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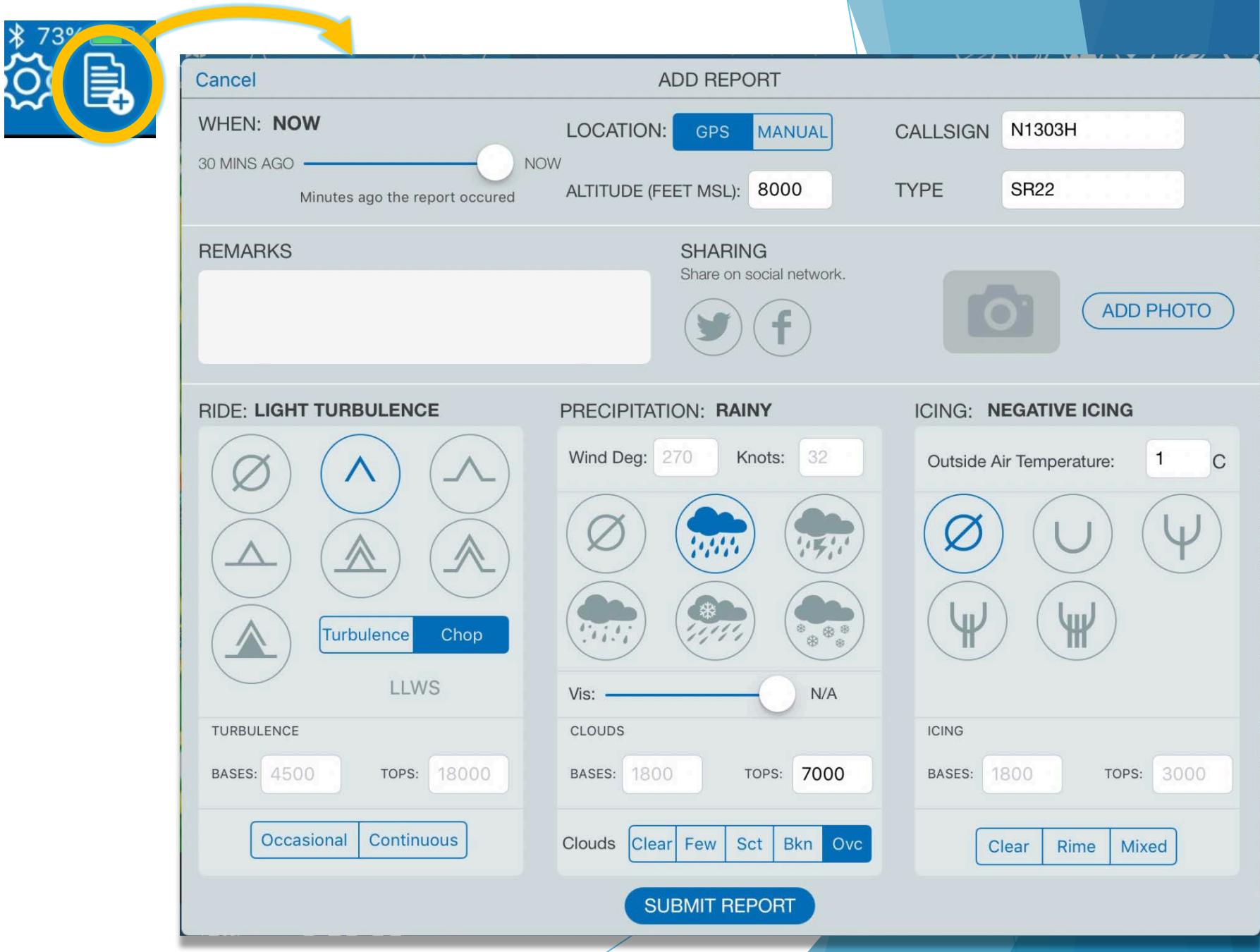
Electronic PIREP Submission

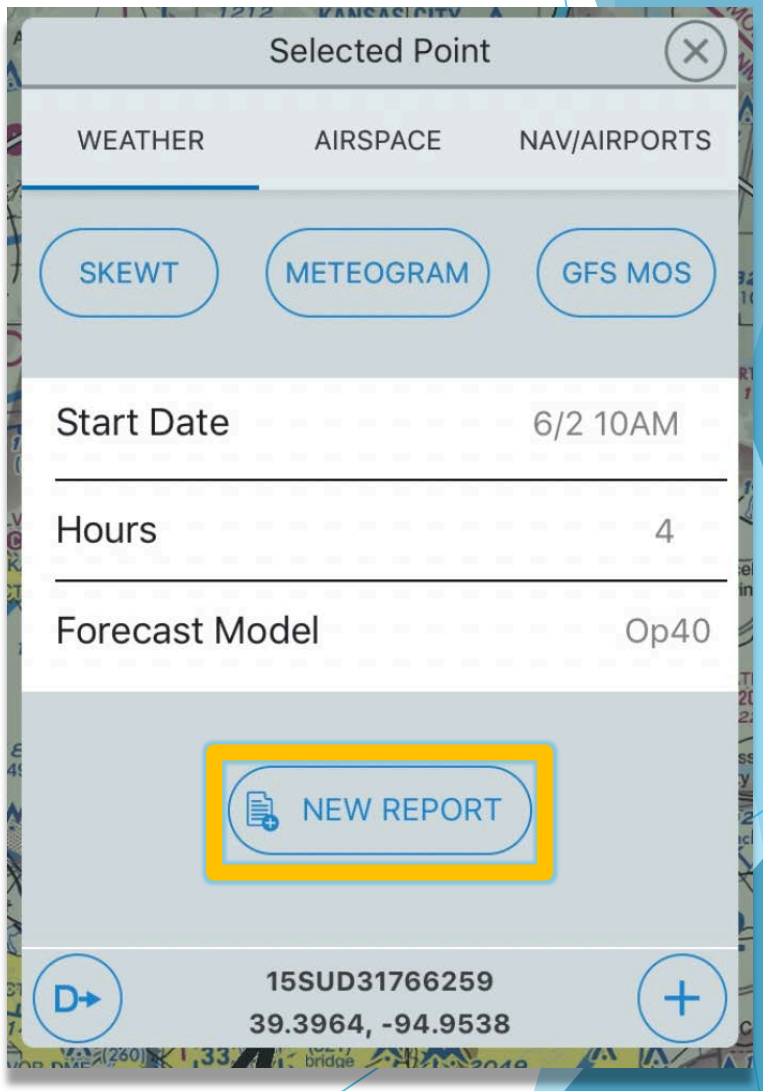
- Launched July 2014
- Free to all pilots
- iOS iPad & iPhone support
- Over 5,000 users
- LMFS web services



Electronic PIREP Submission

Benefits…

- Simplicity & Speed
- Accuracy, removes data entry & communication errors
- Historical PIREP submission (<=30 minutes) to accommodate safe time for PIC to use device such as after aircraft shutdown.
- Users receive a PUSH feedback-loop of acceptance into NAS.
- Aviation Weather Center (AWC) now accepts web-based PIREP submission via aviationweather.gov



Electronic PIREP Submission

Limitations…

- Requires data connection. (Business Wi-Fi in-flight, or LTE/cell data post-flight)
- PIREP Submission Queue (up to one hour), date-time is accurate at time of pilot entering
- Requires some limited head-down time. Pilots encouraged to send severe & icing PIREPs to ATC.

Submission acceptance rate over two years: 88%

If policy is changed to 5 hour acceptance: 97%

PIREP solicitation

- Asking another pilot for a PIREP in areas without recent information.
- Frequently used today in back-channels through ATC.
- Working with partners to create a electronic method to ask pilots prior to departure for a PIREP submission where needed or post-flight.
- Pilots feel more encouraged to provide data when they know it's needed.
- Forecasters needing data for special-emphasis areas.

Connectivity

"I expect that mass adoption of airborne internet hotspots across the full range of GA and business aviation aircraft ***will spur a host of innovative mobile device and cloud based applications that will enhance aircraft safety and utility in ways we can't currently imagine.*** *" - Dan Schwinn CEO Avidyne Corporation*

- ADSB-out PIREP submission, long-term
- Satellite solutions (even low bandwidth is useful)
  - Historically satellite products did not provide cost-benefit to GA pilots.
  - Iridium SBD (portable messaging products)
  - Iridium NEXT
  - Globalstar Sat-Fi part 23 STC
  - Avidyne & Globalstar Partnership
  - Some limited automated reporting may be possible in GA

Open access to data

- GA Pilots are using model soundings on a more frequent basis.
- Real-time AMDAR/TAMDAR data is not made available to GA pilots
- Open access to data will encourage private industry innovation.

Surface Reports

Surface based PIREPs can be useful but not currently suited for inclusion in NAS.

- Crowdsourcing weather data is becoming a popular trend helping forecasters. (See mPING)
- Pilots know hazards and specific threats to aviation better than the general public.
- Particularly helpful in cases of building convection and precipitation type/rate.
- Expect announcement fall 2016 for public database outside NAS to collect/distribute/request surface based reports among participating EFB vendors.

Thank you!