



Elite Electronic Engineering Inc.

Efficient. Effective. Experts. *Think Elite.*

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Aviation Software & Services



Elite provides software applications and training courses for pilots and mission planners, with a focus on military aviation. Our goal is to provide products and services that save time and enhance situational awareness to enable operators to get to the most out of their aircraft. Elite currently offers solutions for the C-130 community that unleash available performance and capability to improve operational efficiency.

Elite also provides consulting services for aircraft performance analysis, flight testing, and operations analysis. We can apply our expansive knowledge of C-130 performance to reduce fuel consumption in current operations and assist in evaluating modernization options.

C-130 preTOLD™ - Takeoff & Landing Data (TOLD) Calculator

Elite's preTOLD application brings accurate Takeoff and Landing Data (TOLD) planning capability to your Windows® or iOS® device to save time and improve the operational efficiency of your C-130 fleet. It delivers results consistent with the planning procedures in the Performance Data Manual (-1-1) using a database built from published aircraft performance data. All takeoff and landing gross weight limitations are displayed to aid risk assessment.

At Elite, we understand the importance of TOLD planning and its impact on mission effectiveness. Our experts applied skills gained from years of experience creating C-130 performance data and working with flight crews to ensure preTOLD gives you the data you need to accomplish your mission. With preTOLD, *know before you go.*

BENEFITS

- Automate preflight TOLD planning to save time and reduce crew workload
- Enable maximum payload capability by pinpointing weight limitations before heading to the flight line
- Quickly evaluate multiple airfields, diversions, and "what-if" scenarios
- Save and recall input scenarios or export TOLD Card (pdf) for distribution - e-mail, print, etc.
- Support training of TOLD planning procedures to pilots, flight engineers, and mission planners
- Customize to incorporate unique operator procedures, limitations, and TOLD Card format

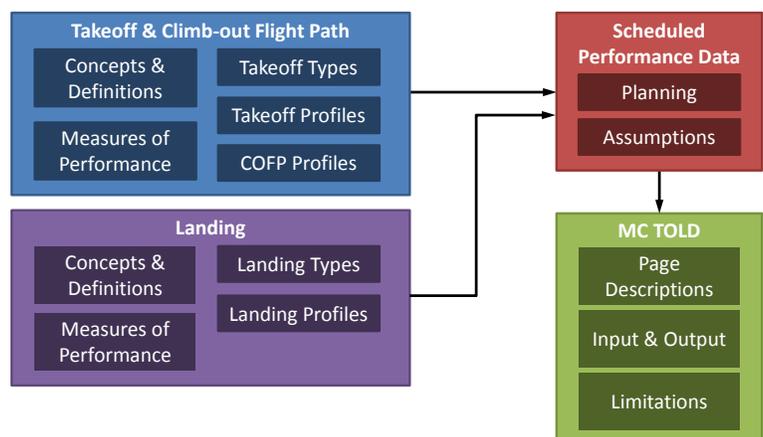
- ✓ C-130H (all variants) based on U.S. Air Force Performance Data (USAF-1-1) for PC and iPad
- ✓ C-130J in development (MC TOLD Block 6.0 with mitigation fixes) for iPad

C-130J Takeoff & Landing Data (TOLD) Pilot Training Course

TOLD planning is a critical step in the flight planning process and a thorough understanding of the data and procedures is necessary to unlock maximum aircraft capability while minimizing risk. Elite's C-130J TOLD Pilot Training Course goes beyond the standard pilot training curriculum to instill a deeper understanding of TOLD data and planning procedures so pilots can plan missions with confidence, improve flight safety, and maximize the capability of their aircraft.

All courses are taught by our C-130J TOLD expert, who developed the course after years of experience working directly with C-130J flight crews to improve and clarify performance data and procedures.

The course begins with an overview of the underlying assumptions used in the performance data development process and the pertinent regulations. With that foundation, the scheduled performance data in the Flight Manual are reviewed with a focus on their application in Mission Computer calculations (MC TOLD), including detailed input/output instructions and system limitations.



BENEFITS

- Improve decision-making with advanced knowledge of TOLD data and planning procedures
- Resolve persistent questions related to data, procedures, and MC TOLD calculations
- 1-day, instructor-led course accompanied by a rich presentation full of visual aids and examples
- Hard copies of training materials are provided to all students for future reference
- Classroom instruction is conducted at a customer location with up to 10 students per class

For more information, contact Kevin Halpin | khalpin@elitetest.com | 630-495-9770 x 111

Elite Electronic Engineering Inc. | www.elitetest.com/aviation-software-and-services | 630-495-9770

C-130H preTOLD™ Screenshots for PC and iPad

C-130H preTOLD - Takeoff and Landing Data Calculator

Input Scenario: New Unsavd Scenario

Aircraft: C-130H, 40/60 KVA, 3000 PSL H+ Pack

Runway Length: 8000 ft
 Runway Heading: 100 ° TRUE
 Runway Slope: 0 %
 Field Elevation: 1000 ft
 Pressure Altitude: 946 ft
 RCR / RSC: 23 / 0
 Outside Air Temp: 11 °C / 52 °F
 Altimeter Setting: 29.98 inHg
 Gross Weight: 155 klb
 Surface Wind: 130 ° / 8 - 16 kts
 Drag Index: 11
 TOLD Type: NORM AMAX MAX
 Engines: 100% 98% 95%
 Bleed Setting: NORM OFF ALL
 Power Setting: RP MCP MAX
 Reduced Power TIT: 970 °C
 Nosewheel Steering: YES NO
 50% Headwind: YES NO
 Anti-Skid Status: ON OFF
 Engines In Reverse: 4REV 2REV 4GI

Takeoff Speeds (KIAS): Refusal: 129, VTO: 123, VOBS: 137, 3 ENG Climb: 168, 4 ENG Climb: 176, VMCG: 86, VMCA 3 (IGE): 100, VMCA 3 (OGE): 106, VMCA 2 (OGE): 148

Takeoff Distances (ft): CFL Balanced: 7381, CFL Unbalanced: 5140, Ground Run: 4786, TOD: 7105, Normal: 4174, Min Field: 3653, 5620, Max Effort: 4174, 3653, 5620

Gradient Clearance: 4 ENG Grad: 350 fpm, 4 ENG: 164.8 klb, 3 ENG Grad: 302 fpm, 3 ENG: 144.7 klb, Climb Altitude: 4800 ft MSL, MAX: 164.8 klb, Screen Height: 35 ft

Obstacle Clearance: Obstacle Alt: 1660 ft MSL, 4 ENG: 175.0 klb, Obstacle Dist: 12730 ft, 3 ENG: 144.3 klb, 2.0951 NM, MAX: 175.0 klb

Service Ceilings: 3 ENG: 17109 ft, 2 ENG: 2133 ft

Max Takeoff Gross Weight (klb) Limited By: 3 Engine Climb: 142.5, Field Length: 159.6, Gradient: 144.7, Obstacle: 144.3, Max Takeoff Gross Weight: 142.5 klb

Takeoff Landing Tools Publications Settings

Calculation Completed.

C-130H preTOLD - Takeoff and Landing Data Calculator

Flaps: 0% 50% 100% MAX

Landing Speeds (KIAS): Approach: 185 164 145 145, Threshold: 175 154 144 137, Touchdown: 161 135 126 126

Landing Distances (ft): 50FT Alt: 9165 6394 4984, Ground Roll: 3144 2692 2463 2463

Brake Energy: 30.48 M ft-lb per Brake, Max Brake Energy Speed: 114 KIAS, Xwind: 8 kts, Max Rec Xwind: 35 kts

Max Landing Gross Weight (klb) Limited By: Brake Energy: 139.2, Ground Roll: 175.0, Max Landing Gross Weight: 139.2 klb

Takeoff Landing Tools Publications Settings

Calculation Completed.

C-130 TAKEOFF AND LANDING DATA CARD

PA	946 ft	RUNWY HOORLENGTH	100° TRUE / 8000 ft	OPERATING WT	
OUTSIDE TEMP	11 / 52 °C	RORBS/CROSCLOPE	23 / 0 %	FUEL WT	
OBSTACLE HEIGHT	1660 ft MSL	WIND DIRECTION/VELOCITY	130° TRUE / 8 - 16 kts	CARGO WT	
OBSTACLE DISTANCE	12730 ft / 2.0951 NM	COMP HT / CROSS	7 ft / 8 kts	GROSS WT	155.0 klb
GRADIENT HEIGHT 3 ENG	302 fpm / 4800 ft MSL	GRADIENT HEIGHT 4 ENG	350 fpm / 4800 ft MSL		
RESEKED POWER		ML MAX CONTINUOUS POWER		MAXIMUM POWER	
TORQUE		TORQUE		TORQUE 100% (Nth Eng)	19600 in-lb
TIT		TIT		TIT	1066 °C
TOF		TOF		TOF	1.42
CFL BALANCED	7381 ft	CFL UNBALANCED	5140 ft	MIN FIELD MAX EFFORT	4174 ft
4 ENG COF & FT/M	164	3 ENG COF & FT/M	145	MIN FIELD VMCA/VTO CORRECTED	4174 ft
GROSS WT LIMIT	164.8 klb	GROSS WT LIMIT	144.7 klb		
4 ENG GRD RUN/TOD	4786 ft / 7105 ft	3 ENG SERVICE CEILING	17109 ft	MAX EFFORT GRD RUN/MAX EFFORT TSD	2463 ft / 5620 ft
4 ENG GRD RUN/TOD		2 ENG SERVICE CEILING	2133 ft	MAX EFFORT GRD RUN/MAX EFFORT TSD CORRECTED	2463 ft / 5620 ft
SMOE	1.01	ACCELERATION CHECK TIME	34 sec	3 ENG GRD RUN/TOD	

preTOLD: 946004.0324 PM UTC Page 1 of 2

iPad C-130H Unsavd Scenario

Aircraft: C-130H, 40/60 KVA, 3000 PSL H+ Pack

Runway Length: 8000 ft
 Runway Heading: 100 ° TRUE
 Runway Slope: 0 %
 Elevation / PA: 1000 / 946 ft
 RCR / RSC: 23 / 0
 Outside Air Temp: 11 °C / 52 °F
 Altimeter Setting: 29.98 inHg
 Gross Weight: 155 klb
 Surface Winds: 130 ° / 8 - 16 kts

Takeoff Data

Torque	19600 in-lb
TIT	1066 °C
TOF	1.42
SMOE	1.01
Xwind	8 KT
Max Rec Xwind	35 KT
MAC Speed	110 KIAS
MAC Time	34 SEC
3 ENG Service Ceiling	17109 ft
2 ENG Service Ceiling	2133 ft

1 2 3 CLEAR
 4 5 6
 7 8 9 PREV
 . 0 - NEXT

iPad C-130H Unsavd Scenario

Aircraft: C-130H, 40/60 KVA, 3000 PSL H+ Pack

Runway Length: 8000 ft
 Runway Heading: 100 ° TRUE
 Runway Slope: 0 %
 Elevation / PA: 1000 / 946 ft
 RCR / RSC: 23 / 0
 Outside Air Temp: 11 °C / 52 °F
 Altimeter Setting: 29.98 inHg
 Gross Weight: 155 klb
 Surface Winds: 130 ° / 8 - 16 kts
 Drag Index: 11
 TOLD Type: NORM AMAX MAX
 % Engines: 100% 98% 95%
 Bleed Setting: NORM OFF ALL

Takeoff Data

Torque	19600 in-lb
TIT	1066 °C
TOF	1.42
SMOE	1.01
Xwind	8 KT
Max Rec Xwind	35 KT
MAC Speed	110 KIAS
MAC Time	34 SEC
3 ENG Service Ceiling	17109 ft
2 ENG Service Ceiling	2133 ft

1 2 3 CLEAR
 4 5 6
 7 8 9 PREV
 . 0 - NEXT