



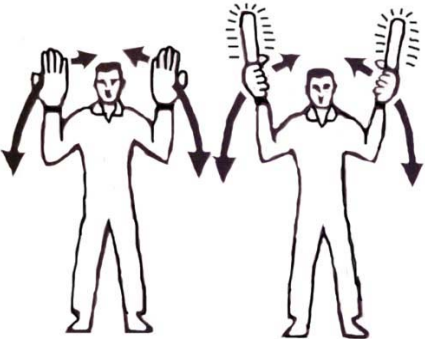
SIGNALS USED FOR AIRCRAFT MOVEMENT ON THE RAMP

Where possible signals comply with North Atlantic Treaty Organization (NATO) Standardization Agreement 3117, Air Standardization Coordinating Committee Air Standard 44/42a, the International Civil Aviation Organization (ICAO), and the Federal Aviation Administration (FAA) signals.

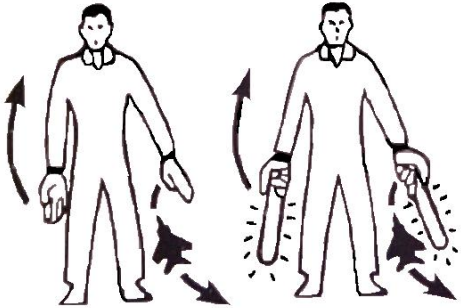
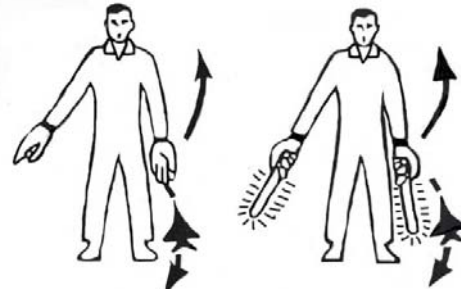
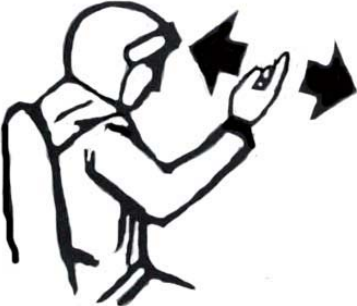
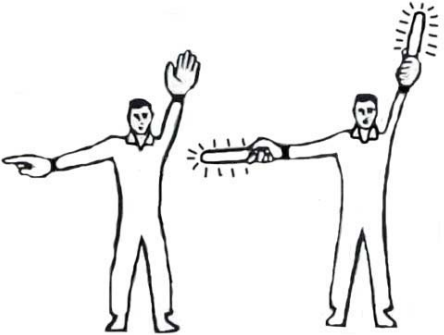
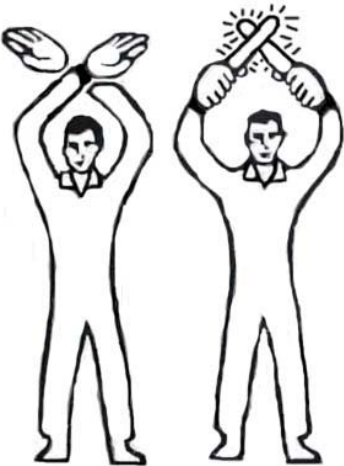
The marshaller will signal facing the aircraft while standing in one of these positions:

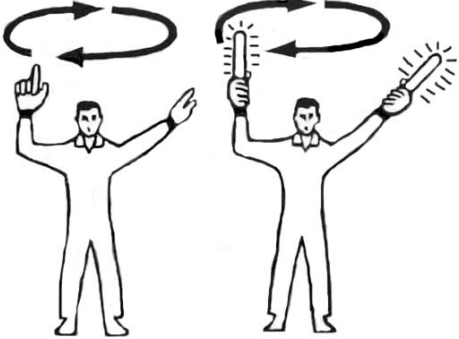
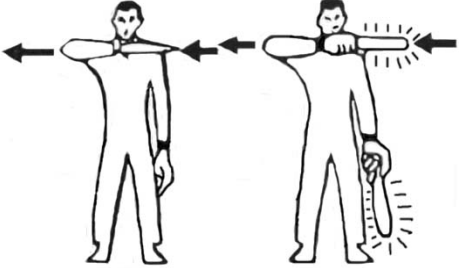
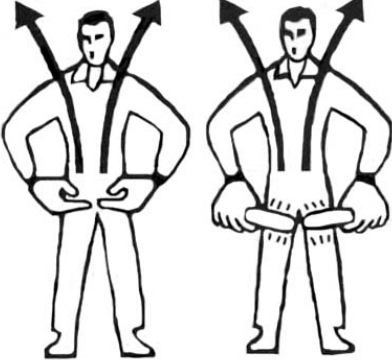


1. Fixed-wing aircraft. The marshaller will stand forward of the aircraft to the pilots left.
Remember if you can not see the pilot he can not see you!
2. Helicopters. The marshaller will stand in front in full view of the pilot.



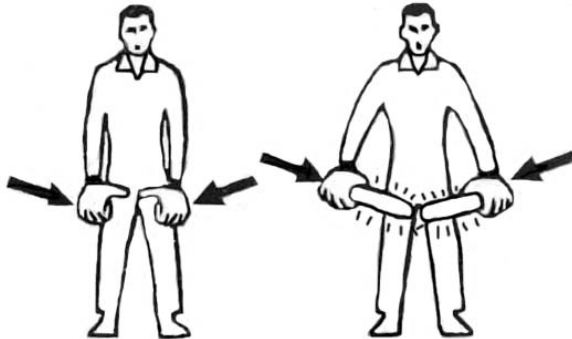
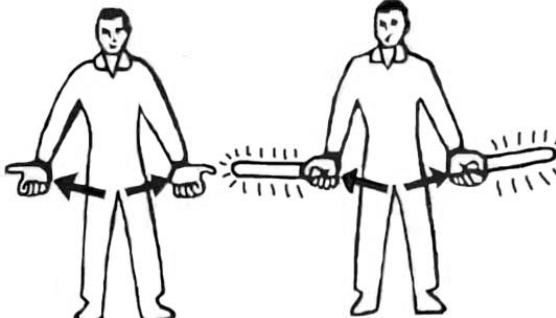
During night operations, the marshaller will use a pair of same color light wands. During taxiing or parking, the pilot must stop immediately if one or both of the marshaller's wands fail.

 The diagram shows two marshaller figures. The first figure has both arms held horizontally in front of his chest. The second figure has his right arm held horizontally in front of his chest and his left arm extended horizontally to the right, with a light wand in his hand.	<p>Fig. 1 <u>PROCEED TO NEXT MARSHALLER</u> Right or left arm down, other arm moved across body and extended to indicate direction of next marshaller.</p>
 The diagram shows two marshaller figures. The first figure has both arms raised vertically above his head with palms facing forward. The second figure has both arms raised vertically above his head, holding light wands, with palms facing forward.	<p>Fig. 2 <u>THIS MARSHALLER</u> Arms above head in vertical position with palms facing toward aircraft.</p>
 The diagram shows two marshaller figures. The first figure has both arms raised to shoulder height, palms facing backward, with arrows indicating a downward and backward movement. The second figure has both arms raised to shoulder height, holding light wands, palms facing backward, with arrows indicating a downward and backward movement.	<p>Fig. 3 <u>MOVE FORWARD</u> Arms a little aside, palms facing backwards and repeatedly moved upward-backward from shoulder height.</p>

	<p>Fig. 4 <u>TURN TO THE LEFT</u> Point right arm downward, left arm repeatedly moved upward-backward. Speed of arm movement indicating rate of turn. Make fist in right hand to indicate apply break.</p>
	<p>Fig. 5 <u>TURN TO THE RIGHT</u> Point left arm downward, right arm repeatedly moved upward-backward. Speed of arm movement indicating rate of turn. Make fist in left hand to indicate apply break.</p>
	<p>Fig. 6 <u>SLOW-DOWN</u> Arms down with palms toward ground then moved up and down several times.</p>
	<p>Fig. 7 <u>SLOW-DOWN ENGINE(S) ON SIDE INDICATED</u> Arms down with palms toward ground, then either hand moved up and down several times to indicate which side should be slowed down.</p>
	<p>Fig. 8 <u>MOVE BACK</u> Arms by sides, palms facing forward, arms swept forward and upward repeatedly to shoulder height. Do not bend arms at the elbow.</p>

	<p>Fig. 9 <u>TURN WHILE BACKING-TAIL TO THE RIGHT</u> Point left arm down and right arm at side with palm facing forward, is swept forward and upward repeated to shoulder height. Do not bend arms at the elbow.</p>
	<p>Fig. 10 <u>TURN WHILE BACKING-TAIL TO THE LEFT</u> Point right arm down and left arm at side with palm facing forward, is swept forward and upward repeated to shoulder height. Do not bend arms at the elbow.</p>
	<p>Fig. 11 <u>CLEARANCE FOR PERSONNEL TO APPROCH AIRCRAFT</u> A beckoning motion with right hand at eye level.</p>
	<p>Fig. 12 <u>PERSONNEL APPROCH AIRCRAFT</u> Left hand raised vertically overhead, palm towards aircraft. The other hand indicates to personnel concerned and gestures towards aircraft.</p>
	<p>Fig. 13 <u>STOP</u> Arms crossed above the head, palms facing forward. This is the FAA signal for emergency stop.</p>

	<p>Fig. 14 <u>START ENGINES</u> Circular motion of right hand at head level with left arm pointing to engine. Number of fingers extended on left hand indicates engine to be started. Thumb of right hand extended to indicate prime.</p>
	<p>Fig. 15 <u>CUT ENGINES/ROTOR</u> Both arm and hand level with shoulder, hand moving across throat, palm downward.</p>
	<p>Fig. 16 <u>ABANDON AIRCRAFT</u> Simulate unfastening seat belt and shoulder straps and throwing them up and off.</p>
	<p>Fig. 17 <u>APU CONNECTED</u> Hands above head, left fist partially clenched, right hand moved in direction of left hand with first two fingers extended and inserted into the circle made by fingers of the left hand.</p>
	<p>Fig. 18 <u>APU DISCONNECTED</u> Hands above head, left fist partially clenched, right hand moved away from left hand, withdrawing first two fingers from circle made by fingers of the left hand.</p>

	<p>Fig. 19 <u>EXTERNAL STARTING AIR CONNECTED</u> Hands above head, left hand cupped, right fully clenched, right fist moved in direction of left hand and inserted into cup made by left hand.</p>
	<p>Fig. 20 <u>EXTERNAL STARTING AIR DISCONNECTED</u> Hands above head, left hand cupped, right fist moved away from left hand withdrawing fist from cup made by left hand.</p>
	<p>Fig. 21 <u>CHOCKS - INSERTED</u> Arms down, fists closed, thumbs extended inwards, swing arms from extended position inward.</p>
	<p>Fig. 22 <u>CHOCKS - REMOVED</u> Arms down, fists closed, thumbs extended outwards, swing arms outwards.</p>

	<p>Fig. 23 <u>LOWER WING FLAPS OR FLAPS ARE EXTENDED</u> Hands in front, palms together horizontally then opened from the wrist.</p>
	<p>Fig. 24 <u>RAISE WING FLAPS OR FLAPS ARE UP</u> Hands in front, horizontally, with palms open from the wrists, then closed.</p>
	<p>Fig. 25 <u>TAIL WHEEL/NOSE WHEEL LOCKED</u> Hands together overhead, palms open from the wrist in a vertical V, and then closed.</p>
	<p>Fig. 26 <u>TAIL WHEEL/NOSE WHEEL UNLOCKED</u> Hand overhead, palms together then opened from the wrists to form a vertical V.</p>
	<p>Fig. 27 <u>TILLER BAR/STEERING ARM IN PLACE</u> Hold nose with left hand, right hand moving horizontally at waist level.</p>

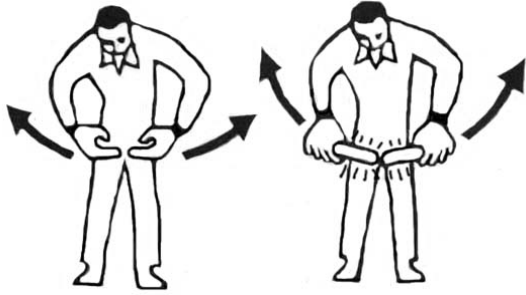


Fig. 28 **WEAPON BAY OPEN**
 Body bent forward at the waist, hands held with fingertips touching in front of body and elbow bent at approx. 45 degrees then arms swing downwards and outwards.



Fig. 29 **WEAPON BAY CLOSED**
 Body bent forward at the waist and arms extend horizontally, then arms swung downwards and in until fingertips touch in front of body and elbows bent at approx. 45 degrees.



Fig. 30 **AFFIRMATIVE (ALL CLEAR)**
 Hand raised and thumb up.



Fig. 31 **NEGATIVE (NOT CLEAR)**
 Arm held out and thumb down.

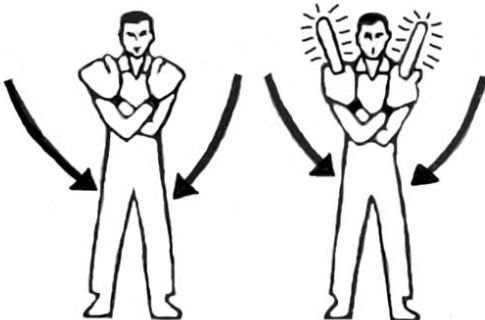
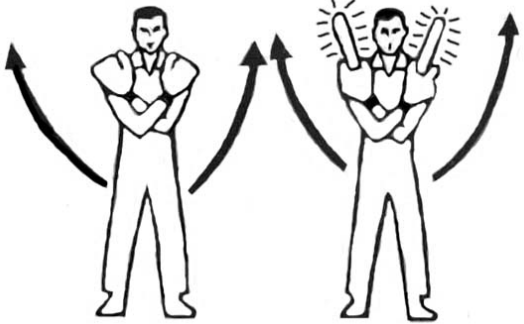
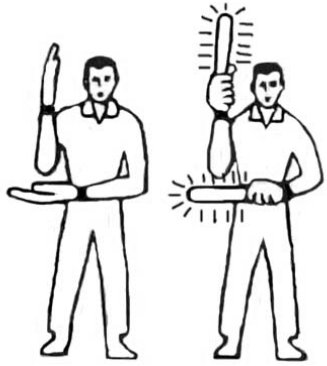
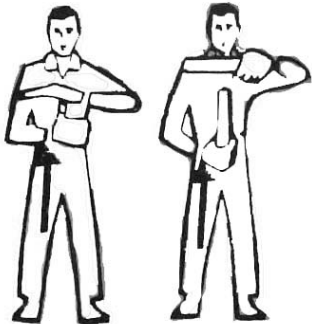
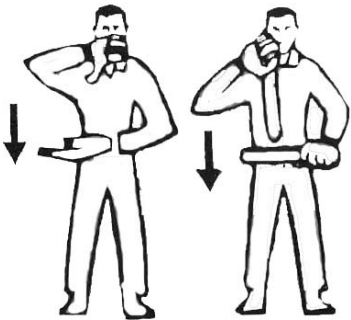
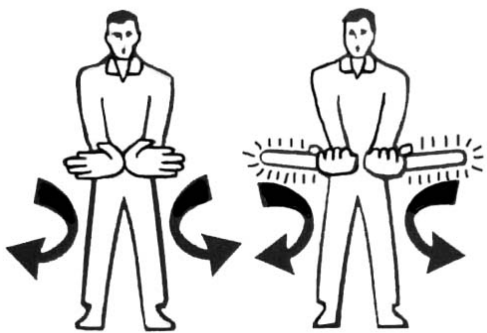
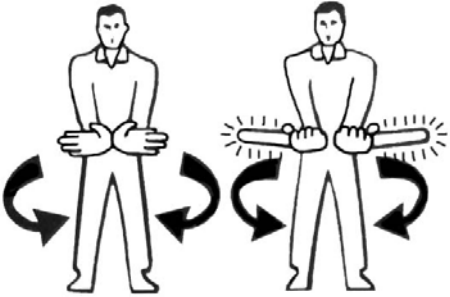

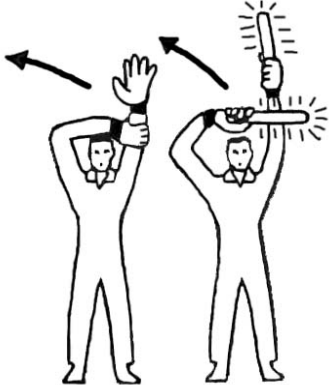
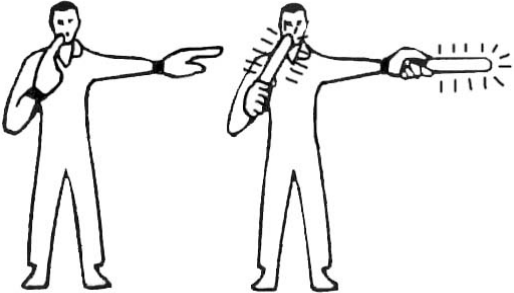
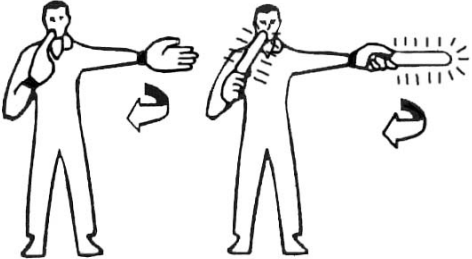


Fig. 32 **FOLD WINGS/HELO BLADES SWEEP WINGS BACK**
 Arms straight out at sides, then swept forward and hugged around shoulders.

	<p>Fig. 33 <u>SPREAD WINGS/HELO</u> <u>BLADES SWEEP WINGS FORWARD</u> Arms hugged around shoulders, then swept straight out to the sides.</p>
	<p>Fig. 34 <u>LOCK WINGS/HELO BLADES</u> Hit right elbow with palm of left hand.</p>
	<p>Fig. 35 <u>TAIL HOOK UP</u> Right fist, thumb extended upward raised to meet horizontal palm of left hand.</p>
	<p>Fig. 36 <u>TAIL HOOK DOWN</u> Right fist, thumb extend downward lowered to meet horizontal palm of left hand.</p>
	<p>Fig. 37 <u>AIRSPEED BRAKES OPEN</u> Hands in front, palms together vertically, then opened from the wrists.</p>

	<p>Fig. 38 <u>AIRSPEED BRAKES CLOSED</u> Hands in front, vertically with palms open from the wrists, then closed.</p>
	<p>Fig. 39 <u>LANDING GEAR PINS INSTALLED</u> With arms above head, the right hand clasps left forearm.</p>
	<p>Fig. 40 <u>LANDING GEAR PINS REMOVED</u> With arms and hands in the “INSTALLED” position, the right hand unclasps left forearm.</p>
	<p>Fig. 41 <u>ENGAGE NOSE GEAR STEERING</u> Point to nose with the index finger while indicating direction of turn with the other index finger.</p>
	<p>Fig. 42 <u>DISENGAGE NOSE GEAR STEERING</u> Point to nose with the index finger, lateral wave with open palm of other hand at shoulder height.</p>

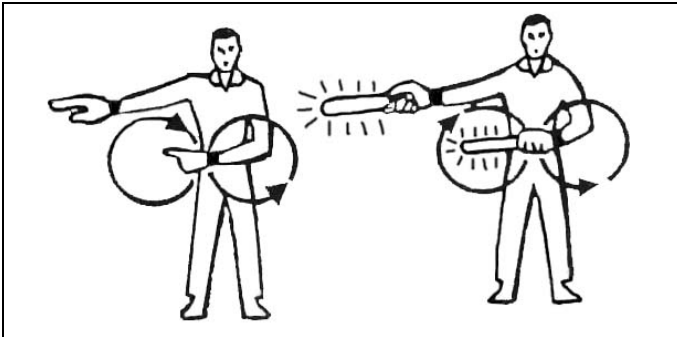


Fig. 43 **FIRE IN ENGINE OR APU**
 Make rapid horizontal figure-eight motion at waist level with either arm, pointing at source of fire with the other hand.

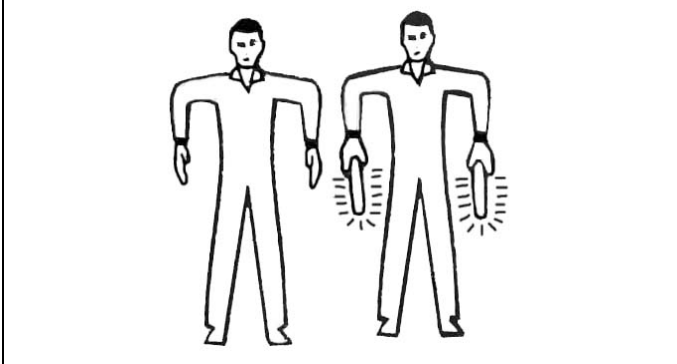


Fig. 44 **HOT BRAKES**
 Arms extended with forearm perpendicular to ground. Palms facing body.

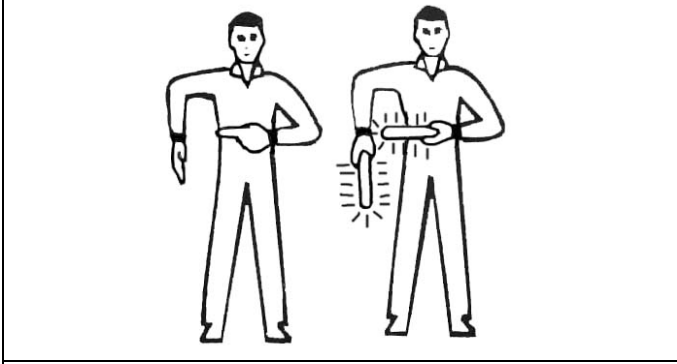


Fig. 45 **HOT BRAKES LEFT SIDE**
 Arms extended with forearm perpendicular to ground. Gesture indicates left side.

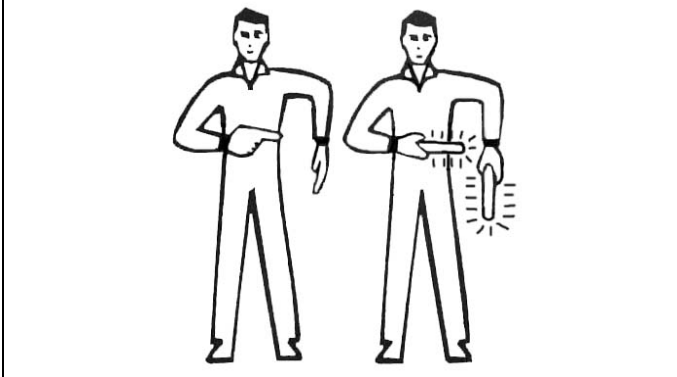
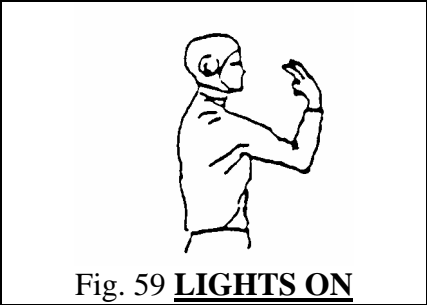
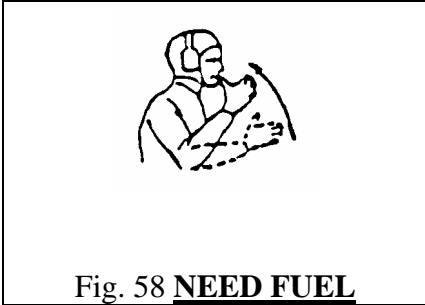


Fig. 46 **HOT BRAKES RIGHT SIDE**
 Arms extended with forearm perpendicular to ground. Gesture indicates right side.



Hand Signals

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