

DEPARTMENT OF TACTICS
UNITED STATES ARMY AVIATION SCHOOL
Fort Rucker, Alabama

October 1968

File No. 6-594-2	5-594-4
8-594-2	30-594-4
22-594-2	69-594-4
55-594-2	71-594-4

SECTION I

AIRMOBILE OPERATIONS

Reference: Map overprint, VIETNAM 1:50,000, Go Cong, sheet 6342 III.

1. GENERAL SITUATION: (Does not reflect actual current tactical situation for this area.)

a. A typical Vietcong action is shown on your map. Late yesterday afternoon, a VC company with automatic weapons entered the village of Tan Binh Dong, grid square 6844. After forcing the inhabitants to listen to propaganda lectures, they turned them to digging roadblocks and positions in the town and along the roads east and west of the village. An American adviser with a Regional Forces (RF) company in Vinh Binh (1), grid square 7343, was informed of the enemy activity. He moved up the highway and attempted to drive the VC company from the village. The attempt was unsuccessful. The RF company was driven from the town into positions across the road at XS685453 and XS674444. They are still holding these positions. The firefight between the VC and the Regional Forces company is still going on.

b. Third Platoon, 71st Assault ~~Company~~ Helicopter Company, was on an airfield standby alert last night at their own heliport. They were diverted from this mission and sent to provide cover for the Regional Forces company. The platoon's fire teams have been relieving each other on station, providing continuous support for the RF company since 0200 hours. They have made a number of strikes and have good radio contact with the RF company's American adviser.

c. Supporting fires for the RF company are available on call from the ARVN battery of 105mm Howitzers at Ap Dong An, grid square 7248. Artillery fire will not be placed on the village of Tan Binh Dong. The battery has an American adviser in radio contact with the RF company.

d. Other known enemy forces in the area are the 314th VC battalion, which has been very active along the highway from Xom Don, grid square 7956, to Go Cong, grid square 8446. The battalion has a number of automatic weapons and has forced local inhabitants to aid in constructing roadblocks along the highway. An enemy unit of unknown strength has recently begun operating in the paddy area and the river north of AP NHI (2) grid square 7753.

e. Elements of the 20th Infantry Division (US) will be committed to an airmobile combat assault to close with and destroy the enemy company in Tan Binh Dong. Although the entire division is operating in the area north of the Song Van Co, only the elements to be committed are shown. They are:

(1) Twentieth Aviation Battalion. This is a ROAD division aviation battalion and has only one airmobile company. However, the 71st ASHC, which provided the armed helicopters in the operational area, was not committed for today and has been attached to the 20th for the operation.

(2) 1-71 Infantry Battalion. This battalion, part of the 2d Brigade, 20th Infantry Division, has been designated an airmobile task force for the operation. Operational control over the aviation elements has been given to CO, 1-71 Infantry.

2. CONCEPT OF OPERATION: 1-71 Infantry will commit two companies to airmobile assault landings, vicinity of Tan Binh Dong, using early morning sunlight to help in gaining surprise. Aviation elements will return to 20th Division area, refuel, and stand by to lift reserve forces or extract committed forces. RF company will continue to serve as blocking force north and west of Tan Binh Dong. Third Platoon, 71st Aviation Company, will perform screening and overhead cover mission in area west of objective. TAC air available on call. Reserve forces and additional supplies will be available in the pickup zone (PZ).

3. SPECIAL SITUATION: The mission commander is making a map inspection of three LZ's tentatively selected by the airmobile force commander. They are indicated on your map as follows: LZ A, XS698446; LZ B, XS697438; and LZ C, XS682437. He now turns to you and asks for a recommendation about the LZ's.

4. FIRST REQUIREMENT:

- a. Who is the mission commander?
- b. Who is the airmobile force commander?
- c. Who will make the final decision about which LZ's will be used?
- d. Using the characteristics of a good landing zone, recommend two landing zones for the initial assault and one for extraction.

NOTE: You are not limited to the designated LZ's but may choose any, which will support the operation.

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SECTION II

AIRMOBILE OPERATIONS

1. SOLUTION TO FIRST REQUIREMENT:

a. The mission commander in this case will probably be the CO, 20th Aviation Battalion. When two or more aviation companies are committed to an operation, the mission commander is normally a battalion commander. In this case, the 71st ASHC is attached to the 20th Aviation Battalion, so CO, 20th Aviation will be the mission commander. There are exceptions, though. You should remember that the mission commander is the senior aviation unit commander participating in the action. There have been lifts involving two aviation companies in which the mission commander was the senior of the two company commanders. When only one aviation company is involved, the mission commander and company commander are the same man.

b. The airmobile force commander is the CO, 1-71 Infantry. Normally, the airmobile force commander is a brigade commander who keeps operational control over the aviation elements. In this case, the infantry battalion commander, since he has operational control over the aircraft, will make the final decisions regarding weather minimums and landing zones. Remember that these decisions are based on aviation advice, and that the airmobile force commander is not likely to disregard the advice he gets from the aviation battalion commander.

NOTE: By this time, you may be curious about the name of the attached aviation company. This is not part of any 71st Battalion. It is from a corps aviation battalion, and its name has nothing to do with the name of its parent unit. In Vietnam, you may encounter any number of aviation companies with names like the 121st, 118th, or A/501, which are part of a battalion with still another number; like the 13th or 52nd. The airmobile company of the division aviation battalion would have the same number as its parent battalion, A/20.

c. Final selection of landing zones is always up to the airmobile force commander, since his troops must land and begin their operation from them.

d. A good landing zone is close to the objective, has cover and concealment nearby, uses dominating terrain, and has few obstacles. It has no enemy positions, good road nets, if vehicles are used, is safe from armor, and is easy to identify. Sometimes, you don't need some of these characteristics, and sometimes, you just can't get the LZ you would like to have. In the operational area, LZ's A and B are both acceptable for the initial assault. LZ Charlie will expose both the aircraft and troops to automatic weapon fire from the VC company, but it will be a good LZ for an extraction after the enemy

company has been destroyed. During the rainy season, it may even be necessary to make the extraction from one of the roads near the objective.

e. DISCUSSION:

(1) Both LZ A and LZ B offer cover and concealment for the troops once they have landed, and the foliage and buildings themselves offer protection for the aircraft on short final and takeoff, if the enemy has not occupied them. Suppressive fires from gunships of A/20th will be necessary in any event. Of the two, LZ B offers the best avenue of approach to the objective. The small stream running through the village adjacent to LZ B may be an obstacle, but footbridges are normally found in these villages (boobytrapped).

(2) Although they were quickly covered during the conference portion of the class, local considerations may be very important in selecting LZ's. The small stream in the village is an example. In this operation, it presents no real obstacle, but it is possible to place troops down in an LZ surrounded by streams too deep to ford. Dust or burned ash, during the dry season, can make some LZ's very dangerous, as aircraft go IFR on landing.

(3) You may have chosen some other LZ's than the ones indicated on your map. They are acceptable if they support the operation. Remember that landings north or west of the objective are dangerous because the enemy is already prepared to fire in those directions, because of the RF company. You will lose the benefit of the RF company as a blocking force and offer the enemy a covered avenue of escape through the villages.

2. SITUATION CONTINUED:

a. The S3, 1-71 Infantry and the liaison officer from the 20th Aviation Battalion are selecting a pickup zone (PZ) for the operation. The job is not as simple as it might seem: the operation takes place in III Corps. In both III and IV Corps, there are two seasons in the delta region, the rainy season and the dry season. During the rainy season, winds are from the southwest and the paddy areas become filled with water. Landing troops takes a relatively short time, often as little as 5 seconds or even less. Loading takes longer, and aircraft may begin to sink into muddy areas. During the dry season, wind is from the northwest. Paddy areas dry up, the surface of the paddies becomes brown and cracks open and dust and chaff becomes a problem creating possible IFR conditions. After considering the above, it was decided that the major highway adjacent to the location of the 1-71 Infantry would be the best PZ.

b. While the PZ was being selected, the Aviation Battalion S3 proposed three flight routes for this operation. They are shown on your map as flight routes red, blue, and green.

3. SECOND REQUIREMENT:

a. Applying the characteristics of a good flight route, comment on any major faults you find on each flight route and select the best flight route for this operation.

(1) Flight route red.

(2) Flight route blue.

(3) Flight route green.

b. No return route is specified. How will you return to the PZ?

c. Who will mark the LZ's?

d. Where will pathfinders be used in this operation?

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SECTION III

AIRMOBILE OPERATIONS

1. SOLUTION TO SECOND REQUIREMENT:

a. The characteristics of a good flight are--

- (1) A good flight deceives the enemy.
- (2) A good flight route avoids enemy positions.
- (3) A good flight uses available friendly fires.
- (4) A good flight route does not restrict friendly fires.
- (5) A good flight route is easy to navigate.

b. The best flight for this operation is flight route green. Major faults with routes red and blue are--

(1) Flight route red. This route meets all the characteristics except one; it definitely will restrict friendly fire of the ARVN artillery.

(2) Flight route blue.

(a) This flight route passes very near the unknown enemy unit at Ap Nhi 2 grid square 7653 and also parallels the Song Vam Co. Paralleling the river will create no difficulties if ceilings are such that flight at 1500 feet is permissible. However, if a low-level flight is deemed necessary, the rivers in Vietnam are habitually inhabited by the enemy and this route would not be desirable.

(b) Route blue also has a very sharp turn from the RP to the LZ. This might create some difficulty in the formation. It is desirable to make gradual turns along this route, especially at the RP.

(3) Flight route green. This route meets all the characteristics of a good flight route, and is acceptable for this operation.

c. No return route is indicated on the map. You can expect to return directly to the PZ, after a turnout from the LZ, as indicated by the marking unit. The flight leader will be careful to stay out of artillery fires and away from enemy position. In some operations, the return route is controlled as closely as the approach route. In others, there may be a different approach and return route for each lift to the same objective area.

d. Marking will be provided by the 3d Platoon, 71st Aviation Company, or by other aircraft. If the RF company does not require covering fires, the armed helicopter fire team will be free to recon the selected LZ's, to throw a marking smoke grenade, and to report enemy fires from the villages and treelines. The use of pathfinders in a daylight operation in this area could warn the enemy.

e. Pathfinders may be used in three places during the operation:

(1) The pickup zone. In the pickup zone, pathfinders would perform the duties of the loading zone control center party, guiding aircraft to parties from the loads control group and to troop pickup sites.

(2) The LZ's. If used in the LZ's, the pathfinders will provide marking for lifts after the initial assault. This use is not likely in this operation.

(3) Extraction. Pathfinders could provide a valuable service in the extraction PZ. (LZ Charley) By arranging the troops and providing panels for individual aircraft, pathfinders can cut extraction time to a minimum.

2. SITUATION CONTINUED:

a. The S3, 20th Aviation Battalion, is trying to determine how the flights should be formed to support the operation. To do this, he must first determine how much each aircraft will carry. Before he can tell how much each ship will carry, he must know how much fuel is required for the mission.

NOTE: Fuel requirements are of primary importance in planning an airmobile operation. The helicopter can only fly as far as its fuel will take it, and the load of troops and equipment must be cut, if necessary, to make room for fuel. You can't fly the helicopter on "wishful thinking" --it takes JP-4.

b. The S3 has determined the following factors to be used in planning the mission:

- (1) Enroute groundspeed - 80 knots.
- (2) Winds from 240° at a maximum of 10 knots.
- (3) Two lifts without refueling.
- (4) Initial lift into LZ Bravo.
- (5) Return to PZ (direct) takes as long as flight from SP to LZ Bravo.
- (6) Fifteen minutes required to run up, move into formation, and land at PZ from present location of 20th Aviation Battalion.
- (7) Five minutes loading time each time aircraft land in PZ.
- (8) Three minutes to takeoff from PZ and cross SP.
- (9) Thirty minutes reserve.

(10) No shutdown during operation.

(11) About 5 seconds in the LZ (negligible).

c. To determine the rate of fuel consumption, the S3 decided not to use the fuel consumption published in the "-10"; since an engine that burns 477 pounds per hour in the "-10," may burn 580 pounds per hour in the field. Instead, he asked for a report from A/20th and found that yesterday, on a lift which lasted 40 minutes, each UH-1D burned approximately 350 pounds of fuel.

3. THIRD REQUIREMENT:

a. Using the figures furnished by A Company, 20th Aviation Battalion, determine the rate of fuel consumption for the UH-1D in this operation.

b. Using the determined rate of fuel consumption, how much fuel must be aboard each aircraft before the start trigger is pulled?

NOTE: Determine your times for the air movement table now; you will save planning time both in the classroom and in the field.

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SECTION IV

AIRMOBILE OPERATIONS

1. SOLUTION TO THIRD REQUIREMENT:

a. Rate of fuel consumption. The rate of fuel consumption is 525 pounds/hour. To find it, using your computer, place the fuel consumed (350) over the time in minutes (40), like this:

$$\frac{35 \text{ (outer scale)}}{40 \text{ (inner scale)}}$$

And read 525 over the rate index, like this:



Or by arithmetic, 40 minutes = $\frac{2}{3}$ of 1 hour. Then:

$$350 \times \frac{3}{2} = 175 \times 3 = 525 \text{ pounds/hour}$$

NOTE: This is not a standard rate of fuel consumption in RVN, although it is realistic in some cases. Rates of consumption vary with missions, locations, types of aircraft, and even the ages of turbine engines.

b. Fuel aboard each aircraft. The amount of fuel aboard each ship before starting should be 952 pounds. To determine this amount, first convert all distances to time in minutes. Remember that the mission commander will be controlling the flight by times for each leg rounded to the nearest 30 seconds, or to the nearest minute, if he decides that it is close enough. (See notes on the air movement table.) Thus, the actual time of flight from the SP to LZ Bravo will take 12 minutes. (28.6 kilometers = 15.5 nautical miles @ 80 knots = 11.7 minutes to 12 minutes. Then:

4 (the number of trips	X	12 (the number of minutes each way	= 48
+2 (the number of takeoffs)	X	3 (takeoff to SP)	= 6
+2 (the number of takeoffs)	X	5 (loading time)	= 10
+		15 (runup time)	= 15
+		30 (reserve)	= 30
			Total 109

Or 01+49, the total amount of time the engines must be run without shutdown.

01+49 hours @ 525 pounds/hour = 952 pounds of fuel, the amount which must be aboard before starting.

(1) The difference on only 1 pound doesn't amount to much of a problem in this case, but there are many cases in which the fuel consumption comes out to some odd number that can't be accurately measured on the fuel gauge. One solution is to round up to the next highest figure that can be accurately measured. It is important to remember that the mission commander is responsible for the amount of fuel that is finally put aboard. Remember that every pound of fuel you put aboard is a pound of cargo that can't be carried. If you are flying on a mission, and the word comes down the line of aircraft to load to a certain amount of fuel, don't try to second-guess the mission commander or aviation unit commander. There may not be enough fuel in the staging area to get everyone back to "home plate," if some aircraft take on more fuel than is authorized.

(2) Another solution that is often used is to have an SOP covering the amounts of fuel that will be loaded for different missions. For example, the 1st Aviation Brigade authorizes two different fuel loads. One is for 01+00 hours of fuel, and the other is for 02+30 hours of fuel. Various "type loads" have been computed to match these fuel loads, resulting in fast, simple planning for airmobile operations.

NOTE: Both the fuel and type loads may be adjusted to meet the requirements of any given mission.

(3) There are too many variables to give you an answer about how much fuel will be loaded. Let's see how the tactical situation develops.

2. SITUATION CONTINUED:

a. It is 0500 hours at the 20th Aviation Battalion's heliport. The 71st ASHC has arrived with four ships from A Company, 82nd Aviation Battalion, attached. The CO, 71st ASHC, noting that the aircraft of A Company, 20th Aviation Battalion, are fully fueled, orders his own aircraft fully fueled, while awaiting instructions from the mission commander.

b. The mission commander and aviation battalion S3 are gathering information to be used in planning the mission. So far, they have come up with the following data:

(1) "Slicks" available:

71st ASHC (including A/82 aircraft)	= 16
A/20th Aviation	= 13
	<u>29</u>

(2) No other aircraft available from corps resources.

(3) All aircraft fully fueled.

- c. The type loads listed in the battalion SOP include the following:

UH-1D

ACL 1, 200 (2+30 Hours Fuel)

<u>TYPE</u>	<u>CARGO</u>	<u>WEIGHT</u>	<u>TOTAL</u>
1.	Five personnel	1200	1200
2.	Bulk cargo	1200	1200
3.	One each mule (sling) cargo	900 300	1200
4.	One each 1/4-ton tlr (sling) cargo	565 500	1065

ACL 2, 100 (1+00 Hours Fuel)

5.	Eight personnel	1920	1920
6.	One each mule (sling) cargo Two personnel	900 600 480	1980
7.	One each 1/4-ton tlr (sling) cargo Four personnel	565 500 960	2025
8.	One each 3/4-ton tlr (sling) cargo	1340 750	2090

d. The liaison officer with 1-71 Infantry reports that CO, A Company, 1-71, plans to take 165 troops and 2,100 pounds of supplies on the initial assault into LZ Bravo. He also wants to take two 1/4-ton trucks with 106mm recoilless rifles mounted. Each vehicle weighs 3,160 pounds.

e. Concept of operation (continued): All available aircraft will be used to transport A Company, 1-71 Infantry, to LZ Bravo. Aviation elements return to PZ and lift B Company, 1-71, into LZ Alfa.

3. **FOURTH REQUIREMENT:**

- a. Which of the type loads listed above cannot be used?
- b. Can the 1/4-ton trucks be lifted? In the event a CH-47 becomes available, how many spaces will be required to move these two vehicles?
- c. You will have to adjust the type loads being used during the initial lift to allow for fuel burned off during runup and loading. How many additional spaces will be available on each ship after the fuel for runup and loading is burned off? How can they be used?

d. How many troops and how many pounds of supplies can be lifted during the first assault?

e. How many troops and how many pounds of supplies can be lifted during the second assault?

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SECTION V

AIRMOBILE OPERATIONS

1. SOLUTION TO FOURTH REQUIREMENT:

a. None of the type loads listed under ACL 2, 100 (1+00 fuel) can be used, at least not during the initial assault, because the aircraft are already fueled for maximum fuel, 2+30 hours. However, using only the loads listed for ACL 1, 200, it will result in wasted lift capacity, since the aircraft will have burned off 20 minutes fuel before leaving the PZ.

b. No. The 1/4-ton trucks cannot be lifted using the UH-1D, since they exceed the allowable cargo load for that aircraft. Chinooks would be required to lift them, and none are available.

If you were required to determine the number of spaces required to lift these vehicles, (in case CH-47's were to be available later in the operation, for example) you would have to determine the spaces required for one of them, then multiply by the number to be lifted, as follows:

$$\frac{3,160}{240} = 13.1, \text{ rounded up to } 13.5, \text{ the number of spaces required to lift } \underline{\text{one}} \text{ of these vehicles.}$$

Then,

$$13.5 \times 2 \text{ (the number to be lifted)} = 27.0$$

c. One-half (.5) of one space will be available on each ship in addition to the type load to be carried. You can't carry half a man, but you can carry 120 pounds of any other type of supplies that will fit in the aircraft.

To determine the additional lift capacity available, first determine how much fuel will be burned off before leaving the PZ:

$$\begin{array}{r} 15 \text{ minutes (run up)} \\ + 5 \text{ minutes (loading at full fuel flow)} \\ \hline 20 \text{ minutes} \end{array}$$

Then multiply by the rate of fuel consumption:

$$20 \text{ minutes} \times 525 \text{ pounds/hour} = 175 \text{ pounds}$$

Then,

$$\frac{175 \text{ pounds}}{240 \text{ pounds (one space)}} = .7, \text{ rounded down to } .5, \text{ the additional number of spaces available in each ship.}$$

d. A total of 145 troops and 3,480 pounds of supplies can be lifted by the total 29 slick ships available, using the adjusted type load. The company commander cannot load all of the troops he wants to, but he can easily carry the supplies he originally planned for, if he can break the loads down into half-spaces.

NOTE: It is not a good idea to load a ship with a cargo of supplies during the initial lift, since the supplies must be off-loaded with the troops. The company commander should plan to break up the supplies into small loads, no matter how many aircraft are available.

e. Since the company commander cannot take all the troops he originally planned to take, he (CO, A Co, 1-71) must decide what troops will be left behind. That is why the lifted unit commander prepares the air loading tables—to insure ground unit integrity, in spite of the limited number of aircraft.

f. No. The same type load will not be used on the second lift. The flight will burn off about 280 pounds during the first lift and loading for the second lift:

32 minutes (24 minutes for the lift, plus 3 minutes for climbout to SP, plus 5 minutes for loading)

$$\times \frac{525 \text{ pounds/hour}}{280 \text{ pounds}}$$

On the second lift, each ship will be able to carry another space in addition to the adjusted type load, since:

175 pounds (burned off prior to first lift)
280 pounds (burned off during the first lift)
455 pounds

$$\frac{455}{240} = 1.89 \text{ spaces, rounded down to } 1.5, \text{ the total number of spaces above the original type load.}$$

2. SITUATION CONTINUED: The airmobile force commander has decided to time the operation so as to arrive in LZ Bravo at the earliest possible time. The mission commander advises him that an operation landing much before beginning morning civil twilight (BMCT, when the sun is 6° below the horizon) might have to be considered as a night operation. S2, 20th Aviation Battalion, has obtained the following weather data from the Air Force weather detachment at corps: Visibility at 0600, 1 mile in fog/haze, maximum wind during the warmest part of the day not to exceed 10 knots. BMNT 0548, BMCT 0612, sunrise 0636. The airmobile force commander says he wants the first company landed at 0615 local time, deciding to give up the cover of sunrise.

3. FIFTH REQUIREMENT:

a. What must be done if the mission commander finds that the visibility at take-off time is too poor for the operation to begin?

b. Can the air movement table be completed? If so, complete the air movement table given in our outline for LZ Bravo.

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SECTION VI

AIRMOBILE OPERATIONS

1. SOLUTION TO FIFTH REQUIREMENT:

a. If the mission commander finds that visibility is too poor to begin the operation, he will advise the airmobile force commander, who is responsible for weather minima. Normally, the airmobile force commander will then call a delay in the operation. In a well-planned operation, all combat and supporting elements know how long a delay will last if called. For example, during your briefing, you may hear something that sounds like, "weather delay, 30 minutes." This means that if you are told to shut down because the lift cannot begin until visibility improves, you will crank again on a signal given in 30 minutes. This way, you don't have one pilot running down the line of aircraft giving you the "kill the engine" sign, followed by another pilot giving the "crank" sign. Also, if the operation is planned this way, you can generally count on supporting fires when you do get to the LZ, since everyone else is waiting the same amount of time.

b. When completed, the air movement table, if written, will look like this:

<u>SERIAL</u>	<u>AVN UNIT</u>	<u>NO ACFT</u>	<u>TRANS UNIT</u>	<u>NO SPACES</u>	<u>PZ</u>	<u>STA TIME</u>	<u>T/O TIME</u>	<u>SP TIME</u>	<u>RP TIME</u>	<u>LZ NO</u>	<u>LZ TIME</u>
1	A/20(+)	29	A, CO. 1-71	NA	1/71	0555:00	0600:00	0603:00	0612:00	B	0615:00

To compute times for the air movement table, begin with the landing time, and compute times of flight at the prescribed groundspeed across the checkpoints. Then subtract the times between points, as follows:

RP to LZ Bravo = 3.9 nautical miles @ 80 knots = 2.9 minutes or 03:00 rounded

Then,

0615:00 (landing time)
- 03:00 (time from RP to LZ)
0612:00 (RP time)

ACP New York to RP = 9.0 nautical miles @ 80 knots = 6.8 minutes or 07:00 rounded
+ SP to ACP New York = 3.0 nautical miles @ 80 knots = 2.2 minutes or 02:00 rounded
Total SP to RP 09:00

Then,

0612:00 (RP time)	0603:00 (SP time)	0600:00 (T/O time)
- 09:00 (time from SP to RP)	- 03:00 (given T/O to SP)	- 05:00 (loading time)
0603:00 (SP time)	0600:00 (T/O time)	0555:00 (station time)

NOTE: The number of aircraft in the serial is unusually large. It would be better if two smaller serials could be landed 30 seconds apart, but armed escort is limited to aircraft from the armed platoons of both companies, one of which is engaged in an overhead cover mission. If gunships can be made available, the flight will be broken into two serials so the troops can be landed closer to their cover and objective. This will result in a new landing time (30 seconds later) for the second serial.

SUMMARY: This Practical Exercise answered some of your questions, but you should still have some, like the one about how to stretch one platoon of gunships to cover two flights of "slicks." It can be done, but there is no "school solution." There aren't any "school solutions" in Vietnam, either—just more questions that have to be answered.

We can't make you an expert on airmobile operations in a classroom. But you should now understand what some of the problems are, and how to go about solving them. When a ground soldier comes up and asks how many troops you can carry, you know there is more to it than turning around and counting the troop seats. You have to know where he wants to go first. And you have to start with when he wants to get there. Inverse planning is the heart of any airmobile operation, and it is always used, even when none of it is written down.

If you eventually become a liaison officer, this class will have helped you to speak the same language as the commanders you are there to help. You know, for example, how to use a type load, and adjust it by using the space method, so that your unit can support the infantry as well as possible. If your unit can't carry everything the ground commander wants it to, at least you know who's got to decide what must be left behind, and can help him make his decision.

No matter what job you do in Vietnam, knowing the command and control relationships used in airmobile operations will help you to do that job better. These relationships explain the final selection of the landing zones you may be landing in, and which organization is responsible for providing fuel during some lifts.

If there is any one central idea which will help you understand airmobile operations, it is the idea that a ground commander is in control of the assault, and everything done during the assault is done to insure the success of a ground action.