

Air Navigation Services Provider

AIRLINE AIRPORT COPTER UAM Executive Summary

HUGHES AEROSPACE CORPORATION



HUGHES DESIGNS, IMPLEMENTS & MAINTAINS INSTRUMENT FLIGHT PROCEDURES FOR BOTH PUBLIC AND PRIVATE AIRPORTS, AIRSTRIPS AND HELIPORTS AS AN FAA & ICAO AUTHORIZED PUBLIC NAVIGATION SERVICE PROVIDER







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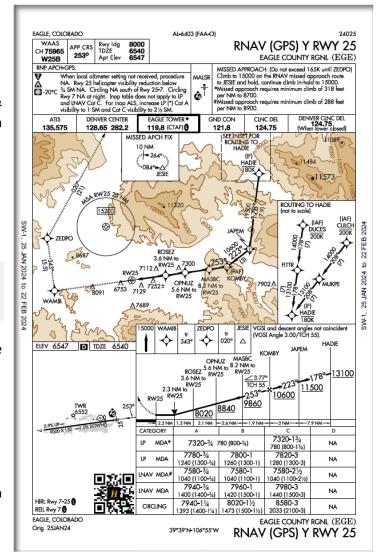


ABOUT HUGHES AEROSPACE

Hughes Aerospace Corporation is recognized globally as a fully credentialed Air Navigation Services Provider, dedicated to delivering the safest and most advanced instrument flight procedures. We serve a diverse clientele, including the FAA, government authorities worldwide, and the aviation industry at large. Hughes expertise spans designing, implementing, and maintaining both public and special instrument flight procedures, with endorsements from the International Civil Aviation Organization (ICAO) and other regulatory bodies globally. Hughes' services are crucial for airspace projects across North America, Latin America, Asia, Europe, and the Middle East, making them a key player for airlines, airports, helicopter operations, and urban air mobility (UAM) sectors. Hughes is the only 14 CFR Part 97 certificated FAA Service Provider.

Complete Performance Based Navigation Services

- Instrument Flight Procedure Design
 - RNAV GPS
 - WAAS LPV, LP & Advanced RNP Approaches
 - RNAV (RNP) RNP APCH RNP AR A-RNP
 - A-RNP Advanced RNP -The fusion of RNP & Precision Final of LPV/ILS/GLS... (example on previous page)
 - RVFP RNAV Visual Flight Procedures
 - COPTER LPV, LP, LNAV
 - Low Level COPTER IFR ZK ROUTES
 - GBAS GLS –Precision Landing Systems -
 - SID/STAR Development CDO's
- CHARTING DIGITAL, GEO-REFERENCED, TAILORED FORMATTING. AVAILABLE IN THE HUGHES APP & EFB'S
- Instrument Flight Procedure Maintenance, Obstacle Determination & FAA NOTAM Service
 - Airport & Heliport Survey
 - VGSI/PAPI Commissioning & Maintenance Flights
 - FAA Licensed UAS Operator
 - DEM's, 3D spatial modeling
 - > FAA conforming GIS Assessments
 - > Heliport Certifications/Evaluations
 - PEP FAA Certified Heliport Procedure Evaluation Pilot
- UTM Airspace Integration/Urban Air Mobility Procedures



- Flight Inspection Services Cadre of experienced FAA Flight Inspection pilots. Certified for Flight, Simulator,
 Obstacle Validation & VGSI/PAPI Inspection
 - Airspace Analysis & Determinations
 - Terrain, Obstacle Survey & Obstacle Determinations
 - Environmental Screening

ONLY HUGHES OPERATES ITS OWN FLIGHT INSPECTION AIRCRAFT, & SURVEY DRONES (UAS) FOR INITIAL FLIGHT INSPECTION & MAINTENANCE SERVICES

Hughes routinely performs ICAO & FAA Validation and Inspection Services for both Public and Special Instrument Flight Procedures & Visual Navaids world-wide. Hughes has FAA certification for Airport/Heliport/Vertiport Inspection.







FAA - Hughes is the largest & only 14 CFR Part 97 Public FAA Service Provider, providing both Public & Special Instrument Flight Procedures. Hughes is the only Service Provider outside of the FAA authorized to perform flight inspection for Commissioning and Maintenance of VGSI/PAPI Visual Navigation Aids. Hughes is a member of the Performance Based Operations Aviation Rulemaking Committee (PARC), working with the FAA, OEM's and Operators to advance criteria and navigation capabilities.

<u>ICAO</u> - Hughes is one of few select organizations in the world to have received prestigious ICAO Endorsement as an approved Air Navigation Service Provider (ANSP). ICAO has partnered with Hughes as a member of the ICAO PBN "Go-Team" and has worked with ICAO member states on Global PBN implementations. Hughes holds more licenses & certifications from government regulators worldwide.

Hughes Aerospace's customers typically include a variety of organizations within the aviation industry that require specialized services in air navigation, instrument flight procedure design, validation, and maintenance.

- Airlines and Commercial Carriers: Airlines looking to optimize flight paths, improve safety, efficiency and ensure compliance with international navigation standards will benefit from Hughes Aerospace's expertise in Performance-Based Navigation (PBN) and satellite-based navigation solutions. More airlines use Hughes navigation procedures than any other.
- 2. **Airports, Vertiports and Heliports**: Airports and heliports looking to enhance their operational efficiency, safety, and compliance with FAA and ICAO standards find Hughes Aerospace's proven history of services in surveying, certification, and inspection invaluable.
- 3. **Government and Military**: Governmental aviation authorities and military organizations requiring precise and reliable navigation services for both civil and defense-related air operations are Hughes significant customers.
- 4. **General Aviation**: Operators of private aircraft, business jets, and other general aviation vehicles looking to improve navigation safety, runway access and efficiency through advanced instrument flight procedures.
- 5. **Helicopter Operators**: Capabilities in designing procedures for helicopters, operators in sectors like medical evacuation (medevac), offshore oil and gas, law enforcement, and executive transport have valued Hughes as their service provider.
- 6. **International Civil Aviation Authorities**: Countries looking to upgrade their legacy air navigation systems and follow global standards should engage Hughes Aerospace for consultancy, development, and implementation of modern navigation solutions.

These customers rely on Hughes Aerospace for their specialized skills in navigating the complex requirements of modern air travel and air traffic management, emphasizing safety, efficiency, and regulatory compliance.



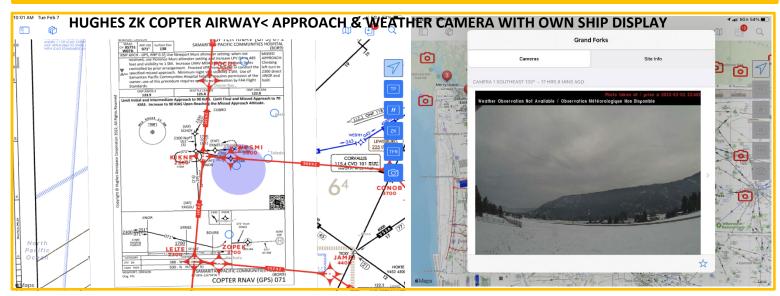


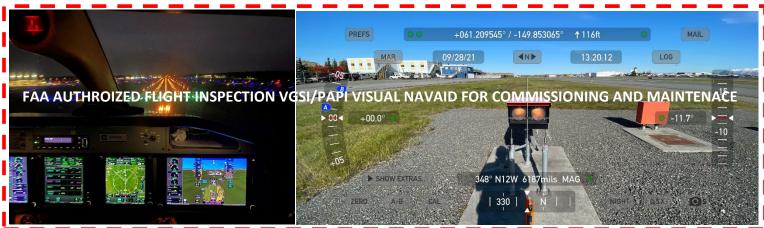




The HUGHES APP – NAVIGATION, WEATHER + CAMERAS & COMMUNICATIONS

The *first Air Navigation Service Provider* to offer an App supporting Weather, Charting, NOTAMS, SMS (including Special Charting products) and field communications with our customers. Available in the Apple Store for iPad & iPhone devices.





AIRPORT, HELIPORT, VERTIPORT SURVEYS & CERTIFICATIONS

HUGHES IS CERTIFIED TO SURVEY AND EVALUATE ALL AERODROMES, EVALUATE & DETERMINE OBSTACLES, AND UPDATE FAA DATABASES AS WELL AS SECURING FAA LOC ID.



ESTABLISHED & FAA APPROVED MAINTENANCE PROGRAM

Hughes provides professional procedures maintenance for new & existing Instrument Flight Procedures. Our staff is experienced with DAILY FAA NOTAM and OEAAA obstacle monitoring services, 540 Day Periodic Inspections, Biennial Maintenance reviews, ensuring all Hughes maintained procedures meet the latest criteria.



