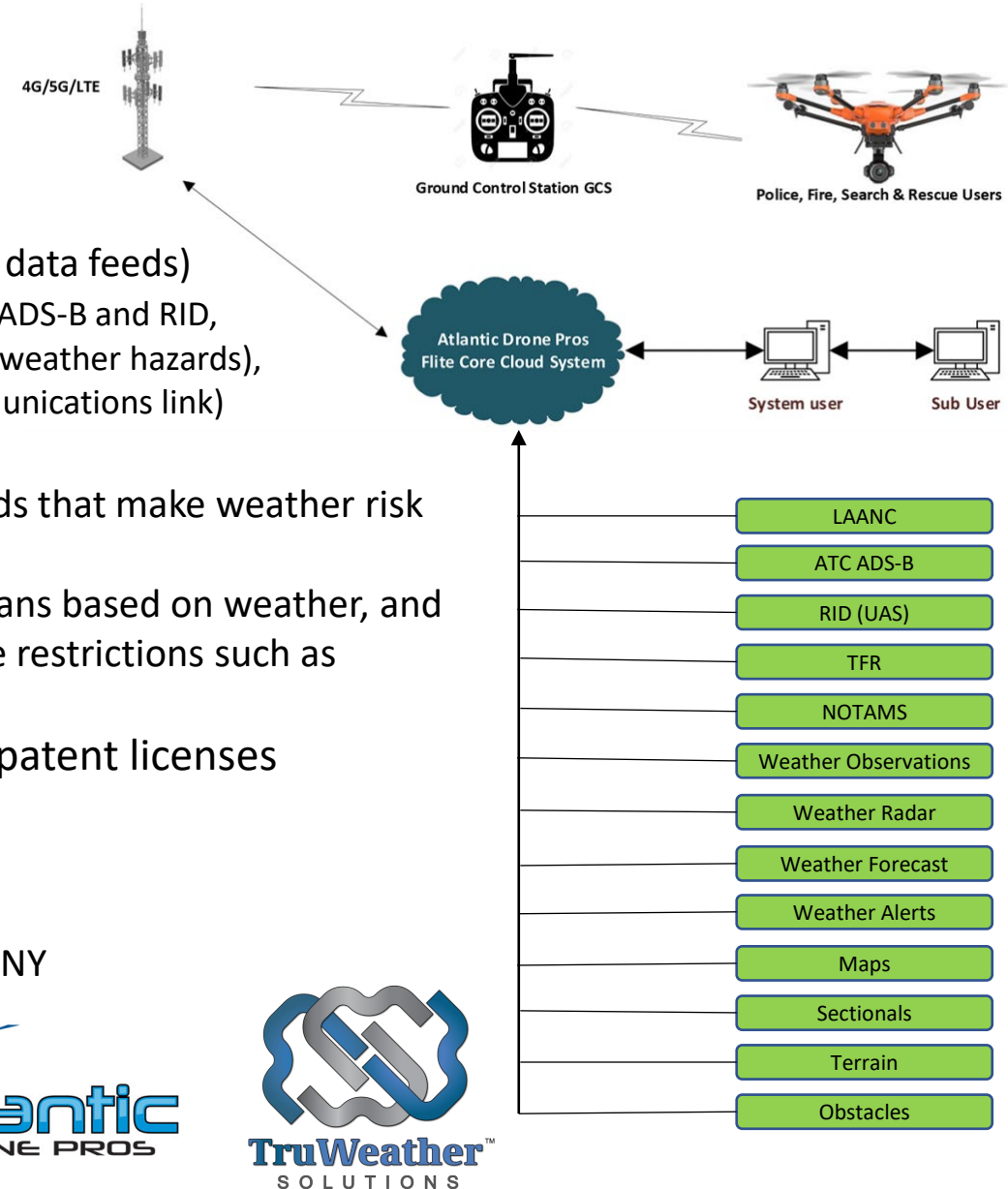


FLITE Core Cloud System (FCCS)

Intelligent Flight Management and UTM for Safer UAS Operations

- Onboard risk mitigation system that considers all available inputs to determine real-time risk to the airframe and, if necessary (using rules-based AI), automatically re-routes or invokes a “safe to land” component (e.g., NASA’s Safe2Ditch)
 - Weather is the primary focus in this project (using onboard sensors and/or data feeds)
 - Eventually, we envision FCCS will also incorporate air traffic control (ATC) over ADS-B and RID, detect and avoid sensing, automated geofencing (e.g., based on NOTAM, TFR, or adverse weather hazards), and system health monitors (e.g., motors, servos, battery temperature/operability, communications link)
- Cloud services
 - ML for recognizing times of day, locations, or specific flight plans or payloads that make weather risk more likely
 - Intelligent flight planning, including evaluation and optimization of flight plans based on weather, and eventually natural and human-made terrain, communications, and airspace restrictions such as airports and certain populated areas
- Leveraging ADP’s 37 years of flight / 5 years of RPA experience & NASA patent licenses
- Known/Targeted Customers
 - Civil Air Patrol
 - 319th Reconnaissance Wing (319 RW), Grand Forks AFB
 - New York Air National Guard's 174th Attack Wing, Hancock Field, Syracuse NY



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