Inter-Mountain Aviation Weather Workshop

Soaring (Glider) Support

Dan Gudgel & Walt Rogers

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Personal Background

(Dan Gudgel; Gudgel Aviation)

- Aviation/Agriculture
- NWS
  - OM / Aviation Services HQ
  - "Start-up" Warning Coordination Meteorologist
  - "Specialty Programs" Service
- Aviation Support
  - Incl., Remote Events Support
- Consulting Meteorologist

Aviation Weather Support

- Standard Aviation Weather Brief (Historic)
  - Emphasis Cross-Country Flight Safety

… Pilot Background Info (Request)
- Adverse Weather
- Synoptic Situation
- Current Weather
- Enroute Weather; incl. Adverse Wx (redundant)
- Destination Weather
- Winds Aloft

… NOTAMs, incl. Airspace Restrictions (FAA)

- Aviation Subset / Aircraft Category: ***Soaring***
  - WFO Area Service Need?
  - Contests (Transitory?)
- Familiarity and Knowledge of Aviation Operations

Basic Soaring Pilot Weather Needs

- Soaring Flight Likelihood

- Four (4) Lift Types
  - Ridge
  - Thermal
  - Mountain Wave
  - Convergence

Personal Observation:

Inter-Mountain Region Superior in Lift Diversity

Contest Support

- Meteorological Parameters Needed *(Thermal LIft)*
  - Sky Conditions
  - Initiation Time (subsequent height & strength evolution)
  - Max Altitude, Strength, and Time-of-Day
  - Last Useful Lift (for Task Planning)
- Launch Time Conditions
- Wind Aloft
- Communication for Decision-Making
  - Threats
  - Probabilities
  - Forecast Confidence
- Recovery Conditions

Additional Support

1. Decision-Support for Competition Director (CD)

   CD sets Tasks; *Resource* for CD in Decision-making

   [Data Collection, Wx Analysis, Contest Forecast, CD Brief … All Done with "Time Deadline"]

2. Subsequently: Contest Pilot Briefing

3. Airfield Weather Watch

4. Task Area Weather Watch
   - Including concerns for Ground Crew / Retrieves

5. Outlook
   - Overall Contest Day utilization / CD Planning Strategy

Applied Meteorology

- Meso-Scale Meteorology;

  but…aware of synoptic-scale disruptive processes

- Familiarity with Area “Lift” Mechanisms
  - Convergence Line Development and Tendencies
  - Convection Impacts

- Interpretive for ‘Educated Customer’ Decisions
  - Meteorologist local expertise relating to needs

Questions and Contact Info

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Tools and Resources Utilized…