

# General Aviation ASIAs FAQs

November 2016



## Table of Contents

What is Aviation Safety Information Analysis and Sharing (ASIAS)? .....	1
What are the benefits of joining ASIAS?.....	1
How can I best leverage ASIAS to help understand potential issues? .....	2
Who participates in ASIAS today?.....	2
Can I see a list of the GA operators that are already members of ASIAS? .....	2
What do I need to do to join ASIAS?.....	3
Once I am a member of the ASIAS program, what are my commitments? .....	3
As a member of ASIAS, what are the guiding principles of handling ASIAS data? .....	3
What does it cost to join ASIAS? .....	3
Once I join ASIAS, what happens next?.....	4
How do I provide digital flight data to ASIAS? .....	4
How do I provide safety narrative reports to ASIAS? .....	5
What is the ASIAS Portal? .....	5
What is the Aviation Safety Infoshare conference? .....	5
Who is MITRE and what is its role in ASIAS? .....	6
What if MITRE receives a Freedom of Information Act (FOIA) request or subpoena for ASIAS data? .....	6
The company data I provide to ASIAS is sensitive—how it is secured? .....	6
How is ASIAS governed? .....	7
What is the FAA’s role in ASIAS? Can they see my data? .....	7
What is the NGAFID? .....	7
What is GAARD/ <i>fleet</i> GAARD?.....	8

## What is Aviation Safety Information Analysis and Sharing (ASIAS)?

[ASIAS](#) is a [Federal Aviation Administration](#) (FAA) funded, joint government-industry, collaborative information sharing program to proactively analyze broad and extensive data sources towards the advancement of safety initiatives and the discovery of vulnerabilities in the National Airspace System (NAS). The primary objective of ASIAS is to provide a national resource for use in discovering common, systemic safety problems that span multiple operators, fleets, and regions of the airspace. Safety information discovered through ASIAS activities is used across the aviation industry to drive improvements and support Safety Management Systems.

ASIAS is not a substitute for your own safety program. It is not a FAA sanctioned Flight Operations Quality Assurance (FOQA) or Aviation Safety Action Program (ASAP). As stated above, it is a separate, joint government-industry, collaborative information sharing program to proactively analyze data sources towards the advancement of safety.

Today, ASIAS' mission encompasses both commercial and general aviation (GA) sectors, analyzing and providing separate safety information for each. GA members of ASIAS also have access to the commercial safety information. While ASIAS is only collecting fixed-wing data today, over the next year or two it is envisioned that ASIAS's mission will expand to include rotorcraft safety issues.

## What are the benefits of joining ASIAS?

There are many benefits to joining ASIAS. First of all, you are contributing data to the only national data repository proactively analyzing GA data looking for systemic safety issues. Your data contributes to the greater NAS-wide safety story. For the majority of GA operators, you may not generate enough data to accurately understand the potential risks for your operation. By joining ASIAS, your data becomes part of a larger database, thus providing your operation a proactive approach to identified systemic issues. You can learn from others' data. Other benefits include:

- Access to the [ASIAS Portal](#) and dashboards providing aggregate safety information.
- Understanding safety issues and trends derived from an aggregate database of like operators and how they can benefit your operations.
- Participating in the twice-yearly [Aviation Safety Infoshare](#) conference.
- Recommending and participating in special studies looking at specific safety issues.
- Contributing to the development of official Safety Enhancements resulting from ASIAS analyses.
- Becoming part of the ASIAS community.

## How can I best leverage ASIAs to help understand potential issues?

ASIAs hosts a wealth of information to help you build knowledge in two primary ways, vulnerability discovery and issue analysis. The [ASIAs Portal](#) can assist with discovering potential hazards that may affect your areas of operation, and uncover issues either by specific type, region, airport, or runway based on quantified data and information that an operator's own data may not provide on its own. The portal is also populated with numerous dashboards and studies that can help operators gain understanding in specific hazards, including stabilized approach, loss of control, terrain, near mid-air collision, automation management, Ground Proximity Warning System (GPWS), clearances, crossing restrictions, runway incursions, and go-arounds.

[Aviation Safety Infoshare](#) is another great opportunity that ASIAs members can leverage to not only understand potential issues, but to connect with other operators and learn how they mitigated such issues.

## Who participates in ASIAs today?

Today, there are 47 commercial airline operators, 37 Corporate/Business operators, ~150 light GA operators, and a handful of Universities participating in ASIAs. The 47 commercial operators represent 99 percent of the commercial operations in the NAS. For Corporate/Business GA, the members consist of Part 91, 91k, and 135 operators. Some provide digital flight data, some provide safety reports, and some provide both. Their fixed-wing fleet sizes range from one aircraft to several hundred. The majority of the Corporate/Business operators operate business jets, however, a few operate large commercial jets as well as single and twin turboprops. GA ASIAs also collects data from light GA operators via the National General Aviation Flight Information Database ([NGAFID](#)). The majority of data stored in the NGAFID today is collected from Part 141 flight schools, primarily university training fleets. The NGAFID also collects data from private GA operators via two methods: the General Aviation Airborne Recording Device ([GAARD](#)) application and from operators equipped with avionics capable of collecting flight data (e.g., G1000).

## Can I see a list of the GA operators that are already members of ASIAs?

By request of the GA operator members, their names are not publically disclosed without their permission. Those operators that have granted permission are listed on the membership chart on the [ASIAs home page](#). After joining ASIAs, operators inform The MITRE Corporation (MITRE) if they want their name publically disclosed as an ASIAs member.

## What do I need to do to join ASIAs?

There are three requirements to join ASIAs:

1. You must provide data to ASIAs; either digital flight data (e.g., FOQA) or voluntary safety reports (e.g., ASAP). For GA, there is no need for your data collection programs to be FAA approved.
2. Your company must have a United States (U.S.) presence and fly U.S. registered, N-numbered aircraft.
3. You must sign an ASIAs cooperative agreement with MITRE. Contact Jeff Mittelman (703-983-7603, [mitt@mitre.org](mailto:mitt@mitre.org)) for more information.

## Once I am a member of the ASIAs program, what are my commitments?

- Abide by the [ASIAs guiding principles and cooperative agreement](#).
- Provide digital flight data or safety reports on regular basis.

You can leave the ASIAs program at any time for any reason.

## As a member of ASIAs, what are the guiding principles of handling ASIAs data?

- ASIAs information and data is considered sensitive, confidential, and/or proprietary and shall not be shared outside of ASIAs without permission of the data owner.
- ASIAs information and data shall not be used for commercial, competitive, punitive, or litigation purposes.
- ASIAs information and data shall not be discussed or shared with the media or using any form of social media.
- Knowledge gained through participation in ASIAs activities may be shared within the participant's organization for the sole purpose of improving aviation safety.

## What does it cost to join ASIAs?

There is no cost to participate. The FAA funds the ASIAs program.

## Once I join ASIAs, what happens next?

After you join ASIAs, you do the following:

- Notify your data collection provider to send your data to ASIAs. They may ask you to sign another agreement or addendum authorizing them to send the data to ASIAs.
- Provide your MITRE point of contact (POC) with a POC from your company along with other names from your company that will need access to the [ASIAs Portal](#). This information should include the employee name, email address, and phone number.

MITRE will do the following:

- Establish [ASIAs Portal](#) accounts for those employees provided by the operator POC.
- Establish a “community” for that operator, along with data loading dashboards, on the ASIAs Portal.
- Provide a “welcome package” to the operator POC.
- Add the operator POC to the invite list for the [Aviation Safety Infoshare](#) conferences.

## How do I provide digital flight data to ASIAs?

There are three ways to provide digital flight data to ASIAs:

1. For most corporate/business operators flying aircraft with a data collection capability (e.g., Quick Access Recorder [QAR]), ASIAs acquires the digital flight data via General Electric (GE) Flight Efficiency Services (FES) (formerly Austin Digital, Inc. [ADI]). If you are currently a GE FES customer, then you simply notify GE FES that you want your data sent to ASIAs after you have joined ASIAs. ASIAs can accept data up to 10 years back. If your data is processed through another vendor, then contact Jeff Mittelman (703-983-7603, [mitt@mitre.org](mailto:mitt@mitre.org)) for more information.
2. For those operators flying smaller aircraft with a data collection capability (e.g., Garmin 1000, Garmin 3000) that data can be ingested into ASIAs via the National General Aviation Flight Information Database ([NGAFID](#)), another part of ASIAs.
3. For those operators with aircraft without a flight data collection capability, the [GAARD/fleetGAARD](#) mobile apps offer a low- or no-cost option to enable your aircraft to collect rudimentary flight data. The data recorded by GAARD/fleetGAARD can be collected by you and sent to ASIAs via the NGAFID.

## How do I provide safety narrative reports to ASIAs?

There are currently three commercial company options for providing safety narrative reports to ASIAs:

- [UTRS/WBAT](#)
- [Baldwin Aviation](#)
- [PRISM/ARGUS](#)

If you are a customer of one of these companies, simply contact them after joining ASIAs and request your data to be sent to ASIAs. ASIAs can accept data up to 10 years back.

If you currently do not use one of these companies, then contact Jeff Mittelman (703-983-7603, [mitt@mitre.org](mailto:mitt@mitre.org)) to discuss other potential options.

## What is the ASIAs Portal?

The ASIAs Portal is the operator members' primary access to ASIAs results and information. It contains more than 20 dashboards presenting trending and hazard analysis results of metrics developed from ASIAs member-supplied data and public information—these aggregated metrics are computed every two-four months (depending upon the metric). The Portal also contains ASIAs-related documentation, training materials, and results of special studies. The dashboards allow you to look at commercial and GA aggregate safety trends and statistics, and in some cases these drill down to the airport and runway level. The Portal is not a public entity—only authorized users may access the Portal. The member operator POC provides a list of users who are authorized from within a given organization. Each user is a member of one or more “communities” and each community has access to different information on the Portal on a need-to-know basis. Users can only see aggregated data and results; users can never see any other members' information in a non-aggregated form.

## What is the Aviation Safety Infoshare conference?

Aviation Safety Infoshare is a confidential, twice yearly conference sponsored by the FAA, in which Government and industry representatives share aviation safety concerns and discuss aviation safety issues and mitigations. Infoshare offers the safety community a unique opportunity to come together in a private setting to learn from each other's experiences. The success of Infoshare relies on the active participation of the community—all ASIAs members are invited to participate in Infoshare and discuss how voluntary safety programs such as FOQA, ASAP, and Line Operations Safety Assessments (LOSA) are used to manage safety within our respective organizations. Infoshare offers a singular opportunity to share experiences, advancing aviation safety for the industry. The conference is held in the Spring and Fall, typically in March/April and September respectively, and the location varies amongst major cities in the continental U.S. (CONUS).

## Who is MITRE and what is its role in ASIAs?

[MITRE](#) is a not-for-profit, private corporation chartered in the public interest. MITRE supports a broad and diverse set of civilian and defense agencies through its management of Federally Funded Research and Development Centers (FFRDCs). MITRE has the privilege to operate the Center for Advanced Aviation System Development (CAASD), the FAA's FFRDC. The FAA asked MITRE to serve as the trusted third-party for ASIAs since they can [protect the data](#), and as a not-for-profit FFRDC they can be neutral and unbiased in the analysis of the data. Operators trust MITRE to ingest their sensitive data, process it, and provide results in a safe and secure manner. MITRE provides the [secure technical infrastructure](#) and expertise for the ASIAs program and plays a leadership role (e.g., tri-chair) on many of the governing bodies associated with ASIAs (e.g., GA Issues Analysis Team[GA-IAT]). The MITRE employees working on the ASIAs program are typically engineers and scientists, many with a background in aviation, as well as experts from the aviation industry (e.g., commercial and GA pilots, dispatchers, air traffic controllers).

## What if MITRE receives a Freedom of Information Act (FOIA) request or subpoena for ASIAs data?

Because MITRE is a private company, MITRE is not subject to FOIA. As for a subpoena, MITRE, like any other company, cannot guarantee protection from a subpoena. While there have not been any subpoenas in the program's existence, the MITRE legal team has a defense prepared that we believe will stand up in a court of law if it should ever come to pass. Other similar defenses have succeeded with propriety data collection programs like ASIAs. Many operators believe that in the event of a subpoena, the subpoena would be delivered directly to the operator and not to ASIAs or MITRE. If you have questions in this area, please contact Jeff Mittelman (703-983-7603, [mitt@mitre.org](mailto:mitt@mitre.org)) for more details.

## The company data I provide to ASIAs is sensitive—how it is secured?

The data you provide to ASIAs is stored by [MITRE](#) at MITRE's facilities, and MITRE is responsible for securing that data. Any data not stored at MITRE is not the responsibility of MITRE. MITRE has a very robust Information Security organization that protects all information at MITRE. MITRE routinely stores sensitive data for the FAA and many other governmental and industry sources as part of the public interest role. MITRE employs secure, encrypted data feeds, strictly limits access to data, stores all the data on a private network not connected to the Internet, and employs secure firewalls with traffic monitoring, intrusion detection systems, log monitoring, and user audits. Over the 8-year life of ASIAs with 70+ participating operators, there has never been a data breach nor has an airline ever left ASIAs due to an issue with data security/protection.



## How is ASIAS governed?

The ASIAS Executive Board (AEB), which is composed of representatives from Government and Industry, directs and authorizes ASIAS analyses including directed studies, assessment of safety enhancements, known risk monitoring, and vulnerability discovery. In the interest of enhancing aviation safety, the results of these analyses are shared with the ASIAS participants. The GA Issue Analysis Team (GA-IAT), under the AEB, is the group that oversees the GA portion of ASIAS, and is chaired and composed of Government and Industry representatives. In addition to the main GA-IAT body, there are two working groups currently operating under the GA-IAT: the GA Metrics Working Group (GAMWG) that works on developing new GA Portal metrics or improving the currently available metrics; the GA Infoshare and Outreach (GINO) Working Group that works on organizing the GA-related activities at Infoshare and works on outreach for current and perspective GA members.

## What is the FAA's role in ASIAS? Can they see my data?

ASIAS is a FAA-funded program jointly developed by the FAA and industry with the sole purpose of improving aviation safety. The FAA works with industry to oversee and direct the program as part of the [AEB](#). The FAA also co-chairs with industry several of the safety and governing bodies that steer and contribute to ASIAS. The FAA cannot see any individual operators' data—they can see the same aggregate, de-identified results the ASIAS member operators can see. The FAA cannot use any ASIAS data or information for punitive or enforcement purposes.

## What is the NGAFID?

The [NGAFID](#) is a system to collect and process flight data for operators typically flying smaller aircraft. The NGAFID was initially developed by the University of North Dakota as part of the FAA's General Aviation Center of Excellence activities; NGAFID is housed at the University of North Dakota, and is now part of ASIAS. Depending upon your aircraft configuration, flight data is uploaded to the NGAFID via one of two techniques:

1. A web interface for those operators flying smaller aircraft with a data collection capability (e.g., Garmin 1000, Garmin 3000).
2. [GAARD/fleetGAARD](#) for those operators flying smaller aircraft without a data collection capability.

Your flight data uploaded to NGAFID is only seen by you. You can run metrics on your data (e.g., exceedances, unstable approach) and also replay your flights. ASIAS will de-identify and aggregate all NGAFID data looking for national safety trends just as it does for other data collected by the ASIAS program.

## What is GAARD/*fleet*GAARD?

GAARD/*fleet*GAARD are mobile apps developed by MITRE to enable those aircraft without a flight data collection capability to collect flight data in a low- or no-cost way. GAARD is the General Aviation Recording Device and *fleet*GAARD is a fleet version of GAARD.

GAARD is a free iOS and Android app intended to be run on your smartphone or tablet and is available on the Apple App Store and Google Play Store. GAARD records flight data information, and post-flight, the data can be uploaded to the [NGAFID](#). Also, post-flight using the app, the user can replay their flight in a variety of ways and share the flight information via email, if they choose. For the most robust data collection, the apps should be paired with an Attitude Heading and Reference System (AHRS)—several models of AHRS are compatible with the app—those compatible AHRS are listed in the app store descriptions.

While GAARD is intended for use by the individual owner/operator, *fleet*GAARD is intended for the Part 141/135/91 operators with several aircraft without a capability for flight data collection. It allows the operator to control and configure the app on multiple devices using a web-based interface.