

Help for CFI Tools Takeoff & Landing

PURPOSE: The Takeoff and Landing Distance App is used to calculate the Takeoff and Landing distance for a given Aircraft under given conditions.

The current METAR data for the station can be obtained by touching the Get WX button.

Calculation is available ONLY for these 21 Aircraft:

Beech Bonanza V35

Cessna 150-M	Cessna 182-R	DA 20-C1 w/Gross Weight Increase
Cessna 172-L	Cessna T182-T	Diamond DA 40
Cessna 172-M	Cessna 310-R	Mooney M20M
Cessna 172-P	Cessna Cardinal	Piper PA-28-161 Warrior II
Cessna 172-R	Cirrus SR20	Piper PA-28-181 Archer II
Cessna 172-S	Diamond DA 20-C1	Piper PA-28R-201 Arrow III
		Piper PA-28-236 Dakota
		Piper PA-32-301 Saratoga

HOW TO USE the takeoff & Landing Distance App:

To calculate the Takeoff and Landing distances:

- Touch the button to select an Aircraft
- Touch the Airport ID field to select an Airport
- Enter the Runway(s) separated by spaces or commas. Most US airports will have the runways defined. There is no limit on the number of runways
- Enter the Weather conditions. If the selected Airport has a METAR station the weather may be obtained by touching the Get Wx button.

- View the Results

Rwy - The runway ID

HWind Headwind, calculated based on the wind direction and speed and the runway heading

XWind Crosswind, calculated based on the wind direction and speed and the runway heading

Tkoff Takeoff Ground Roll

>50' Takeoff total distance to clear a 50 feet obstacle

Land Landing Ground Roll

>50' Landing total distance to clear a 50 feet obstacle

These distances are expressed in either Feet or Meters depending on the selected Option.

Options

Default Airplane

Touch the button and select the Default Airplane to be displayed when the App starts

Home Airport

Touch the field and Select the Home Airport to be displayed when the App starts

Default Runways

Enter Runways separated by spaces. These runways will be used for Airports that do not have runways defined in the Airport database. Most US Airports have runways defined in the database.

Load WX at Start

Turn this switch ON to have the METAR for the Home Airport automatically load when the App starts

Wind Speed

Select either Knots or MPS (Meters per Second) for wind speed measurement

Temperature

Select either Celsius or Fahrenheit

Distance

Select either Feet or Meters for distance measurement. This option is used for both Pressure Altitude and the Takeoff & Landing distances.

Weight

Select either Pounds or Kilograms for weight measurement

The database contains the airport METAR station names for over 4,000 worldwide airports and for the **US ONLY** the runways.

CAUTION! This App should only be used for training purposes

PLEASE NOTE: The source of the METARs used in this App is NOAA's National Weather Service Aviation Weather Center. It can be found here:

<http://aviationweather.gov/adds/metars/>

If the METAR station cannot be found with this site, it will not be available in this App.

Takeoff & Landing Distance Screenshot

AT&T 11:01 AM 100%

Preflight

Current WX

METARs

Weight & Balance

Takeoff & Landing

Area Wx

Airport Update

Hold Viewer

VOR Viewer

Crosswind Calculator

Weather

AOPA

DUATS

Options

Takeoff & Landing Options

Cessna 172-S

Airport ID: Get Wx

General Edward Lawrence Logan Intl, Boston, MA

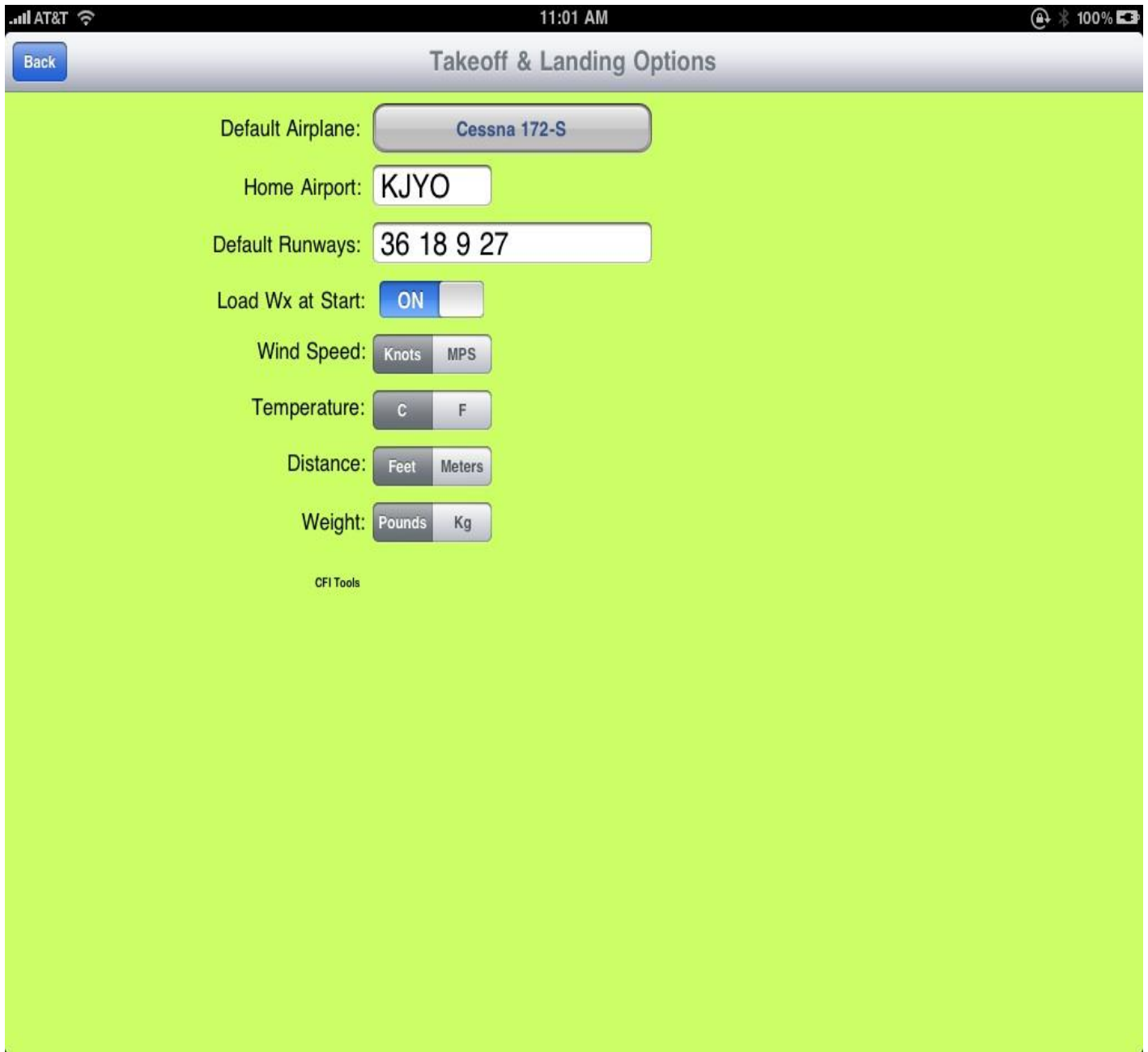
Wind Dir. Speed(Kts) Temp(C) PrsAlt(Ft)

Weight(Lbs) Runways

Rwy	HWind	XWind	Tkoff	>50'	Land	>50'
15	-6.2	16.9	1283	2180	760	1758
33	6.2	-16.9	914	1553	541	1252
4	18.0	0.0	785	1334	465	1075
22	-18.0	0.0	1864	3167	872	2016
9	11.6	13.8	855	1453	506	1171
27	-11.6	-13.8	1549	2631	872	2016
14	-3.1	17.7	1134	1928	672	1554
32	3.1	-17.7	947	1609	561	1297

CFI Tools

Takeoff & Landing Distance Options Screenshot



Takeoff & Landing Distance Airplane Selection Screenshot



The screenshot shows a mobile application interface with a black status bar at the top. The status bar displays "AT&T" with a signal strength indicator, the time "11:34 AM", and "100%" battery with a battery icon. Below the status bar is a list of airplane models, each on a separate yellow background row. The list includes:

Beechcraft Bonanza V35
Cessna 150M
Cessna 172-L
Cessna 172-M
Cessna 172-P
Cessna 172-R
Cessna 172-S
Cessna 182-R
Cessna T182-T
Cessna 310R
Cessna Cardinal
Cirrus SR20
Diamond DA 20-C1
Piper PA-28-161 Warrior II
Piper PA-28-181 Archer II
Piper PA-28R-201 Arrow III