

# FIS-B Weather

What is it? Where is it? How do I get it?

# Automatic Dependent Surveillance - B

**ADS-B**

```
graph TD; ADS-B --- FIS-B; ADS-B --- TIS-B; FIS-B --- FIS_B_Text[Flight Information Services]; TIS-B --- TIS_B_Text[Traffic Information Services];
```

**FIS-B**

Flight Information  
Services

**TIS-B**

Traffic Information  
Services

ADS-B is **Automatic** because it works with no action required by us or ATC. It is **Dependent** because it depends on our GPS system (GNS 430 or 530). And it is sending **Surveillance** info to ATC via a **Broadcast**. FIS-B and TIS-B are provided to aircraft (like ours) that have ADS-B in.





= accessible on GNS430/530



= also accessible on iPad



**METAR**

**TAF**

**National NEXRAD ("CONUS")**

**Regional NEXRAD**

**SPECI**

**AMEND**

**AIRMET**

**Convective SIGMET**

**SIGMET**

**D-NOTAM**

**FDC-NOTAM**

**PIREP**

**SUA status**

**Winds/Temp Aloft**

**Lightning**

**Turbulence**

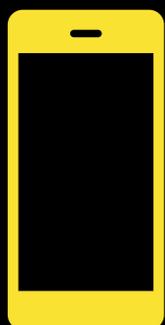
**Icing**

**Freezing Levels**

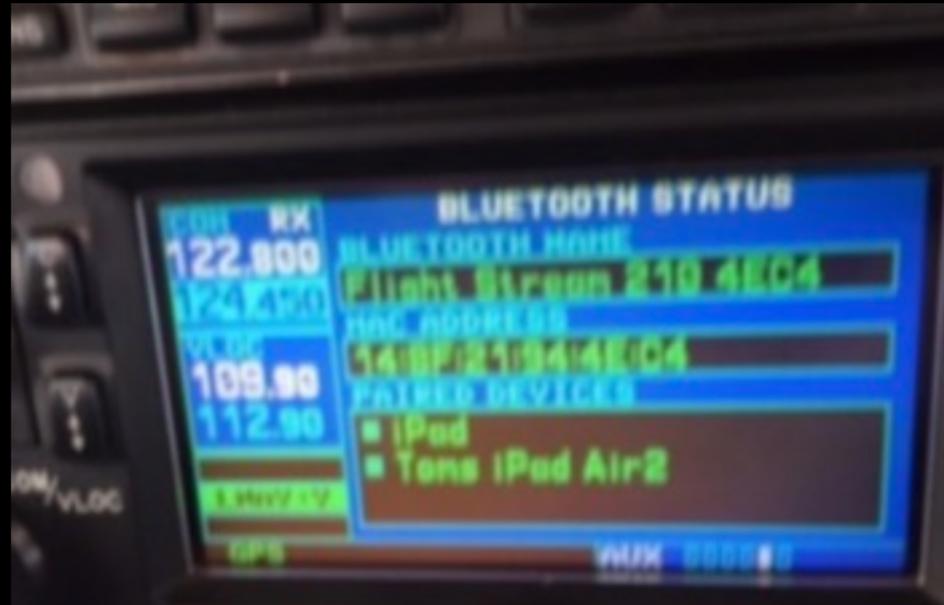
**Cloud Tops**

**Graphical AIRMET**

**Center Weather Advisory**



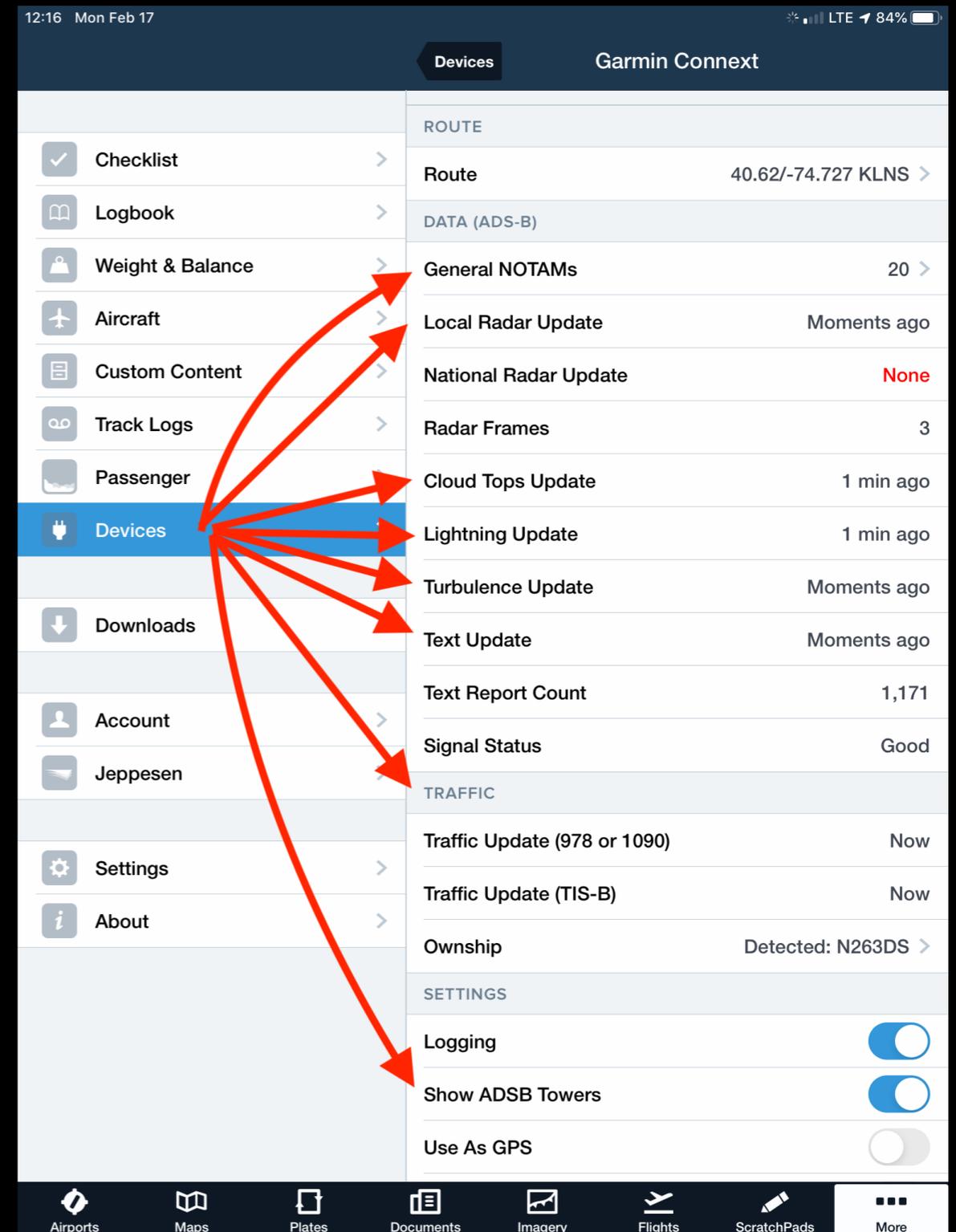
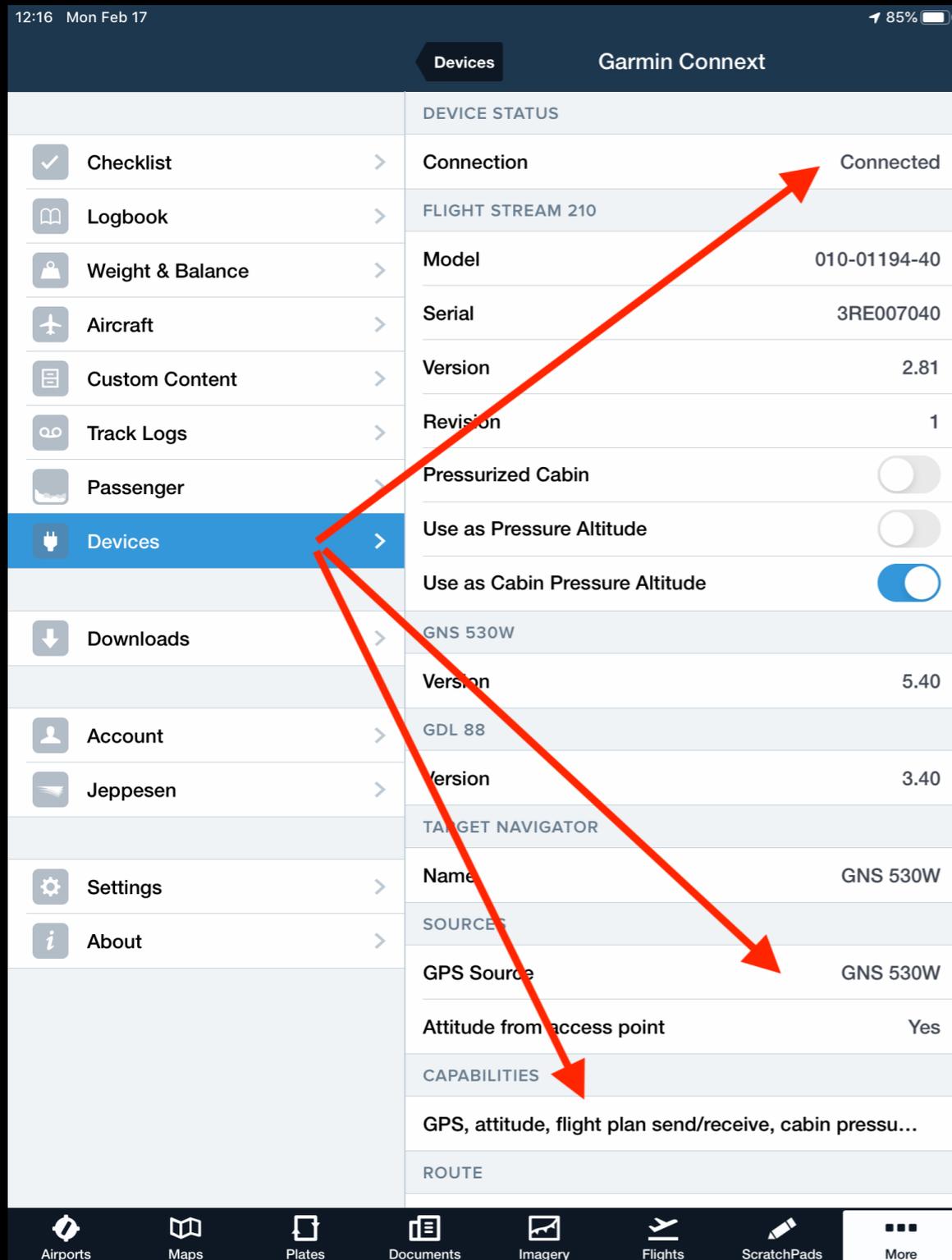
**If you don't connect via Flight Stream 210, you are missing a LOT of good weather information.**



**Cheatsheet on how to connect:  
<http://blueskyaa.com/wp-content/uploads/Flightstream.pdf>**

**Disclaimer: This is geared towards ForeFlight users but other systems are not too different.**

Nice to know (but not required). You can check your connection.  
The last slider switch on the right will display towers (next page)



# See the ADS-B antenna towers - Grnd, Low, Medium, High



Low  
ADS-B  
Tower

The GNS 430/530 automatically connects to the right level tower. This preserves bandwidth for the system.



**High**

**Up to 24000' AGL**



**Medium**

**Up to 14000' AGL**



**Low**

**Up to 3000' AGL**



**Surface**

**On the ground at  
limited airports**



# The Graphic Options

Tap the map overlay box to pull down your options

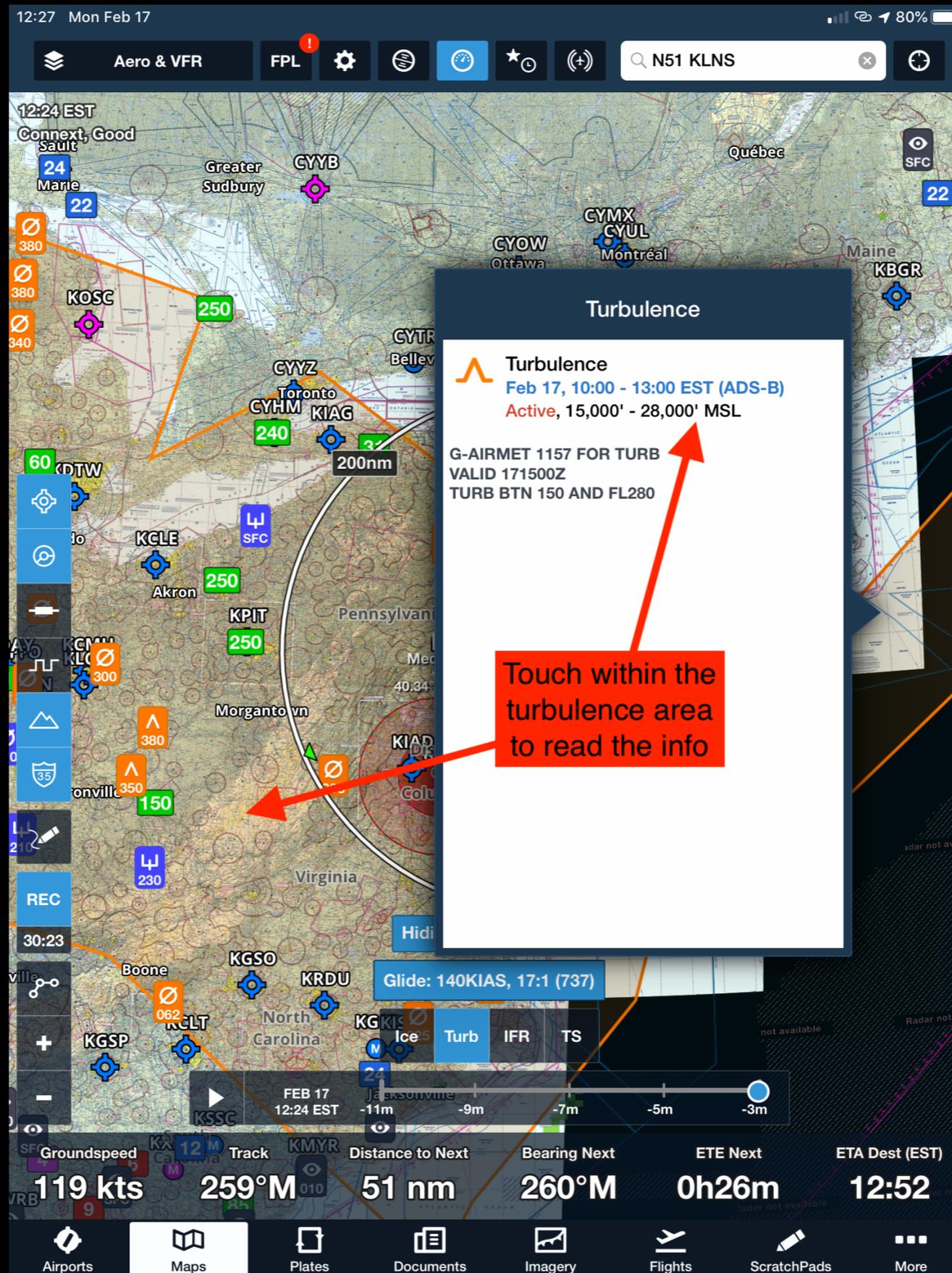
Tap the weather product that you want to see

The screenshot shows a flight simulator interface with a map overlay menu. The menu is divided into two columns of options. The left column includes: Aeronautical, Jeppesen VFR, Jeppesen IFR (low), Jeppesen IFR (high), Street Map, Aerial Map, US VFR sectional, US IFR (low), US IFR (high), Canada VNC, Canada IFR (low), Canada IFR (high), US IFR (planning), US IFR (ocean), US VFR (flyway), Caribbean/Mexico (low), and Caribbean/Mexico (high). The right column includes: Radar (Composite), Radar (Lowest Tilt), Cloud Tops (ADS-B), Enhanced Satellite, Color IR Satellite, Icing (US), Icing (Global), Turbulence (ADS-B), Turbulence (US), Turbulence (Global), Surface Analysis, Freezing Lvl (ADS-B), Hazard Advisor, Traffic, AIR/SIGMET/CWAs, TFRs, Flight Category, Surface Wind, Winds Aloft, Dewpoint Spread, Temperature, Visibility, Ceiling, Sky Coverage, PIREPs, and Lightning. The background map shows a flight path with waypoints like N51, N175AF, and N424V8. The bottom of the screen displays flight data: Groundspeed 6 kts, Altitude 22000 ft, Distance to Next 77 nm, Bearing Next 261°M, ETE Next 12h09m, and ETA Dest (EST) 00:13. The bottom navigation bar includes icons for Airports, Maps, Plates, Documents, Imagery, Flights, ScratchPads, and More.

# The Turbulence Layer

So, here's one example; the other graphic items behave the same e.g. Graphical Airmets, Icing, Sigmets, Center Weather Advisories.

Here we can see that the PIREP and Ceiling layers have also been selected.



# Textual items: Tap an airport on the map

12:38 Mon Feb 17 75%

Aero & VFR FPL

N51 KLNS

KRDG  
Reading Regional/Carl A Spaatz Field

Direct To Add to Route

43m ago (ADS-B)

VFR

KRDG 171654Z 02008KT 10SM CLR  
A3027 RMK AO2 SLP258 T00781033

Time 11:54 EST

Wind 020° at 8 kts

Visibility 10 sm

Clouds Sky clear

Temperature 8°C (46°F)

Dewpoint -3°C (27°F)

Altimeter 30.27 inHg

Humidity 46%

Density Altitude -734'

Info METAR Forecast Winds FBOs

Hiding Distant Traffic

Glide: 140KIAS, 17:1 (737)

Ice Turb IFR TS

FEB 17 12:34 EST -14m -12m -10m -6m -4m

Groundspeed 126 kts Track 248°M Distance to Next 24 nm Bearing Next 246°M ETE Next 0h11m Descent to Dest 180 fpm

Airports Maps Plates Documents Imagery Flights ScratchPads More

# The Airports Pages provide textual weather and NOTAMS

**KABE: Lehigh Valley International**  
Allentown, Pennsylvania, US  
40.65°N/75.44°W  
Sunrise, set: 6:52 AM, 5:38 PM EST

Flight category **VFR** ATIS **126.975**  
Elevation **394' MSL** Clearance **124.05**  
Pattern altitude **1,394' MSL (est.)** Ground **121.9**  
Fuel **Jet A+, Jet A, 100LL** Tower **120.5**  
Procedures **ILS, GPS, VOR, LOC,...** Appr, Dep **Multiple**

Frequency: 126.975  
Clearance: 124.05  
Ground: 121.9  
Tower: 120.5  
Appr, Dep: Multiple

Weather: METAR, TAF, MOS., Forecast Discussion, Winds Aloft

NOTAMS: VFR 5m ago  
KABE 172051Z 29003KT 10SM CLR 12/M07 A3024 RMK AO2 SLP243 T01171072 50000  
Time: 3:51 PM EST  
Wind: 290° at 3 kts  
Visibility: 10 sm  
Clouds: Sky clear  
Temperature: 12°C (54°F)  
Dewpoint: -7°C (19°F)  
Altimeter: 30.24 inHg  
Humidity: 26%  
Density Altitude: -170'

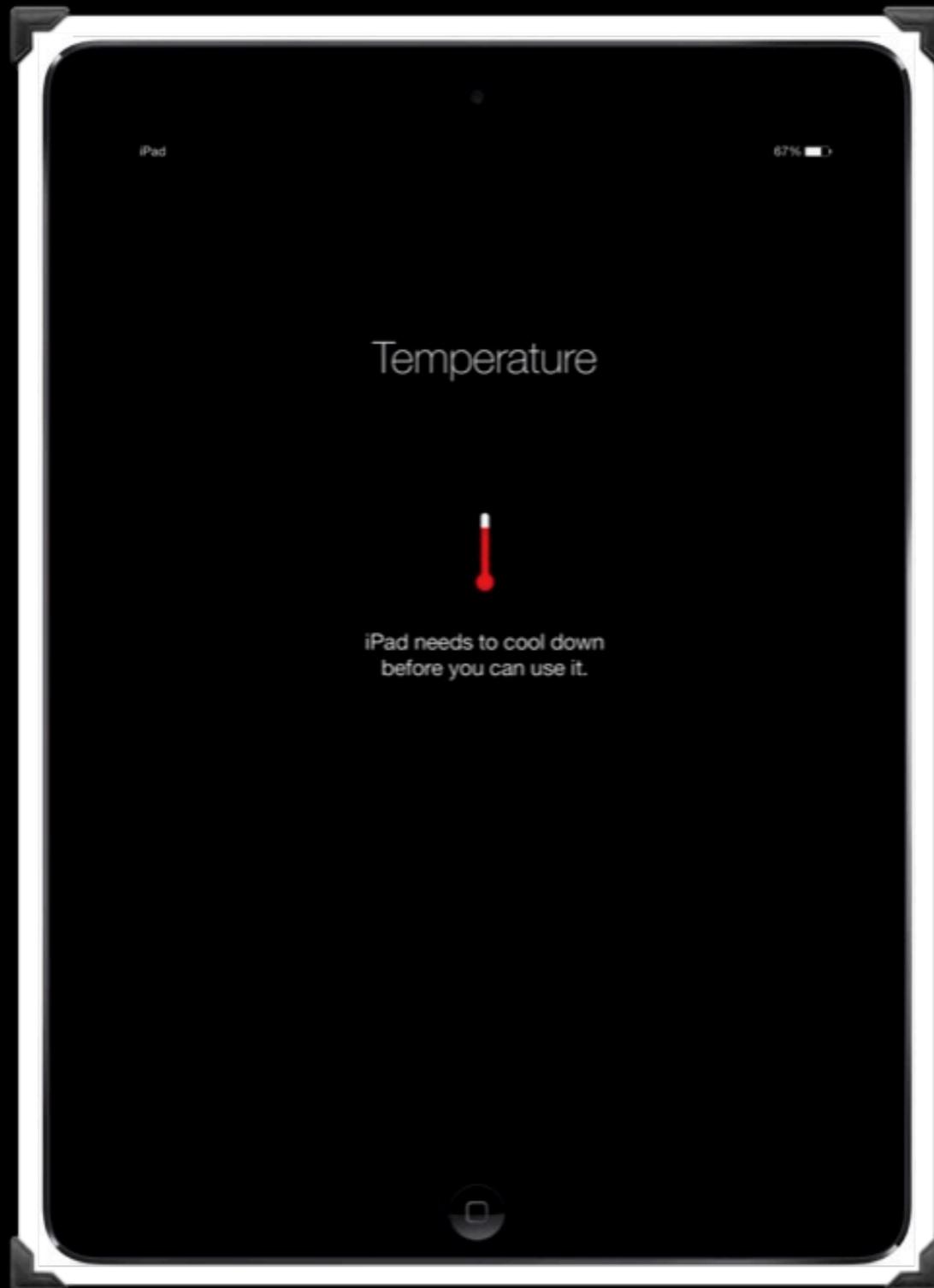
NEARBY WEATHER  
KXLL: Allentown Queen City... 21m  
399' MSL, CTAF 122.7  
320° at 3 kts, 10 sm, sky clear  
30.25 inHg, 11°C (-5°C dewpoint)  
5.4nm SW, course 216°M

**CAUTION:**  
*“Except for TFRs, NOTAMs older than 30 days are not provided.”*  
**AIM 7-1-11**

**This is to preserve bandwidth. You still need a briefing.**

**Imagine launching to an airport that has been repaving the only runway for the past month and a half!**

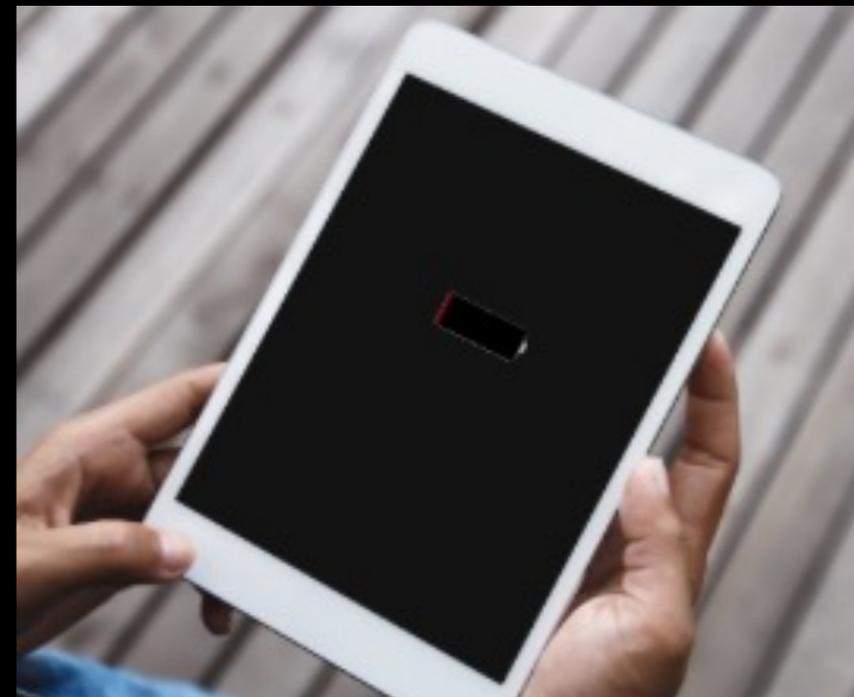
# These things can happen...



**iPad Overheat**

**Flightstream 210  
INOP**

**Bluetooth  
INOP**



**iPad Battery Dead**

**But you still have access to some of the weather - through the GNS 430 or 530. These ADS-B Weather Products are accessible.  
(no iPad required)**

**METAR [T]**

**TAF [T]**

**National NEXRAD ("CONUS") [G]**

**Regional NEXRAD [G]**



## The ADS-B Graphical Weather Page



Page 4 of the NAV Chapter

Use the cursor/highlight button and the small right knob to scroll through three different graphical weather products



### CONUS NEXRAD

-large scale, multi-state precipitation - for general planning only.  
(15 minute update)



### REGION NEXRAD

-uses local doppler radars, stitched together. "Composite" meaning multi-level.  
(2 1/2 minute update)



### [graphic] METARS

-cyan = VFR  
-green = MVFR  
-amber = IFR  
-red = LIFR

## The METAR Page



FPLN destination is default. Can be changed with cursor and small right knob.

But there is a look-ahead limitation preventing selection of airports at a significant distance from present position. (again... bandwidth preservation)

Page 7 of the Waypoint Chapter

## The TAF Page



TAFs are issued:

- 0000Z
- 0600Z
- 1200Z
- 1800Z

(One more click to the right)

Page 8 of the Waypoint Chapter

**Avoid unpleasant iPad disruptions. Pre-flight Planning:**

- Keep it cool
- Keep it charged
- Keep it handy



**Tail Winds!**