An official website of the United States government Here's how you know

United States Department of Transportation

Federal Aviation Administration

Remote Identification for Drone Pilots

UAS Remote ID

Drones or unmanned aircraft systems (UAS) are fundamentally changing aviation, and the FAA is committed to working to fully integrate drones into the National Airspace System (NAS). Safety and security are top priorities for the FAA and remote identification (remote ID) of drones is crucial to our integration efforts.

What is Remote ID?

Remote ID is the ability of a drone in flight to provide identification and location information that can be received by other parties.

Why Do We Need Remote ID?

Remote ID helps the FAA, law enforcement, and other federal agencies find the control station when a drone appears to be flying in an unsafe manner or where it is not allowed to fly. Remote ID also lays the foundation of the safety and security groundwork needed for more complex drone operations.

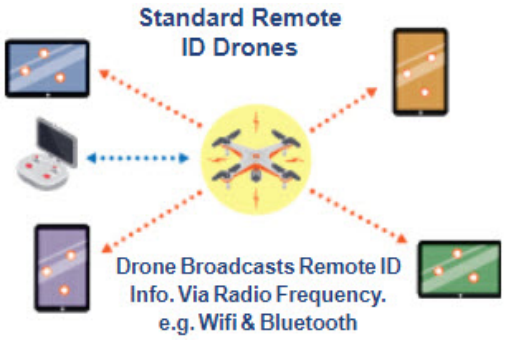
Final Rule on Remote ID

The final rule on remote ID will require most drones operating in US airspace to have remote ID capability. Remote ID will provide information about drones in flight, such as the identity, location, and altitude of the drone and its control station or take-off location. Authorized individuals from public safety organizations may request identity of the drone's owner from the FAA.

There are three ways drone pilots can meet the identification requirements of the remote ID rule:

- Operate a Standard Remote ID Drone (PDF) that broadcasts identification and location information of the drone and control station. A standard remote ID drone is one that is produced with built-in remote ID broadcast capabilities.
- Operate a drone with a remote ID broadcast module (PDF) giving the drone's identification, location, and take-off information. A broadcast module is a device that can be attached to a drone, or a feature (such as a software upgrade) integrated with the drone. Persons operating a drone with a remote ID broadcast module must be able to see their drone at all times during flight.
- Operate (without remote ID equipment) (PDF) at FAA-recognized identification areas (FRIAs) sponsored by community-based organizations or schools. FRIAs are the only locations unmanned aircraft (drones and radio-controlled airplanes) may operate without broadcasting remote ID message elements.

3 Ways Drone Pilots Can Meet Remote ID Rule



Drone Remote Identification

- Remote ID capability is built into the drone
- From takeoff to shutdown, drone broadcasts:
  - Drone ID
  - Drone location and altitude
  - Drone velocity

- Control station location and elevation
- Time mark
- Emergency status

Drone Remote Identification

- Remote ID capability through module attached to drone
- Limited to visual line of sight operations
- From takeoff to shutdown, drone broadcasts:
  - Drone ID
  - Drone location and altitude
  - Drone velocity
  - Takeoff location and elevation
  - Time mark

FAA-Recognized Identification Area (FRIA)

- Drones without Remote ID can operate without broadcasting
- Drones without Remote ID must operate within visual line of sight and within the FRIA
- Anyone can fly there, but FRIAs can only be requested by community-based organizations and educational institutior

Which Drone Pilots Must Comply With the Rule?

All drone pilots required to register, including those who fly for fun, for business, or for public safety, must operate their drone in accordance with the final rule on remote ID beginning September 16, 2023, which gives drone owners sufficient time to upgrade their aircraft.

Registering Drones

Under the final rule, recreational drone pilots may register once and apply that unique registration number to multiple aircraft. During registration, they have to list the serial number of any Standard Remote ID Unmanned Aircraft (including drones and model aircraft) they register. If they use a remote ID broadcast module, the module's serial number must be listed on their registration which will permit them to move the module from unmanned aircraft to unmanned aircraft so long as the unmanned aircraft are on the same registration number.

What Information Will be Broadcast?

Whether using a Standard Remote ID Drone or a remote ID broadcast module, nearly all of the message elements are the same and they must be broadcast from take-off to shutdown.

A Standard Remote ID Drone must broadcast the following message elements:

- A unique identifier for the drone. Operators of a Standard Remote ID Drone may choose whether to use the drone's serial number or a session ID (an alternative form of identification discussed below that provides additional privacy to the operator) as the unique identifier;
- An indication of the drone's latitude, longitude, geometric altitude, and velocity;
- An indication of the control station's latitude, longitude, and geometric altitude;
- A time mark; and

- An emergency status indication.

A drone with a remote ID broadcast module must broadcast the following message elements:

- The serial number of the broadcast module;
- An indication of the drone's latitude, longitude, geometric altitude, and velocity;
- An indication of the latitude, longitude, and geometric altitude of the drone's take-off location; and
- A time mark.

Again, the deadline for operational compliance is September 16, 2023.

Session ID

As mentioned above, operators of Standard Remote ID Drones are free to choose between broadcasting their drone's serial number or a session ID. Note: some Standard Remote ID Drones may not offer the session ID option. The session ID will be uniquely identifiable such that law enforcement and the FAA can correlate each session ID to a specific drone's serial number, but this ability will not be publicly available.

The FAA is developing a strategy for assignment of session ID to drone pilots and will consider existing policies when developing the session ID policy. In addition, the FAA will seek public comment on the session ID policy prior to finalizing it.

Last updated: Thursday, October 20, 2022

U.S. DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration
800 Independence Avenue, SW
Washington, DC 20591
866.835.5322 (866-TELL-FAA)
Contact Us

GET IMPORTANT INFO/DATA

Accident & Incident Data

Charting & Data

Flight Delay Information

Supplemental Type Certificates

Type Certificate Data Sheets (TCDS)

REVIEW DOCUMENTS

Aircraft Handbooks & Manuals

Airport Diagrams

Aviation Handbooks & Manuals

Examiner & Inspector

FAA Guidance

Performance Reports & Plans

LEARN ABOUT NEXTGEN

Next Generation Air Transportation System (NextGen)

NextGen Today

NextGen Programs and Resources

Performance Reporting and Benefits

VISIT OTHER FAA SITES

Airmen Inquiry

Airmen Online Services

N-Number Lookup

FAA Mobile

FAA Safety Team

Frequently Asked Questions

POLICIES, RIGHTS & LEGAL

About DOT

Budget and Performance

Civil Rights

FOIA

Information Quality

No FEAR Act

Office of Inspector General

Privacy Policy

USA.gov

Web Policies and Notices

Web Standards