

DEPARTMENT OF TACTICS
UNITED STATES ARMY AVIATION SCHOOL
FORT RUCKER, ALABAMA

January 1967
File No. 2-559-1
5-559-1
13-559-1
69-559-1
33-5029-1

PERFORMANCE OBJECTIVES

EMPLOYMENT OF PATHFINDERS IN VIETNAM

1. KNOWLEDGES:

From memory the student will be able to list correctly:

- a. The mission of the Pathfinders as stated in class.
- b. The two radio nets established by Pathfinders in support of an operation.
- c. The personnel Organization of the pathfinder unit according to TOE 7-168E.
- d. The pathfinder equipment and control procedures that are established and employed during the conduct of an airmobile operations.
- e. Where pathfinders are assigned in the Army force structure.
- f. The three areas of operations in which pathfinders are utilized.
- g. The time pathfinders normally arrive in the objective area in Vietnam and the preferred method of delivery.
- h. The three major limitations of pathfinders as stated in class.

2. SKILLS: None.

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STUDENT OUTLINE

EMPLOYMENT OF PATHFINDERS IN VIETNAM

1. Pathfinder Mission.

To establish navigational assistance to and control of Army aircraft in areas designated by supported unit commanders.

2. Organization.

- a. Divisional aviation battalion - referred to as pathfinder detachment. Consist of 2 officers and 13 enlisted men.
- b. Non-divisional aviation battalion - referred to as pathfinder Infantry platoon. Consist of 2 officers and 13 enlisted men.

3. Assignment.

Pathfinder detachment/platoon are assigned to divisional aviation battalions and to the field Army and allocated on the basis of one per non-divisional aviation battalion.

4. Capabilities. At full strength the pathfinder detachment/platoon can do the following:

- a. Conduct reconnaissance for and recommends landing zones for Army aircraft in areas which have been selected by supported unit commanders.

- b. Move to areas of operations by foot, surface vehicle, aircraft, or parachute.
- c. Prepare landing zones to include marking with visual and electronic aids and removal of minor obstacles.
- d. Assist in navigation and control of Army aircraft within its area of operation.
- e. Provide ground-to-ground and ground-to-air radio communication within its area of operations.
- f. Establish and operate the following types and numbers of landing facilities.
 - (1) One airplane landing zone with a maximum of two airplane landing strips; or
 - (2) One helicopter landing zone containing up to four helicopter landing sites.
- g. Separate into two independent teams and provides the above assistance on a reduced basis to two supported units operating over a wide area.

5. Limitations.

- a. Personnel. Pathfinders usually are augmented with additional personnel from the supported unit to accomplish large tasks in landing or pickup zones. Additionally support usually consist of engineer, artillery, and infantry personnel.
- b. Equipment. Additional radios and other type equipment may be required when operating as two independent teams.

c. Subsistence. The detachment/platoon is dependent upon other units for administration, mess, supply, maintenance, and medical aid.

6. Equipment.

a. Visual aids. Panels, lanterns, rotating beacons, helicopter night landing aids, and signal lamps.

b. Electronic aids. Homing beacon (MRT2-A) and FM radios.

7. Method of Employment.

a. Command relationship.

(1) Aviation battalion - normally employed under the command and control of the aviation battalion or of the supported unit to which attached.

(2) Aviation group, Airmobile Division - Pathfinder Sections are attached to the helicopter battalions for operational missions.

b. Method of delivery. Parachuting, boating, walking, rappelling, or preferably landing by aircraft.

c. Arrival time in objective.

(1) Ten to thirty minutes prior to first assault elements.

(2) In Vietnam, arrive with first assault element.

(3) Maybe earlier as dictated by tactical situation.

8. Airmobile Operations.

a. Pathfinders utilized as follows:

(1) Loading or staging area.

- (a) Air traffic control.
- (b) Marking landing sites and obstacles.
- (c) Assisting ground unit in loading.

(2) Landing zones or objectives.

- (a) Air traffic control.
- (b) Clearing and marking obstacles.
- (c) Selecting and marking landing sites and points.
- (d) Movement control of aircraft on ground.

(3) Pickup zones or extraction areas.

- (a) Air traffic control.
- (b) Marking landing sites, points, and/or removal of obstacles.
- (c) Assisting tactical units in loading expeditiously.

b. Organization for the mission.

(1) Helicopter operations. The following parties are organized.

- (a) Landing zone control center party. Operates a communications center, controls aircraft, maintains record of arrivals and departures, maintains communications with supported unit and other landing zones.
- (b) Helicopter site party. Reconnoiters, prepares, and marks the helicopter sites.
- (c) Release point party. Used primarily to control helicopter traffic into a landing zone that contains multiple sites.

NOTE: Not used in Vietnam.

(2) Airplane landing zone.

- (a) Landing zone control center. (Same as helicopter landing zone)
- (b) Parking party. Reconnoiters, prepares, and marks the taxiway, parking areas, and dispersal areas.
- (c) Landing strip party. Reconnaiteers, prepares, and marks the landing area.

(3) Communications procedure.

- (a) Ground-to-air net. Provided for communications between aircraft and control center. First contact made at communications check point (CCP).
- (b) Pathfinder internal net. Used to maintain communications with other elements of the detachment/platoon.

NOTE: Unit terminal guidance personnel are trained and employed by aviation unit commander within his area of responsibility when qualified pathfinder detachments are not available.

NOTES

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ADVANCE SHEET

EMPLOYMENT OF PATHFINDERS IN VIETNAM

PURPOSE: This presentation is designed to teach the employment of pathfinders in Vietnam. It will include the mission of pathfinders, the organization of the unit, the location of pathfinders in the Army force structure; the capabilities, limitations, and equipment used; and the method of operation of loading, landing and pickup zones by pathfinders.

DISCUSSION POINTS: None

STUDY ASSIGNMENTS:

1. Scan: None.
2. Study: None.
3. Read: Supplemental material, this Advance Sheet.

SPECIAL INSTRUCTIONS: Bring to class this Advance Sheet.

SUPPLEMENTAL MATERIAL:

1. General. Prior to the current decade, the aircraft employed in support of administrative and tactical operations of the field army were anchored to a relatively small number of fixed airfields located well to the rear of the combat echelons. Administrative and logistical support functions of the field army which required the use of aircraft

were also anchored to the fixed airfields. Since the aircraft were not suited to operation from unprepared terrain, support of tactical operations was virtually limited to air delivery of supplies and equipment in airborne operations. Thus, the problem of ground assistance was limited to the organization and operations of drop zones and the provision of navigation assistance to the point of execution of the air delivery. The Army requirement for providing ground assistance was fulfilled by a relatively small number of highly skilled and specially equipped pathfinder teams.

2. Pathfinder operations. Tragedies connected with the Sicily invasion in July of 1943 by elements of the 82d Airborne Division spotlighted the need for close and effective control of air-transported combat formations, both while in the air and upon the ground. The 82d Airborne Division departing from airfields in North Africa was assigned the mission of seizing and holding a principal Sicilian airfield and assisting in the amphibious landing of the 1st Infantry Division. Two airborne battalions dropped 30 miles from their designated drop zones. Another battalion jumped 55 miles from its objective and fought with the British Forces for 6 days. A fourth battalion coming in on D plus 1 lost 23 of its troop-carrier aircraft to Allied antiaircraft fire. These failures caused the airborne forces to focus their attention on the training that was initiated at Oujjoda, Morocco, in March 1943. Here, a group known as pathfinders, was organized as a parachute scout company, consisting of three platoons, each platoon having two squads of eight men. The mission of the parachute scout company was to precede the main body of the airborne force to the designated drop and landing

zones and by use of high-powered lights, flares, and smoke pots, to mark those zones and provide visual navigation aid to the incoming aircraft. Using these general concepts, further pathfinder work was undertaken in August 1943, shortly after termination of the Sicilian campaign. Each parachute regiment sent three pathfinder teams to Arigento, Sicily, for indoctrination in new pathfinder methods. In this new approach to the problem, pathfinders preceded the airborne force to set up radar apparatus, radio beacons, and other improved locator aids. On 13 September 1943, the 504th Pathfinder Team departed Arigento, Sicily, and with good piloting and dead-reckoning navigation, the team was air-delivered on the designated drop zone, south of Palstum, Italy. Radar, radio beacons, and other locator equipment was set up immediately. Twenty-five minutes later, the first planes of the main body were guided directly over the drop zones and, within $1\frac{1}{2}$ hours, 90 plane loads of men and equipment had been accurately dropped. All other regiments met with equal success. The ground assistance to aircraft provided by the Pathfinder Team measurably increased the success of this operation. Out of 262 planes, 260 dropped their troops on the predesignated targets, a tremendous improvement over the Sicilian campaign. In March 1944, fulfillment of the need for pathfinders to increase the success of airborne operations culminated in the organization in each division, of 18 pathfinder teams organized and equipped to perform ground assistance to aircraft. These teams were employed during the remainder of World War II in all airborne operations and provided assistance in critical air supply of other combat units.

Subsequent to World War II and the advent of the United States Air Force, pathfinder functions were phased out of the Army and reconstituted as Air Force Control Teams. In 1955, the Army realized a new requirement for pathfinders to provide ground force combat commanders with positive means of providing ground assistance to Army transport aircraft. A provisional pathfinder team was organized at Fort Benning, Georgia, to test concepts and organization. As a result of these tests, Pathfinder TOE 7-168T was published in May 1957, authorizing 2 officers and 10 enlisted men with a basis of allocation of 1 team per aviation transportation transport battalion (4 per field army). In July 1961, the pathfinder team was redesignated a detachment and the number of personnel increased to 15. Based on its troop lift capability the aviation battalion now may be augmented with a pathfinder capability. The airmobile division has assigned a pathfinder platoon consisting of four sections. These sections are equivalent to a pathfinder detachment. Non-divisional aviation battalions are assigned a pathfinder infantry platoon, however, the size is the same as a detachment of 15 men. The name "pathfinder infantry Platoon" resulted from a change from TOE 7-168T to 7-168E. The name may change again for standardization purposes and one more enlisted man may be added to provide flexibility in splitting the detachment/platoon for employment over a wide area.

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PERFORMANCE CHECK

EMPLOYMENT OF PATHFINDERS IN VIETNAM

1. What is the mission of the Pathfinders?
provide control & navigational assistance to air craft. 15 path find in a group
2. What two radio nets are established by pathfinders in support of an operation?
 - a.
 - b.
3. What is the personnel organization of the detachment/platoon?
4. What type of equipment is used by pathfinders in landing zones?
 - a. *radios*
 - b. *visual marking systems*

10 F11 radios in a group.

2 NDB's

5. What net is used for air traffic control and which party operates it?

6. To what units are pathfinders assigned to?

a.

b.

c.

7. What type of parties are organized for operation of landing zone?

Airplane landing zone

Helicopter landing zone

a.

a.

b.

b.

c.

c.

8. What three areas of operations are pathfinders utilized?

a. loading or staging areas.

b. handy landing zones or objectives

c. pick up zone ²³ _{SH-13} ~~E~~

9. At what point along the flight route does the flight leader make first contact with the pathfinder control center?

10. In Vietnam, when does the pathfinder team arrive in the objective area?

11. What is the preferred method of delivery of pathfinders into the area of operation?

