibase Fox. The complex was visible to the battalion OP. A destruction mission was fired by 8 inch howitzers located at the Marine base at An Hoa, and adjusted by the FAC and personnel at the OP. With the destruction mission complete, Army gunship fire was directed at the target by the Airborne FAC. The structure was destroyed. The complex burned all throughout the afternoon, all night, and into the following morning.

It is imperative that the gunships be briefed thoroughly on the area of contact as well as the immediate tactical situation calling for the support. Ideally, this should be accomplished on the ground by the commander(s) concerned. However due to the immediate nature of the required support, in many cases, only a hasty brief in the air was possible --- this by the company commander concerned. When possible, the battalion commander briefed the incoming pilots in the air from the battalion OP. This assisted the "hand-off" to the company commander. In all cases, the battalion commander monitored the net on which the gunships were operating and was able to influence gunship action (in particular where alternate targets appeared) and advise lead aircraft of friendly locations other than the unit being supported.

When "non-permissive" conditions are present, ground commanders must readily adjust with the situation. Except in the most critical cases, casualties must be held on the ground until a location is sufficiently secured for heliborne medical evacuation. Evacuation of the dead must often be deferred. Conservation of food and ammunition may be necessary. When used to direct aircraft, smoke should be camouflaged; however, other means should be devised.

Special radio control nets must be used. Ground observers at the battalion OP to keep track of aircraft in the AO are also necessary -- both for the welfare of the aircraft crew should they suddenly be in trouble and for the efficiency of the operation. In the event an aircraft is downed but recoverable, sufficient troops should be employed to secure the aircraft. This presents a difficult choice for the commander -- which must be resolved in accordance with the tactical situation. Nevertheless, this additional mission may be inserted instantaneously into a hot tactical situation and commanders must learn to cope with it.

In order for the reader to appreciate the degree of "non-permissiveness" of the area of operations to light aircraft, it is emphasized that the ten incidents related here are only those that resulted in total destruction of the aircraft or its evacuation from the area of operations by external means. At times hits were registered on aircraft, but on more numerous occasions, aircraft were fired upon without noticeable effect. However, it is also emphasized that only on one occasion was aircraft support insufficient to the degree that battalion operations were negatively affected. This occurred on 24 February as a result of poor weather, not enemy action.

XI

REMARKS ABOUT THE USE OF CS

The infantry battalion commander needs an "ace in the hole" for unusual circumstances when conventional application of combat power seems to fail. On four separate occasions during the battles around Hardcore, CS was used for this purpose. At best, results were not conclusive. The problem lies

in the method of delivery and in the persistency of the gas. A happy solution seems to be the 4.2 mortar as a delivery weapon. Approximately 200 rounds of experimental CS ammunition were made available to the battalion during the action around Hardcore; also, two "bombs" of the 50 lb type were available.

Two bombs were unfortunately dropped somewhat off target by UH1 aircraft on the objective of the two company attack of 10 February. However, about 150 rounds of 4.2 CS ammunition were expended and exploded on target. At the same time, the target was covered by 105 mm howitzer fire. The concept called for the distribution of the gas over the entire area interspersed with HE shells delivered by the artillery. The results were not conclusive; the objective was occupied by approximately two companies of well trained NVA soldiers the day before and could not be taken by two companies of U.S. infantry supported by close air, gunships and artillery. It was taken on the second day without significant resistance. It is impossible to determine whether or not the CS preparation was instrumental in driving the enemy from the objective or whether additional enemy casualties were suffered due to its use.

The most lucrative situation for the use of CS as an "ace in the hole" appears to be during a stiff fire fight when the element of surprise will work advantageously for friendly elements. Such a situation presented itself on 11 February during the one company attack on the village of An Tam 2 (AT955508) to the west of Hardcore. The situation was that a rifle company in an attempt to overrun a fortified village had been driven back by heavy automatic and semi-automatic rifle fire. The company was compelled to abandon one dead comrade and a machine gun in the village. The company

commander regrouped his forces for a second attack. Unfortunately, due to the scarcity of the experimental ammunition, the 4.2 platoon had only 3 rounds available. These were fired, but no appreciable results were noted. The company failed in the attempt to penetrate the enemy defenses the second time; a two company attack was successful the following day.

CS was employed a third time on 14 February as a preliminary to an airstrike which caught at least 40 observed enemy sniper holes near a river bank (AT966531) to the north of Hardcore. C Company attacked at first light the next day to exploit the strike. The position was well defended as C Company received sniper fire upon initiation of the attack. However, when it was overrun 13 bodies were found with numerous drag trails leading across the river. It could not be determined with certainty whether CS was the proximate cause of the evacuation of the position or the contributory cause of any of the enemy casualties. The mode of dispersing (4.2 mortar rounds interspersed with 105 mm. artillery) was similar and followed by airstrikes.

On the fourth and final occasion, the Golden Dragons employed CS in the 3d attack on Hill 341. Unfortunately, very few rounds burst on target. The hill was not taken. Both attacking companies incurred unacceptable casualties. The use of CS was again inconclusive in its results.

It is the opinion of the battalion commander that the delivery means is correct. The 4.2 mortar is an "ace in the hole" weapon at battalion level due to its flexibility, responsiveness, accuracy and available mass of fire power. However, the same accuracy as commonly experienced with HE or WP ammunition was not experienced with the CS round. The WP round was used to register for the CS preparation in order to check wind drift and target

coverage. However, difficulty was experienced in the subsequent TOTS due mainly to fuze timing problems. In general the problem was that the rounds exploded early and therefore did not reach the objective area effectively. Also, although in the first attempt at its usage sufficient rounds were placed accurately on the objective, minutes later, advancing troops did not need gas masks to operate in the area. Therefore, the experimental rounds seem to lack sufficient persistency. It is believed that if the fuze timing (and concurrently the adjustment problem) and the persistency of the round are improved, that the terminal effects will match the capabilities of the delivery weapon and the weapons system will be effective in surprise actions for the infantry battalion.

XII

REMARKS ABOUT THE MINIBASE CONCEPT

In offensive situations, the infantry battalion commander in Vietnam must continually evaluate the forces involved in support activities *vis a vis* the number of troops employed directly against the enemy. He must consider the requirement for immediate indirect fire support and the quantity of support available. The extensive time required for 105 mm rounds on the target as compared to 4.2 inch rounds and the increase in volume of fire available argues for the continuous use of the heavy mortar platoon in battalion operations. It is considered necessary to release at least two mortars or the entire platoon as the situation dictates -- if the attacking companies are operating outside the 4.2 inch mortar fan from the firebase position.

This also adds to the available choice of GT lines which must be evaluated in formulating schemes of maneuver, fire plans, close air support plans and helicopter support plans.

In the push to the south of Hardcore the Golden Dragons employed a minibase as the battalion observation post consisting of two 4.2 inch mortars, one ground mounted 106 recoilless rifle and the battalion reconnaissance platoon. The minibase was emplaced entirely by UH1 aircraft, although later some ammunition resupply was accomplished by CH47 aircraft.

It is believed that the minibase concept enhances the distribution of combat power for the attacking companies where it is required most. In the case of Minibase Fox, the added combat power forward was achieved at the expense of (a) limiting the activities of the reconnaissance platoon to the area of the minibase; however, some of the functions of the reconnaissance platoon are to furnish the eyes and ears of the battalion (which it did) and (b) by reducing the firepower available from the firebase by two mortars and (due to the location of 3 rifle companies outside the 4.2 inch mortar firebase) the requirement for 4.2 inch support from the firebase was also reduced. Security of the minibase was enhanced by its selection on difficult, commanding terrain with outstanding 360 degree observation and by the offensive posture of three rifle companies operating within a 4000 meter radius to the south of the minibase. The 106 mm recoilless rifle (ground mounted) provided direct fire protection for the minibase within the deadspace of the 4.2 inch mortar caused by its minimum range characteristic and provided a direct fire capability for targets of opportunity.

It is the concern of the Golden Dragon battalion commander that an optimum

balance of combat power be available for application against the enemy at all times and that this combat power be responsive to the commander. Especially when operating in force against a determined enemy, all available firepower must be available for immediate use. To do this when operating in a large AO, it is necessary either to move the firebase or adopt a variation of the mini-base principle. To move the firebase is uneconomical and impractical; to use a minibase provides a reasonable and workable solution. The combination of battalion OP and the minibase also solves the security problem for the combat station of the battalion commander and his command group.

XIII

CONCLUSION

In 26 days of continuous, intensive combat, the Golden Dragons cleared the plains area to the northeast and west of Hardcore, and struck deep into the North Vietnamese Army's 2d Division basecamp stronghold in the mountains south of Hardcore. These 26 days of counter-offensive action (3 February - 27 February) came at a critical time in the enemy TET offensive operations. It is the considered opinion of the battalion commander that the Golden Dragons devastated the enemy with more far reaching effect than confirmation of 243 enemy KIA and 43 weapons CIA indicated. Due to the massive application of combat power in the form of airstrikes, artillery, and gunships in combination with the organic firepower and maneuver of the battalion against positively identified targets, a bonus punishment was inflicted on the enemy which is difficult and indeed impossible to quantify. ~~It could be as high a factor as 2 or 3~~ — professional judgment dictates this opinion — however, no one

will ever know for certain. What is certain is that the Golden Dragons, through courage and audacity at the footsoldier level, by intelligent use of supporting weaponry, and by perserverence and sacrifice of all concerned dealt a telling blow on the enemy.

A handwritten signature in cursive script that reads "George L. Ball". The signature is written in dark ink and is positioned above the typed name and title.

GEORGE L. BALL
LTC, Infantry
Commanding

FIGURE "A"

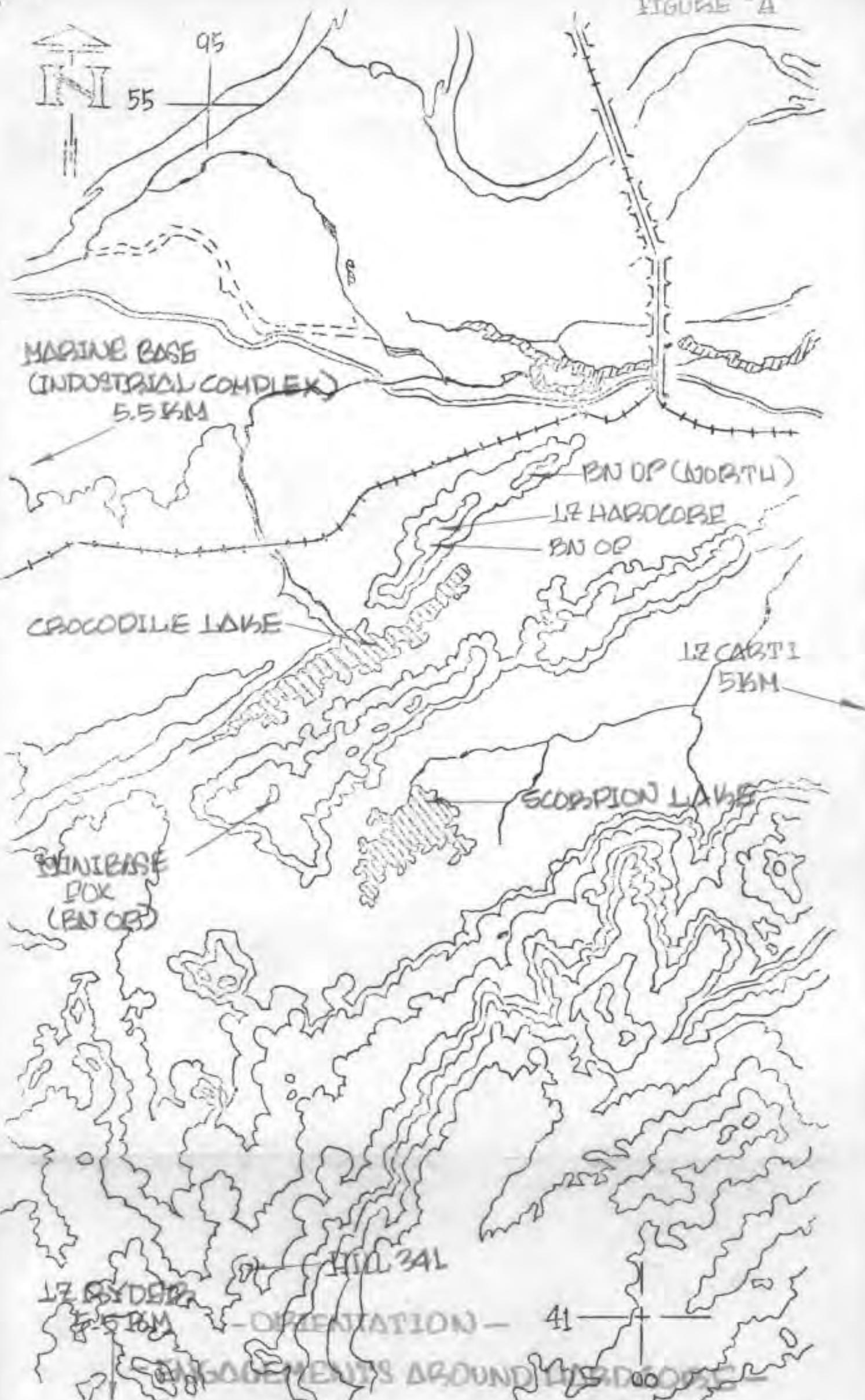
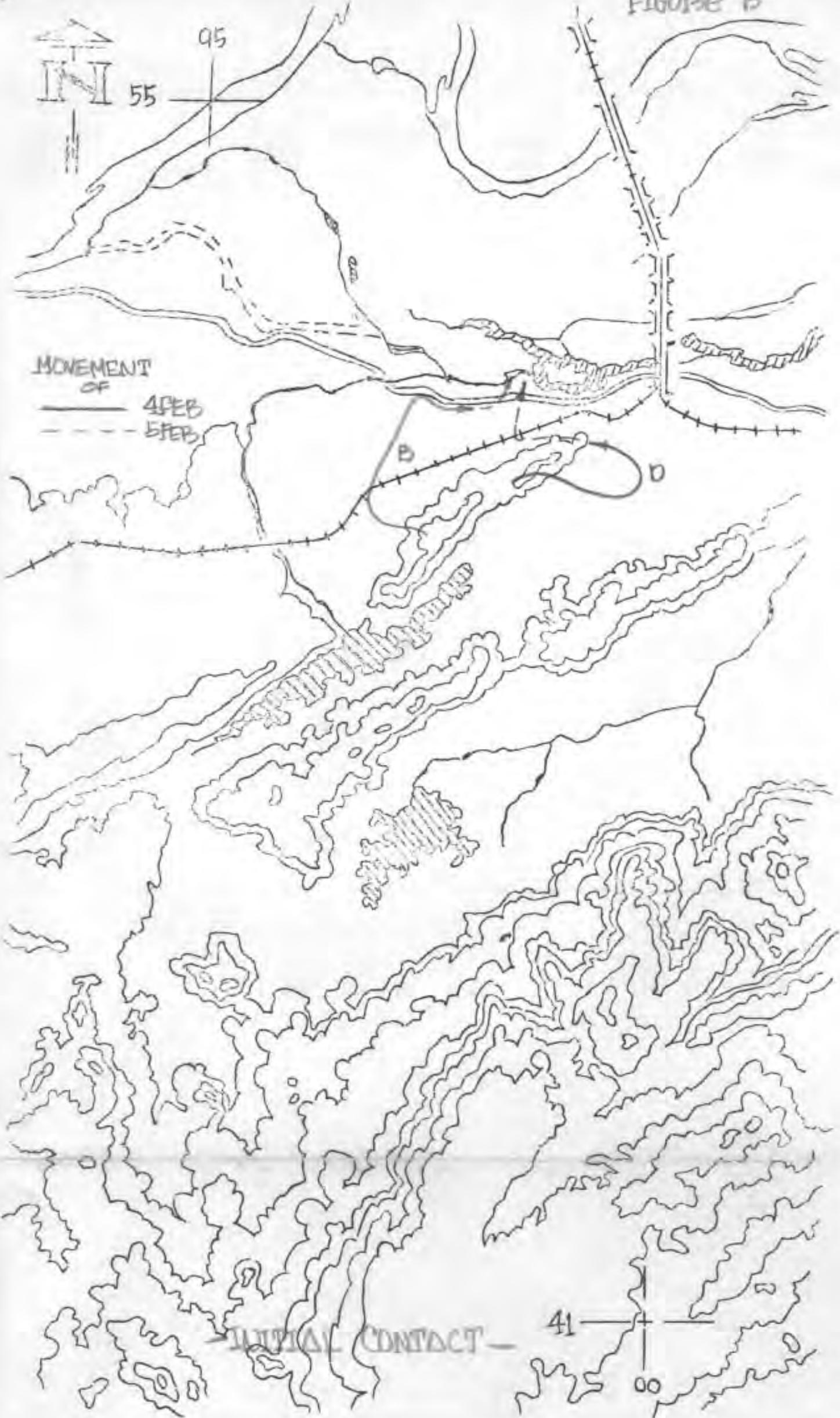
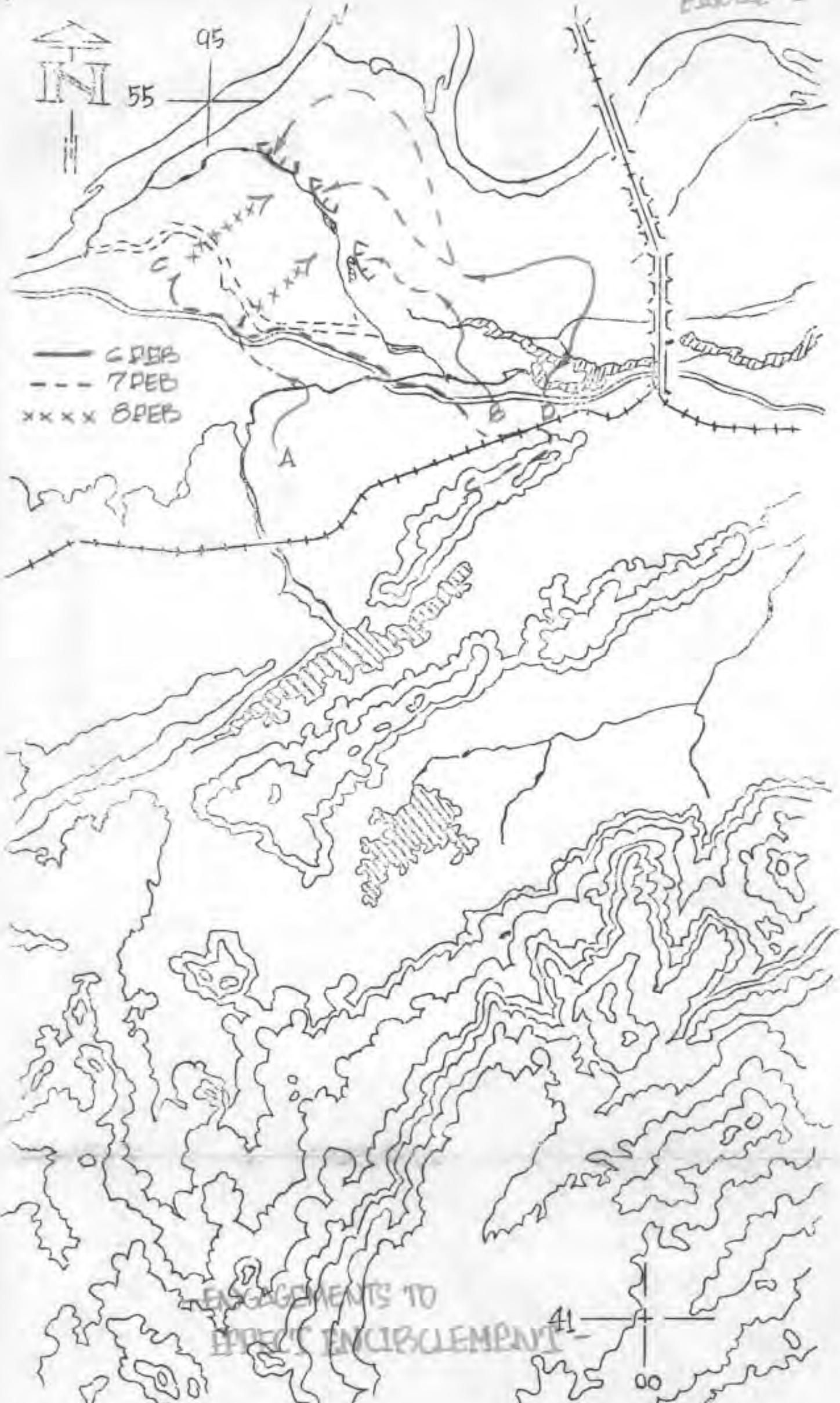


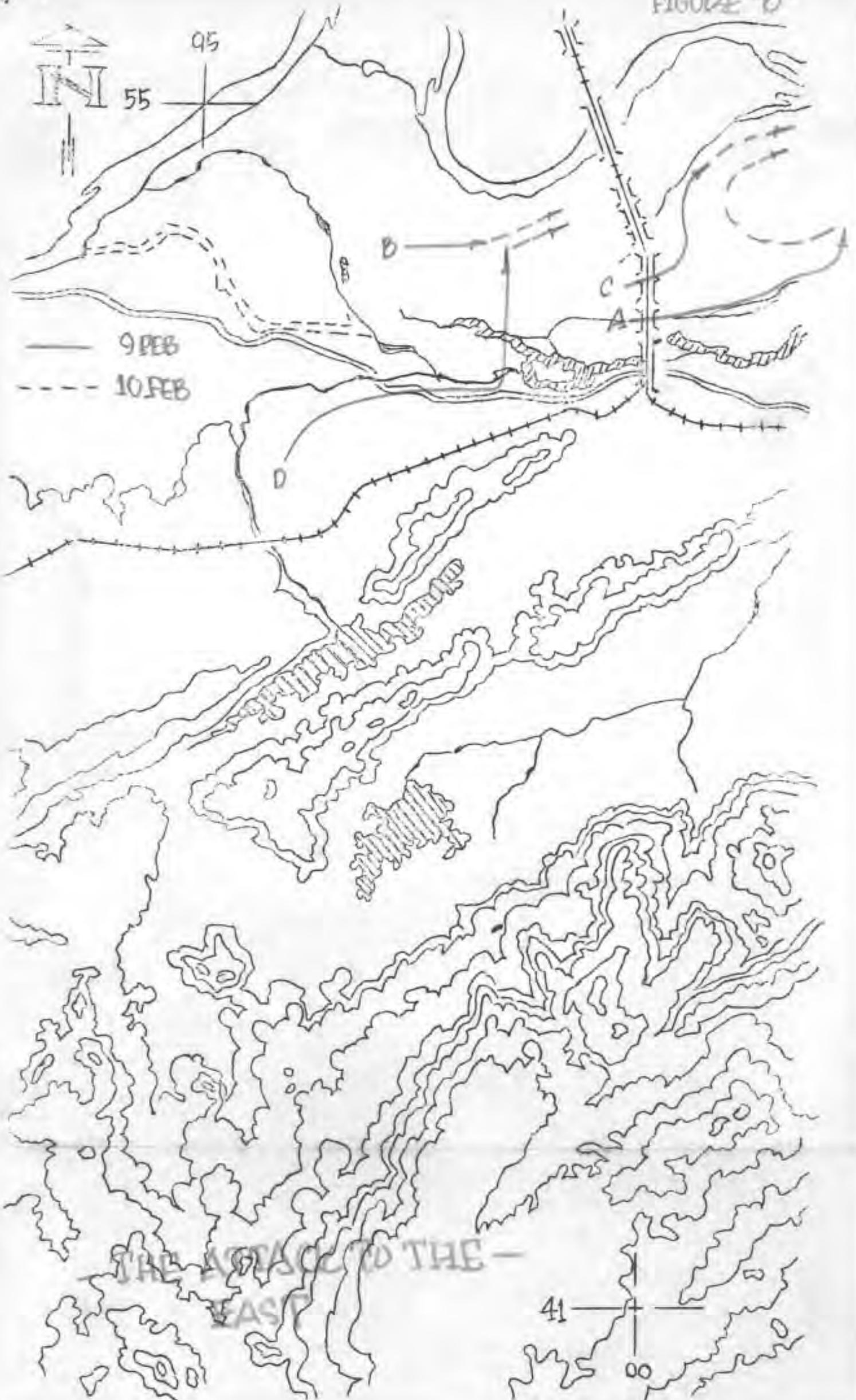
FIGURE B





ENGAGEMENTS TO
HPR'S ENCIRCLEMENT

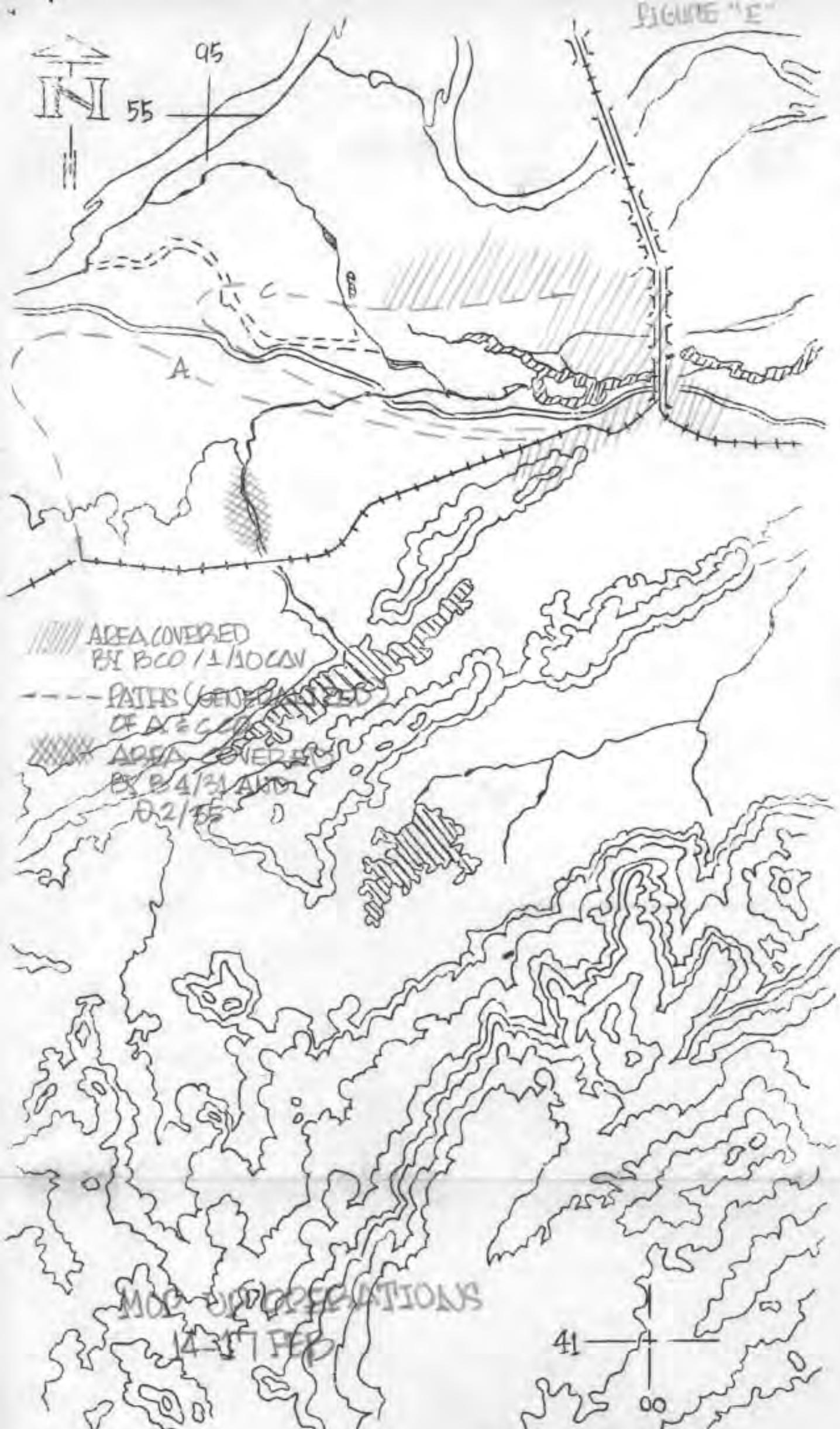
FIGURE "D"



— 9 FEB
 - - - 10 FEB

THE ATTACK TO THE
 EAST

41
 00



MOB OPERATIONS
14-17 FEB

41
00



THE FISH TO
THE SOUTH
(18-22 FEB)

HILL
344

BLUDGE

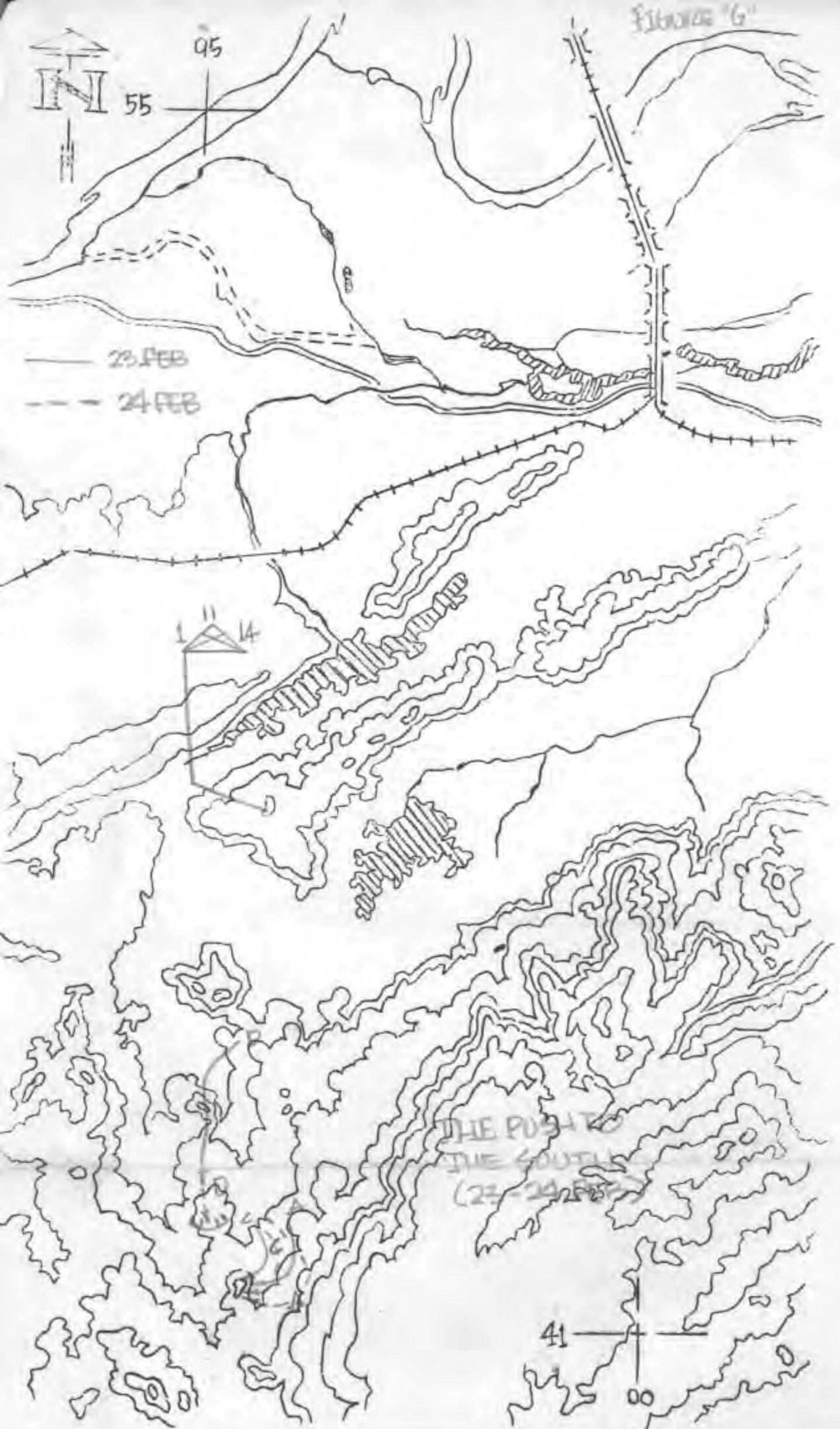
95

55

41

00

100



55

95

23 FEB

24 FEB

11
14

THE PUSH TO
THE SOUTH
(23-24 FEB)

41

00

95

55



- GT LINES
- - - FLIGHT PATHS
- ▨ MANEUVERZ
- TARGETS (NUMBERED)

LZ HARDCORE

MINI BASE FOX (CROSS)

LZ CHAR BRASS (CROSS)

A2

B2

41

00

LZ PINEZ

