FIS-B Weather

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

Automatic Dependent Surveillance - B

ADS-B

FIS-B
Flight Information Services

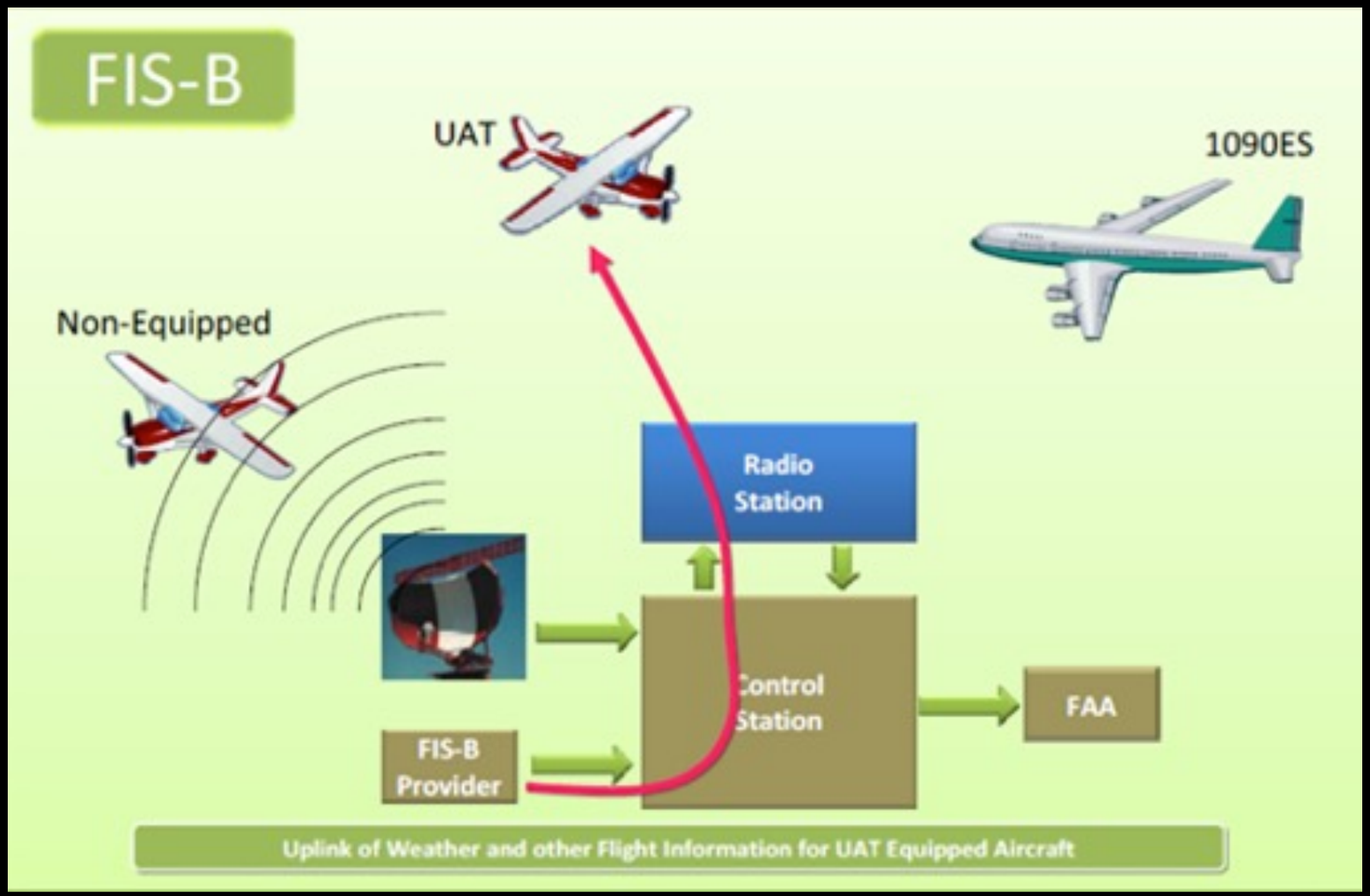
TIS-B
Traffic Information Services

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.

FIS-B

How it works

-Ground based antenna
    -Four levels: Ground, Low, Medium, High
-Continuous transmission
-Lag (1-15 minutes)



= 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

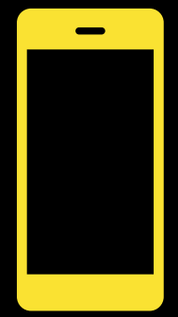
Icing

Freezing Levels

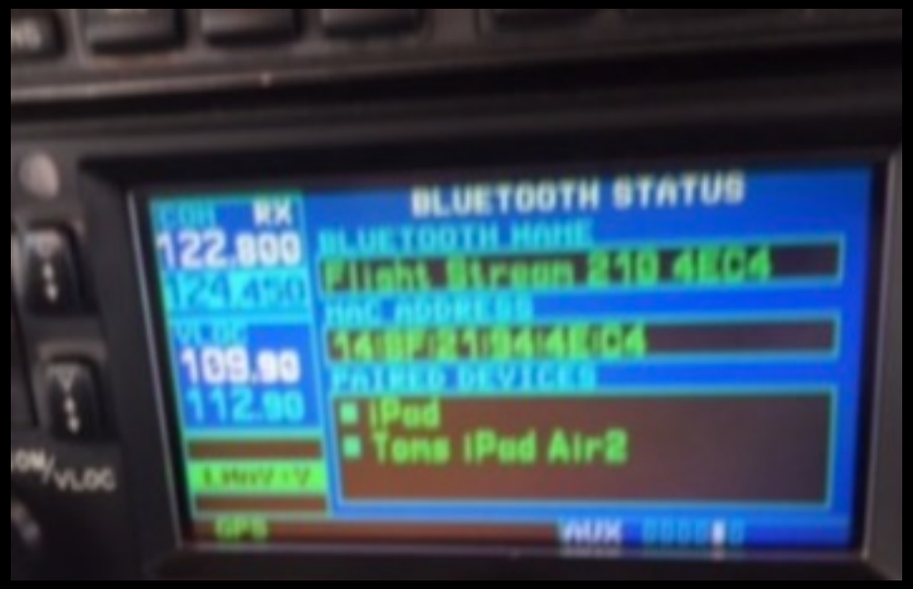
Cloud Tops

Graphical AIRMET

Center Weather Advisory



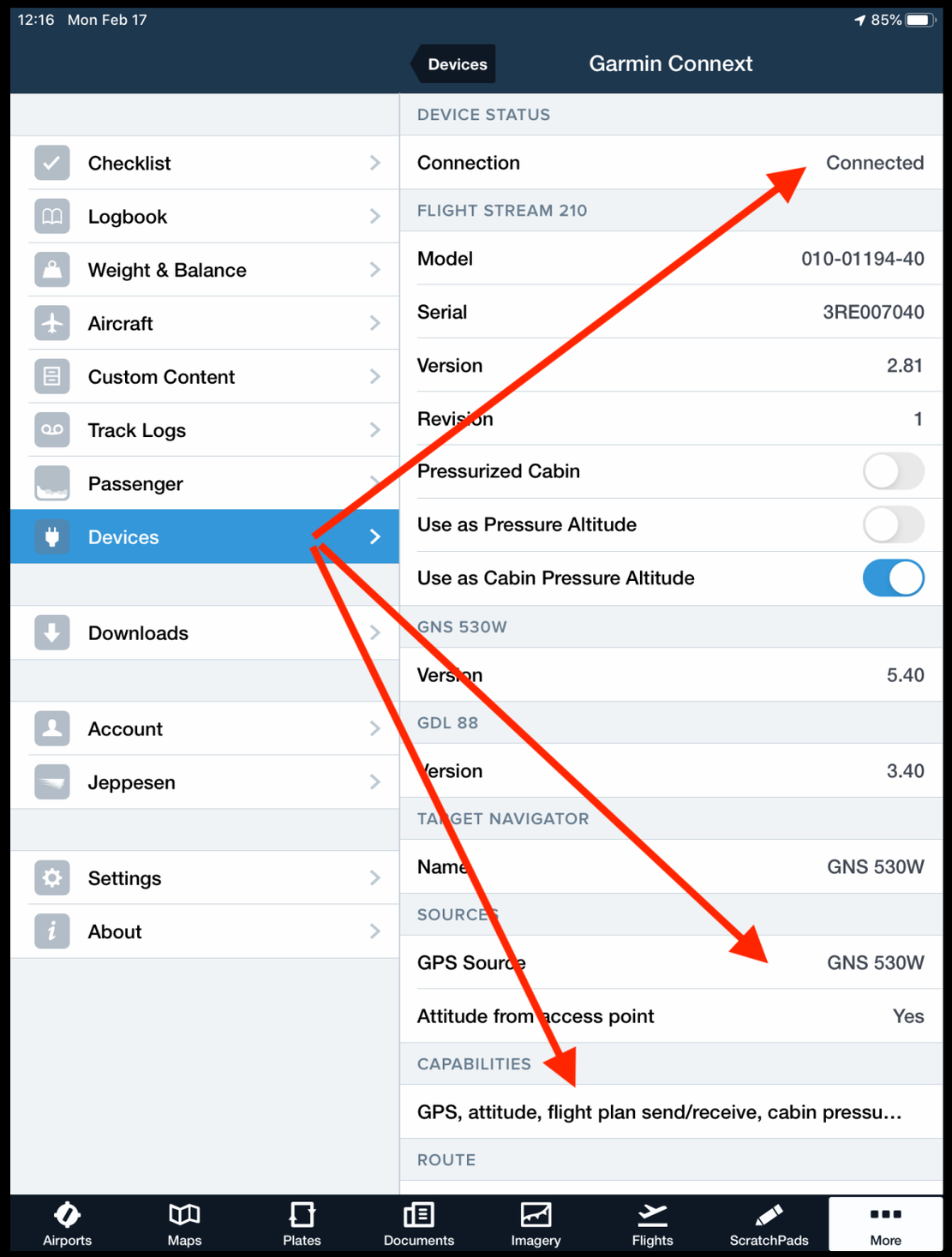
If you don’t connect via Flight Stream 210, you are missing a LOT of good weather information.

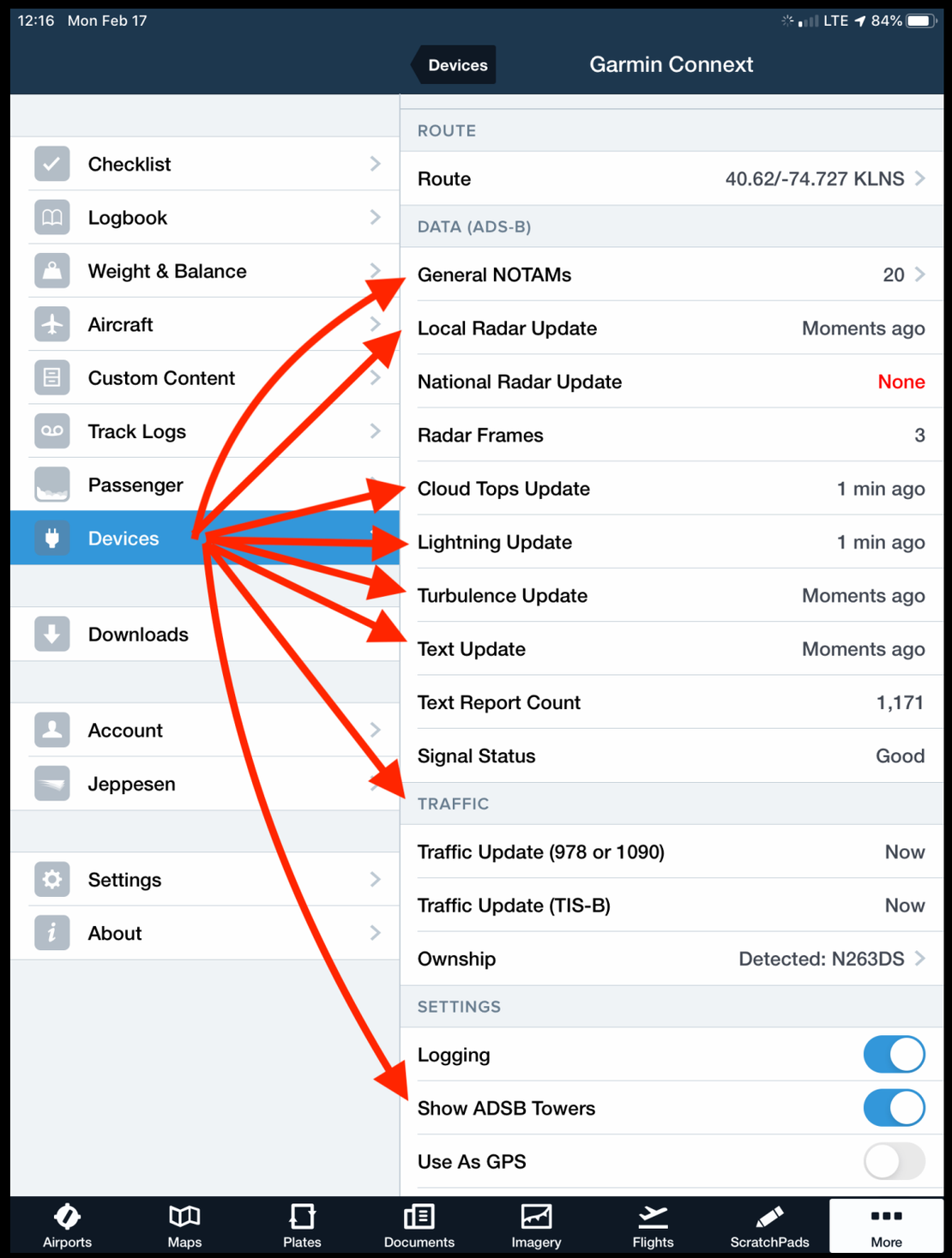


Cheatsheat on how to connect:
http://blueskyaa.com/wp-content/uploads/Flightstream.pdf

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.

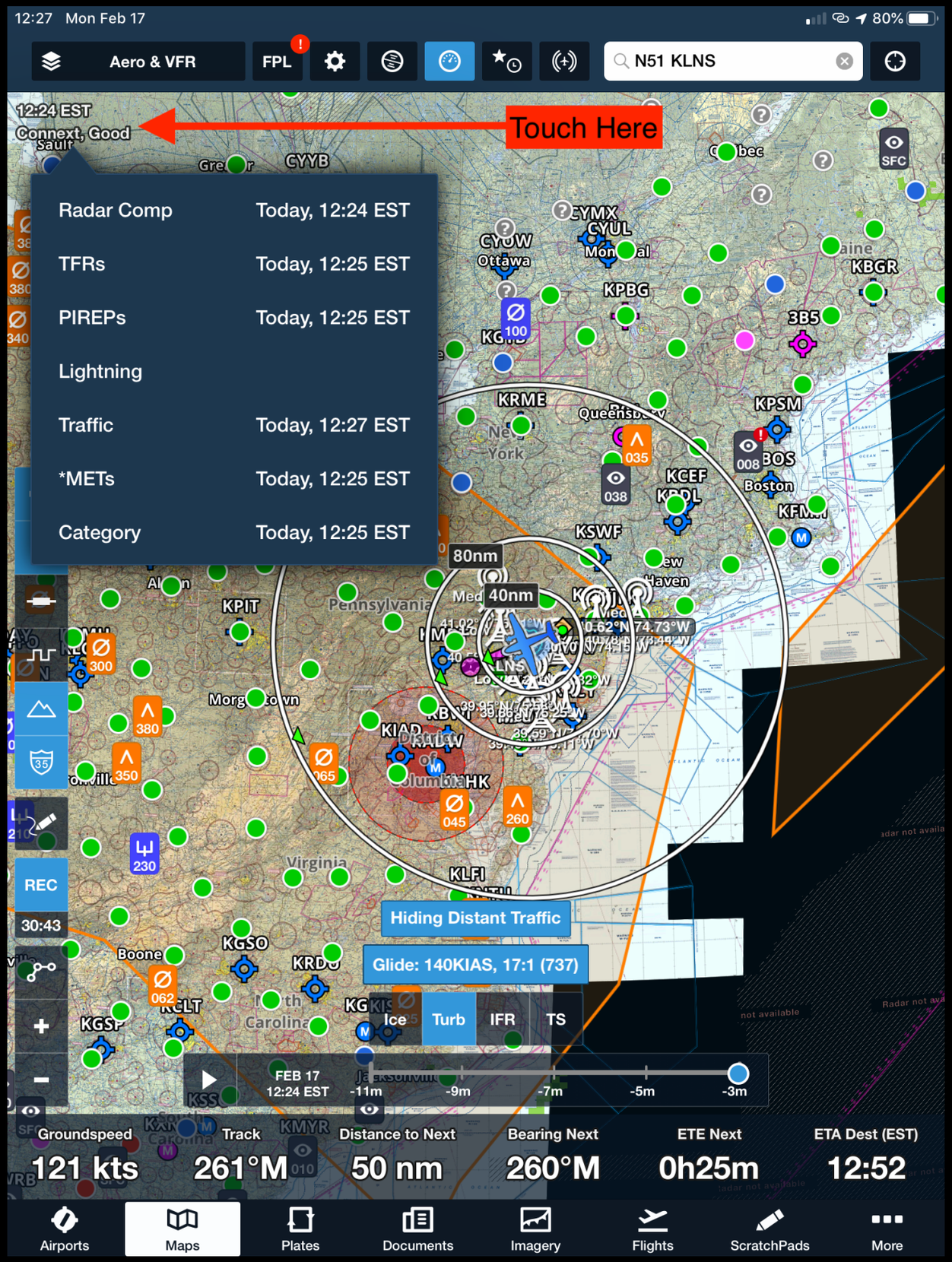
High — **Up to 24000’ AGL**

Medium — **Up to 14000’ AGL**

Low — **Up to 3000’ AGL**

Surface — **On the ground at limited airports**

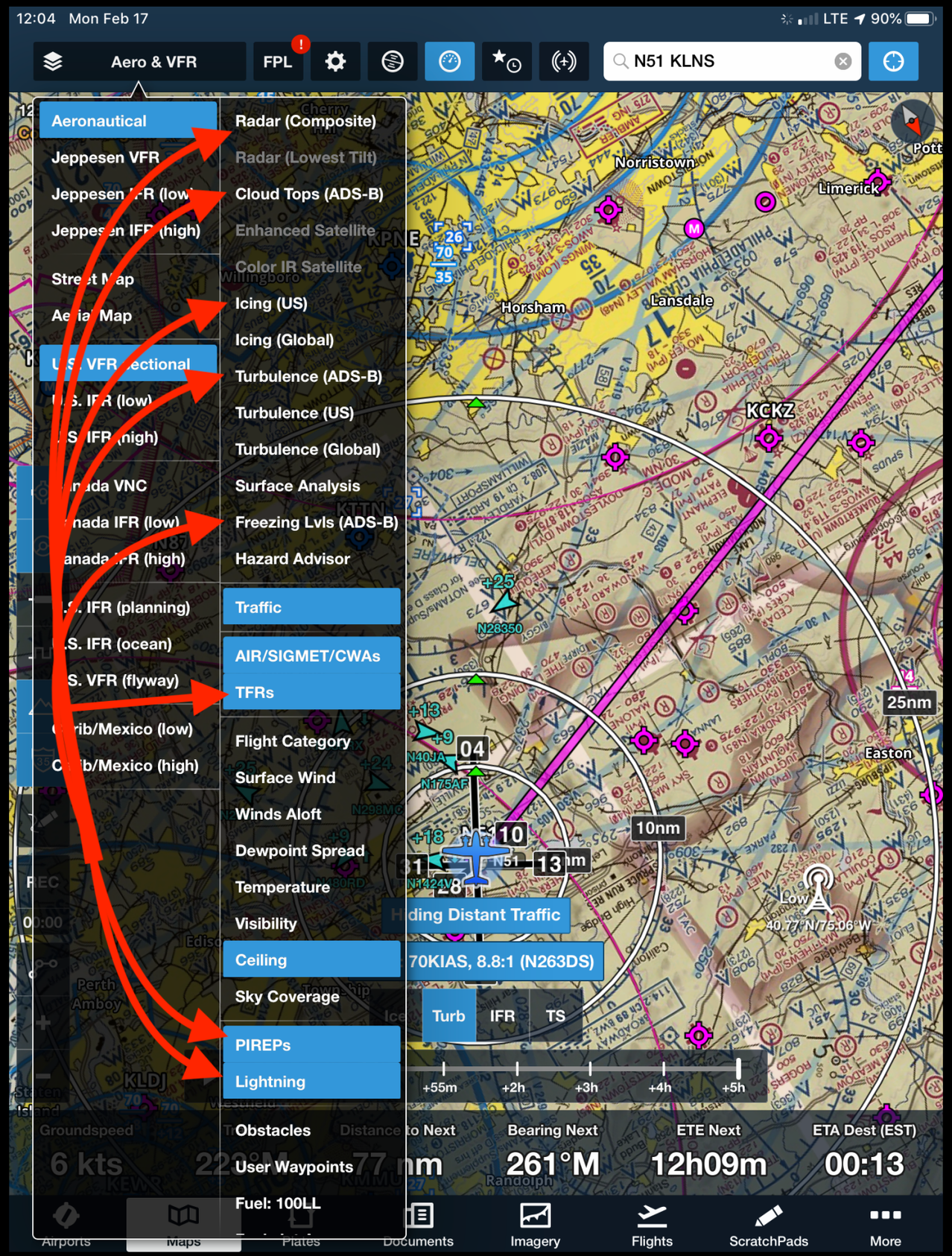
You can tap on the timestamp to see what is being updated



The Graphic Options

Tap the map overlay box to pull down your options

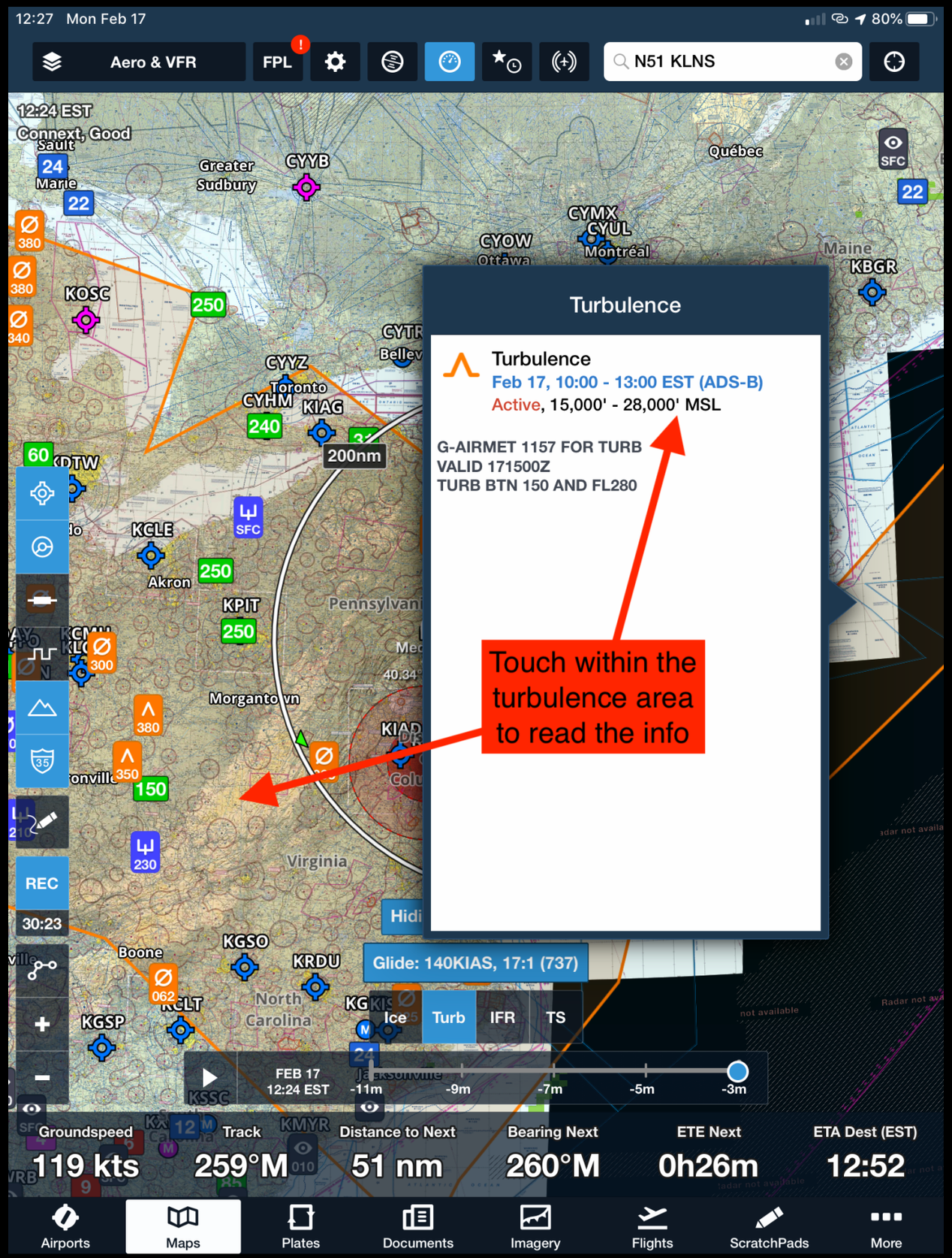
Tap the weather product that you want to see



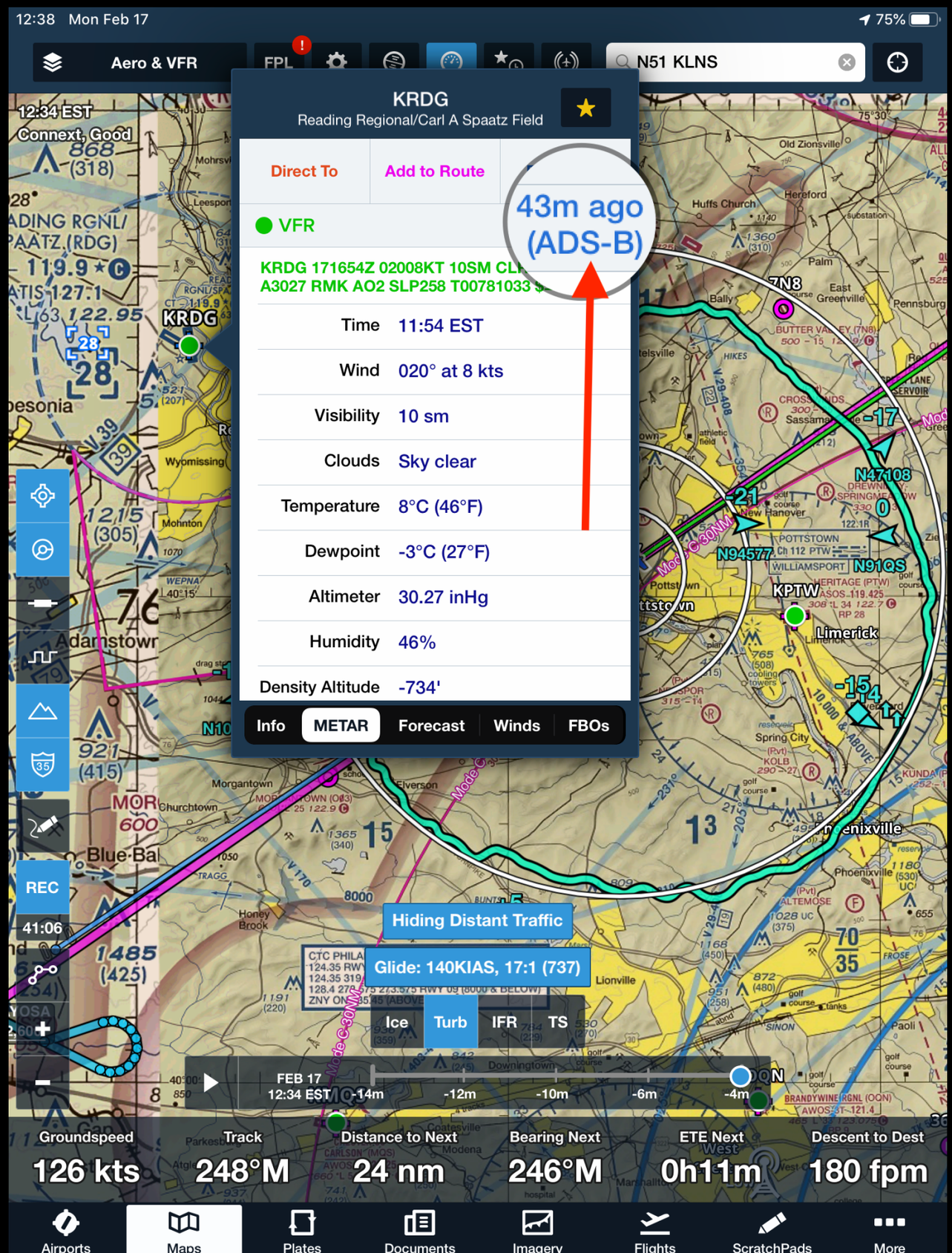
The Turbulence Layer

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

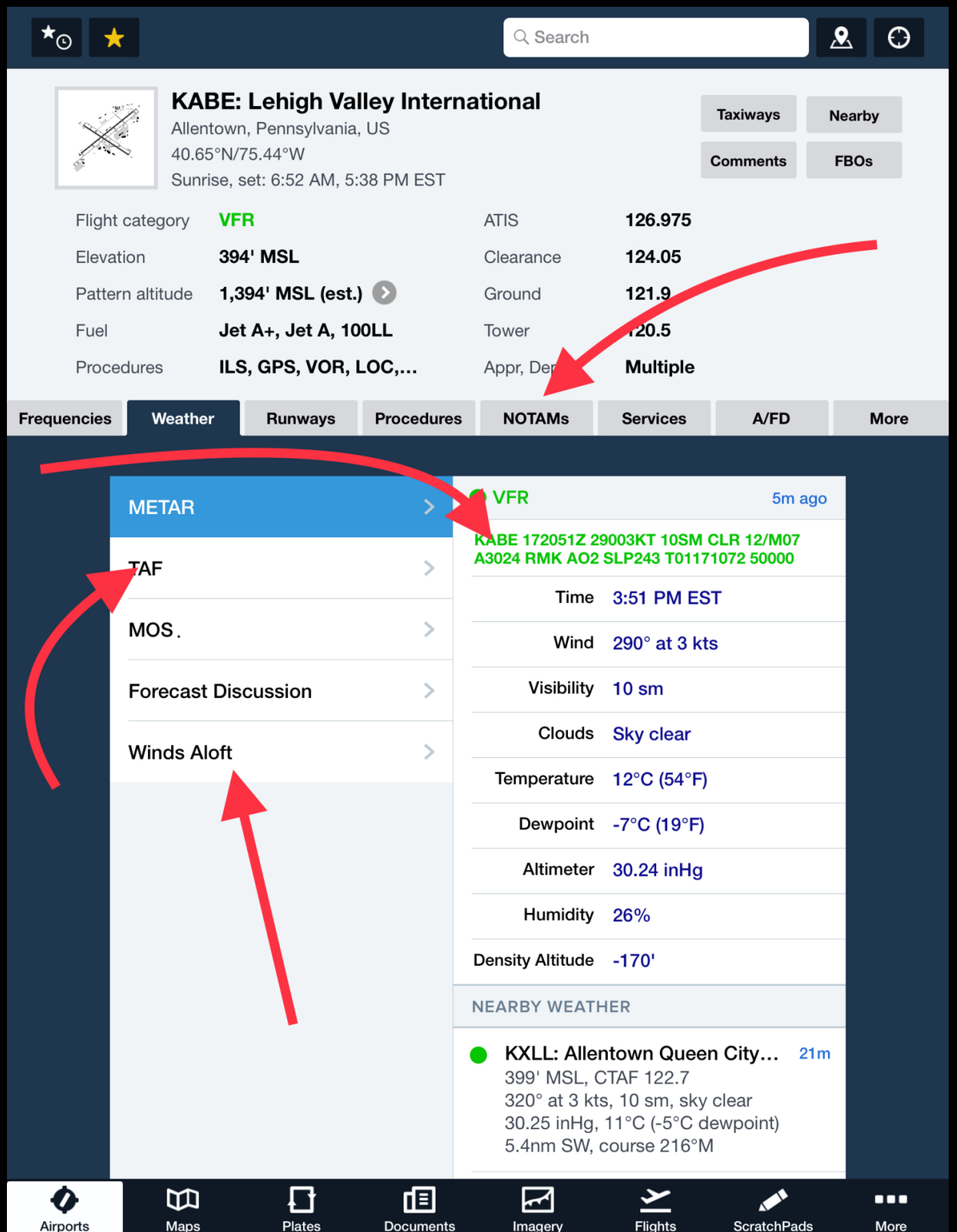
Here we can see that the PIREP and Ceiling layers have also been selected.



Textual items: Tap an airport on the map



The Airports Pages provide textual weather and NOTAMS



CAUTION:

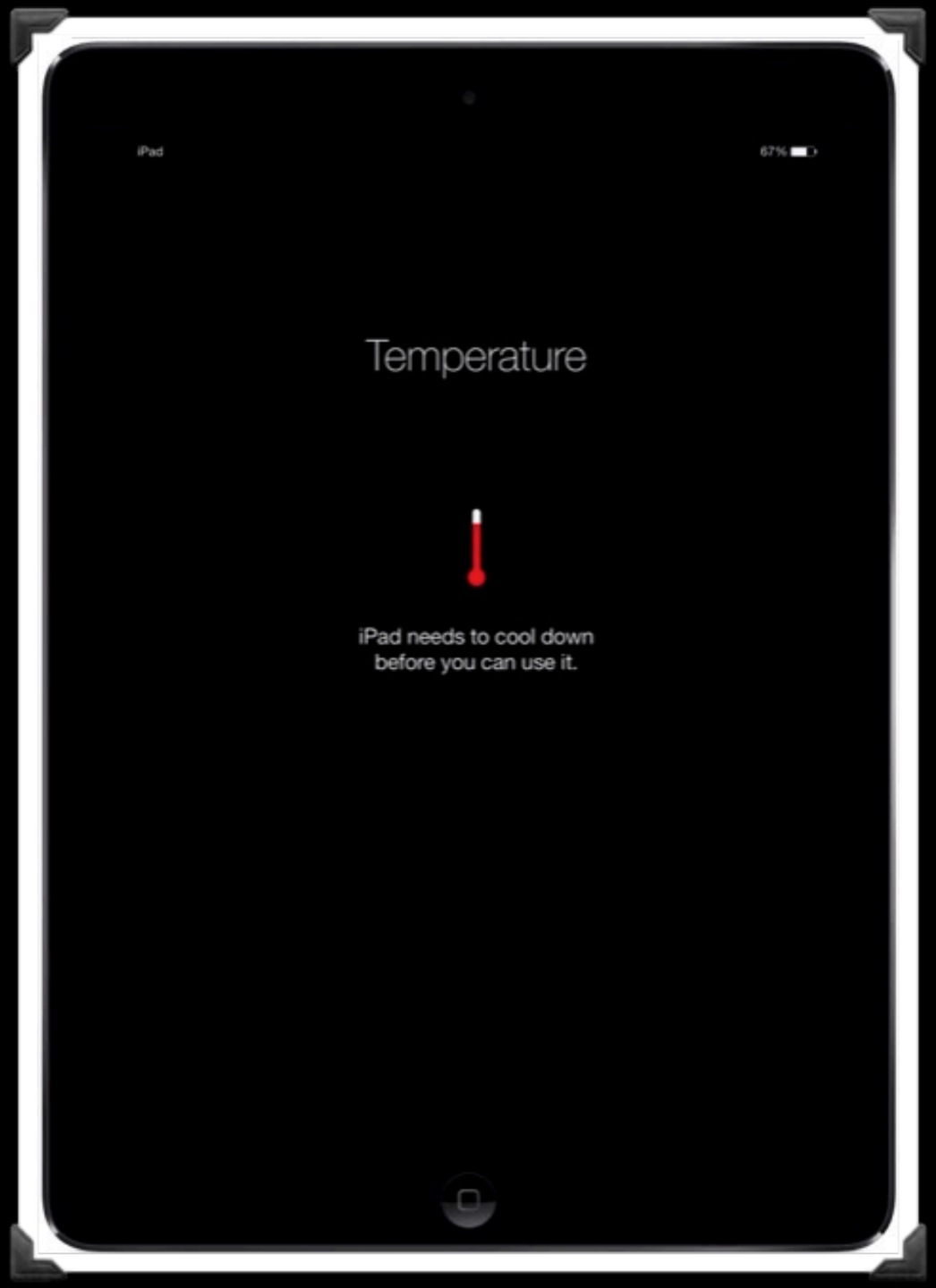
"Except for TFRs, NOTAMs older than 30 days are not provided."

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!

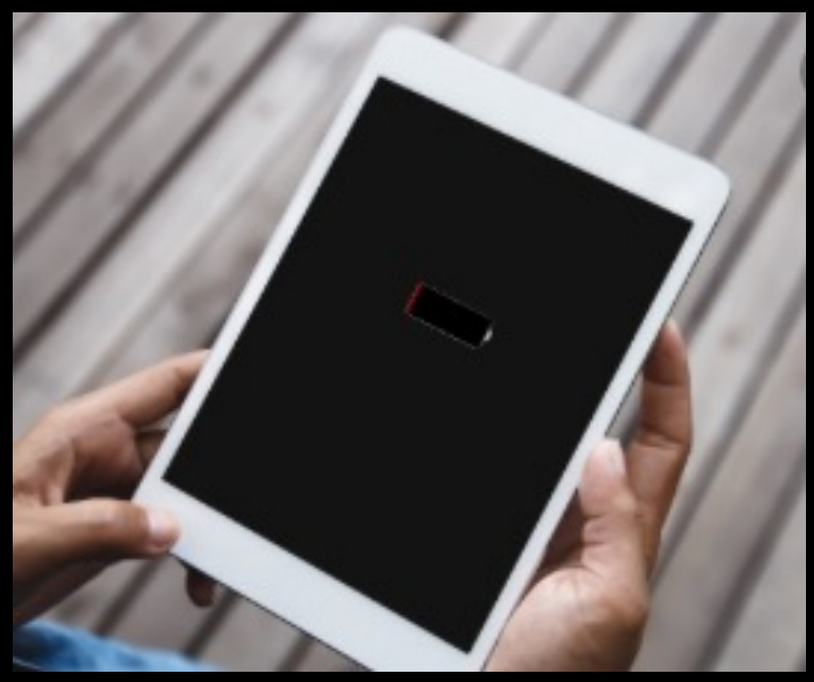
These things can happen…



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!