

SCALE HELICOPTER



FLIGHT MANEUVERS

AMA 518

ABBREVIATIONS AND ACRONYMS



Ground

m

Meter

ft.

Feet

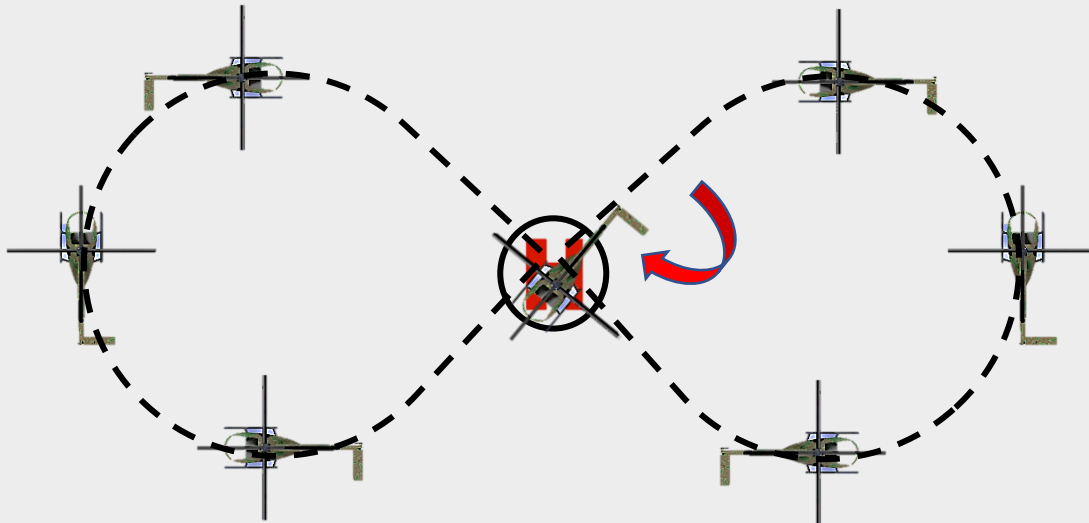
MPH

Miles per hour

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TOP VIEW

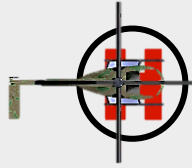
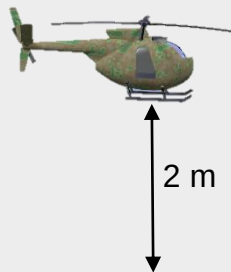


SIDE VIEW

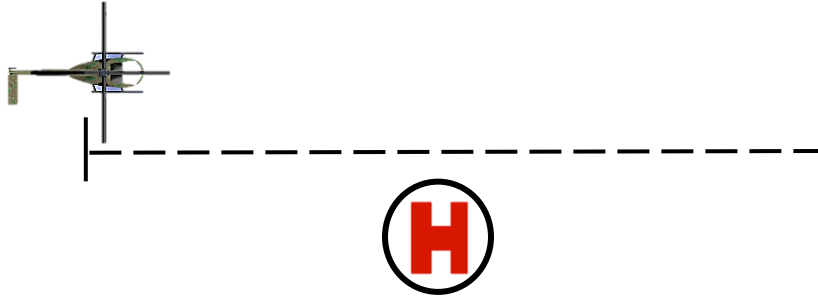
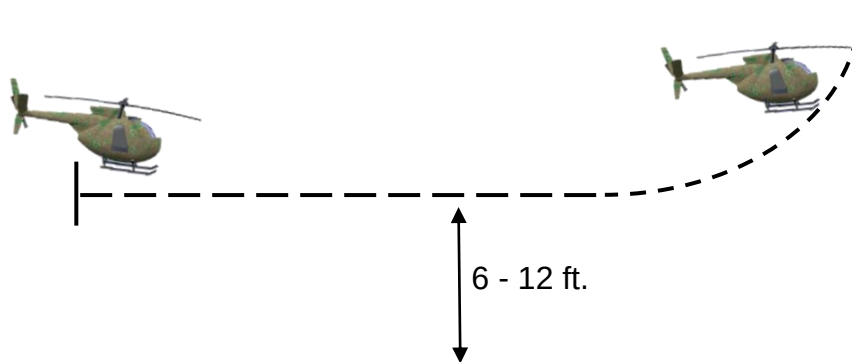


ⓐ

SPEED	Scale Speed
DURATION	
ALTITUDE	
NOTES	NO CHANGE IN SPEED-ALTITUDE
	Both loops should be same size and shape

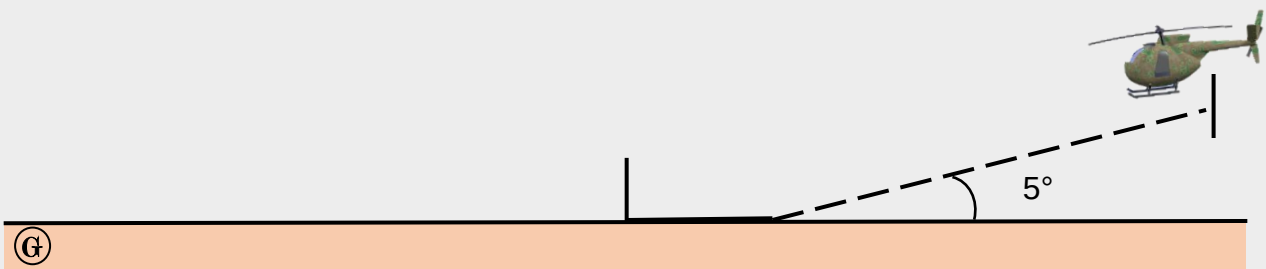
FLIGHT MANEUVER # 02**HOVERING AUTO****TOP VIEW****SIDE VIEW**

SPEED	
DURATION	
ALTITUDE	6 Feet
NOTES	POWER OFF
	Land on pad

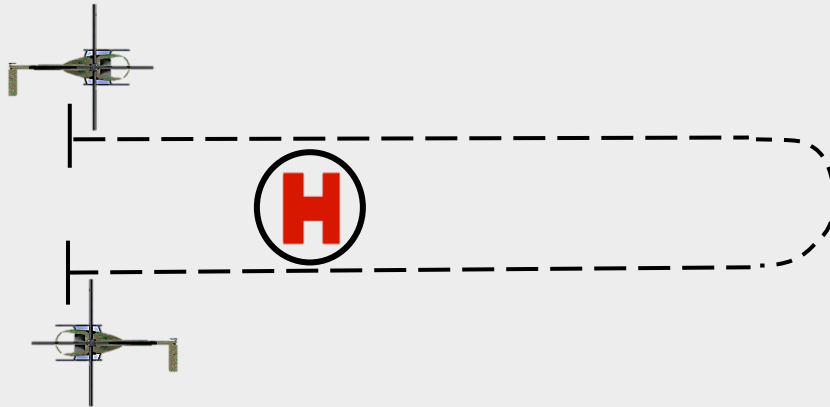
FLIGHT MANEUVER # 03
STALL TURN
TOP VIEW

SIDE VIEW


Ⓔ

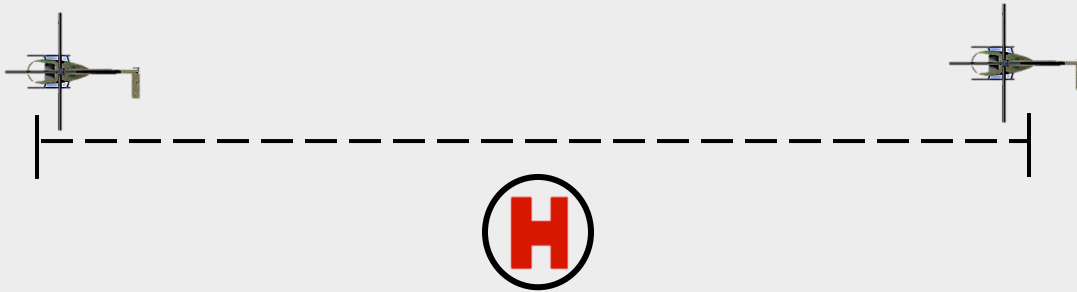
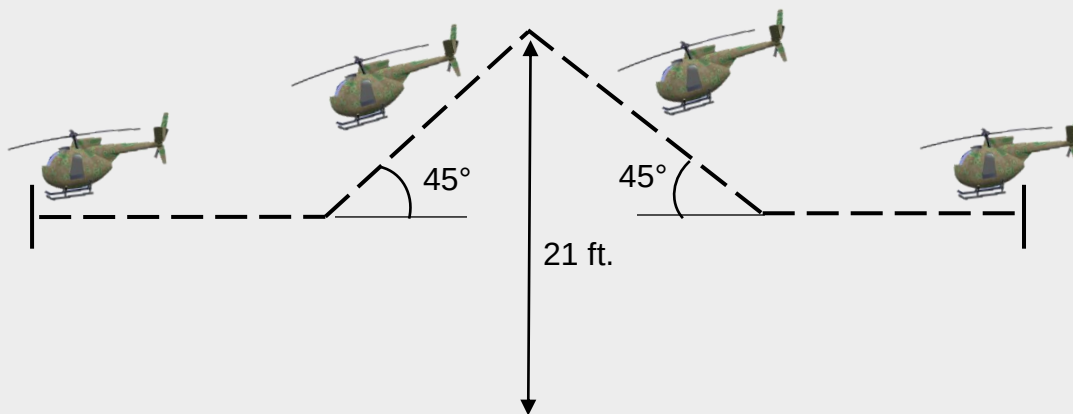
SPEED	20 MPH
DURATION	
ALTITUDE	6-12 FT START
NOTES	Heli 90 degree to ground when 180 degree pedal turn is made. Enter and exit at the same altitude

FLIGHT MANEUVER # 04**RUN ON LANDING****TOP VIEW****SIDE VIEW**

SPEED	WALKING
DURATION	25 METERS
ALTITUDE	
NOTES	MODEL SHOULD SLIDE AFTER REACHING THE
	GROUND
	Finish at pad

FLIGHT MANEUVER # 05**RETURN TO TARGET****TOP VIEW****SIDE VIEW****Ⓜ**

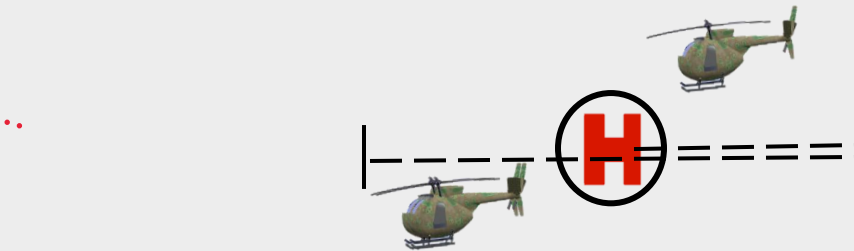
SPEED	20 MPH
DURATION	
ALTITUDE	6-12 FT START
NOTES	Enter and exit at same altitude

FLIGHT MANEUVER # 06
PUSH OVER
TOP VIEW

SIDE VIEW


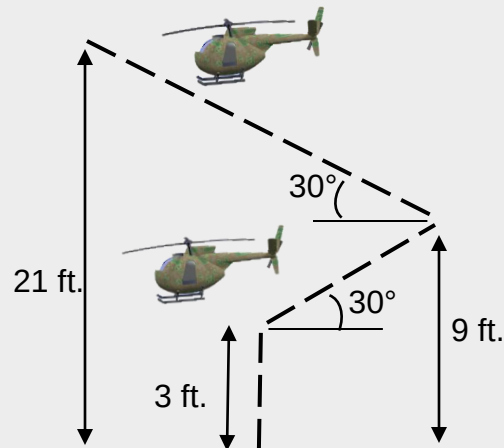
©

SPEED	20 MPH
DURATION	
ALTITUDE	START 6 FT PEAK 21 FT FINISH 6 FT
NOTES	Enter and exit at same altitude

TOP VIEW



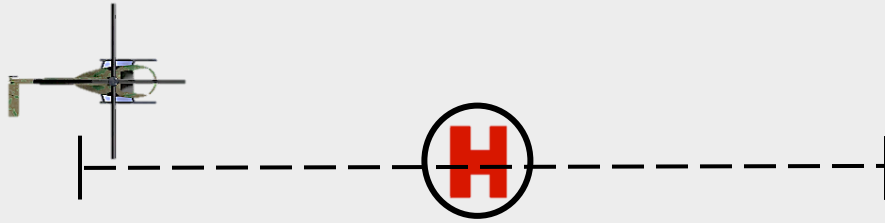
SIDE VIEW



Ⓜ

SPEED	WALKING
DURATION	
ALTITUDE	3 FT, 9 FT, 21 FT
NOTES	Heli heads into the wind and climbs to 3 ft then backs up
	@ 30 degrees to a height of 9 ft, then climbs
	out @30 degree to 21 ft

TOP VIEW



SIDE VIEW



Ⓔ

SPEED	FAST WALK
DURATION	
ALTITUDE	6 FT-2 METERS
NOTES	NO CHANGE IN ALTITUDE,
	PARALLEL TO FLIGHT LINE
	NO CHANGE IN SPEED

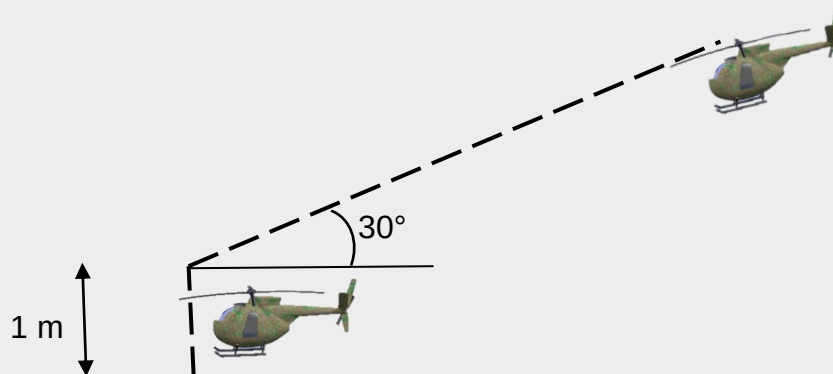
FLIGHT MANEUVER # 09

NORMAL LANDING

TOP VIEW



SIDE VIEW



Ⓜ

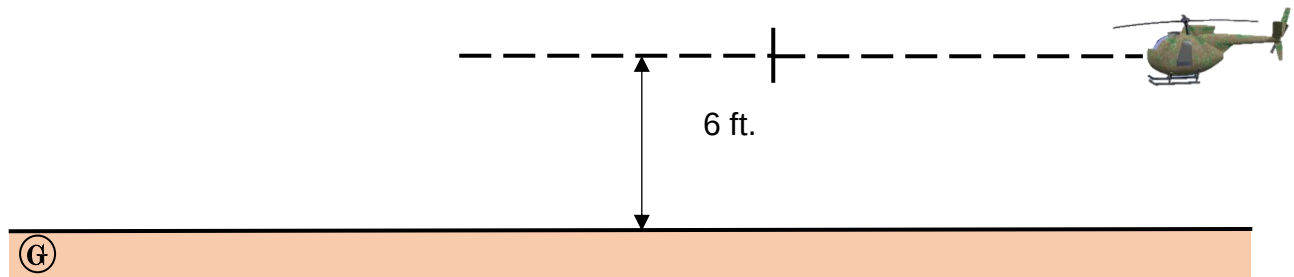
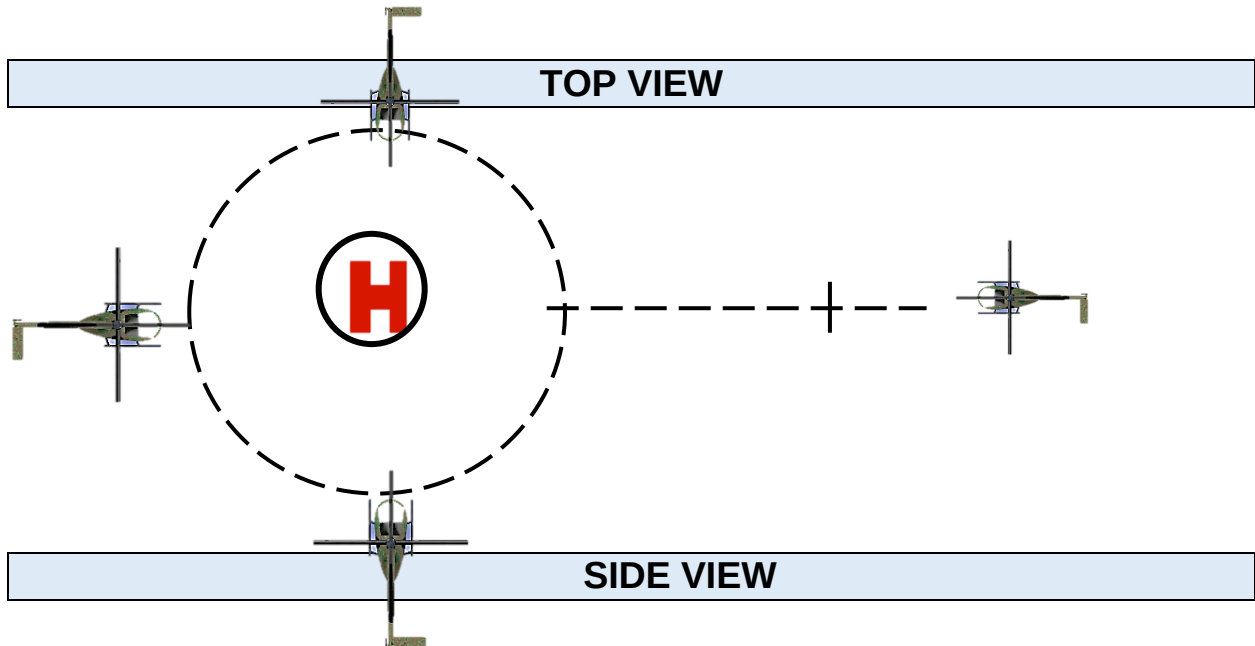
SPEED	FAST WALK
DURATION	25 METERS
ALTITUDE	
NOTES	Land on pad

FLIGHT MANEUVER # 10**NOSE IN HOVER****TOP VIEW****SIDE VIEW****ⓐ**

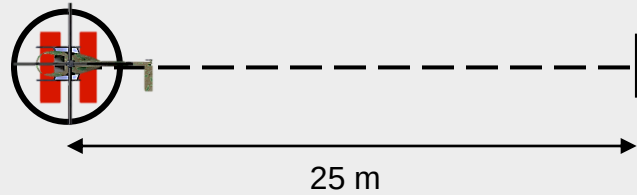
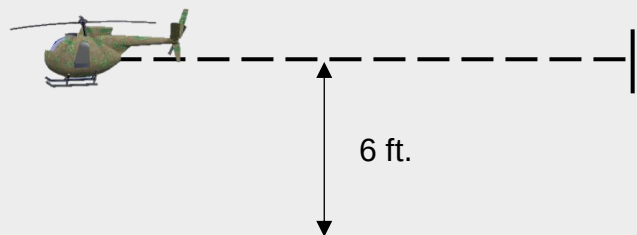
SPEED	NONE
DURATION	15 SECONDS
ALTITUDE	6 FT
NOTES	NO MOVEMENT

FLIGHT MANEUVER # 11

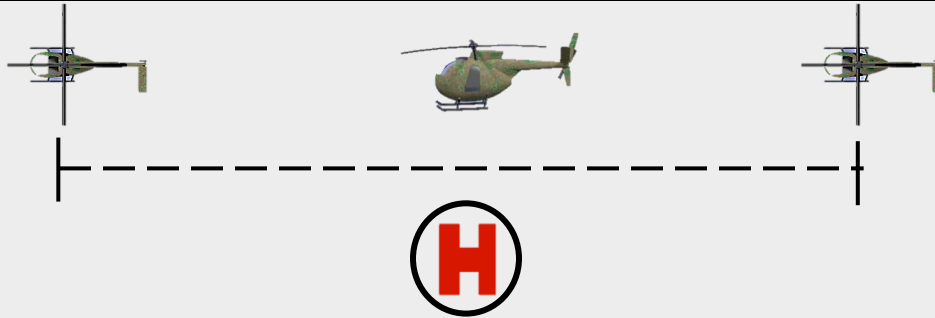
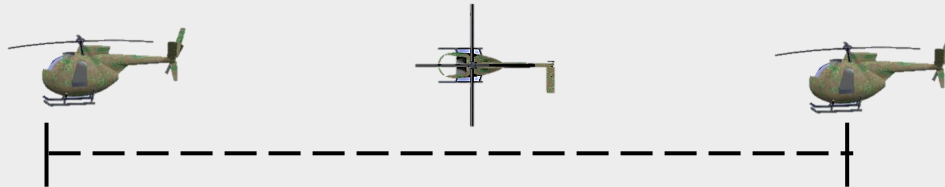
PEDAL TURN



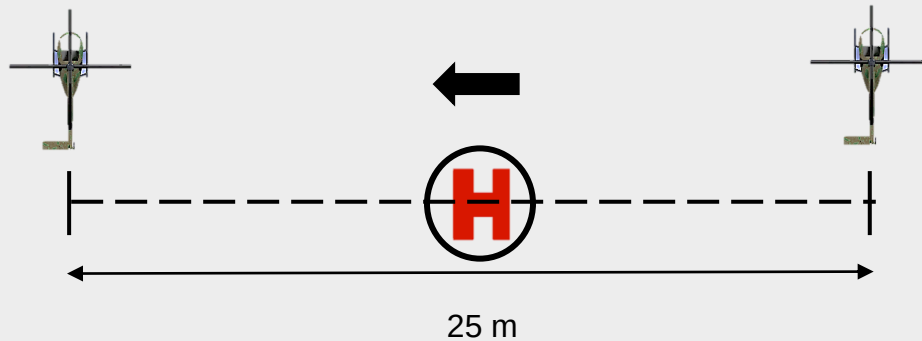
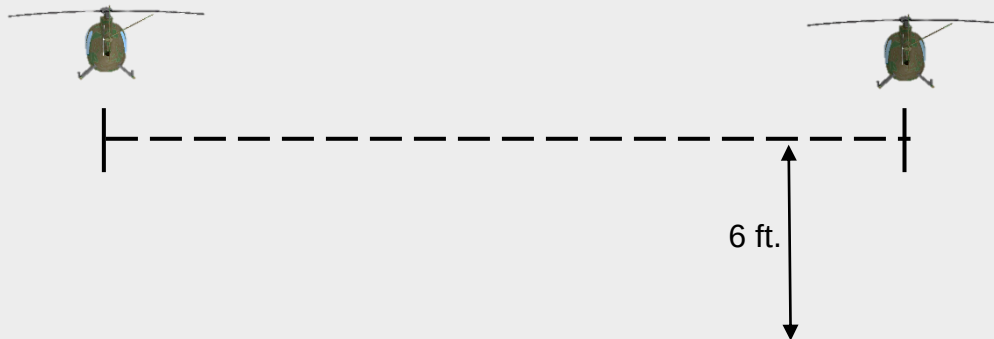
SPEED	Walking
DURATION	
ALTITUDE	6 FT
NOTES	NO CHANGE OF ALTITUDE OR SPEED
	Heli nose points at heli pad during maneuver

FLIGHT MANEUVER # 12**QUICK STOP****TOP VIEW****SIDE VIEW****Ⓞ**

SPEED	WALKING
DURATION	25 METERS
ALTITUDE	6 FT- 2 METERS
NOTES	HELI TRAVELS AT WALKING SPEED AND STOP
	QUICKLY BECAUSE OF HAZARD WITH NO CHANGE IN
	ALTITUDE

FLIGHT MANEUVER # 13**ROLL****TOP VIEW****SIDE VIEW****Ⓔ**

SPEED	Scale flying speed
DURATION	
ALTITUDE	SAFE
NOTES	NO CHANGE IN ALTITUDE

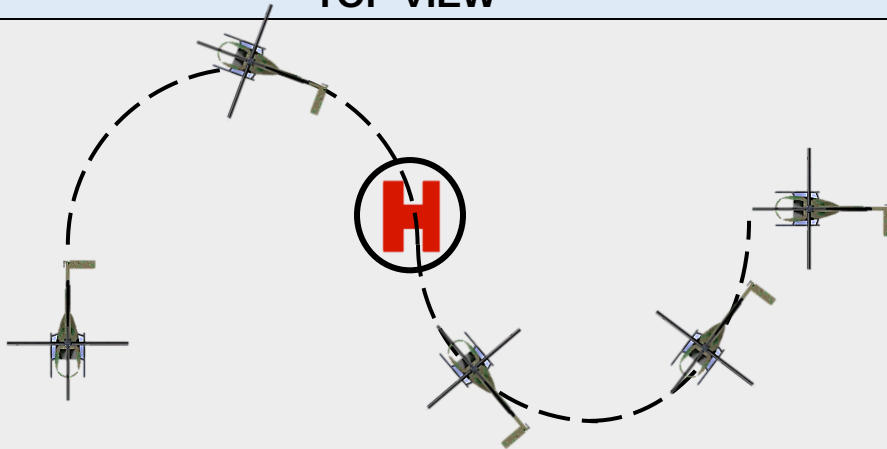
FLIGHT MANEUVER # 14**SIDE WAYS FLYBY****TOP VIEW****SIDE VIEW****Ⓔ**

SPEED	FAST WALK
DURATION	25 METERS – 75 FT
ALTITUDE	6 FT – 2 METERS
NOTES	NO CHANGE IN ALTITUDE AND SPEED
	PARALLEL TO FLIGHT LINE
	TAIL STAYS AT 90° TO FLIGHT LINE

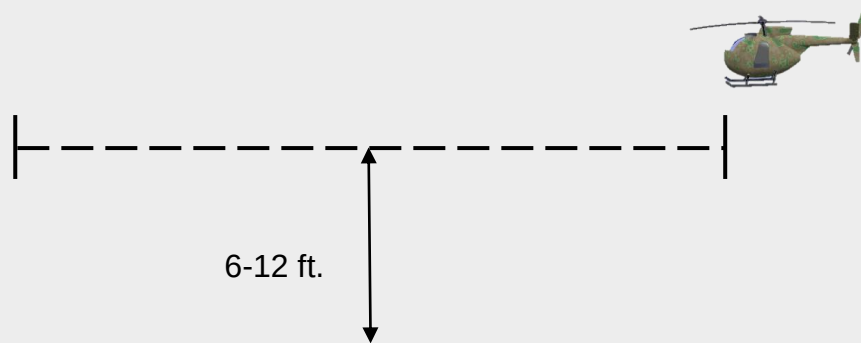
FLIGHT MANEUVER # 15

S TURN

TOP VIEW



SIDE VIEW



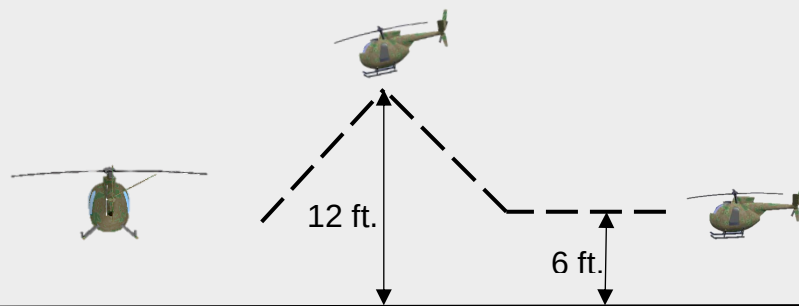
Ⓔ

SPEED	Scale flying speed
DURATION	
ALTITUDE	6-12 FT, 2-4 METER
NOTES	No change in altitude, both turns same shape and size

TOP VIEW

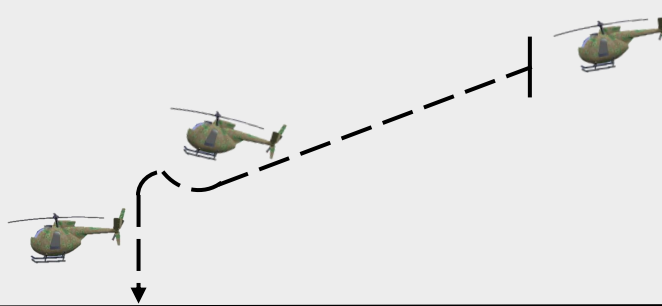


SIDE VIEW

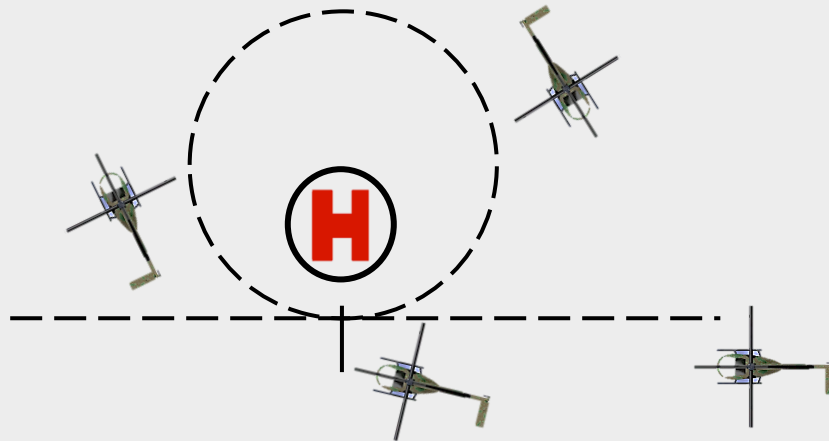
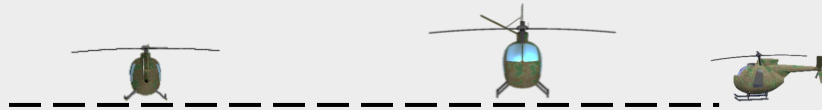


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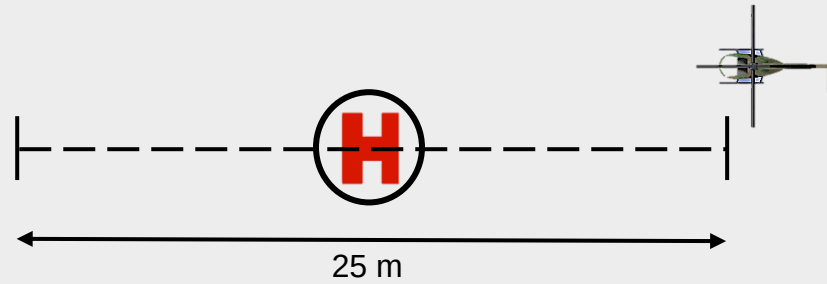
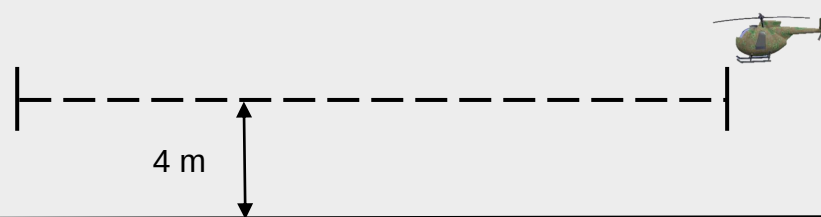
SPEED	WALKING
DURATION	25 METERS
ALTITUDE	6-12 FT
NOTES	Heli turns 90 degrees when it reaches 6ft

FLIGHT MANEUVER # 17**AUTO ROTATION TO LANDING****TOP VIEW****SIDE VIEW****ⓐ**

SPEED	
DURATION	
ALTITUDE	Start at a minimum of 21 ft
NOTES	POWER OFF
	Land on pad

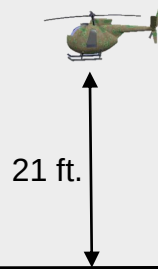
FLIGHT MANEUVER # 18
CIRCLE
TOP VIEW

SIDE VIEW

Ⓒ

SPEED	
DURATION	
ALTITUDE	6-12 FT 2-4 METER
NOTES	NO CHANGE IN ALTITUDE SPEED
	Nose points towards flight direction

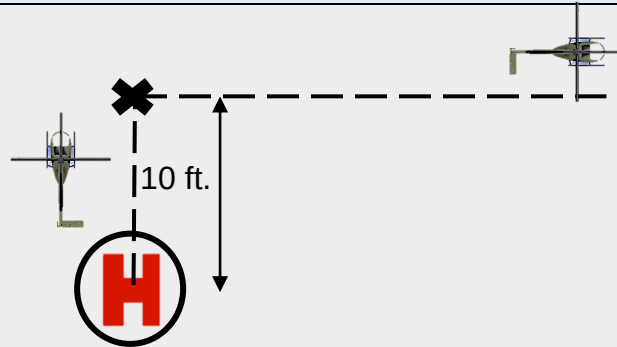
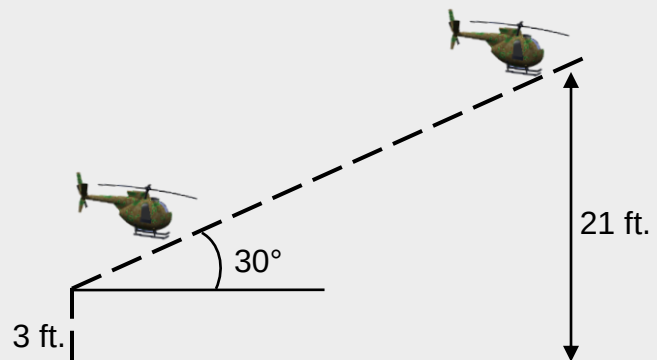
FLIGHT MANEUVER # 19**FAST FLY BY****TOP VIEW****SIDE VIEW**

Ⓒ

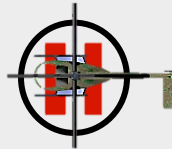
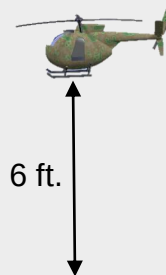
SPEED	20 MPH
DURATION	25 METERS – 75 FT
ALTITUDE	4 METER- 12 FT
NOTES	NO CHANGE IN SPEED AND ALTITUDE

FLIGHT MANEUVER # 20**HIGH HOVER****TOP VIEW****SIDE VIEW**

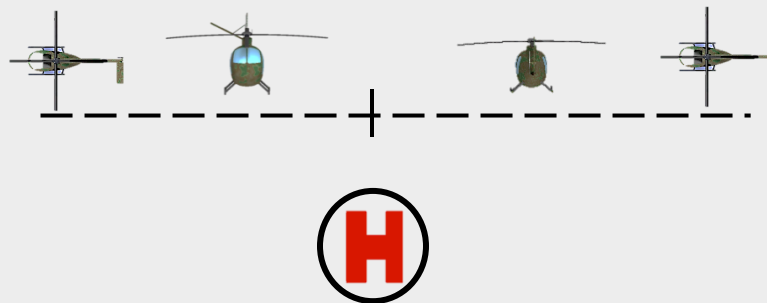
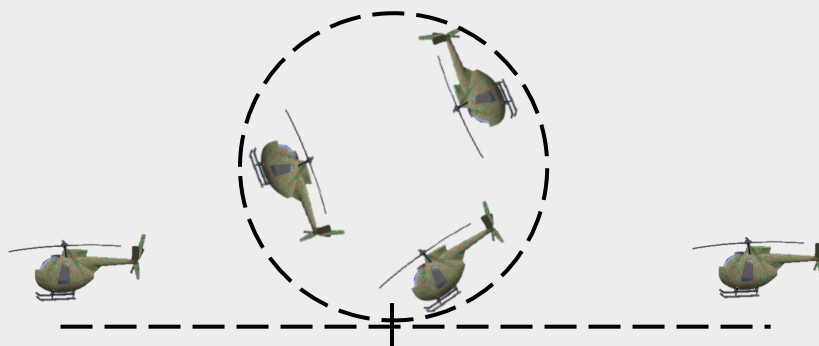
SPEED	
DURATION	15 SEC
ALTITUDE	21 FT – 7 METER
NOTES	Solid stable hover, No movement of heli

FLIGHT MANEUVER # 21**HOVER TAXI- CLEARING TURNS****TOP VIEW****SIDE VIEW****ⓐ**

SPEED	WALKING SPEED
DURATION	FINISH AT 21 FT
ALTITUDE	TAXI AT 3 FT – FINISH AT 21 FT
NOTES	TAXI OUT – STOP TURN 45° TOWARD TAKE OFF
	DIRECTION – TURN 90° TO CHECK TRAFFIC – TURN
	TO DEPART

FLIGHT MANEUVER # 22**HOVERING PIROUETTE****TOP VIEW****SIDE VIEW****Ⓞ**

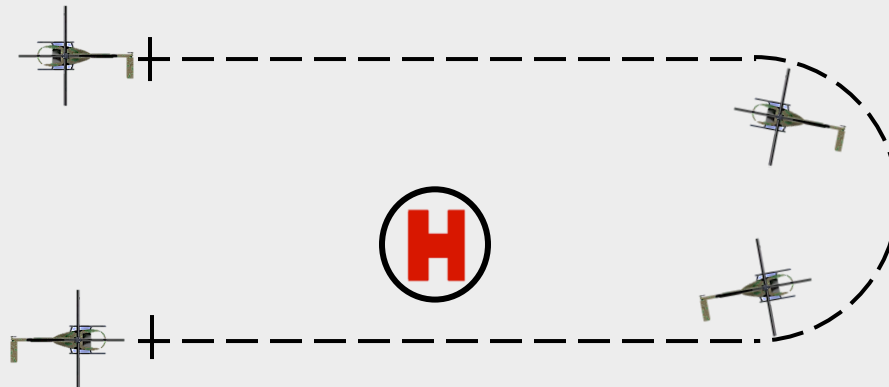
SPEED	NONE
DURATION	
ALTITUDE	6 FT
NOTES	MOVE AROUND A POINT
	NO CHANGE IN ALTITUDE

FLIGHT MANEUVER # 23
LOOP
TOP VIEW

SIDE VIEW


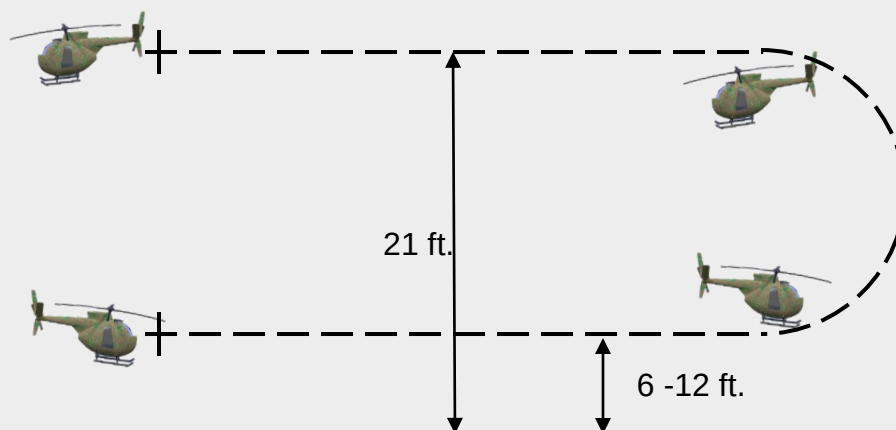
Ⓞ

SPEED	Scale flight speed
DURATION	
ALTITUDE	SAFE
NOTES	ENTER AND EXIT SAME ALTITUDE

TOP VIEW



SIDE VIEW



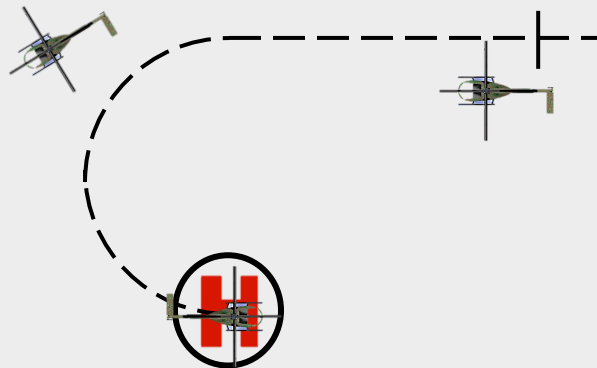
Ⓒ

SPEED	20 MPH
DURATION	
ALTITUDE	START 6 -12 FT, FINISH AT 21 FT
NOTES	

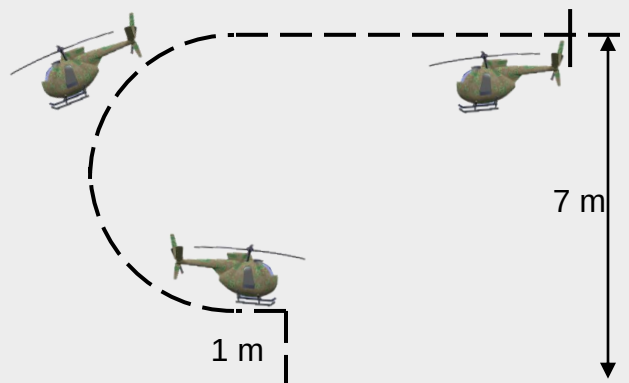
FLIGHT MANEUVER # 25

180° DECENT TO LANDING

TOP VIEW

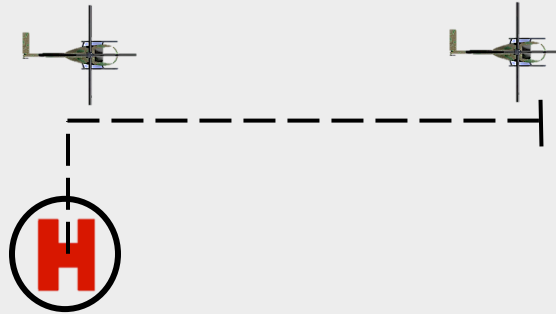
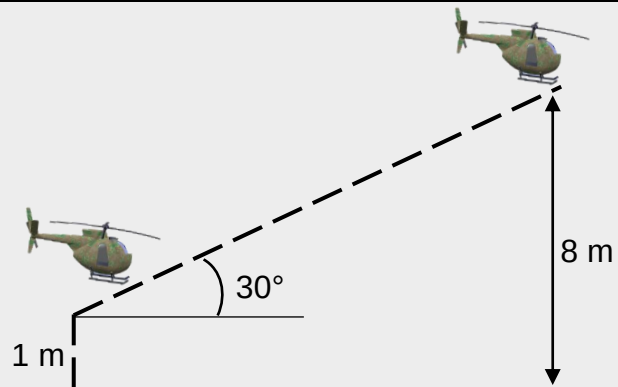


SIDE VIEW

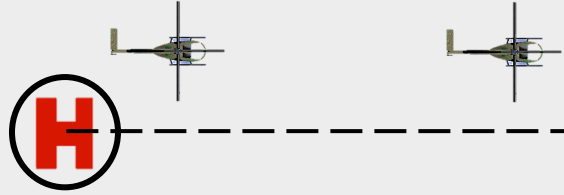
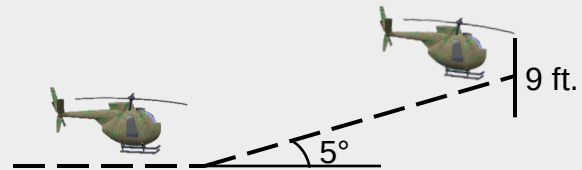


Ⓒ

SPEED	Scale flying speed
DURATION	
ALTITUDE	Start @ 21 ft
NOTES	land on pad

FLIGHT MANEUVER # 26**HOVER TAXI WITH NORMAL TAKE OFF****TOP VIEW****SIDE VIEW****Ⓔ**

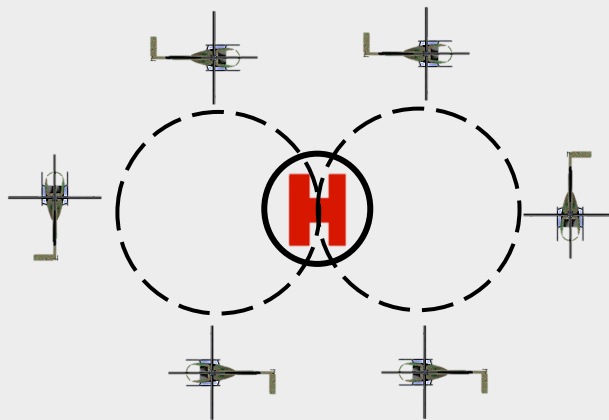
SPEED	WALKING
DURATION	END AT 24 FT / 8 METERS
ALTITUDE	
NOTES	HOVER TAXI FOR 10 FT @ 3 FT THEN TAKE OFF
	Start @ 3 ft hover over heli pad

FLIGHT MANEUVER # 27
GROSS WEIGHT TAKE OFF
TOP VIEW

SIDE VIEW


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SPEED	WALKING
DURATION	FINISH AT 9 FT
ALTITUDE	0 TO 9 FT
NOTES	HELI NEED TO SLIDE on ground BEFORE TAKING OFF

TOP VIEW



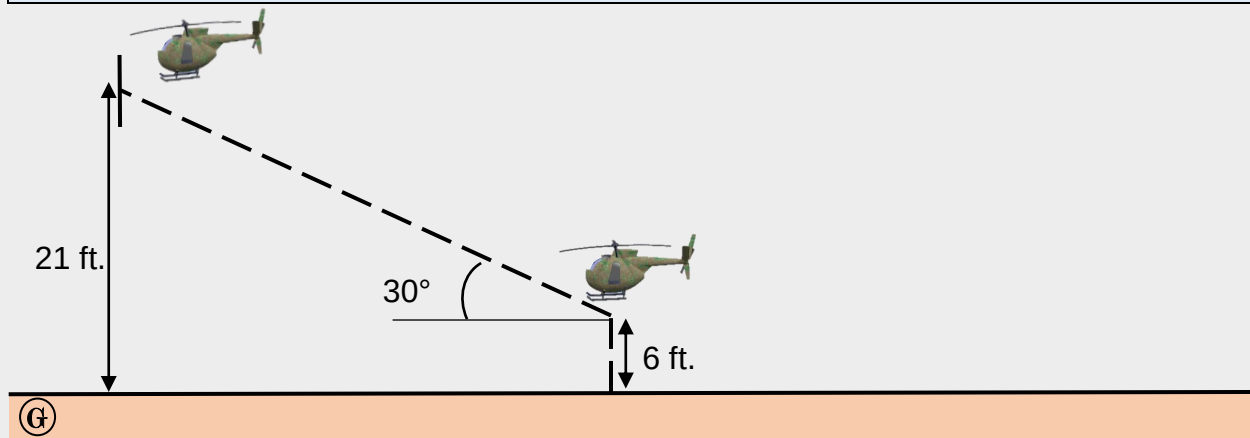
SIDE VIEW



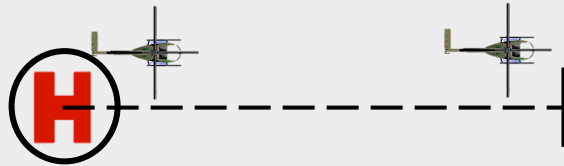
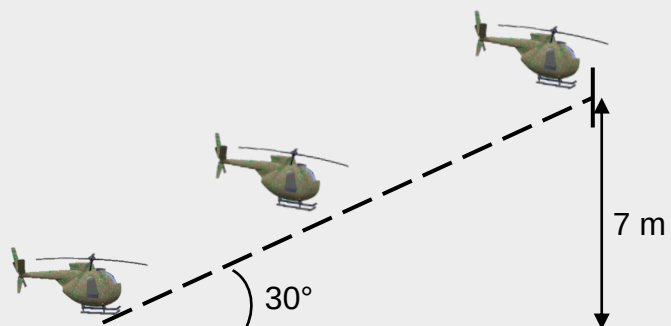
Ⓔ

SPEED	Scale speed
DURATION	
ALTITUDE	pilots choice
NOTES	NO CHANGE IN SPEED AND ALTITUDE
	Both circles same size and shape

FLIGHT MANEUVER # 29
CONFINED TAKE OFF
TOP VIEW

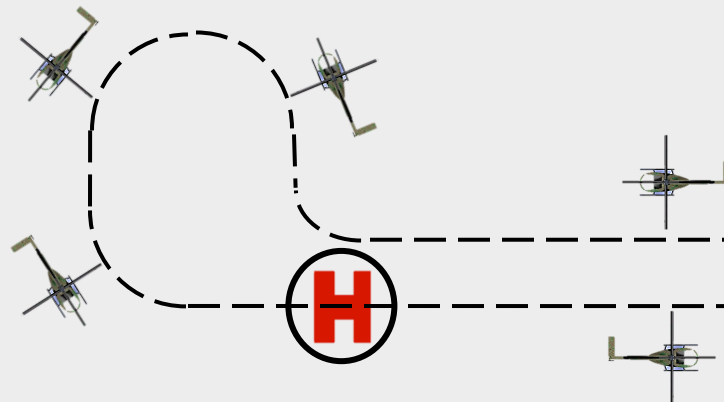
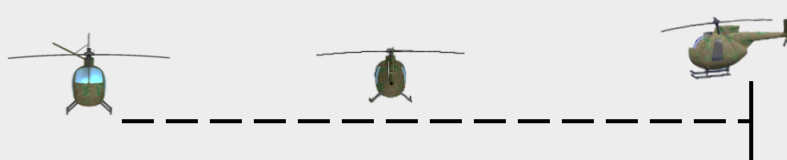
SIDE VIEW


SPEED	WALKING
DURATION	END AT 21 FT- 7 METERS
ALTITUDE	
NOTES	Heli climbs to 6ft before climbing out

FLIGHT MANEUVER # 30
NORMAL TAKE OFF
TOP VIEW

SIDE VIEW


Ⓜ

SPEED	WALKING
DURATION	
ALTITUDE	FINISH AT 7 METER - 21 FT
NOTES	NO CHANGE IIN SPEED OR LINE

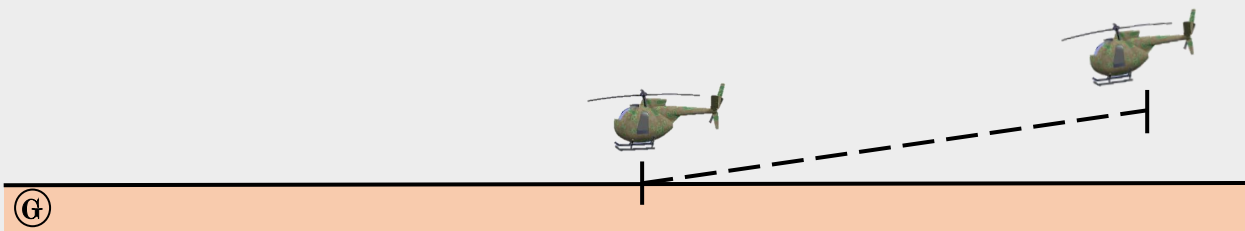
FLIGHT MANEUVER # 31**MISSED APPROACH****TOP VIEW****SIDE VIEW****Ⓞ**

SPEED	10-15 MPH
DURATION	25 METERS
ALTITUDE	6 - 12 FT
NOTES	NO CHANGE IN ALTITUDE AND SPEED

TOP VIEW



SIDE VIEW



SPEED	WALKING
DURATION	25 METERS
ALTITUDE	
NOTES	Land on pad