

Next Generation of the HEMS Weather Tool



Where do we go from here?



Five-Alpha LLC

FAASTeam Webinar



- 2,000 Signed up for this webinar.
- Over 5,000 have viewed it on YouTube since.

One of the Best Kept **"WEATHER SECRETS"** in Aviation



The HEMS Weather Tool



Presented By: &



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<https://www.youtube.com/watch?v=ukDXsy6BFQM>

Groups that watched the Webinar



- GA Pilots
- Ultralight Pilots
- Agriculture Pilots
- **Balloon Pilots**
- EMS Pilots
- First Responders

- Glider Pilots
- Floatplane Pilots
- ENG Pilots
- **Drone Pilots**
- Offshore Pilots

Name Change



- **Quote from Balloonist on webinar feedback.**

“Where has this d#\$ned thing been for the last 10 years. I thought it was something just for HEMS pilots.”

Helicopter Weather Accidents (2006-2019)



1. 02-Feb-06 CHI06LA074 / IIMC / CFIT Chesterfield, IN
2. 10-Dec-06 LAX07FA056 / CFIT / IMC Hesperia, CA
3. 03-Dec-07 ANCo8FA025 / CFIT / Ocean IMC Conditions Whittier, AK
4. 05-Feb-08 DFW08FA062 / CFIT / IIMC S. Padre Island, TX
5. 08-Jun-08 DEN08FA101 / CFIT / IMC Huntsville, TX
6. 27-Sep-08 MIA08MA203 / CFIT / IMC District Heights, MD
7. 25-Sep-09 ERA09FA537 / CFIT / IMC WX / loss of control Georgetown, SC
8. 14-Nov-09 WPR10FA055 / LOC/IMC Wx Doyle, CA
9. 25-Mar-10 ERA10MA188 LOC/IMC WX / TSRW Brownsville, TN
10. 31-Aug-10 CEN10FA509 / LOC / Spatial Disorientation Walnut Grove, AR
11. 30-Sep-12 CEN12FA670 / IMC WX Eastland, TX
12. 10-Dec-12 CEN13FA096 / IMC WX / Icing Compton, IL
13. 02-Jan-13 CEN13FA122 / CFIT / Possible IMC Wx and Icing Clear Lake, IA
14. 06-Jun-13 ERA13FA273 / CFIT/ LOC/ IMC Manchester, KY

15. 31-Dec-14 WPR15FA072 / Low clouds and fog in area Benson, AZ
16. 12-Mar-15 CEN15FA171 / Low ceiling/visibility Eufala, OK
17. 06-Apr-15 ERA15FA178 / low ceiling and fog Florence, AL
18. 10-Dec-15 WPR16FA037 / CFIT/IMC McFarland, CA
19. 15-Dec-15 WPR16FA040 / CFIT Superior, AZ
20. 26-Feb-16 ERA16FA140 / CFIT/IMC Enterprise, AL
21. 27-Mar-16 ERA16FA143 / CFIT/IMC Canadensis, PA
22. 06-May-16 ANC16FA023 / Marginal VMC Skagway, AK
23. 16-Nov-16 WPR17FA021 / low visibility with heavy rain Pukoo, HI
24. 15-Feb-17 CEN17FA103 / IMC Shreveport, LA
25. 29-Jan-19 CEN19FA072 / CFIT/IMC Probable Zaleski, OH

**Note: 15-25 represent 23 Fatalities*

Inclusion of other weather resources



- **Other AWOS Sites**
- **DOT Road Sites**
- **RAWS (Remote Automated Weather Stations) 1731**
- **Weather Cameras**
- **Other Weather Sites**

Entities Asking For This



Proposed Research Project



- **Find an institution of excellence or other agency to conduct a research project to do the following.**
 - Evaluate “all” available weather sources for feasibility
 - Evaluate reliability
 - Evaluate impact on the HEMS Weather Tool Algorithm
 - Evaluate accuracy

- **Spring FPAW Topic**

- Turbulence Mapping in Urban Areas
- Onboard Weather Gathering Instrumentation
- Crowd Sourcing Weather Gathering/Reporting

Smart Phone Application



- **The HEMS Weather Tool is currently an html based system that while it works well on a computer can be “clunky” when accessed by a smart phone or tablet which can lead to distraction.**
- **Questions and Roadblocks:**
 - Who can create an application?
 - Government
 - 3rd Party
 - Is there funding to be had?
 - What issues are there with connectivity and band width?

Thank You



<https://vtol.org>



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