

Midwest Stratospheric Data Systems (MSDS)

X2Griffon APRS Tracking Walkthrough

Real-time tracking guide for the X2Griffon high-altitude balloon payload
Callsign: **KE9CFY** • Frequency: **432.500 MHz**

This guide explains how to track the **X2Griffon** high-altitude balloon payload in real time. The payload transmits APRS telemetry under the callsign **KE9CFY** on **432.500 MHz**.

1. Primary Method – MSDS Live Tracking Portal (Most Common)

This is the simplest and preferred method for the public, families, students, and most observers.

1. Go to the official MSDS website: **midwestsds.com**
2. Navigate to the **Live Tracking** or **Flight Tracker** section (available during active missions).
3. The portal displays the real-time position, altitude, speed, and path of the X2Griffon using APRS/GPS telemetry.
4. Bookmark the page or keep it open on your phone for continuous updates throughout the flight.

2. Local RF Tracking (For Ham Radio Hobbyists & Chase Teams)

This method allows licensed amateur radio operators to receive the packets directly over the air using a handheld radio and phone.

What you need:

- Dual-band HT (Baofeng, BTECH, or similar) with Kenwood-style (K1) speaker-mic jack
- One of the following compatible audio interface cables:
 - **BTECH APRS-K1 PRO**
 - **BTECH APRS-K1** (original version)
 - **Generic K1-style APRS audio cable** (commonly sold as “Baofeng UV-5R APRS Cable” or Kenwood 2-pin to 3.5 mm / USB-C)
- Android phone running **APRSdroid** (or iPhone with APRSpro)

Setup Steps:

1. Connect one of the compatible cables (BTECH APRS-K1 PRO, BTECH APRS-K1, or a generic K1-style APRS audio cable) between the radio and your phone.
2. **Tune the radio to 432.500 MHz** (most common 70 cm frequency used for this type of payload).
3. Radio settings (especially important for BTECH APRS-K1 PRO / BTECH APRS-K1 / generic K1 cables):
 - Squelch = 0
 - VOX = 0
 - Dual Watch / TDR = Off
 - All CTCSS / DCS / STE tones = Off
 - Volume ≈ mid-way
4. In APRSdroid:
 - Set your own callsign (with SSID)
 - Connection Protocol → **Audio (AFSK)**
 - Enable High-Quality Demodulator
 - Audio Output → Music (or Voice Call if needed)
 - Start Tracking / Monitoring
5. When the X2Griffon packets are decoded, the position appears on the APRSdroid map.

Note: The three cables listed above (BTECH APRS-K1 PRO, BTECH APRS-K1, and generic K1-style APRS audio cables) are interchangeable for this audio AFSK setup with most Baofeng / BTECH / Kenwood K1 radios.

Quick Reference

Item	Value
Callsign	KE9CFY
Primary Tracker	midwestsds.com Live Portal
Frequency	432.500 MHz
Compatible Cables	BTECH APRS-K1 PRO, BTECH APRS-K1, Generic K1 APRS cable
Secondary Tracker	aprs.fi
Launch Site	Casey, Illinois
Planned Launch	September 19, 2026
Organization	Midwest Stratospheric Data Systems

Midwest Stratospheric Data Systems • Casey, Illinois • midwestsds.com
Open atmospheric data from near-space • FAA-compliant • Citizen science