Improving Air Route Traffic Control Center Weather Comprehension & Compliance through the Chicago Center Local Safety Weather Team

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IWAWS May 30, 2020
ZAU Local Safety Council Weather Team

- Sub team of ZAU Local Safety Council
- 2007- Address weather dissemination and develop a recommendation for weather related tools for ZAU
- NATCA Controllers, Operational Supervisors, & National Weather Service Meteorologists
Collaborative Process

- Understand how weather influences air traffic & weather products
- Negative impacts of not depicting weather
- Make it easier for controllers to meet required responsibilities
Previous Projects - Short Refresher Videos

TCF Traffic Flow Management (TFM) Convective Forecast

Prepared By: Local Safety Council Weather Team & National Weather Service ZAU CWSU
Previous Projects - Short Refresher Videos

Phraseology Requirements:

2-6-6. HAZARDOUS IN-FLIGHT WEATHER ADVISORY SERVICE (HIWAS)

“ATTENTION ALL AIRCRAFT, HAZARDOUS WEATHER INFORMATION (SIGMET, Convective SIGMET, AIRMET, Urgent Pilot Weather Report (UUA), or Center Weather Advisory (CWA), Number or Numbers) FOR (specific weather phenomenon) NEW WITHIN (geographical area) AVAILABLE ON HIWAS, OR FLIGHT SERVICE FREQUENCIES.”
Previous Projects - Safety Discussions

Splitting Positions for Weather

ZAU Safety Discussion
Weather Deviation Procedures

March Safety Discussion
WARP Standardization

Presented By: ZAU Local Safety Council Weather Team and National Weather Service
Regional Visible Satellite

Previous Projects - Safety Discussions
Disseminating Weather Products - CWAs

Ø21655 SIGE MKCE WST Ø21655 CONVECTIVE SIGMET 20E VALID UNTIL 1855Z OH TN KY IN FROM 50WSW ROD-40ENE CVG-50SSE BNA-30NE MSL-30SE PXV-50WSW ROD AREA TS MOV FROM 23030KT. TOPS TO FL420.

300010 ZAU1 CWA 300010 ZAU CWA 101 VALID UNTIL 300100 FROM 28S MKG-10W PMM-30E ORD-28S MKG AREA OF RAPIDLY DVLPG HVY SHRA AND TS. TOPS FL370. MV FROM 27010KT. CONT AFTER 01Z.

Easier + Familiar = Increased Compliance
### Pre-Duty Weather Briefing

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Weather Week - When do controllers learn about weather?

- College course or week long class at FAA Academy in Oklahoma City, OK
- On position
- Guidance and phraseology provided in FAA 7110.65
Weather Week - Stage 3

- Expose trainees to CWSU and meteorologists & weather products
- Discuss how does weather impacts their job
- Pilot perspectives
- Set expectation that you are responsible for knowing the weather every time before you take position
- Afford trainees the opportunity to practice weather related phraseology and techniques
- Stress the importance of soliciting/disseminating PIREPs and calling depicted weather
Weather Week - ZAU Weather Concerns

ZAU TURBULENCE PIREP SOLICITATION
VALID: 21/2000Z – 22/0400Z

ISOL SEV POSSIBLE UNTIL 01Z AOA FL400

ALL ZAU: LGT-MOD TURB 140-FL240 & AOA FL310

OTHER SIG TURB ASSOC W/ CONVECTION

FORECAST JET STREAM
Weather Week - ZAU Weather Concerns

- Effects of icing are cumulative
  - Lift decreases
  - Thrust decreases

- Drag increases
- Weight increases
- Stalling speed increases

ZAU ICING PIREP SOLICITATION
VALID: 12/2000Z - 13/0400Z

LGT 080-FL180
FRZLVL: 040 (NE) – 050/060 (SW)
Weather Week - Briefing Tools
Weather Week - Stage 4

Controllers work simulations that require them to
- Issue depicted weather
- Practice broadcasting advisories
- Work deviations
- Solicit and issue PIREPs
- Review best practices and techniques
ZAU LSC Weather Team Members

FAA
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Griffing Gettemy - Operational Supervisor

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