

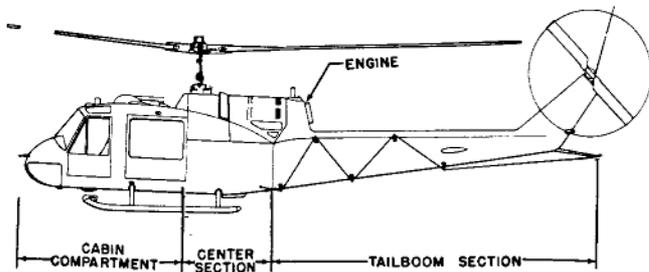
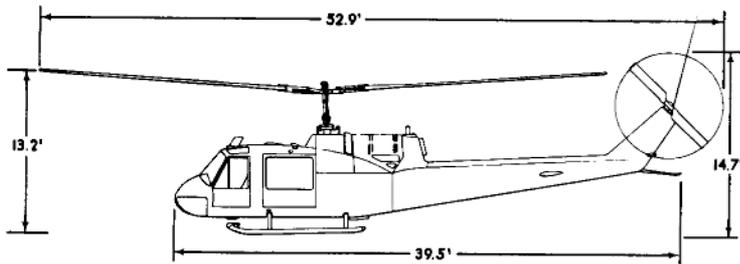
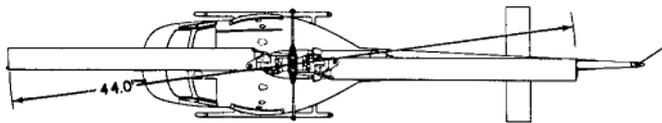
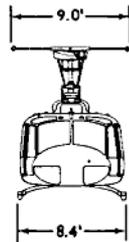


STANDARD AIRCRAFT CHARACTERISTICS

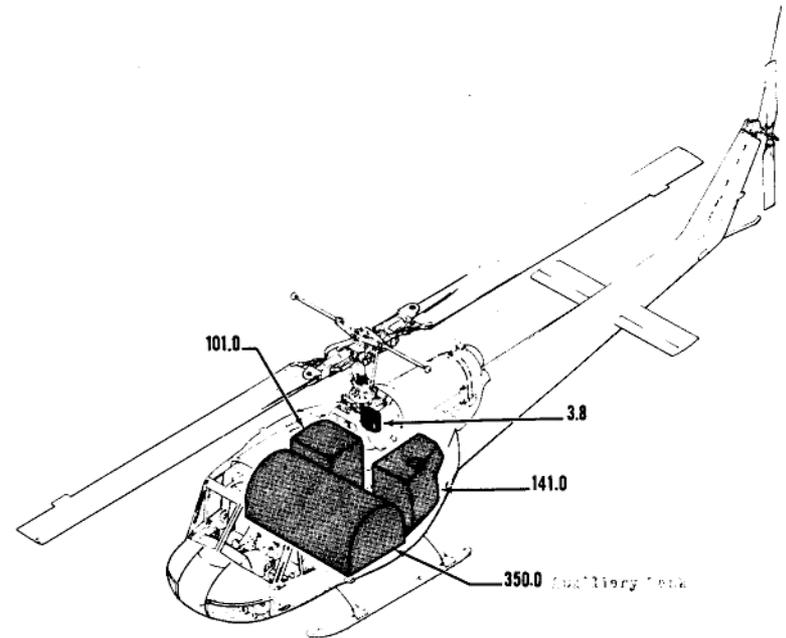
UH-1E(540)

BELL

Disc Area	1520.0 sq ft	Airfoil Section(Root to Tip)
Blade Area	99.0 sq ft	9-1/3% Sym Section Special
Engine/Rotor Gear Ratio	20.4:1	Chord(Root to Tip)=27.0 in.



DESCRIPTIVE ARRANGEMENT



Fuel (Gal)

Oil (Gal)

TANKAGE

POWER PLANT	MISSION AND DESCRIPTION	WEIGHTS																																															
<p>No. and Model.....(1) T53-L-11 Mfg.....Lycoming Engine Spec. No.....104.28 Type.....Free Power Turbine Red. Gear Ratio.....0.3119 Tail Pipe.....Fixed Area Augmentation.....None</p> <p style="text-align: center;">RATINGS</p> <table border="1"> <thead> <tr> <th>SEA LEVEL STD</th> <th>SHP</th> <th>NET JET THRUST (13)</th> <th>RPM</th> <th>MIN</th> </tr> </thead> <tbody> <tr> <td>T.O.</td> <td>1100</td> <td>124</td> <td>6610</td> <td>5</td> </tr> <tr> <td>MIL.</td> <td>1000</td> <td>115</td> <td>6610</td> <td>30</td> </tr> <tr> <td>NOR.</td> <td>900</td> <td>107</td> <td>6600</td> <td>Cont.</td> </tr> </tbody> </table>	SEA LEVEL STD	SHP	NET JET THRUST (13)	RPM	MIN	T.O.	1100	124	6610	5	MIL.	1000	115	6610	30	NOR.	900	107	6600	Cont.	<p>The basic mission of the UH-1E(540) are visual observation and target acquisition, reconnaissance and command control. The UH-1E(540) is capable of flight from established airfields, carriers of the LPH and CVS class, advanced bases, areas of ships with individual landing platforms of limited landing facilities, and from unprepared fields. It may be handled on carrier elevators without any folding of components.</p> <p>In addition, the UH-1E(540) may be used for medical evacuation, to transport personnel, special teams or crews, equipment and supplies. By the attachment of appropriate weapons it is possible to deliver point target and area fire.</p> <p>The gas turbine powered UH-1E(540) is of compact design having a low silhouette. The two-bladed main and tail rotors are of all metal construction. The fuselage is of semi-monocoque construction.</p> <p>The cabin has large sliding doors, allowing straight-through loading. Litters may be loaded from either side or from both sides simultaneously. The cargo floor is knee high for easy loading. The copilot's controls are easily removed; thus providing accommodations for a passenger in the copilot seat or when the copilot seat is removed, an additional 8.75 square feet of cargo area for a total of 47.2 square feet.</p>	<table border="1"> <thead> <tr> <th>LOADING</th> <th>LB.</th> <th>L.F.</th> </tr> </thead> <tbody> <tr> <td>Empty</td> <td>5450</td> <td></td> </tr> <tr> <td>Basic</td> <td>5610</td> <td></td> </tr> <tr> <td>Design</td> <td>6600</td> <td>3.0</td> </tr> <tr> <td>Combat</td> <td>7029*</td> <td>2.3</td> </tr> <tr> <td>Max. T.O.</td> <td>9500</td> <td>2.1</td> </tr> <tr> <td>Max. Land</td> <td>9500</td> <td></td> </tr> </tbody> </table> <p style="text-align: center;">*For Basic Mission</p>	LOADING	LB.	L.F.	Empty	5450		Basic	5610		Design	6600	3.0	Combat	7029*	2.3	Max. T.O.	9500	2.1	Max. Land	9500							
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PERFORMANCE SUMMARY

TAKE-OFF LOADING CONDITION	① CLEAN	② TRANSPORT CARGO	③ OVERLOAD TRANSPORT CARGO	④ MEDICAL EVACUATION	⑤ PERRY
TAKE-OFF WEIGHT lb.	7687	8287	8500	7749	9600
Fuel internal (JP-5) lb./lb.	1645	1645	1645	1645	3656
Payload lb.	0	800	1013	400	0
Disc loading lb./sq.ft.	5.05	5.45	5.59	5.09	6.25
Vertical rate of climb at S.L. (A) fpm.	930	450	280	900	0
Absolute hovering ceiling (OGE) (A) ft.	5800	2600	1500	5500	0
Max. rate of climb at S.L. (A) fpm.	1470	1260	1175	1440	890
Service ceiling (B) ft.	15100	12700	11800	14900	8000
Speed at S.L. (B) kn.	113	111	110	114	104
Max. speed/altitude (B) kn./ft.	117/4000	113/4000	112/3000	117/4000	105/2000
O.E.I. Service ceiling ft.	-	-	-	-	-
Min. speed (O.E.T.) kn.	-	-	-	-	-
Max. Speed (O.F.I.) kn.	-	-	-	-	-
Combat radius n.mi.	116	116	115	122	-
Mission time (C) hrs.	2.13	2.09	2.08	2.15	-
Average cruising speed kn.	113	113	112	120	-
Cruising altitude ft.	SL	SL	SL	5000	-
Range n.mi.	221	216	214	-	634
Average cruising speed kn.	113	112	112	-	105
Cruising altitude ft.	SL	SL	SL	-	1000
Maximum endurance HRS.	3.12	2.76	-	-	-
Endurance speed kn.	45	-	-	-	-
Endurance altitude ft.	SL	SL	-	-	-

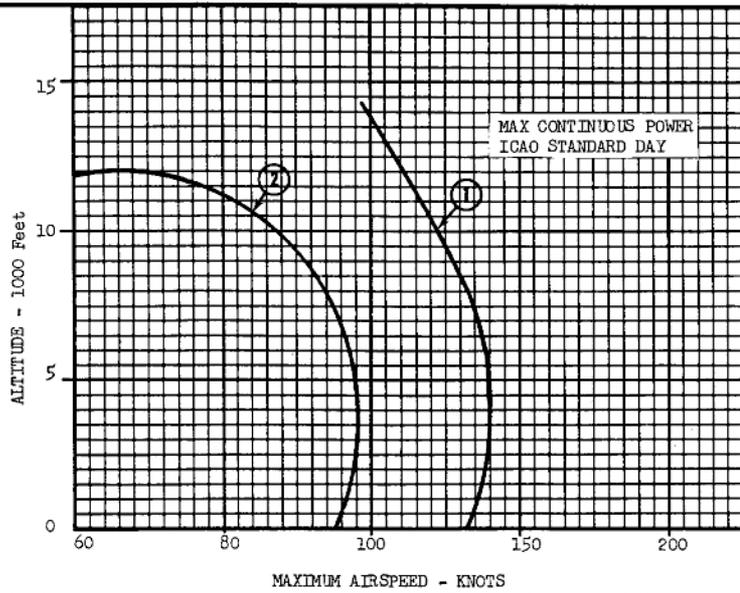
NOTES

- (A) Military rated power
 (B) Maximum continuous power
 (C) Mission time - Time in air (excludes time before start of enroute climb and reserve, unless otherwise specified and noted.)

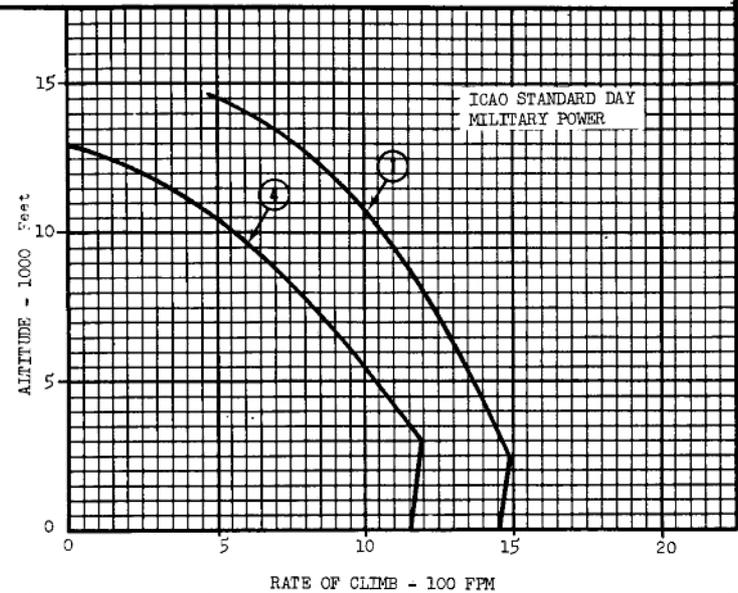
Performance Basis:

- (1) All performance at standard day conditions.
 (2) Aerodynamic flight test data.
 (3) Engine specification fuel consumption increased 5%.

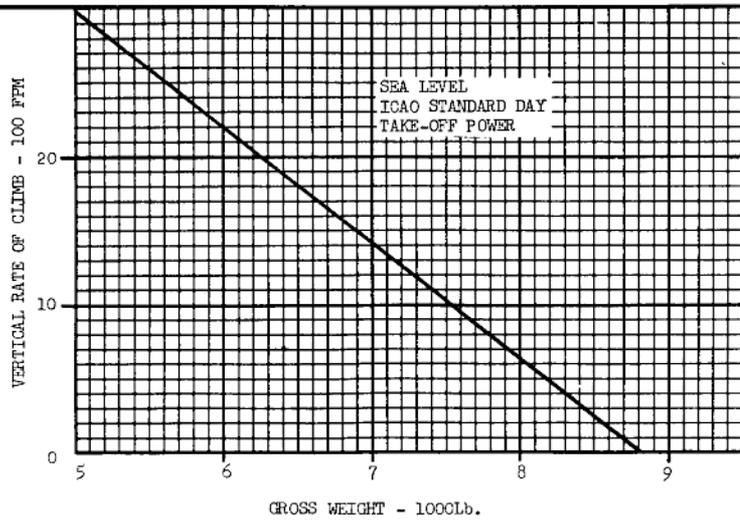
SPEED



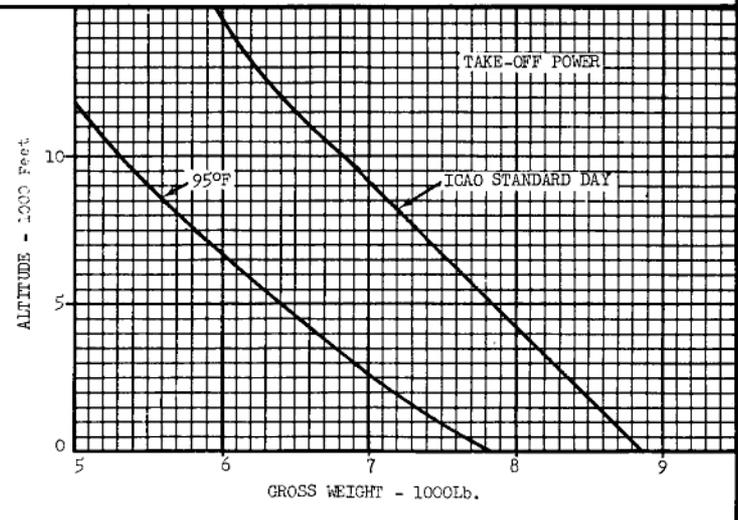
CLIMB



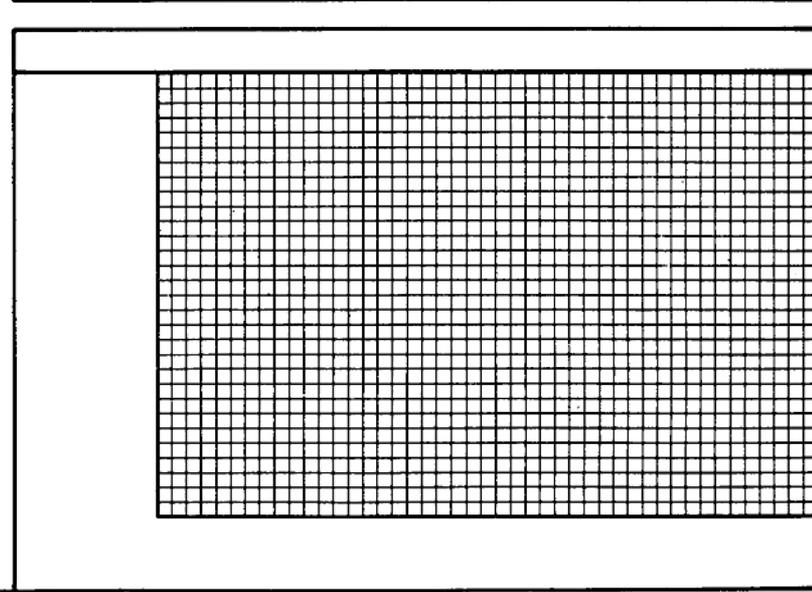
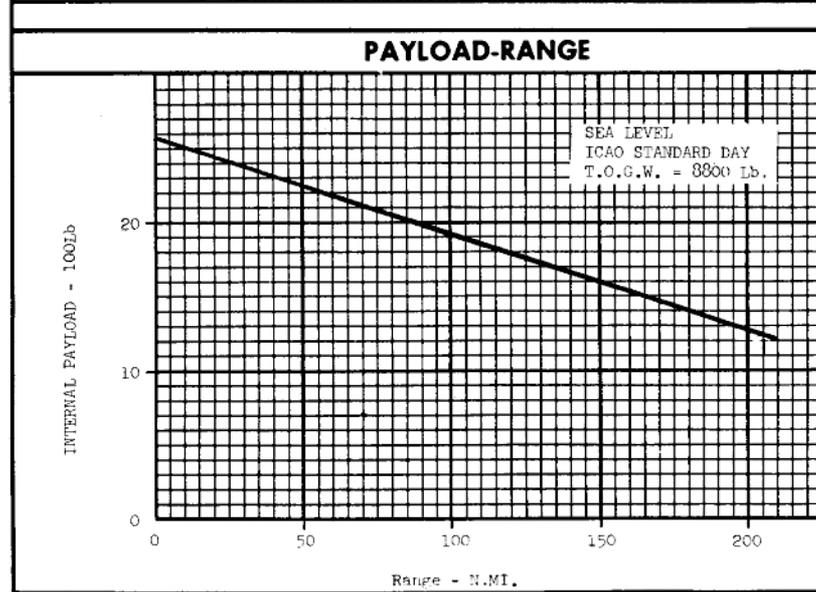
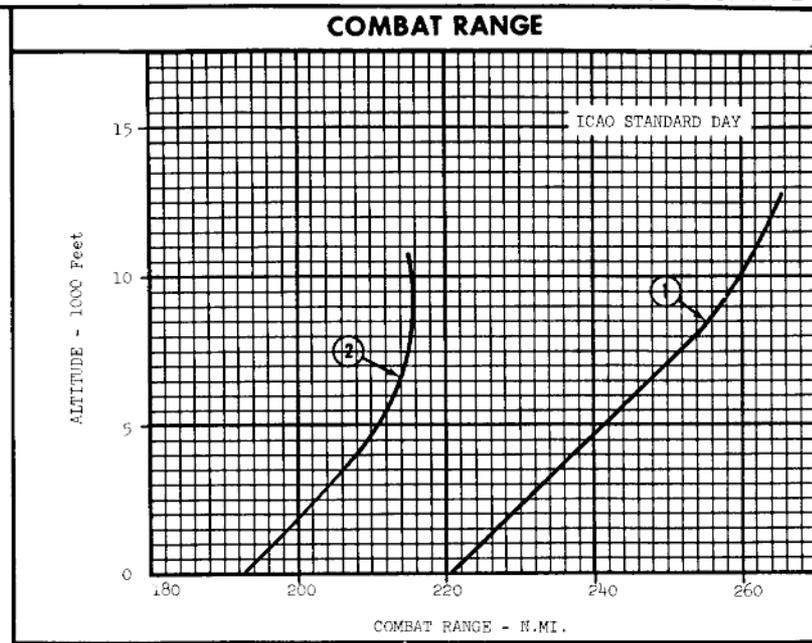
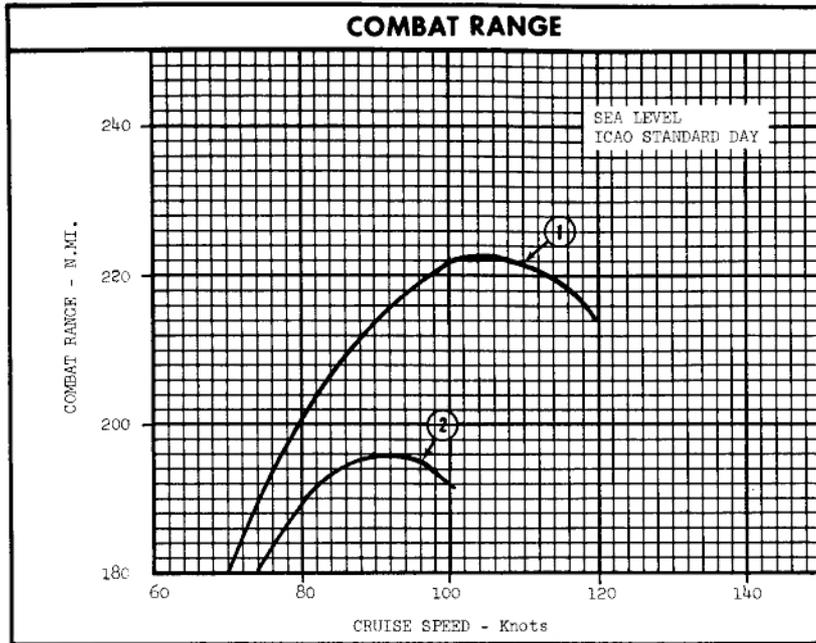
VERTICAL RATE OF CLIMB



HOVER CEILING - O.G.E.

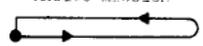
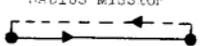
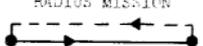
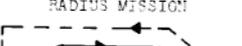
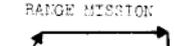
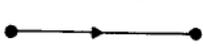
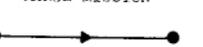
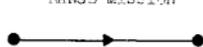


○ LOADING CONDITION COLUMN NUMBER



○ LOADING CONDITION COLUMN NUMBER

NOTES

① CLEAN	② TRANSPORT CARGO	③ OVERLOAD TRANSPORT CARGO	④ MEDICAL EVACUATION	⑤ FERRY
<p>RADIUS MISSION</p>  <ol style="list-style-type: none"> 1. Warm-up and take-off: Fuel allowance of 5 minutes at maximum continuous power at sea level. 2. Cruise out: At speed for best range at sea level. 3. Hover: 5 minutes out of ground effect at mid-mission. 4. Cruise back: To home base at speed for best range at sea level. 5. Landing Reserve: Fuel for 20 minutes at speed for maximum range at speed at sea level. 	<p>RADIUS MISSION</p>  <ol style="list-style-type: none"> 1. Warm-up and take-off: Fuel allowance of 5 minutes at maximum continuous power at sea level. 2. Cruise out: To remote base at speed for maximum range at sea level. 3. Land and unload payload: Mid-point fuel allowance of 2 minutes at maximum continuous power at sea level. 4. Cruise back: To home base at speed for maximum range at sea level. 5. Landing reserve: Fuel for 20 minutes at speed for maximum range. 	<p>RADIUS MISSION</p>  <ol style="list-style-type: none"> 1. Warm-up and take-off: Fuel allowance of 5 minutes at maximum continuous power at sea level. 2. Cruise out: To remote base at speed for maximum range at sea level. 3. Land and unload payload: Mid-point fuel allowance of 2 minutes at maximum continuous power at sea level. 4. Cruise back: To home base at speed for maximum range at sea level. 5. Landing reserve: Fuel for 20 minutes at speed for maximum range. 	<p>RADIUS MISSION</p>  <ol style="list-style-type: none"> 1. Warm-up and take-off: Fuel allowance of 5 minutes at maximum continuous power at sea level. 2. Climb out: On course at speed for best climb at intermediate power to 5000 feet. 3. Cruise out: To remote base at 5000 feet at maximum continuous power. 4. Descend to sea level: No fuel used, no distance gained. 5. Land and pick up two (2) litter patients: Mid-point fuel allowance of 2 minutes at maximum continuous power at sea level. 6. Climb back: On course at best climb speed at maximum continuous power. 7. Cruise back: To home base at 5000 feet at maximum continuous power. 8. Descend to sea level: No fuel used, no distance gained. 9. Landing reserve: Fuel for 20 minutes at speed for maximum range at sea level. 	<p>RANGE MISSION</p>  <ol style="list-style-type: none"> 1. Warm-up and take-off: Fuel allowance of 5 minutes at maximum continuous power at sea level. 2. Climb out: On course at best climb speed at intermediate power to optimum cruise altitude not to exceed 10,000 feet (unless limited by cruise ceiling). 3. Cruise out: To remote base at speed for maximum range at optimum cruise altitude not to exceed 10,000 feet (unless limited by cruise ceiling). 4. Descend to sea level: No fuel used, no distance gained. 5. Landing reserve: Fuel for 30 minutes at speed for maximum range at sea level.
<p>RANGE MISSION</p>  <ol style="list-style-type: none"> 1. Warm-up and take-off: Fuel allowance of 5 minutes at maximum continuous power at sea level. 2. Cruise out: To remote base speed for maximum range at sea level. 3. Landing Reserve: Fuel for 30 minutes at speed for maximum range at sea level. 	<p>RANGE MISSION</p>  <ol style="list-style-type: none"> 1. Warm-up and take-off: Fuel allowance of 5 minutes at maximum continuous power at sea level. 2. Cruise out: To remote base speed for maximum range at sea level. 3. Landing Reserve: Fuel for 30 minutes at speed for maximum range at sea level. 	<p>RANGE MISSION</p>  <ol style="list-style-type: none"> 1. Warm-up and take-off: Fuel allowance of 5 minutes at maximum continuous power at sea level. 2. Cruise out: To remote base speed for maximum range at sea level. 3. Landing Reserve: Fuel for 30 minutes at speed for maximum range at sea level. 		
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