TTT- Aviation Oy Ltd.

W&B / Performance calculation C152 OH-CLE 9.8.2012

Date:	_//	
PIC:	Student:	
Route:		
Filed by:		<u> </u>
Approved by	/:	

WEIGHT & BALANCE									
	MASS	ARM	MOM. (Kgm)						
BASIC WEIGHT (BW)	545,5	-	422,9						
FRONT SEATS		1							
BAGGAGE AREA 1 (max 54 kg)		1,63							
BAGGAGE AREA 2 (max 18 kg)		2,13							
ZERO FUEL WEIGHT		-							
FUEL (max 64,9 kg)		1,06							
RAMP WEIGHT		-							
TAXI FUEL	- 2	1,06	- 2,1						
TAKE-OFF WEIGHT		-							
ROUTE FUEL (-)		1,06							
LDG WEIGHT AT DEST.		-							

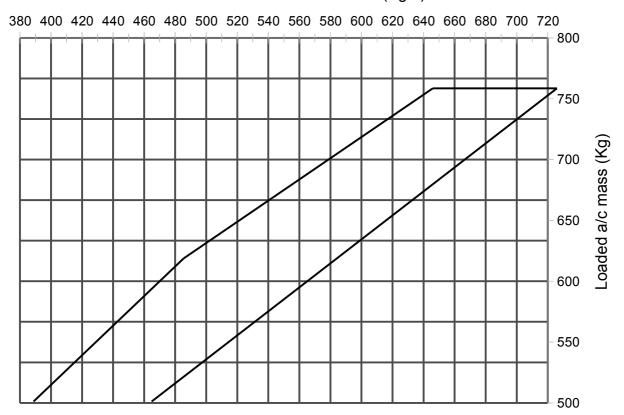
	BASIC DATA								
A/C MTOW BW - kg Usable fuel Max. fuel MOM kgm									
OH-CLE	OH-CLE 758 545,5 90,2 / 64,9 kg 98 l / 70,6 kg 422,9								

SEATS 1 & 2							
MASS	MOM.						
kg	kgm						
50	50						
55	54						
60	59						
65	64						
70	69						
75	74						
80	79						
85	84						
90	89						
95	94						

BAGGAGE (max 54 kg)									
MASS	MOM - kgm								
kg	Fwd	Aft							
2	3	4							
4	7	9							
6	10	13							
8	13	17							
10	16	21							
18	29	38							
30	49	-							
40	65	-							
50	82	-							
54	88	-							

FUEL									
Amount	Mass	Moment - kgm							
liters	kg	Woment - kgm							
5	3,6	3,8							
10	7,1	7,5							
20	14,2	15,0							
30	21,3	22,6							
40	28,4	30,1							
50	35,5	37,6							
60	42,6	45,1							
70	49,7	52,6							
80	56,8	60,2							
90	63,9	67,7							
98	70,6	74,8							
CONSUMP TION	24 l/h								

Loaded a/c moment (Kgm)



CESSNA 152 TAKE-OFF DISTANCE / SHORT FIELD

CONDITIONS:

Flaps 10° / Max. power before brake release / Dry, level hard surface runway / Wind calm

NOTES:

- 1. Take-off using short field technique
- 2. Before take-off at or over 3000 ft altitude, mixture should be leaned to afford maximum power
- 3. Decrease distances by 10 % for each 9 kts of headwind. When departing in a tailwind up to 10 kts, increase distances by 10 % for each 2 kts of tailwind.

4. When operating on a dry grass runway, increase ground roll by 15 %

MASS	LIFT-OFF		0°	С	10	Ç	20	°C	30	°C	40	°C
kg	SPEED /	PRESSURE ALTITUDE	GND	15 m /								
	SPEED @	ALITIODE	ROLL	50 ft								
757	15m / 50 ft	ft										
	50		m	m	m	m	m	m	m	m	m	m
	54	0	195	363	212	393	230	424	247	456	267	489
	KIAS	1000	215	399	233	433	251	466	271	501	293	539
		2000	236	440	256	477	277	515	299	555	322	597
		3000	261	488	282	527	305	570	329	616	355	666
		4000	287	541	311	585	335	634	363	686	392	744
		5000	317	600	343	652	370	707	401	770	344	838
		6000	349	671	379	730	410	796	443	870	479	953

CESSNA 152 LANDING DISTANCE / SHORT FIELD

CONDITIONS

Flaps 30° / Idle power / Max. braking / Dry, level hard surface runway / Wind calm

NOTES:

- 1. Landing using short-field technique as described in POH section IV
- 2. Decrease distance by 10 % for 9 kts of headwind. When landing in a tailwind up to 10 kts, distances should be decreased by 10 % for each 2 kts of tailwind.
- 3. When operating on a dry grass runway, increase ground roll by 45 %.
- 4. If landing should be performed without flaps, increase approach speed by 7 KIAS and landing distance by 35 %

MASS	LIFT-OFF SPEED /	PRESSURE ALTITUDE	0°	C	10	°C	20	°C	30	°C	40	°C
kg 757	SPEED / SPEED @ 15 m / 50 ft	ft	GND ROLL	15 m / 50 ft	GND ROLL	15 m / 50 ft	GND ROLL	15 m / 50 ft	GND ROLL	15 m / 50 ft	GND ROLL	15 m / 50 ft
1 , 0,	1414.0		m	m	m	m	m	m	m	m	m	m
	KIAS 50	0	137	354	142	362	148	370	152	378	157	386
	54	1000	142	361	148	370	152	378	158	387	163	316
		2000	148	370	152	378	158	387	163	396	169	405
		3000	152	378	158	389	165	398	171	407	175	415
		4000	158	389	165	398	171	407	177	418	183	427
		5000	165	398	171	407	177	418	183	427	189	437
		6000	171	408	177	418	184	430	191	439	197	450

TAKE-OFF RUN AVAILABLE	LANDING RUN AVAILABLE	
TAKE-OFF RUN REQUIRED	LANDING RUN REQUIRED	
TAKE-OFF DISTANCE TO 15 m / 50 FT	LANDING DISTANCE FROM15 ft / 50 FT	
CROSSWIND	HEADWIND	
COMPONENT	COMPONENT	

RUNWAY AVAILABLE

EFHF 18/36 TORA = TODA = 1280 m, LDA 18 = 1080 m, LDA 36 = 1160 m

EFHF 09/27 TORA = TODA = 1024 m, LDA 09 = 1024 m, LDA 27 = 985 m

EFTP 06/24 TORA = TODA = LDA = 2700 m EFTU 08/26 TORA = TODA = LDA = 2500 m

MAXIMUM CROSSWIND-COMPONENT = 12 KTS