

Property of SWICAir
B737-300 Performance Calculations

Apr 2017

Tail Number:	FROM:	TO:	CAPTAIN:	PREPARED BY:	DATE / TIME:
--------------	-------	-----	----------	--------------	--------------

(B) Selected FL =

(D)

1. Aircraft BOW									
2. ACM () - 1 () - 2									
3. Extra F/A									
4. PAX (FIRST-8 MAX) TOTAL _____									
5. PAX (COACH-120MAX) TOTAL _____									
6. BAGS/CARGO (FORWARD)									
7. BAGS/CARGO (AFT)									
8. ZFW (Add lines 1 thru 7)									
9. MAX ZFW (106,500 LBS. MAX)									
10. TAKEOFF FUEL									
11. TAKEOFF GROSS WEIGHT									
13. BURNOFF TO DESTINATION									
14. LAND GROSS WT (DEST)									
15. BURNOFF TO ALTERNATE									
16. LAND GROSS WT (ALT)									
17. Landing Fuel/Weight Units									
18. + ZFW (from line 8)									
19. = Landing Condition									

(A)

LOC	Rwy	LIMIT WEIGHT	CONTROLLING
		1 3 5 0 0 0	Origination
			T/O - STRUCTURAL
			T/O - RUNWAY
			T/O - CLIMB
		1 1 4 0 0 0	Takeoff Alt.
			LDG - STRUCTURAL
			LDG - RUNWAY
			LDG - CLIMB
		1 1 4 0 0 0	Destination
			LDG - STRUCTURAL
			LDG - RUNWAY
			LDG - CLIMB
		1 1 4 0 0 0	Alternate
			LDG - STRUCTURAL
			LDG - RUNWAY
			LDG - CLIMB

(C) Burn to Dest + Reserve + Alternate = T/O Fuel + Taxi = Ramp Fuel

Time to Dest	Reserve	Alternate	=	Time/Fuel	
			=		

Takeoff Speeds:

V₁ =

V_r =

V₂ =

(F) TOC: /

(Time / Fuel)

TOD: /

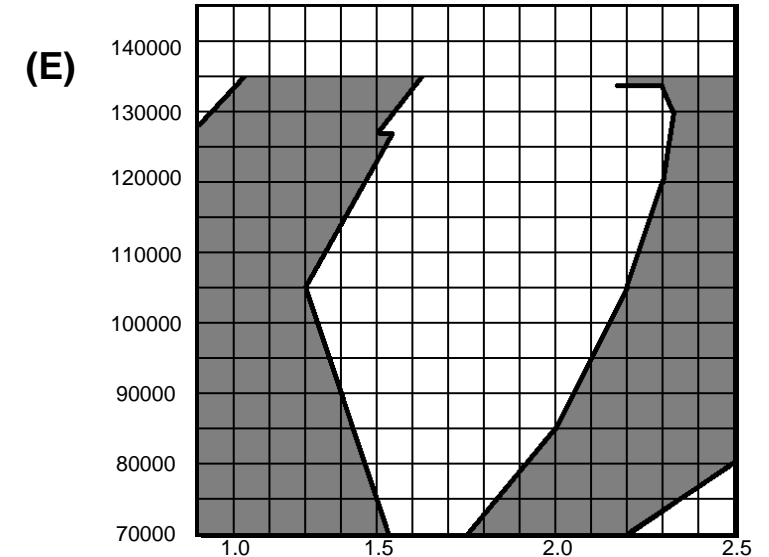
(Time / Fuel)

(Dist / TAS) /

(Dist / TAS)

Landing Speed:

V_{ref} =



Hints for performance calculation chart

A – Limit Weights. Use Airport Analysis charts located in “City Pair Book” for Departure, Arrival, Takeoff Alternate, and Alternate locations.

B – Optimum FL. Use Max T/O weight for origination (lowest of Structural, Runway or Climb weights) from step A to enter FL chart located in “Performance Tables” page 1. Ensure your altitude is hemispheric for direction of flight and select the highest achievable altitude (round down!)

C – Use selected FL and total flight distance to determine Burn to Dest. Total flight distance obtained from route planning on the Route Planning Chart. Enter Simplified Flight Planning Chart located in “Performance Tables” page 3 with distance and FL to determine fuel burned. Normal reserve fuel is 4000 pounds & 0:45 minutes, if additional holding or contingency fuel is required add 75lbs/minute to the normal reserve fuel. Normal taxi fuel is 500 pounds, if additional taxi time is required add 25 lbs/min to the normal taxi fuel.

D – Weight and Balance. Use appropriate “Performance Tables” to complete steps 1 -19. Remember to identify summer/winter weights. Use 47lbs of baggage per pax (2 bags @ 23.5lbs per bag). Plan 2/3 of weight in forward bin and 1/3 in aft. (Stab trim table found in performance charts Page 5)

E – CG Limits. Plot T/O (circle) and Landing (square) CGs.

F – TOC, TOD, T/O speeds, Landing speed. Use “Performance Tables” pages 8 – 12 to complete this data.