YOKOTA AERO CLUB CESSNA 172F/M

FLIGHT SUPPLEMENTVersion 7.11 February 2014DO NOT REMOVE CHECKLIST FROM

AIRCRAFT

PERFORMANCE DATA (172-M)

TAKE-OFF DATA

TAKE-OFF DISTANCE FROM HARD SURFACE RUNWAY, FLAPS 10°

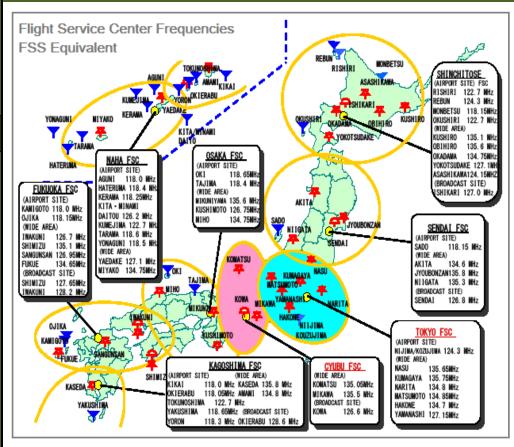
Gross	IAS	HEAD	At Sea L	evel 59° F	At 250)0' 50° F	At 500)0' 41° F	At 75)0' 32° F
Weight Lbs	AT 50 ft. MPH	WIND KNOTS	Ground Roll	Total to clear 50' Obs	Ground Roll	Total to clear 50' Obs	Ground Roll	Total to clear 50' Obs	Ground Roll	Total to clea 50' Obs
2500	70	0 10	600 405	1205 905	720 495	1420 1075	875 610	1715 1315	1050 745	2080 1610
5550)		20	250	640	310	770	390	955	485	1190
2200	65	0 10 20	445 295	935 690	535 355	1085 810	645 440	1290 970	770 530	1525 1160
		20 0	170 320	475 715	215 380	565 820	270 460	690 960	335 545	835 1115
1900	61	10 20	205 110	520 345	245 140	600 405	300 175	710 485	365 220	830 580

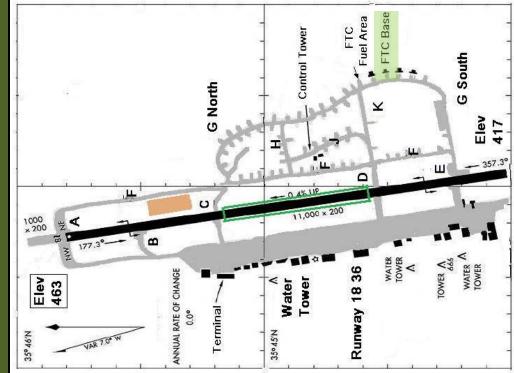
For operation on a dry, grass runway, increase distance (both "ground roll" and "total to 50ft obstacle") by 7% of the "total to clear 50ft obstacle" figure.

CRUISE FUEL CONSUMPTION

Conditions 2550 Lbs Recommended Lean Mixture 20° C Above 20° C Below Pressure Standard Standard Temp Temperature %BPH GPH Standard Temp %BPH GPH Altitude Feet RPN %BPH GPH 2000 2550 76 72 64 58 52 46 10.2 72 68 61 55 49 43 9.6 10.3 9.2 8.3 7.5 6.8 9.6 8.7 7.9 7.2 6.6 9.0 9.1 8.3 7.6 6.9 6.3 77 69 2500 2400 61 55 49 2300 2200 2100 10.2 9.2 8.3 7.6 6.9 6.3 76 68 62 55 49 44 72 65 58 52 47 41 4000 9.6 8.7 8.0 7.3 6.6 6.1 2600 73 65 58 52 46 9.7 8.8 2500 2400 8.0 7.3 6.6 2300 2200 2100 72 68 9.6 9.1 6000 2650 76 72 65 59 53 47 10.1 10.3 9.6 8.8 8.0 7.3 6.7 77 69 62 56 50 2600 2500 2400 2300 9.3 8.4 7.7 7.0 62 56 50 44 8.4 7.6 7.0 6.4 2200 10.1 9.2 8.4 7.7 7.0 71 65 59 53 47 42 9.5 8.7 8.0 7.3 6.7 2700 76 69 62 56 50 45 8000 73 66 59 53 47 9.8 2600 2500 8.1 7.4 6.7 2400 2300 2200 6.4 6.1 9.6 8.8 8.1 7.4 6.8 72 65 59 53 48 68 62 56 50 45 10,000 2700 10.2 9.1 77 69 63 57 51 9.3 8.5 7.8 7.1 8.4 7.7 7.0 6.5 2600 2500 2400 2300 62 59 53 48 12,000 2700 69 9.3 65 8.8 8.4 8.9 8.2 7.5 8.0 7.4 6.7 6.2 2600 2500 66 60 54 48 62 56 51 45 8.4 2400 7.1 2300 6.8 42

LANDING DATA LANDING DISTANCE ON HARD SURFACE RUNWAY NO WIND - 30° FLAPS - POWER OFF 20° (40° (Gross Approach Pressure Weight Lbs IAS Atitude Ground Total to clear 50' Obs 1415 Rol 50' Obs Roll 585 50' Obs Roll 565 50' Obs 1350 1385 1420 1460 1495 1535 1580 1625 Roll 605 625 650 675 700 725 755 785 50' Obs Feet Roll 625 650 670 695 725 750 780 810 1320 1350 1385 1425 S.L 545 1290 1380 1320 1355 1385 1000 565 585 605 630 655 675 705 730 760 1420 1455 1495 1535 1575 1620 1665 1450 1490 1530 1570 1615 1660 585 610 610 2000 3000 630 1460 1500 1540 1585 1425 1460 2550 71 4000 630 655 655 680 705 730 5000 680 1500 6000 705 1545 1705 7000 1755 73 1585 760 1630 790 1670 815 1715 Notes . Reduce landing distance 10% for each 5 knots headwind 2. For operation on a dry, grass runway, increase distance (both "ground roll" and "total to 50ft obstacle") by 20% of the "total to clear 50ft obstacle" figure 3. If landing with flaps up is necessary, increase approach speed by 10mph IAS and allow for 35% longer landing distance





Alternate / Emergency Airfield Data

CESSNA	172 F	(T-41)	/ 172M	105 mph
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Field	Distance	No Wind ETE	Runway		Fuel Re	quired	
	(nm)	(min)		Wind Factor	0 knots	15 knots	30 knots
Atsugi	20	12	Rwy 01/19	Fuel	1.8	1.9	2
126.2	20	12	8000x150	Duration	12	13	14
Utsunomiya	50	29	Rwy 18/36	Fuel	4.2	4.7	5.8
128.2	50	29	5570x150	Duration	29	34	40
Iruma	10	6	Rwy 04/22	Fuel	0.9	1	1.2
126.2	10	0	6562x148	Duration	6	7	8
Tachikawa	5	3	Rwy 14/32	Fuel	0.5	0.5	0.6
118.85	3	3	2952x148	Duration	3	3	4

ATC Light Signals

COLOR/TYPE OF SIGNAL	AIRCRAFT ON GROUND	AIRCRAFT IN FLIGHT
Steady Green	Cleared for takeoff	Cleared to land
Flashing Green	Cleared for taxi	Return for landing (to be followed by steady green)
Steady Red	STOP	Give way to other aircraft and continue circling
Flashing Red	Taxi clear of runway in use	Airport unsafe, do not land
Flashing White	Return to starting point on airport	Not applicable
Alternating Red / Green — — —	Exercise extreme caution	Exercise extreme caution
Acknowledge all light sig	nals by flashing landing	light or rocking wings.

PERFORMANCE DATA (172-F)

TAKE-OFF DATA

TAKE-OFF DISTANCE FROM HARD SURFACE RUNWAY, FLAPS 10°

Gross	IAS	HEAD	At Sea L	evel 59° F	At 250)0' 50° F	At 500)0' 41° F	At 750)0' 32° F
Weight Lbs	AT 50 ft. MPH	WIND KNOTS	Ground Roll	Total to clear 50' Obs	Ground Roll	Total to clear 50' Obs	Ground Roll	Total to clear 50' Obs	Ground Roll	Total to clear 50' Obs
2500	70	0 10 20	600 405 250	1205 905 640	720 495 310	1420 1075 770	875 610 390	1715 1315 955	1050 745 485	2080 1610 1190
2200	65	0 10 20	445 295 170	935 690 475	535 355 215	1085 810 565	645 440 270	1290 970 690	770 530 335	1525 1160 835
1900	61	0 10 20	320 205 110	715 520 345	380 245 140	820 600 405	460 300 175	960 710 485	545 365 220	1115 830 580

 Increase distance for on early a subversariation reinperature of particular annuale 2. For operation on a dry, grass runway, increase distance (both "ground roll" and "total to 50th obstacle") by 7% of the "total to clear 50th obstacle" figure.

CRUISE FUEL CONSUMPTION

Conditions 2550 Lbs Recommended Lean Mixture

		Recomme	indea Lee	arrivitx care			
Pressure Altitude Feet	RPM	20° C I Standar %BPH		Stan Tempe %BPH		20° C / Standar %BPH	
2000	2550 2500 2400 2300 2200 2100	77 69 61 55 49	10.3 9.2 8.3 7.5 6.8	76 72 64 58 52 46	10.2 9.6 8.7 7.9 7.2 6.6	72 68 61 55 49 43	9.6 9.1 8.3 7.6 6.9 6.3
4000	2600 2500 2400 2300 2200 2100	73 65 58 52 46	9.7 8.8 8.0 7.3 6.6	76 68 62 55 49 44	10.2 9.2 8.3 7.6 6.9 6.3	72 65 58 52 47 41	9.6 8.7 8.0 7.3 6.6 6.1
6000	2650 2600 2500 2400 2300 2200	77 69 62 56 50	10.3 9.3 8.4 7.7 7.0	76 72 65 59 53 47	10.1 9.6 8.8 8.0 7.3 6.7	72 68 62 56 50 44	9.6 9.1 8.4 7.6 7.0 6.4
8000	2700 2600 2500 2400 2300 2200	73 66 59 53 47	9.8 8.8 8.1 7.4 6.7	76 69 62 56 50 45	10.1 9.2 8.4 7.7 7.0 6.4	71 65 59 53 47 42	9.5 8.7 8.0 7.3 6.7 6.1
10,000	2700 2600 2500 2400 2300	77 69 63 57 51	10.2 9.3 8.5 7.8 7.1	72 65 59 53 48	9.6 8.8 8.1 7.4 6.8	68 62 56 50 45	9.1 8.4 7.7 7.0 6.5
12,000	2700 2600 2500 2400 2300	69 66 60 54 48	9.3 8.9 8.2 7.5 6.8	65 62 56 51 45	8.8 8.4 7.7 7.1 6.5	62 59 53 48 42	8.4 8.0 7.4 6.7 6.2

LANDING DATA

LANDING DISTANCE ON HARD SURFACE RUNWAY NO WIND - 30° FLAPS - POWER OFF

Gross	Approach	At Sea L	evel 59° F	At 25	00' 50° F	At 500)0' 41° F	At 750)0' 32° F
Weight Lbs	IAS MPH	Ground Roll	Total to clear 50' Obs						
2500	69	610	1200	640	1260	685	1335	725	1410
2200	64	560	1100	590	1155	620	1220	660	1290
1900	60	500	980	520	1030	550	1080	580	1140

Notes 1. Reduce landing distance 10% for each 5 knots headwind 2. For operation on a dry, grass runway, increase distance (both "ground roll" and "total to clear 50ft obstacle") by 20% of the "total to clear 50ft obstacle" figure.

Degrees Off Runway Heading 20° 30° 40° 50° 60° 3 4 5 6 7 8 11 4 6 7 8 10 11 12 5 6 7 8 10 11 12 5 7 9 11 12 14 15 6 9 11 13 15 14 16 7 10 12 14 16 18 16 7 10 12 14 16 18 16 8 11 14 17 19 12 14 7 10 12 14 16 18 16 8 11 14 17 21 23 26 10 15 19 23 26 17 19 9 15 19 23 26 16		-	Crosswind	wind	Com	ıer	t Table	e	
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7 10 12 15 17 1 7 10 13 15 17 1 7 10 13 15 17 1 8 11 14 16 18 1 8 12 15 19 20 1 8 12 15 18 20 1 9 13 17 20 23 1 13 17 20 23 26 1 13 17 20 23 26 10 15 19 23 26 23 10 15 19 23 26 23 10 15 19 23 26 26 10 15 19 23 26 26 10 15 19 23 26 26 10 15 19 23 26 27		m	9	6			16	17	18
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