

# NTSB Most Wanted List

Critical changes needed to reduce transportation accidents and save lives.

## *Improve General Aviation Safety*



### **NTSB Weather Priorities**

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# Challenges

- **We have learned over the years that weather is one of the weakest areas for pilots**
  - You can take the private pilot exam, fail all of the weather questions and still pass

## **Excerpt from NTSB Most Wanted List:**

“..Knowledge tests and flight reviews should test for awareness of weather, use of instruments, and use of “glass” cockpits.”



# What is the issue?

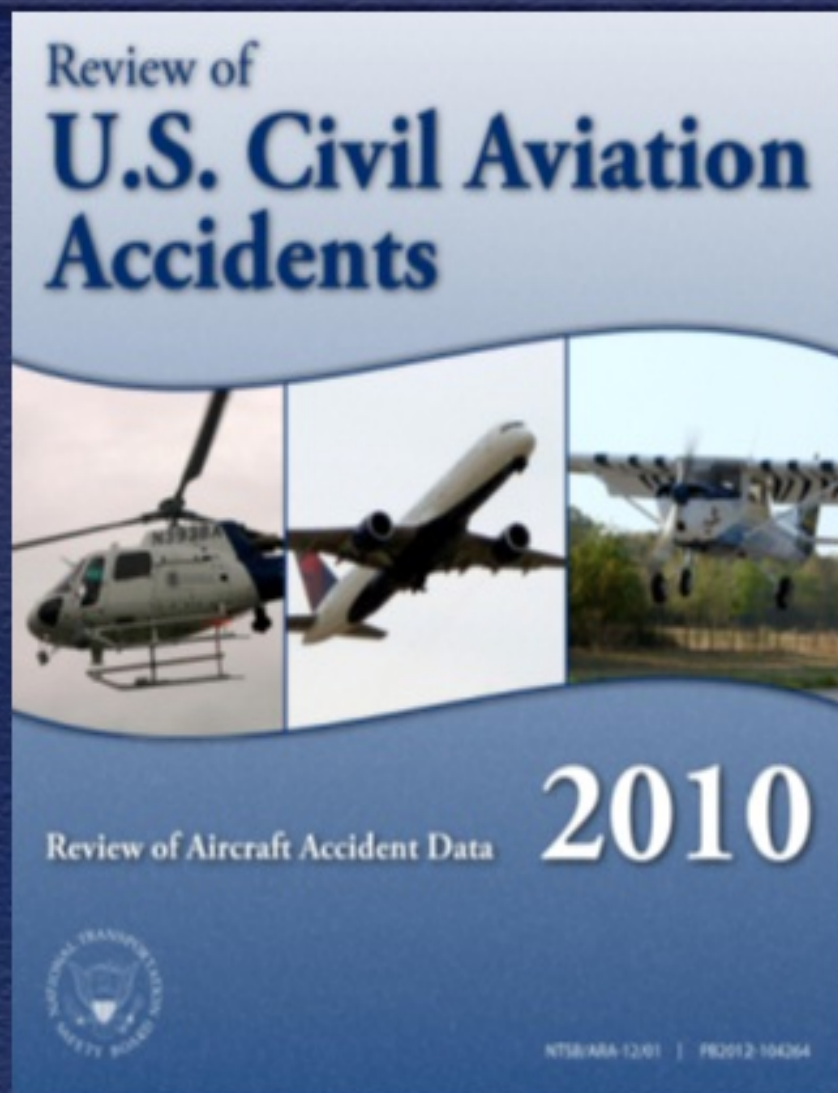
**“..NTSB continues to investigate about 1,500 accidents each year in general aviation. In most cases, pilots did not have the adequate knowledge, skills, or recurrent training to fly safely, particularly in questionable weather conditions.”**

-NTSB Most Wanted List





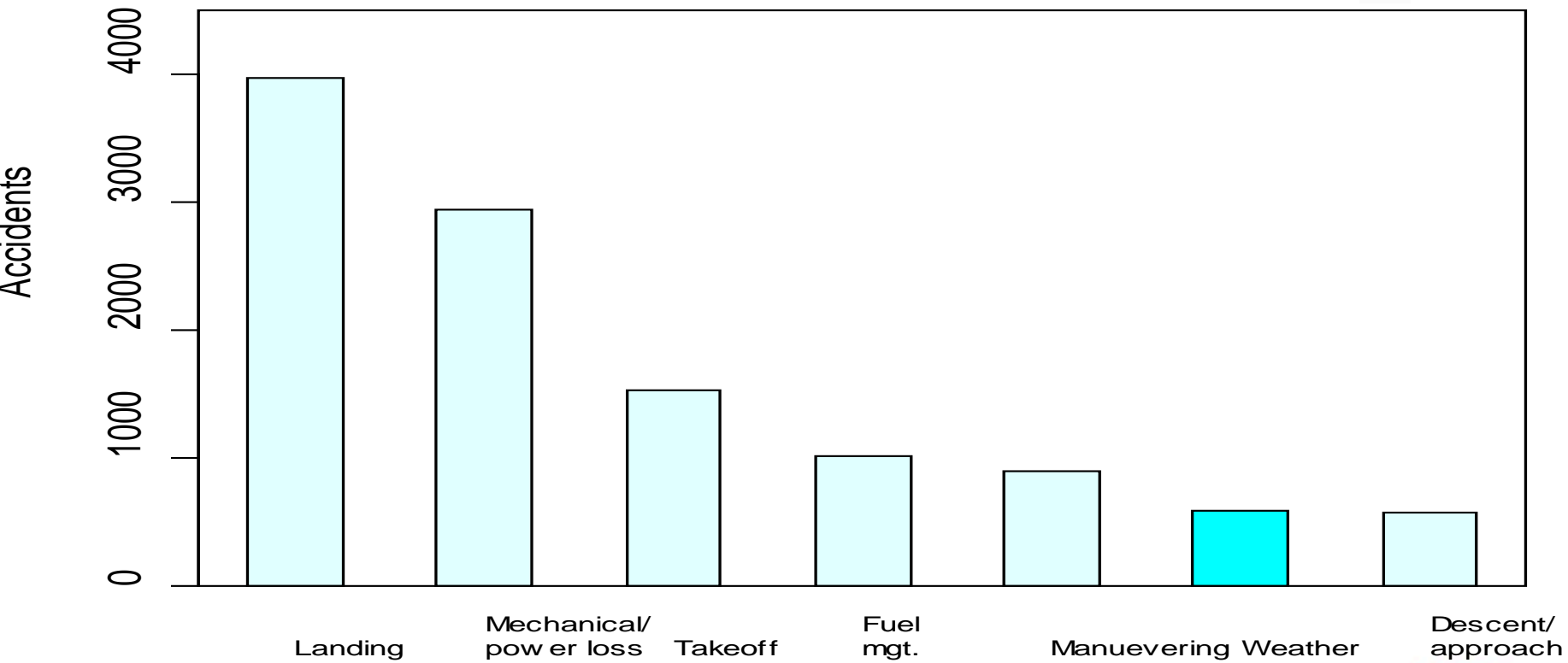
# NTSB Accident Statistics



- **1,500** accidents
- **275** fatal accidents – **470** fatalities
- Part 91 accounted for 51% of total flight time and 97% of all fatal accidents

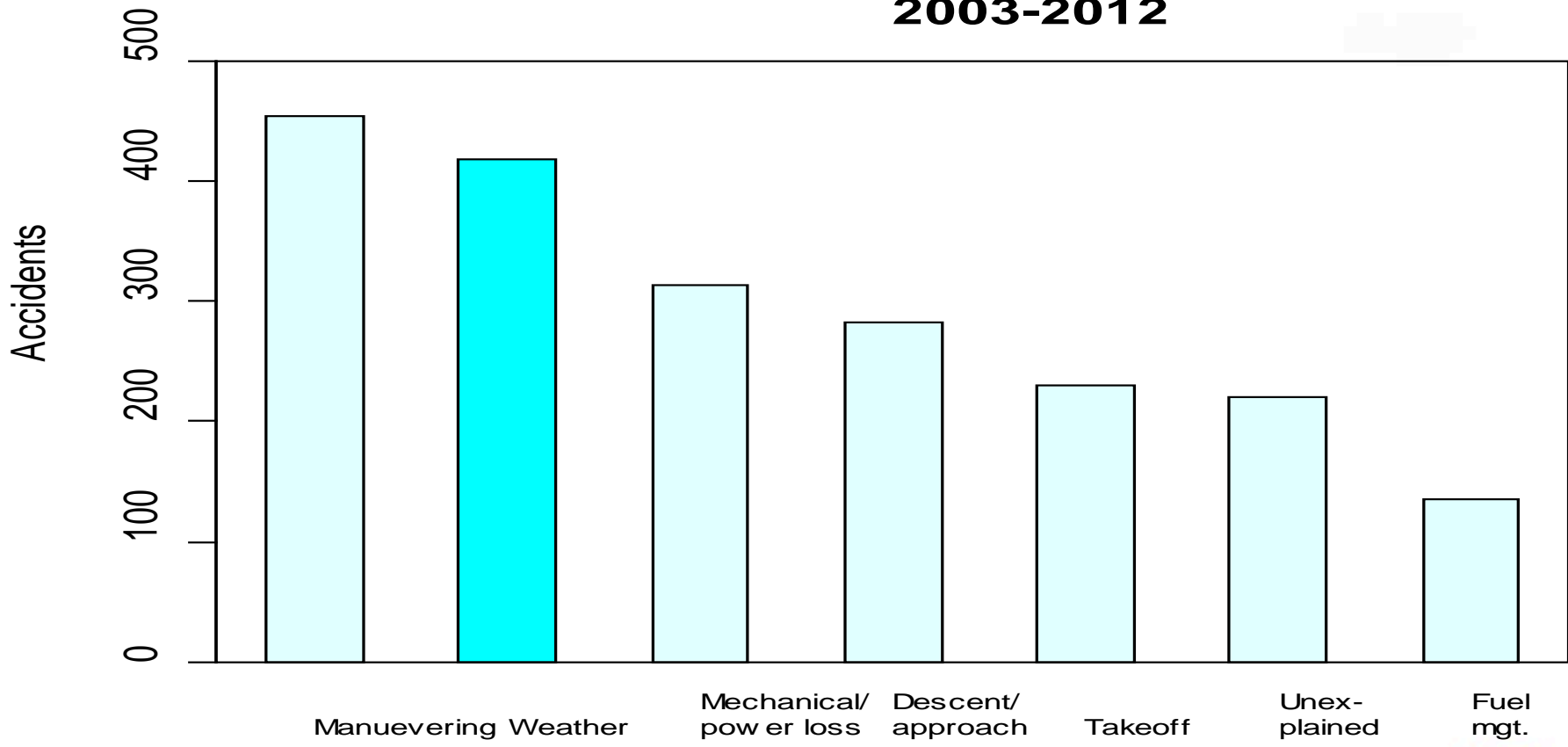


# Leading causes of fixed-wing 2003-2012



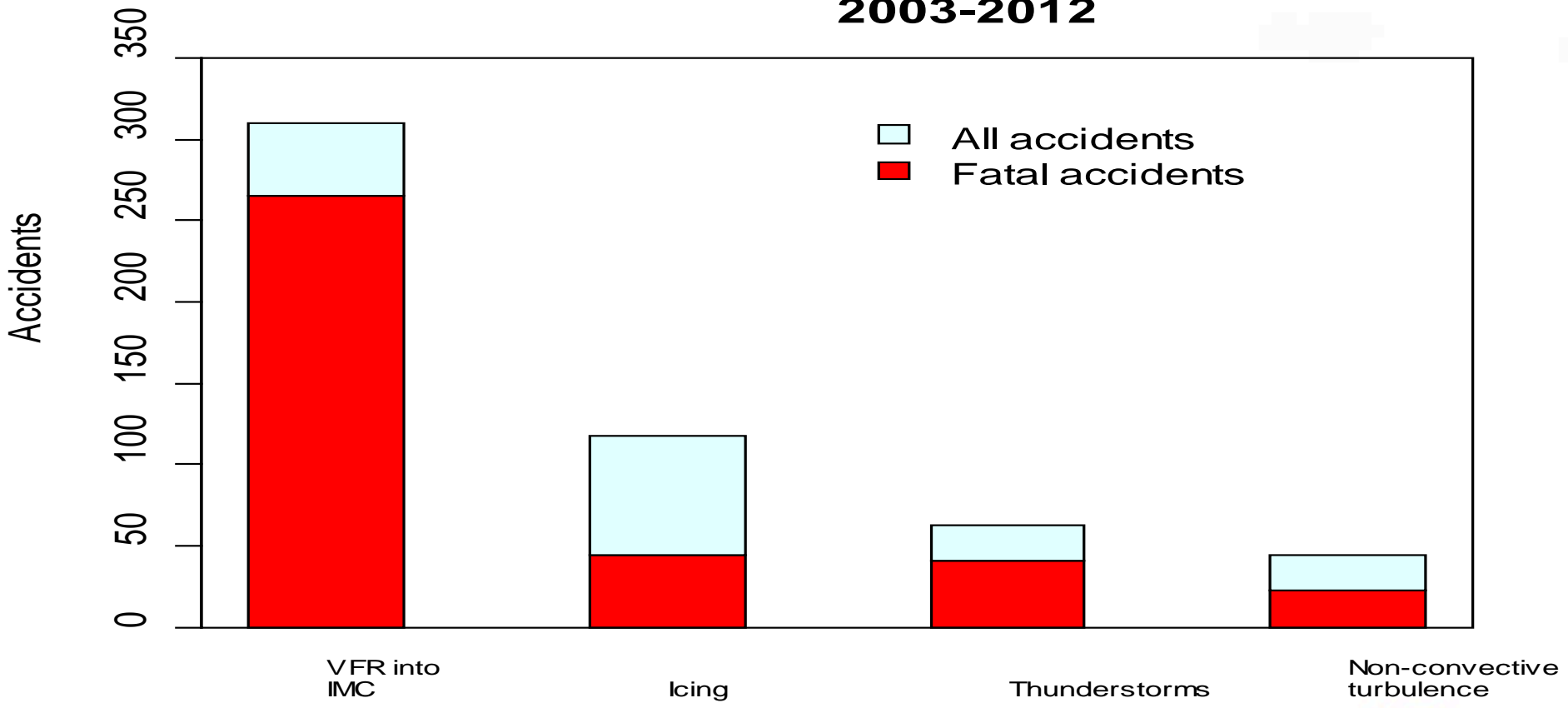


## Leading causes of FATAL fixed-wing accidents 2003-2012





## Types of fixed-wing weather a 2003-2012



# VFR into IMC

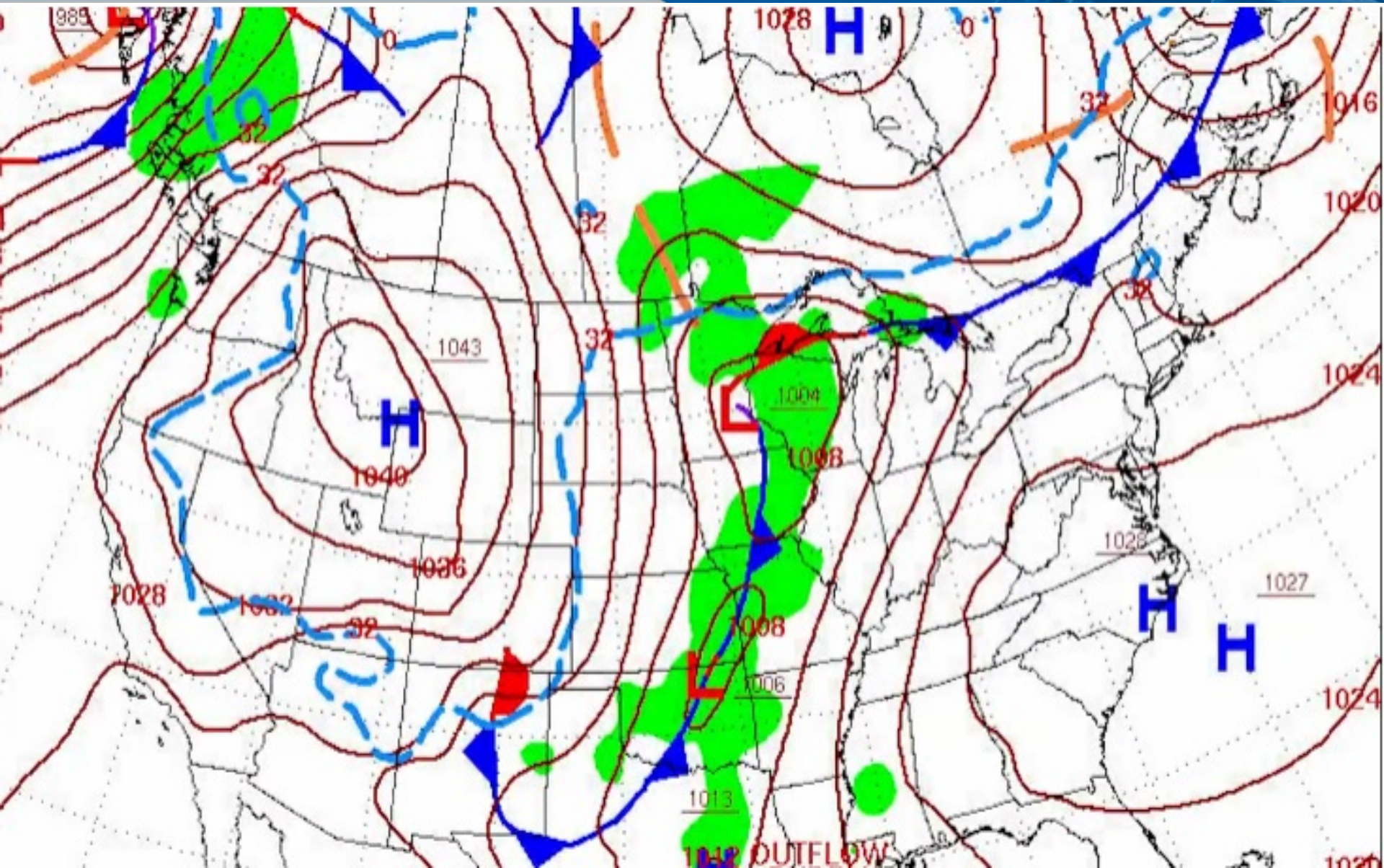


- **On November 26, 2011, a Cirrus SR-20 plunged to the ground in suburban Chicago, killing its four occupants.**
- **Pilot information:**
  - 47 years old
  - Private pilot
  - 207 total hours
  - “some” instrument training






# Low Pressure System Moving into the Area







# Area Forecast

9:00 - 11:00 a.m.

Ceiling Broken / Overcast 1,500 - 2,500

Overcast 4,000

Scattered light rain showers

Outlook: IFR due to ceilings, rain, mist

# Amended Terminal Area Forecast



The DPA Terminal Area Forecast (TAF), in effect from 0600, expected weather conditions at 1000 to be: wind from 200 degrees at 12 knots, gusting to 19 knots; visibility 6 miles in light rain showers and mist; broken clouds at 2,500 feet agl, and overcast clouds at 3,500 feet agl. The DPA TAF was amended at 0915. The amended forecast expected weather conditions at 1000 to be: wind from 190 degrees at 12 knots; visibility 5 miles in light rain, drizzle, and mist; and overcast clouds at 800 feet agl.



States he was VFR



**...visual flight rules, uh, was wondering if we were gonna be available for landing.**

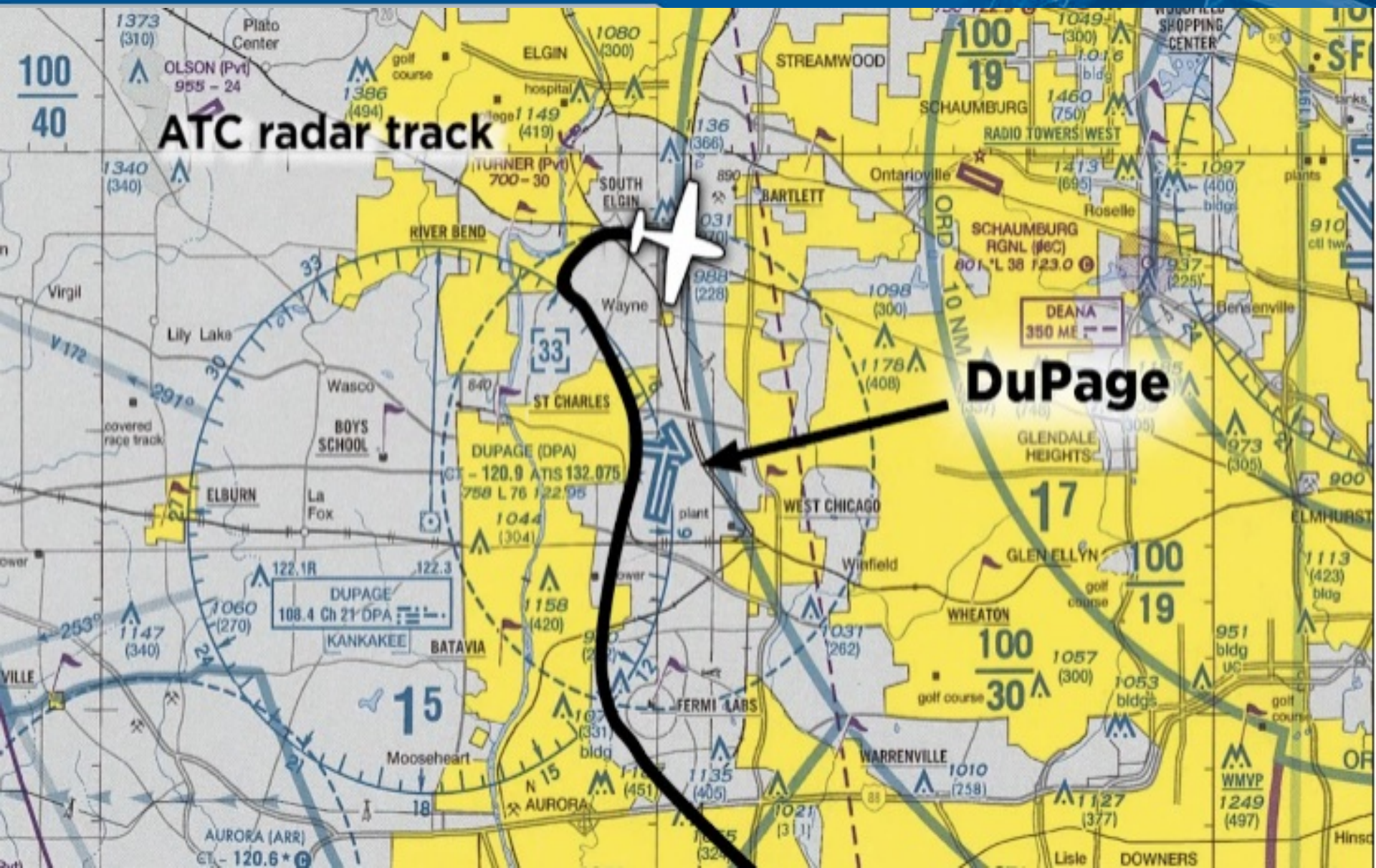
# Field Was IFR



**November 3CD, the field is IFR, say intentions.**



# Trying to Locate the Field



In Too Deep..



I'm in IFR training, and I've let this get around me.

# What we Teach

- Utilize weather technology correctly to make smart decisions
  - Understand limitations of your specific equipment, recognizing lag time and other restraints and plan accordingly
  - Becoming competent and confident prior to flying with advanced equipment
- Know before you go mentality is important
  - Receive a weather briefing
  - Gather the most current weather information
- Never become overconfident
  - Don't underestimate mother nature





# Education and Training



 MAIN MENU

Interactive Scenario 1: Upper Midwest Autumn

LOOK LEFT

LOOK RIGHT



OPEN DATALINK WEATHER



VIEW OAT



USE RADIO

## Decision 1

- A** Continue on course through precipitation

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- B** Ask ATC for deviations around precip ahead

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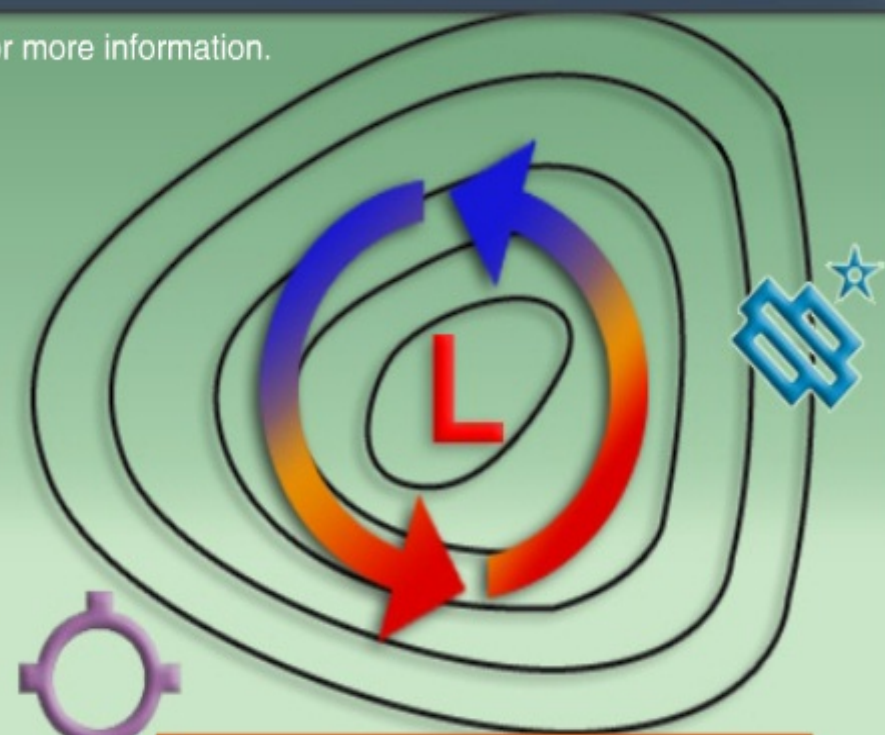
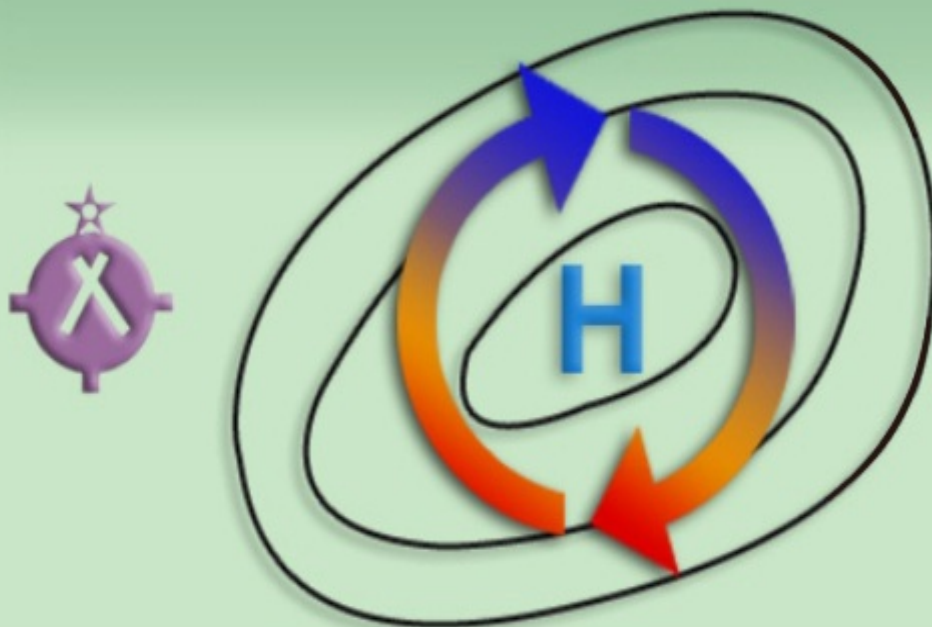
- C** Land at Pittsburgh and wait

Time: 1930Z  
Altitude: 8,000 msl

## What to Expect

Your location relative to high and low pressure systems can give you an idea of the kind of weather to expect.

Roll over each airport symbol for more information.



When a high and a low are close together and the isobars are tightly packed, expect very high winds. For light aircraft, the weather may not be flyable for days.



## Audio Transcript

## Lessons Learned

00:15

## Lessons Learned

- *It's better to be on the ground wishing you were flying than flying wishing you were on the ground.*
- *In-flight weather decisions almost always work better if made earlier, rather than later.*
- *An off-airport landing may cause slight airplane damage, but trying to continue VFR in bad weather is likely to cause death. Your choice.*





# Discussion..

