



Condor Aero Club
Zelienople, PA
Founded 1957

Weather Planning





How do You Flight Plan ??

- Look out the Window ??
- Watch the Local News or The Weather Channel ??
- Check the AWOS ??
 - KPJC: (724) 452-5304
 - KBTP: (724) 586-6434
 - KPIT: (215) 798-0218
- Go Online ??
- Call Flight Service ?? (1-800-WX-BRIEF)
 - In 2005, Lockheed Martin (now Leidos Flight Services) assumed FSS Functions.
- Account-Based Online Services ?? (1800wxbrief.com)
- Subscription-Based Tools ?? (Foreflight, etc.)
- Have you set Personal Minimums ??



Weather Briefings

■ What do the FARs say? (91.103 Preflight Action)

*“Each pilot in command shall, before beginning a flight, **become familiar with all available information** concerning that flight. This information must include—*

*(a) For a flight under IFR or a flight not in the vicinity of an airport, **weather reports and forecasts**, fuel requirements, alternatives available if the planned flight cannot be completed, and any known traffic delays of which the pilot in command has been advised by ATC;*

(b) For any flight, runway lengths at airports of intended use, and the following takeoff and landing distance information...”

■ FAA Quote in *Flying Magazine* (May 22, 2024):

“The FAA does not prefer one weather source over another, nor do we define a ‘legal weather briefing.’ It is up to the pilot in command (PIC) to use a weather source that best suits their needs and allows them to meet the preflight planning requirements.”

■ Obtaining a “Compliant” Self-Briefing:

- *Use Account-Based Login Services (1800wxbrief.com) and/or Subscription-Based Tools (Foreflight) that provide a Structured Briefing as well as a Documented Record of the Briefing.*



Standard vs “Compliant” Briefing

Standard (FAA/FSS) Briefing

1. Adverse Conditions
2. ** VFR Not Recommended
3. Synopsis
4. Current Conditions
5. Enroute Forecast
6. Destination Forecast
7. Winds Aloft
8. NOTAMs
9. (Prohibited Areas... Special Rules Area)
10. ATC Delays
11. (Request for PIREPs)
12. (Request for TFRs)

Compliant Briefing

1. Adverse Conditions (including TFRs)
2. Synopsis
3. Current Weather
4. Enroute Forecast
5. Destination Forecast
6. Winds and Temperatures Aloft Forecast
7. NOTAMs



METARs, TAFs, etc.

- METARs (Meteorological Aerodrome Report)
 - (5) SM Radius, Valid up to (1) Hour from Observation
- TAFs (Terminal Area Forecasts)
 - (5) SM Radius, Issued every (6) Hours, Valid for (24) to (30) Hours
- SPECI (Special Weather Report)
 - Special METAR issued more frequently if conditions change rapidly
 - Visibility Dropping Rapidly
 - Wind Shift by 45 degrees or more
 - Onset of Thunderstorms or other severe Wx
 - Rapid changes in Temperature, Dewpoint, or Pressure
- MOS (Model Output Statistics)
 - Combines outputs from multiple Weather Prediction Tools for >2000 US Airports
 - Up to (72) Hour Forecast

*** METARs & TAFs Alone are NOT Sufficient for Trip Planning ***



Subscription-Based Tools (EFBs)

Feature	iFly EFB	ForeFlight	Garmin Pilot	WingX Pro	FlyQ	DroidEFB	Paper Charts
VFR & IFR Navigation Charts	✓	✓	✓	✓	✓	✓	✓
Geo-referenced Approach Plates	✓	✓	✓	✓	✓	✗	✗
Synthetic Vision	✓	✓	✓	✓	✓	✗	✗
Terrain/Obstacle Alerts	✓	✓	✓	✓	✓	✗	✗
Scratch Pad	✓	✓	✓	✓	✓	✓	✓
Nexrad WX Imagery	✓	✓	✓	✓	✓	✓	✗
VFR & IFR Flight Planning	✓	✓	✓	✓	✓	✓	✗
Automated VFR Plans (RealPlan)	✓	✗	✗	✗	✗	✗	✗
Wind Optimization	✓	✓	⚠	✓	✓	⚠	✗
Airspace Alerts	✓	✓	✓	✗	✓	✗	✗
Visual Terrain Planning	✓	✓	✗	✗	✗	✗	✗
Leidos Online Filing	✓	✓	✓	✓	✓	✓	✗
Weight & Balance	✓	✓	✓	✓	✓	✓	✗
Leidos Preflight Briefing	✓	✓	✓	✓	✓	✓	✗
Flight Data Recording	✓	✓	✓	✓	✓	✓	✗
Logbook	⚠	✓	✓	✗	✓	✓	✗
Chart Supplement Data	✓	✓	✓	✓	✓	✓	✓
FBO Directory	✓	✓	✓	✓	✓	✓	✗
Realview Airport Images	✓	✓	✗	✗	⚠	✗	✗
Fuel Prices	✓	✓	✓	✓	✓	✓	✗
Graphical TFR, AIRMETS, SIGMETS	✓	✓	✓	✓	✓	✓	✗
Backup Flight Instruments	✓	✓	✓	✓	✓	✗	✗
Vertical Profile View	✓	✓	⚠	✗	✓	✗	✗
Auto-Taxi Airport Diagrams	✓	✓	✓	✓	✓	✓	✗
Auto-Taxi Satellite Images	✓	✓	✗	✗	✗	✗	✗
Connected Panel (EFIS)	✓	✓	✓	✓	✓	✓	✗
Open ADS-B Receiver Support	✓	✓	⚠	✓	✓	✓	✗
ADS-B Traffic w/Alerts	✓	✓	✓	✓	✓	✓	✗
3D ADS-B Traffic Display	✓	✓	✓	✗	✗	✗	✗
ADS-B Weather	✓	✓	✓	✓	✓	✓	✗
Supported Hardware & Tech Support							
iPad/iPhone	✓	✓	✓	✓	✓	✗	✗
Android	✓	✗	⚠	⚠	✗	✓	✗
Windows	✓	✗	✗	✗	✗	✗	✗
Live Support Desk	✓	✗	✓	✓	✗	✗	✗
Active Social Media/Forums	✓	✓	✗	✗	✗	✗	✗
Overall Score	97%	89%	81%	71%	74%	59%	1%
User Reviews (App Store/Google Play)	4.6	4.4	3.3	3.4	4.5	4.4	n/a
Annual Subscription (This grid updated January 2024)	VFR \$194.99 IFR \$149.99	Basic \$120.00 Pro \$240.00 Perf \$360.00	Std \$109.99 Prem \$209.98	Base \$74.99	VFR \$199.99 IFR \$199.99	Basic \$74.99 Pro \$149.99	VFR \$1314.00 IFR \$5,321.00

✓ Full ⚠ Partial ✗ No Support



Graphical Forecasts for Aviation (GFAs)

Aviation Surface/Clouds Forecast Graphics

21Z



VISIBILITY (SM)



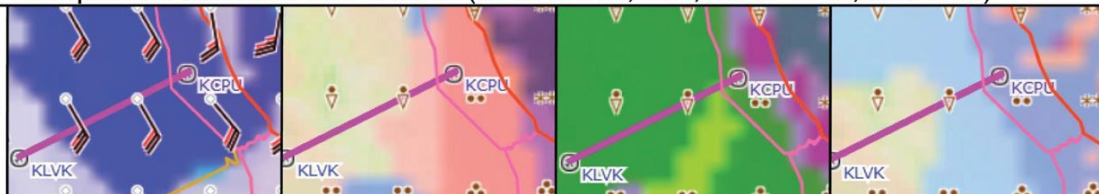
SURFACE WINDS/GUSTS(RED)



COVERAGE AND BASE (MSL)

Graphical Forecasts for Aviation (SFC WIND, VIS, WX/PCPN, and CIG)

19Z

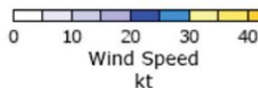


15015G30KT

1SM

-SHRA

OVC010



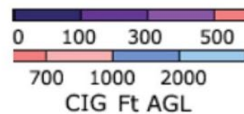
Wind Speed
kt



VIS SM



Rain
Snow
Mix
Chance
Likely



CIG Ft AGL

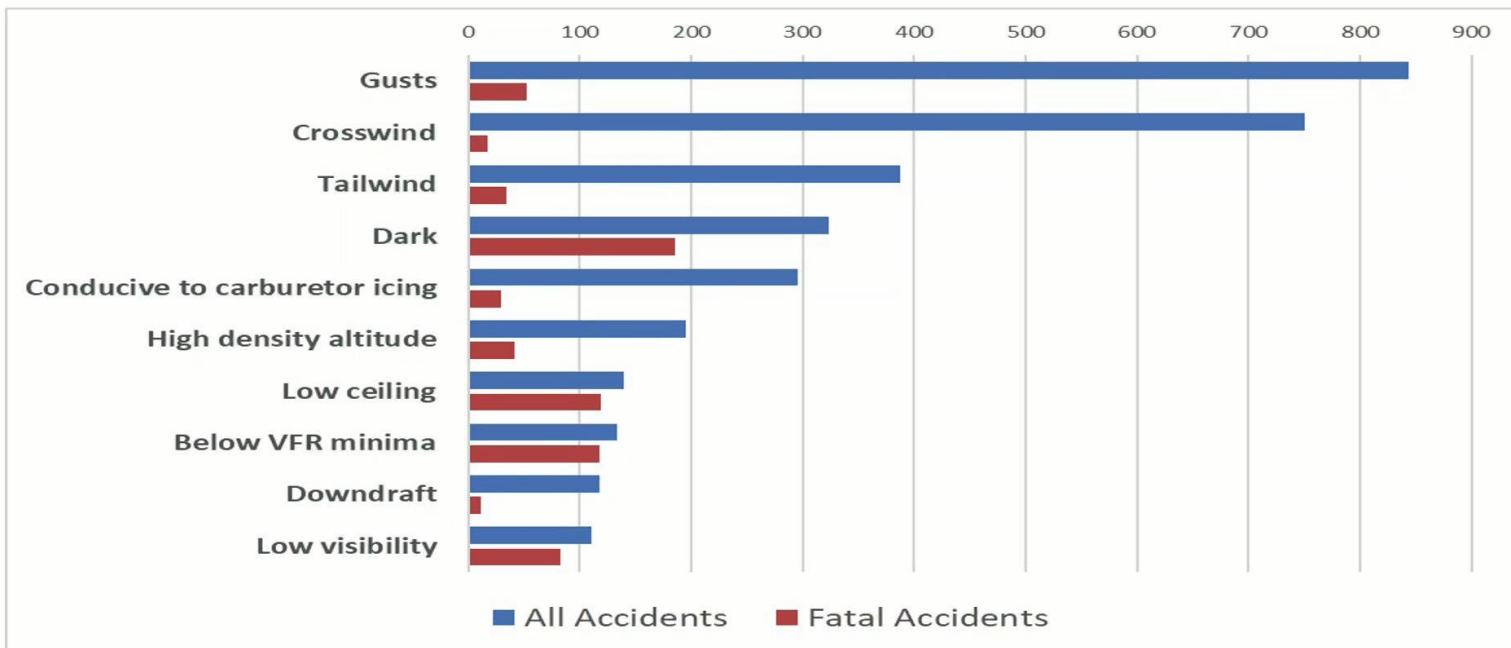


Weather-Related GA Accidents

(~25% of All GA Accidents)



Weather Facts





- [Boldmethod Aviation Weather Quiz 1](#)
- [Boldmethod Aviation Weather Quiz 2](#)

- [Comparing Airborne Radar to Aviation Weather](#)

- [CondorAero.com](#)

- [1800WXBRIEF.com Demo](#)
- [ForeFlight Web Demo](#)

- [ADS-B Weather Quiz](#)
- [ADS-B Traffic Quiz](#)



Questions ?

