Educating and Training New Aviators: Getting Off on the Right Foot

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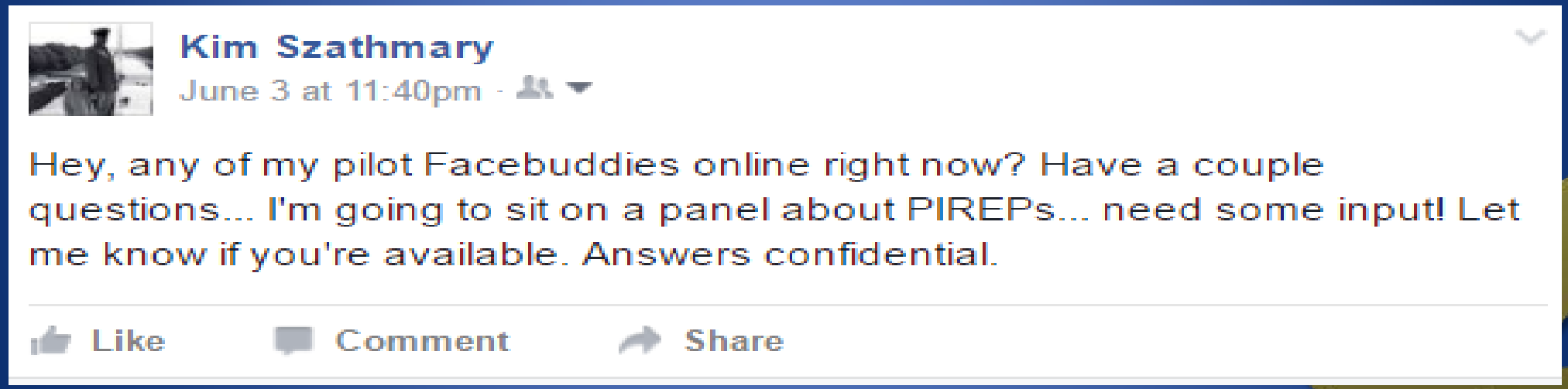
An Informal "Pilot" Study

- *VERY scientific random sample of pilots …*



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An Informal "Pilot" Study

"I'm hearing the PIREP process isn't what it ought to be… do you give PIREPs?"

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"Pilot" Study Results

- ***Many (not all) major airline pilots in my sample do NOT give PIREPs to ATC, unless asked***
  - ***"We only pass WX info to our company, and we only get WX info from our company. We have a huge weather shop to take care of us."***
  - ***"We don't care if a GA aircraft reported moderate turbulence…"***
- ***Some recent major airline hires (military retired) do still offer PIREPs to ATC***
  - ***Maybe they're still in the habit?***

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"Pilot" Study Results

- ***Corporate pilots DO give PIREPs***
  - ***"Sure, we give them, and we like to get them. We want the most up-to-date conditions en route and at our destination."***

- ***Others with small flight departments—same***
  - ***State Police***
  - ***Medevac***
  - ***Private Charter***

Photo: Matthew Odenbrett

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Flight Schools in the U.S.

- According to the FAA: 621 “Pilot Schools”
  - Embry-Riddle has 2 of those
    - Daytona Beach, FL
    - Prescott, AZ
  - 94 schools in Florida
- ERAU faculty, instructors, and students were the most immediate source of info
- **Other schools were also contacted for input…. “We can all improve.”

Source: http://av-info.faa.gov/PilotSchool.asp

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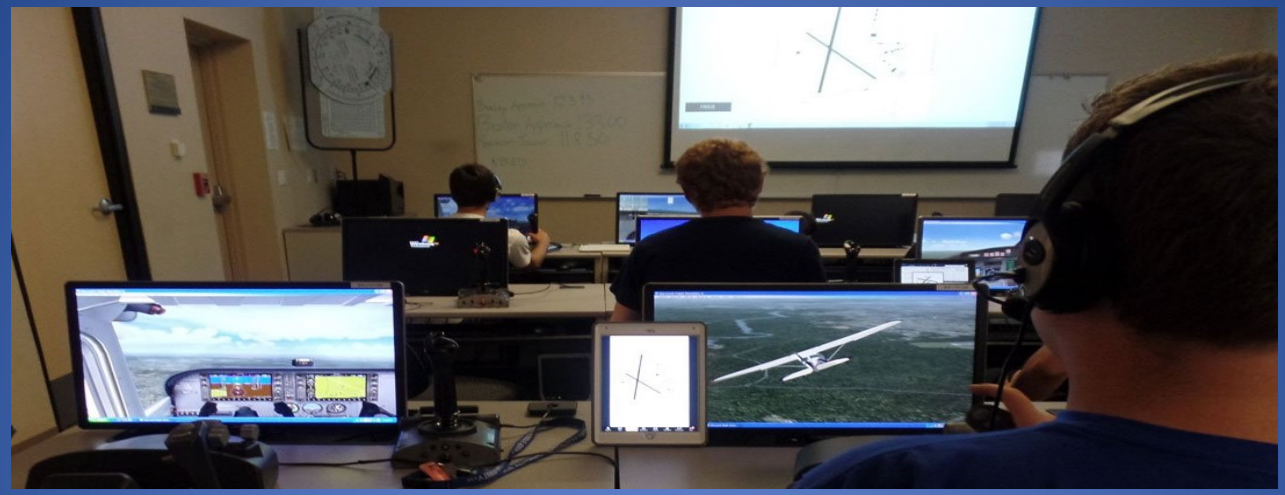
Educating Future Pilots: What Are We Teaching?



- **Classroom / Ground School**
  - **Students learn about PIREPs and their usefulness**
    - **-AIM and FAR requirements**
      - **-Elements of a PIREP**
        - **-How to give a PIREP**
          - **-When to give a PIREP**
            - **-Who should get them?**

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Educating Future Pilots: What Are We Teaching?

- ***Flight Line***
  - ***What is actually being done in practice, not just at Embry-Riddle, but at other schools, too?***

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Educating Future Pilots: What Are We Teaching?

Who knows better than:

- ***Chief Pilots (or equivalent)***
- ***Flight Supervisors***
- ***Flight Dispatchers***
- ***Ramp Ops Managers***
- ***Instructor Pilots***
- ***Student Pilots***

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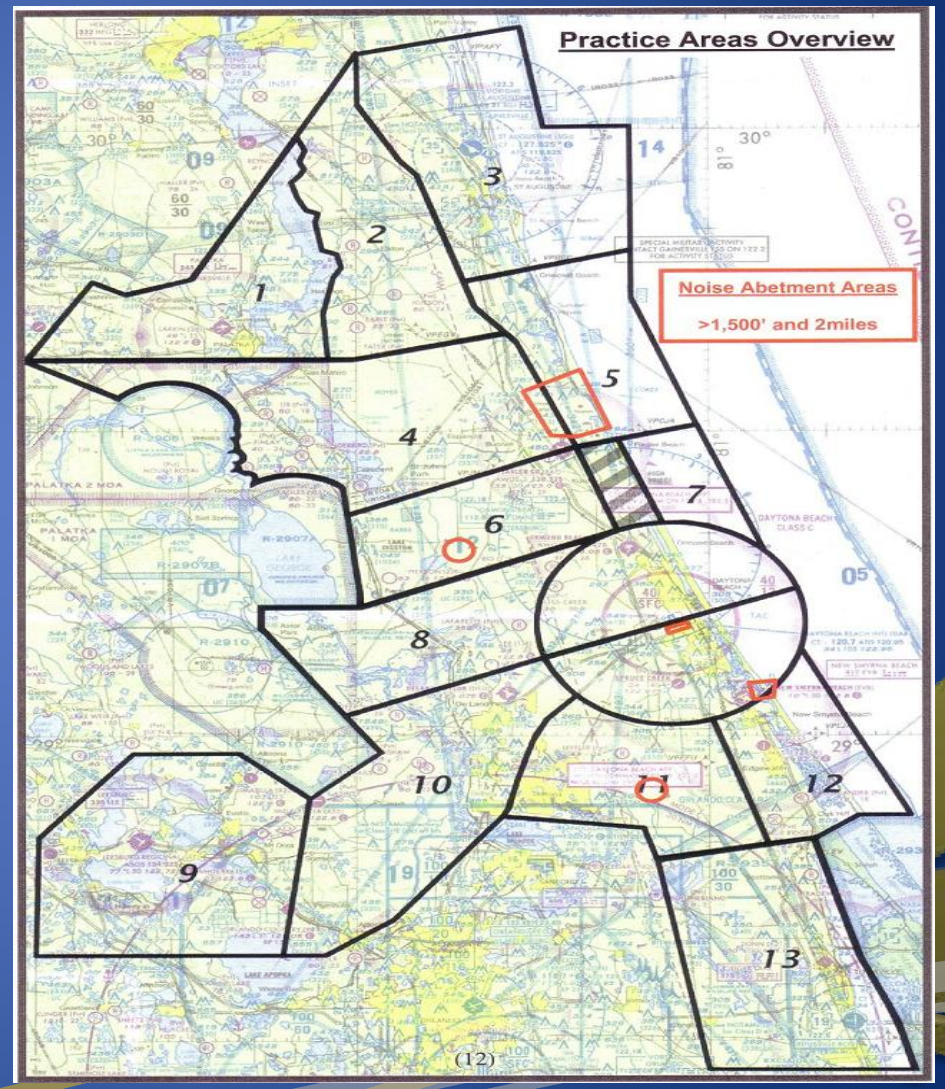
In Practice…

- ***New ERAU student pilots generally work only in the local practice areas***

- ***Weather is reported to the <u>Flight Sup</u>***



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In Practice…

- **Students working in the local area typically report the WX <u>only</u> to the Flight Supervisor**
  - **Why?**
    - **Flight Sup's frequency is always in the radio**
    - **PIREPs not stressed since the focus is on maneuvering**
    - **WX data is requested often for follow-on student sorties**
    - **PIREPs Log is a great source of data—updated with each flight**
    - **Instructor Pilots (IPs) often give PIREPs for changing WX conditions, or when requested by ATC**
    - **If WX changes significantly from forecast, they're probably returning to the field… not really a time to "practice making radio calls" when worried about making it back in time**

Do students ever make actual PIREPs?

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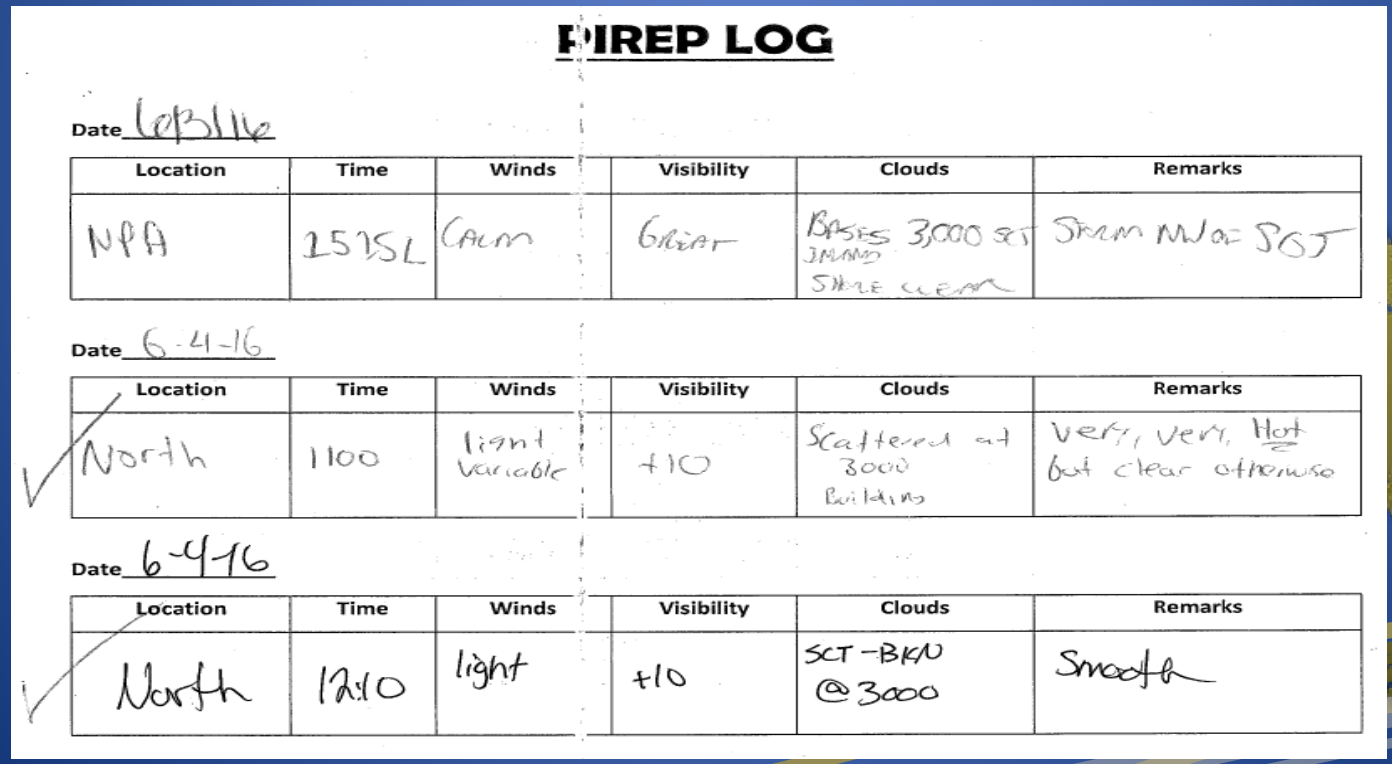
PIREPs Log

- ***Students report WX (at ERAU) on the PIREP Log every time they return from a flight…***
  - ***Briefed to outbound IPs and students***



PIREP LOG

Date 6/3/16

Location	Time	Winds	Visibility	Clouds	Remarks
NPA	1515L	Calm	Great	Bases 3,000 SCT Inland Shore clear	Storm NW of SGJ

Date 6-4-16

Location	Time	Winds	Visibility	Clouds	Remarks
North	1100	light variable	+10	Scattered at 3000 Building	Very, very, Hot but clear otherwise

Date 6-4-16

Location	Time	Winds	Visibility	Clouds	Remarks
North	12:10	light	+10	SCT-BKN @3000	Smooth

PIREPs Log

- **Does PIREP Log weather data ever make it to ATC/FSS/Flight Watch?**
  - **AT ERAU, "Yes, if there's something significant or different than the forecast. Our IPs are asked for weather conditions all the time, and always provide when they're asked."**

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But What About REAL PIREPs (to ATC or another agency)?

"Students DO give PIREPs on cross country trips"

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Should Schools Be Doing More?

- ***Students are generally not allowed to fly in adverse weather***
  - ***Called back before winds approach schoolhouse limits (15 kt crosswind for Cessnas, 17 kt crosswind for Diamonds and Arrows)***
  - ***Opportunities for meaningful PIREPs other than cross country flights?***

Should Flight Sups/Dispatchers be relaying this PIREP data to FSS when "student profile" makes sense to do so?

Yes, probably so!!

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Conclusions

- *Flight Schools have a mix of student profiles*
  - *“Local area” lines seem to operate much like some of the major airlines (“stovepipe”)*
  - *“Cross country” lines give opportunities to practice giving PIREPS and learn good habits*

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Recommendations

- Raise awareness with Instructors and Students
- Instructors should be modeling PIREPS for students

- Instructors ask FAA for clear guidance
  - IPs mentioned the “textbook definitions” of light and moderate turbulence are not clear
  - IPs mentioned the language is not directive in most places… as mentioned previously, not required!
  - IPs unsure if a small aircraft report of moderate turbulence will deter Cessnas or other small acft

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FLY SAFE!

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