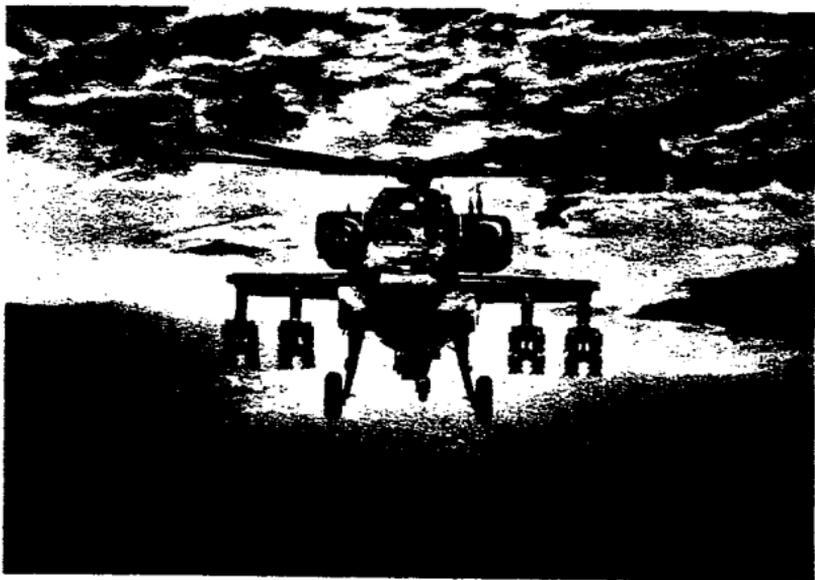


# AVIATION HANDBOOK



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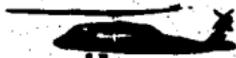
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UTILITY  
UH-1



PAYLOAD/NORMAL MISSION	2,900
NORMAL CRUISE SPEED	60-120 knots
ENDURANCE AT CRUISE (plus 30 min reserve)	2+15 Hours
TROOP CAPACITY	10
LITTERS & AMBULATORY	6
EXTERNAL CARGO max recommended	4,000
LANDING WIDTH clear of obstructions	100' by 100'
WEAPONS	M-60 (6) see page 9

UTILITY  
UH-60



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PAYLOAD/NORMAL MISSION	6195
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NORMAL CRUISE SPEED	80-145 knots
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ENDURANCE AT CRUISE (plus 30 min reserve)	2+15
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TROOP CAPACITY	14
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LITTERS & AMBULATORY	4/6
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EXTERNAL CARGO max recommended	8,000
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LANDING WIDTH clear of obstructions	100' by 100'
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WEAPONS	M-60
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OBSERVATION/SCOUT  
OH-58 A



PAYLOAD/NORMAL MISSION	760
NORMAL CRUISE SPEED	0-90 knots
ENDURANCE AT CRUISE (plus 30 min reserve)	3+00
TROOP CAPACITY	2
LITTERS & AMBULATORY	1/2
EXTERNAL CARGO max recommended	0
LANDING WIDTH clear of obstructions	100' by 100'
WEAPONS	

OBSERVATION/SCOUT  
OH-58 C



---

PAYLOAD/NORMAL MISSION	837
NORMAL CRUISE SPEED	0-90 knots
ENDURANCE AT CRUISE (plus 30 min reserve)	2+45
TROOP CAPACITY	2
LITTERS & AMBULATORY	1/2
EXTERNAL CARGO max recommended	0
LANDING WIDTH clear of obstructions	100' by 100'
WEAPONS	

---

OBSERVATION/SCOUT  
OH-58 D



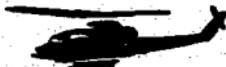
PAYLOAD/NORMAL MISSION	see WEAPONS
NORMAL CRUISE SPEED	0-90 knots
ENDURANCE AT CRUISE (plus 30 min reserve)	2+30
TROOP CAPACITY	0
LITTERS & AMBULATORY	0
EXTERNAL CARGO max recommended	0
LANDING WIDTH clear of obstructions	100' by 100'
WEAPONS	(7) see page 9

MEDIUM LIFT  
CH-47 D



PAYLOAD/NORMAL MISSION	20,206
NORMAL CRUISE SPEED	90-145 knots
ENDURANCE AT CRUISE (plus 30 min reserve)	2+30
TROOP CAPACITY	33
LITTERS & AMBULATORY	24
EXTERNAL CARGO max recommended	28,000
LANDING WIDTH clear of obstructions	150' by 150'
WEAPONS	M-60

ATTACK  
AH-1S



PAYLOAD/NORMAL MISSION	0 see WEAPONS
NORMAL CRUISE SPEED	0-150 knots
ENDURANCE AT CRUISE (plus 30 min reserve)	2+30
TROOP CAPACITY	0
LITTERS & AMBULATORY	0
EXTERNAL CARGO max recommended	0
LANDING WIDTH clear of obstructions	100' by 100'
WEAPONS	(1)/(2)/(3) see page 9

ATTACK  
AH-54



PAYLOAD/NORMAL MISSION	see WEAPONS
NORMAL CRUISE SPEED	0-175 knots
ENDURANCE AT CRUISE (plus 30 min reserve)	2+30
TROOP CAPACITY	0
LITTERS & AMBULATORY	0
EXTERNAL CARGO max recommended	0
LANDING WIDTH clear of obstructions	100' by 100'
WEAPONS	(2)/(4)/(5) see page 9

- (1) TOW MISSILE  
ANTI-TANK WEAPON  
RANGE:

MINIMUM

ARMED: 65 METERS

GUIDED: 500 METERS (SIGHT  
MUST CAPTURE IR  
SOURCE IN MISSILE)

MAXIMUM: 3,750 METERS (WIRE  
LENGTH)

ROUNDS: 4-8

- (2) 2.75' FOLDING FIN AERIAL ROCKET  
(FFAR)

ANTI-PERSONNEL/THIN SKINNED  
VEHICLES

RANGE:

MINIMUM

WARHEAD ARMED: 100 METERS

MAXIMUM

DIRECT FIRE: 2,500 METERS

INDIRECT FIRE: 6,000 METERS

BURST RADIUS: 10 METERS

WARHEADS

WP

HE (PD. PROX)

ILLUMINATION

FLECHETTES

DUAL PURPOSE

CAPABILITIES

OBSCURATION

PERSONNEL/  
THIN SKINNED  
VEHICLES

1 MILLION

CANDLE POWER

...2 MIN.

LIGHT ARMOR/  
PERSONNEL

LIGHT ARMOR/  
PERSONNEL

LIGHT ARMOR/  
PERSONNEL

ROUNDS:

AH-1S: 38-76

AH-64: 38-76

- (3) 20MM GATLING GUN  
ANTI-PERSONNEL/LIGHT ARMOR  
RANGE:

MAXIMUM: 2,000 METERS

BURST RADIUS: 5 METERS

WAR HEADS

HE

API

ROUNDS: 700-900

- (4) HELLFIRE MISSILE  
ANTI-ARMOR LASER GUIDED WEAPON  
RANGE:

MINIMUM: 1,000 METERS

MAXIMUM: IN EXCESS OF 5,000  
METERS

ROUNDS: 8-14

- (5) 30MM CHAIN GUN

ANTI-PERSONNEL/THIN SKINNED VEHICLES  
RANGE:

MAXIMUM: 3,000 METERS

WARHEAD: HE

BURST RADIUS: 8 METERS

ROUNDS: 900-1200

- (6) M-56 FASCAM MINES

HELICOPTER DELIVERED ANTI-TANK  
MINE FIELD

FRONTAGE PER HELICOPTER:  
300 METERS

DEPTH PER HELICOPTER: 20 METERS

DENSITY: .5 MINE/METER FRONT

- (7) STINGER

AIR TO AIR, INFRARED HOMING  
(HEAT SEEKING) GUIDED

MISSILE SYSTEM

RANGE:

MAXIMUM: IN EXCESS OF 4000 METERS

WARHEAD: HE

ROUNDS: 2

PLANNING CAPABILITIES

DESERT

OH-58	END:	2+0
AH-1S	END:	1+0
	TOW:	4
	20MM:	400
	2.75:	14
AH-64	END:	1+50
	HF:	8
	30MM:	777

EUROPE

OH-58	END:	2+7
AH-1S	END:	2+0
	TOW:	8
	20MM:	900
	2.75:	38
AH-64	END:	2+30
	HF:	8
	30MM:	1148
	2.75:	38



Position of marshaller, rotary wing aircraft (pilot seated on the right).



LANDING DIRECTION. Marshaller stands with arms raised vertically above head and facing towards the point where the aircraft is to land. The arms are lowered repeatedly from a vertical to a horizontal position, stopping finally in the horizontal position (STANAG 3117)



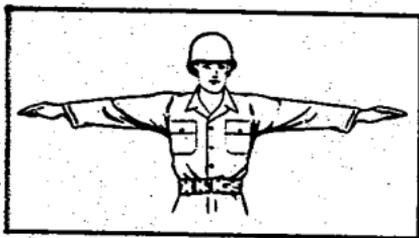
THIS WAY, THIS MARSHALLER, DESIRED LANDING DIRECTION, or DESIRED LANDING POINT. (Pilot will make his approach towards the marshaller's front.) Hold arms rigid and overhead, palms facing inwards (STANAG 3117).



YOUR APPROACH IS CORRECT. Extend arms to the side at shoulder height, with palms to the front.



WAVEOFF, GO AROUND, or DO NOT LAND. Cross arms repeatedly over the head in the STOP signal.



**HOVER.** Extend arms horizontally sideways,  
palms downward (STANAG 3117).



**MOVE AHEAD.** Arms a little aside, palms facing backwards and repeatedly moved upward-backward from shoulder height. Indicate the speed desired of the aircraft by rapidity of arm motions (STANAG 3117).



SPOT TURN. Move left or right hand upward and backward, from a horizontal position, to indicate direction of tail movement. Point other hand to center of spot turn. Marshallers must remain in full eye view with pilot (STANAG 3117).



**TURN TO LEFT (PORT).** Position right arm down and point to left wheel; move left arm repeatedly upward and backward. Indicate rate of turn by rapidity of arm motions (STANAG 3117).



TURN TO RIGHT (STARBOARD). Position left arm down and point to right wheel; move right arm repeatedly upward and backward. Indicate rate of turn by rapidity of arm motions (STANAG 3117).



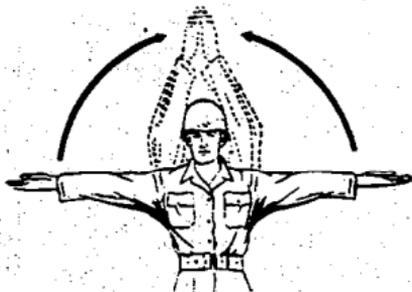
**MOVE DOWNWARDS.** Extend arms horizontally to the side, beckoning downward with palms turned down. Indicate rate of descent by speed of movement (STANG 3117).



**LAND.** Cross and extend arms downwards in front of the body (STANAG 3117).



**PROCEED TO NEXT MARSHALLER.** Move right or left arm down; extend other arm across body to indicate direction of next marshaller (STANAG 3117).



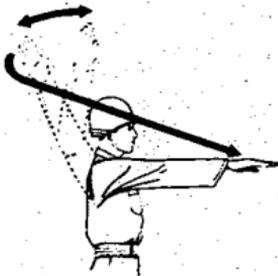
MOVE UPWARDS. Extend arms horizontally to the side, beckoning upward with palms turned up. Indicate rate of ascent, by speed of movement (STANAG 3117).



ACKNOWLEDGMENT, AFFIRMATIVE, or READY SIGNAL.  
Hand raised, thumb up (STANAG 3117).



**NEGATIVE SIGNAL. Hand raised, thumb down  
(STANAG 3117).**



TAKEOFF. Make circular motion with right hand overhead, ending in a throwing motion in the direction of takeoff.



HOOK UP LOAD. Rope climbing motion with hands  
(STANAG 3117).



HOOKUP COMPLETED. (Sling loading.) Place right fist in front of head and left fist over right fist in a "rope climbing" position. Then bump fists together.



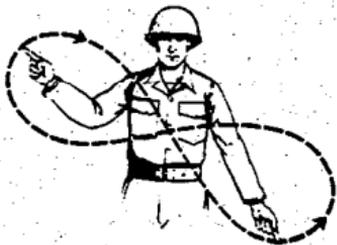
CUT CABLE. A signal similar to RELEASE LOAD except that the right hand has the palm downwards and not clenched. Rapid repetition of right hand movement indicates urgency (STANAG 3117).



LOAD HAS NOT BEEN RELEASED. Bend left arm horizontally across chest with fists clenched, palm downwards; open right hand pointed up vertically to center of left fist (STANAG 3117).



REMOVE BLADE TIE-DOWNS. Left hand above head, right hand pointing to individual boots for removal. (STANAG 3117).



ENGINE FIRE. (Director or Marshaller to pilot.) Describe a large figure 8 with one hand and point to the fire area with the other hand.

MEDEVAC REQUEST  
TACTICAL SITUATION

THE REQUEST FOR A MEDEVAC AIRCRAFT MUST INCLUDE (IN SEQUENCE):

- PICK-UP LOCATION (IF GRID COORDINATES ARE USED, SIX DIGITS PRECEDED BY 1000,000 METER GRID DESIGNATOR).
- RADIO FREQUENCY, CALL SIGN, AND SUFFIX.
- NUMBER OF PATIENTS BY PRECEDENCE: URGENT, PRIORITY, AND/OR ROUTINE.
- SPECIAL EQUIPMENT REQUIRED.
- NUMBER OF PATIENTS BY TYPE: LITTER AND/OR AMBULATORY.
- SECURITY OF PICK-UP SITE.
- METHOD OF MARKING PICK-UP SITE:
  - INVERTED "Y"
  - MARKER PANELS
  - SMOKE
  - VEHICLES
  - ANY AVAILABLE LIGHTS
- PATIENTS NATIONALITY AND STATUS
- CBR CONTAMINATION

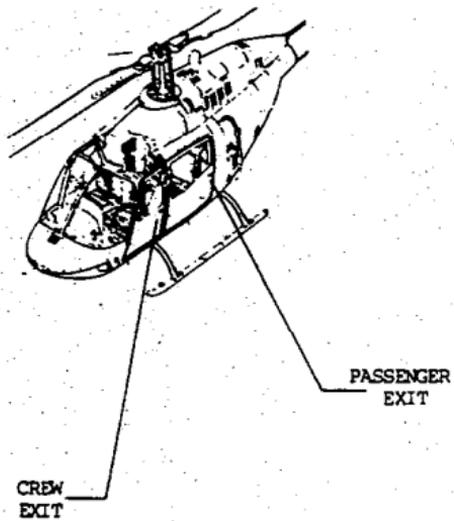
## CRASH RESCUE

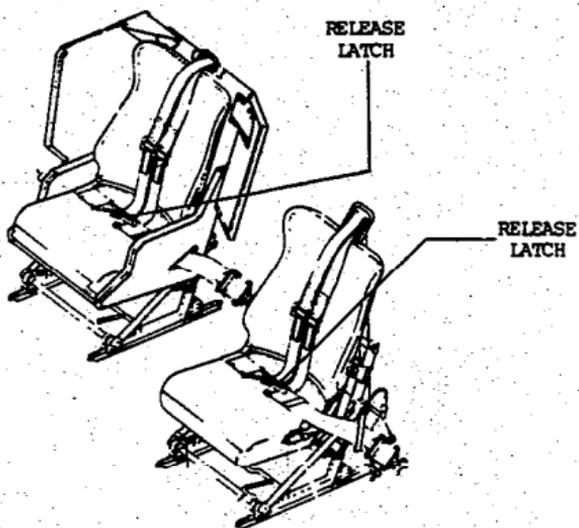
### DO

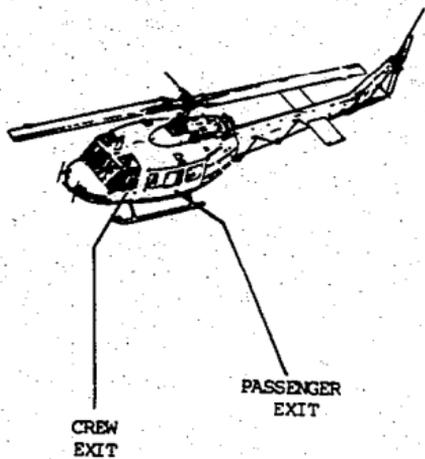
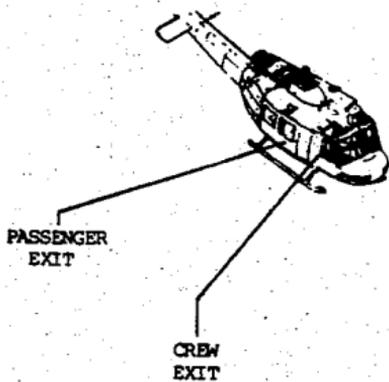
- AVOID TURNING ROTORBLADES AND TAIL ROTOR.
- BECOME FAMILIAR WITH THE ENTRY POINTS FOR EACH TYPE HELICOPTER (FOLLOWING PAGES)
- USE A SHARP INSTRUMENT TO BREAK THE CANOPY/PLEXIGLASS IF THE ENTRY POINTS ARE JAMMED... (AVOID IMPAILING THE CREW).
- IF THE HELICOPTER IS RUNNING ALL OVERHEAD AND CONSOLE SWITCHES... PULL AFT... ALL INSTRUMENT PANEL SWITCHES... PULL DOWN.
- OPEN/SLIDE BACK ARMOR SIDE PANEL.
- UNHOOK SEATBELT LATCH
- MOVE INJURED PERSONNEL AWAY FROM THE AIRCRAFT.
- INITIATE LIFE SAVING STEPS.

### DON'T

- APPROACH THE AIRCRAFT FROM THE UPHILL SIDE OR THE REAR OF THE HELICOPTER... (BLADES TURNING).
- REMAIN IN FRONT OF OR DIRECTLY BEHIND THE WEAPONS SYSTEMS.
- ATTEMPT TO PUT OUT A FIRE WITH THE AIRCRAFT'S FIRE EXTINGUISHER.
- PANIC!!!







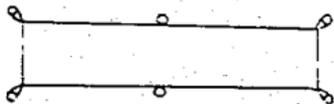


CO-PILOT  
EXIT

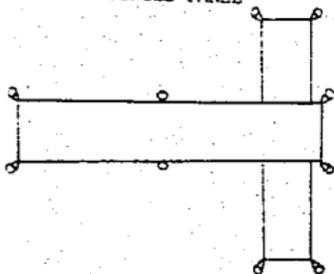


PILOT  
EXIT  
39

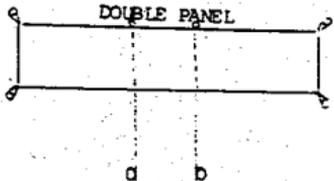
LZ MARKING  
(DAY)



SINGLE PANEL

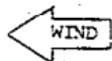
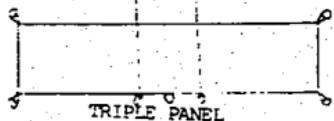


DOUBLE PANEL



NOTES:  
ALL PANEL  
TIE-DOWNS MUST  
BE SECURELY  
STAKED

MAXIMUM SLOPE  
FOR UH-1H 3°  
OH-58 5°  
AH-1 5°



TRIPLE PANEL

LZ MARKING  
(NIGHT)

NOTES:  
AT LEAST  
TWO LIGHTS MUST  
BE USED

ALL LENS SHOULD  
BE SAME COLOR

BLUE LENS ARE  
NOT RECOMMENDED

ALLOW AT LEAST  
50' CLEARANCE  
EITHER SIDE OF  
NIGHT LZ MARKER

BALLAST BAGS  
MUST BE FILLED  
AND TIE DOWNS  
STAKED  
TO PREVENT  
BLOW-DOWN.



TWO LIGHT METHOD

