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Release Notes

Software 2.0 Release

Confidential & Proprietary

Revision History

Revision	Date	Author/Title	Comments	Approvers
A	10/30/2025	Charlie Garbutt – Technical Writer & Guide Designer	First draft created	See Arena ECO

Approval History

Revision	Date	Title	Comments

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Introduction

Purpose

FlightWave Software Release 2.0.0 marks a major advancement in system performance, video payload capability, and operator experience across the Edge platform. This release introduces significant upgrades to the Overwatch gimbal, Mapping Array payload, Ground Control Station (GCS), and core aircraft systems. These enhancements deliver higher reliability, faster deployment, improved situational awareness, and increased mission effectiveness for operators in the field.

The purpose of these Release Notes is to communicate the new capabilities, feature enhancements, resolved issues, and operational changes included in Software Release 2.0.0. This document applies to all FlightWave Edge aircraft, payloads, and Ground Control Station units receiving the 2.0 software update. It is intended for flight operations teams, maintenance and field service personnel, engineering teams, and authorized partners responsible for deploying or supporting FlightWave systems.





Software Release 2.0.0 includes:

- Significant reduction in streaming latency and improved glass-to-glass video performance
- Multiple new camera modes and image-capture enhancements
- Better mapping accuracy and payload calibration improvements
- Enhanced system stability, diagnostics, and security
- UI and usability enhancements to improve operator workflows


This release represents a major step in the continued evolution of the Edge platform, built around customer feedback, operational data, and mission-critical reliability.

Release Notes



Software 2.0.0

OVERWATCH GIMBAL UPDATES	
GLASS-TO-GLASS LATENCY	700ms → 160ms
TIME TO STREAM	1:06m → 00:30s
CAMERA MODES	3 new camera modes: 1080p30 1080p60 4K30
VIDEO/PHOTO CAPTURE	Dramatic increase to clarity/definition
MISB 601.17	Embedded MISB 601.17-compliant metadata in recorded video
ERROR CODES	Structured error codes for easier diagnostics
ENCRYPTION	Enhanced encryption and security standards
SYNCHRONIZATION	Secure image synchronization updates
AIR-GAPPED OTA	Updates to install performance Install time reduced by ~4 minutes
 CAMERA CAPTURE	Improved camera capture and video recording pipeline
 STREAMING	More reliable video streaming across all resolutions
MAPPING ARRAY UPDATES	
ENCRYPTION	Enhanced encryption and security standards
CAMERA CALIBRATION	Improved camera calibration: reduced vignetting, higher resolution, and more accurate stitching
AIR-GAPPED OTA	Updates to install performance Install time reduce by ~4 minutes
MAPPING ACCURACY	Enhanced Mapping Accuracy
 CAMERA CAPTURE	Improved camera capture and video recording pipeline
 STREAMING	More reliable video streaming across all resolutions

FUSELAGE – CORE AIRCRAFT BODY & FLIGHT COMPUTER

SYSTEM PERFORMANCE	Overall system performance enhancements
 STABILITY	Stability and reliability bug fixes

GROUND STATION CONTROLLER (GCS)

RETURN TO OPERATOR (RTO) MODE	Dynamically stream operator/tactical location, enabling return-to-operator navigation
UI ENHANCEMENTS	Offline map support, streamlined context actions
OFF-SCREEN DRONE INDICATOR	Always locate the drone on the world map
 SERIAL CONNECTIONS	More resilient drone serial connections with improved reconnection handling
 STABILITY	Stability fixes across camera and drone communication

Legend:

 – Fixed Bug

Support & Escalation

Contact

If operators experience behavior outside the items listed in FlightWave Documentation, capture the following and submit to FlightWave Support:

- Telemetry logs from the GCS
- Payload media (lowest resolution proxy is acceptable)
- Brief description of circumstances (mission type, payload configuration, altitude)

Support Contact: support@flightwave.aero

Website: www.flightwave.aero

Closing Statement

Continued Improvement

Thank you for your continued trust in FlightWave and the Edge platform. Software Release 2.0.0 is a milestone in performance, reliability, and capability—designed to empower operators with faster decision-making, clearer intelligence, and uncompromised mission success. We remain committed to rapid innovation and to supporting you every step of the way.

Thank you for your partnership and continued feedback.

FlightWave Aerospace Systems

Red Cat Holdings

Designed, Assembled, and Supported in the United States.