



ICAO MID

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Workshop

*“The Prevention of Aircraft Accidents and Incidents through
the Collection & Analysis of Safety Data & Information”*

Unveiling the Power of Voluntary Reporting Data in Aviation Safety Investigations



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Unveiling the Power of Voluntary Reporting Data in Aviation Safety Investigations

- Introduction
- What is Voluntary Reporting?
- Why Voluntary Safety Reporting Matters?
- Benefits of Voluntary Reporting
- Challenges and Limitations of Voluntary Reporting
- Best Practices
- Conclusion





INTRODUCTION



Aviation safety is of utmost importance and understanding the link between aviation voluntary reporting and the accident investigation process is crucial in maintaining it.

To ensure that safety is maintained, it is essential to investigate incidents and accidents that occur during flight operations.

Voluntary reporting systems can provide valuable information that helps identify potential safety hazards before they cause accidents.

Lets try and explore the benefits, challenges, and best practices of implementing voluntary reporting systems to enhance the accident investigation process.



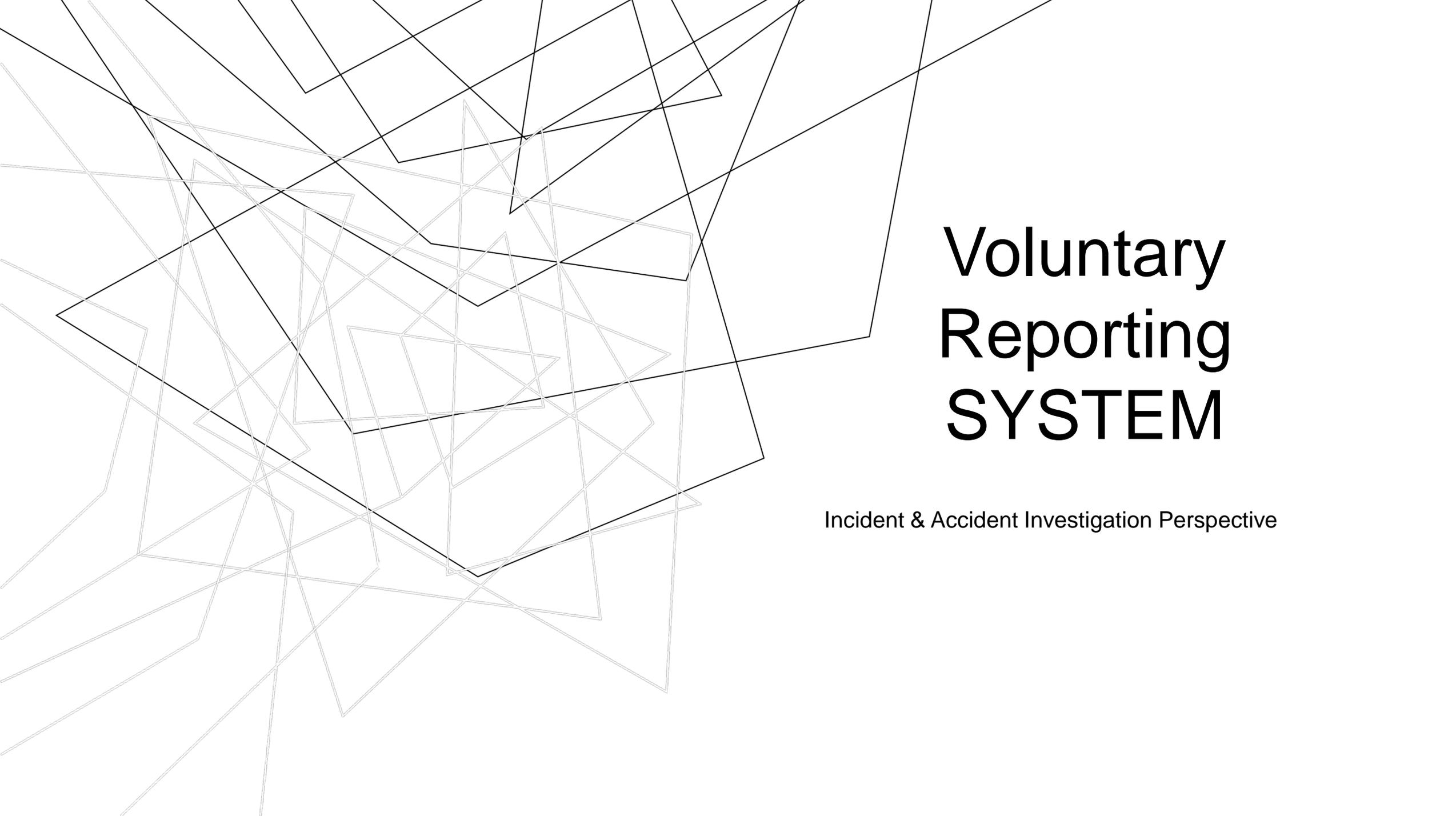
A voluntary and confidential incident reporting system is an important component of a mature aviation safety system that complements a States mandatory reporting scheme.

For a voluntary and confidential scheme to work effectively, aviation industry personnel must have **confidence** that the information they provide will be **protected** by State legislation.

The main philosophy of the system recommends that a voluntary reporting scheme once implemented **must allow anyone who has an aviation safety concern** to report it to the responsible entity of the system (CAA or Investigation Authority), knowing that their **entity will be protected**.

Are all States providing these principles to the reporters?

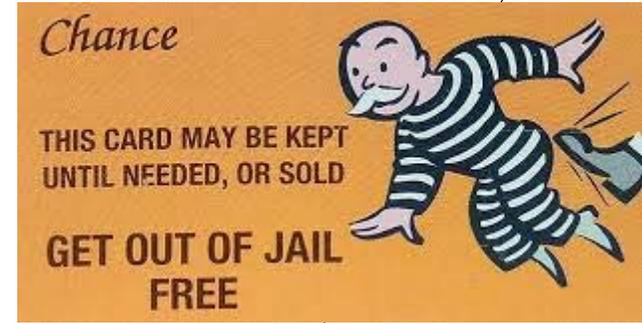
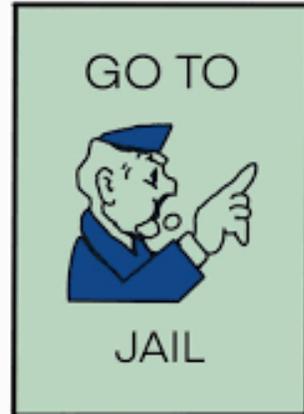
Is reporting culture in most States sufficiently mature to encourage reporting?



Voluntary Reporting SYSTEM

Incident & Accident Investigation Perspective

What a Voluntary Reporting System should not be!!



Important Facts:

Reports and/or data submissions involving the following should not be considered:

- ✓ Intentional disregard to safety, reckless conduct;
- ✓ Criminal activity, substance abuse, controlled substances, alcohol or intentional falsification
- ✓ Unwilling to act within the VRS philosophy



VOLUNTARY REPORTING SYSTEM

- ICAO transferred a large section of Chapter 8 of Annex 13 to the new Annex 19 on Safety Management.
- Includes key provisions on MOR and VOR systems paving the way to formalizing the SMS and SSP.
- At the level of AIA means to convince stakeholders of the importance of taking safety measures beyond simply determining a risk or a failure based on a single event dealt with in one investigation.
- The complementarity between **Annex 13** and **Annex 19** is important when it comes to processing incidents, determining serious incidents, and investigating an organization's SMS.
- AIA positioning relating to the SSP is both inside (contributing with safety data and risk identification) and outside to avoid being tied to priority decisions, in order to remain independent when it comes to investigating these decisions should they play a role in future occurrences.



What is Voluntary Reporting SYSTEM?

✈️ A mechanism that allows all individuals to report potential safety hazards without fear of punishment or retribution

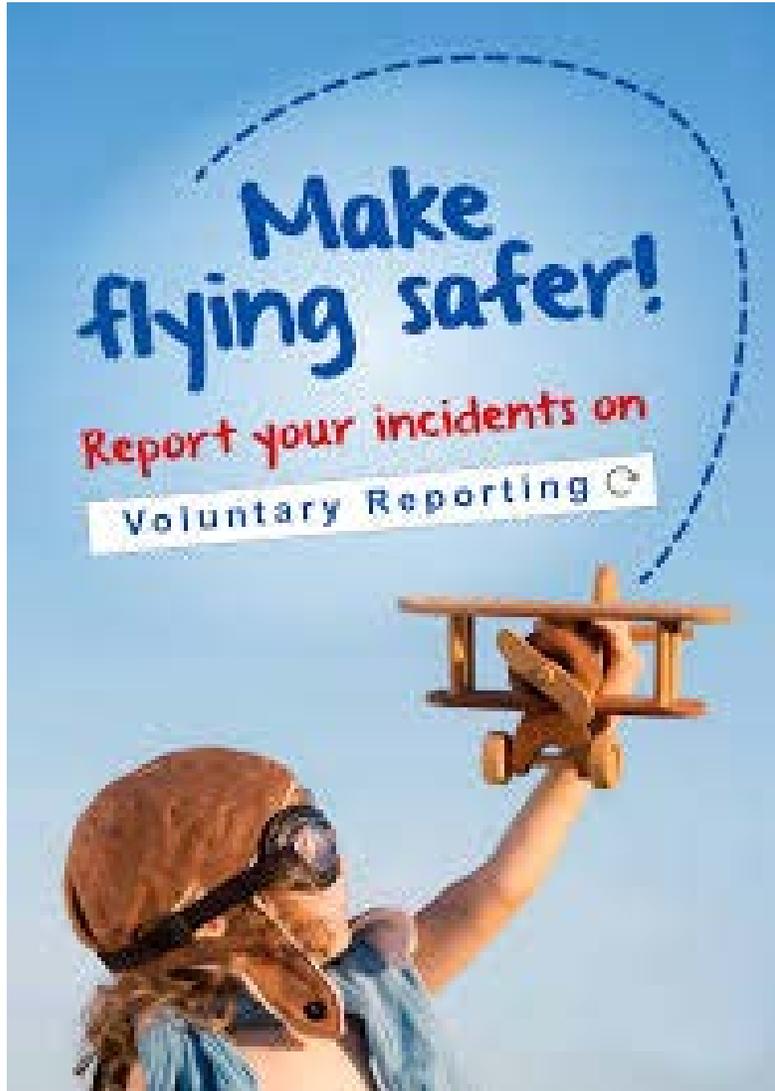


✈️ Successful implementations have resulted in improved safety records

✈️ Increases communication between stakeholders, and a culture of safety within organizations.

✈️ Encourages open and honest reporting, which is essential for identifying and addressing safety issues

VOLUNTARY REPORTING SYSTEM



2023

Annex 19 item 5.1.3 recommends that States establish a voluntary safety reporting system to collect safety data and safety information not captured by mandatory safety reporting systems.

ICAO recommends that “State authorities with responsibilities for the implementation of the SSP should have access to the accident & incidents database referenced in 8.1 of Annex 13 to support their safety responsibilities.”

In its guidance material, ICAO observes, ***“Ideally, State-run voluntary incident reporting systems are operated by an organization separate from the aviation administration responsible for the enforcement of aviation regulations.”***



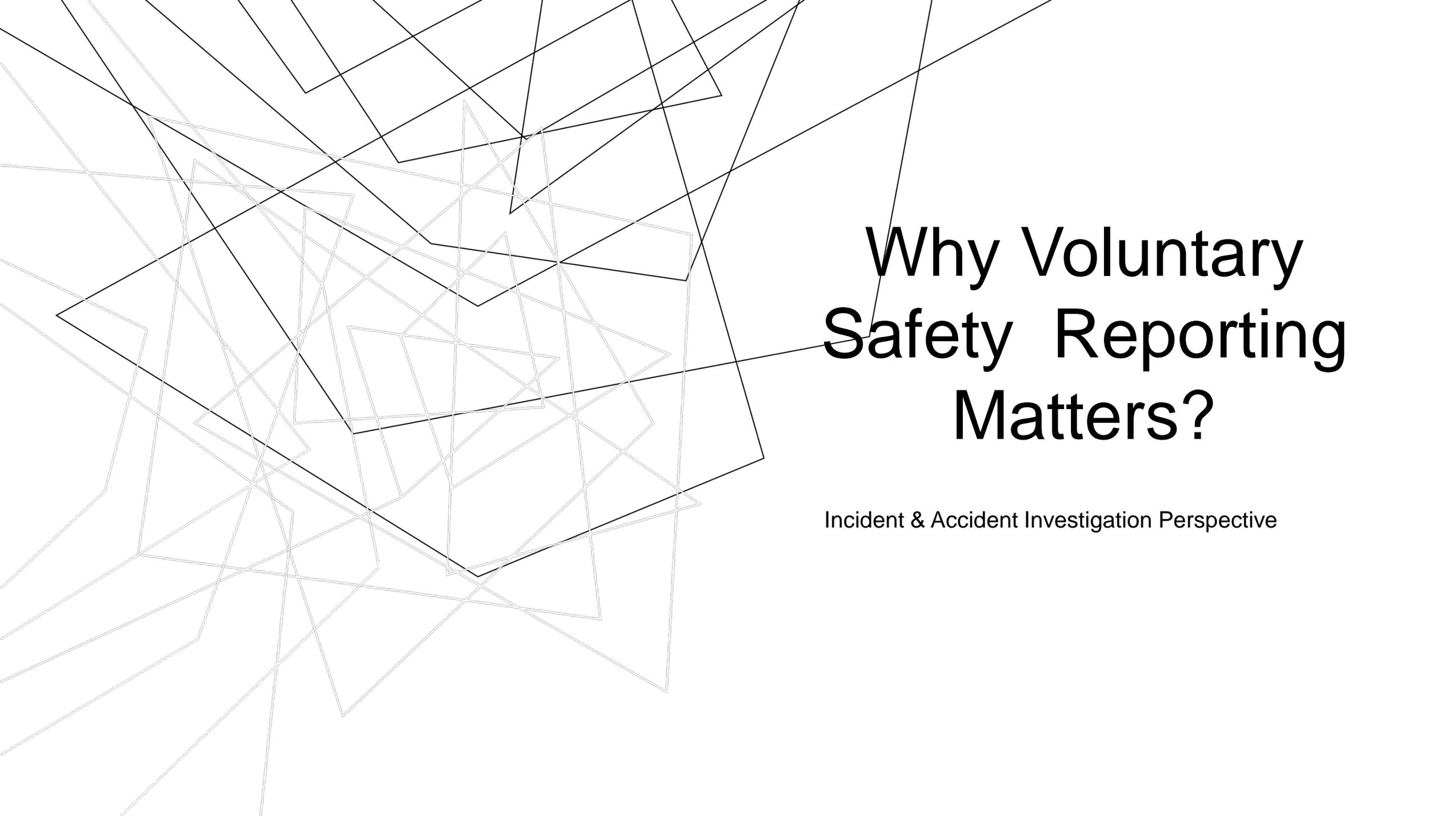
Voluntary Reporting SYSTEM

Annex 13 - Chapter 8 addresses: Accident prevention measures

- ✈ Refer provisions from Annex 19 relative to promotion of accident prevention by collection and analysis of safety data and by a prompt exchange of safety information.
- ✈ On Database and preventive actions Annex 13 item 8.1 *defines “A State shall establish and maintain an accident and incident database to facilitate the effective analysis of information on actual or potential safety deficiencies and to determine any preventive actions required.”*

Annex 19 - 5.3.1: “States shall accord **protection to safety data captured by**, and safety information derived from, voluntary safety reporting systems and related sources in accordance with Appendix 3”





Why Voluntary Safety Reporting Matters?

Incident & Accident Investigation Perspective

Why Voluntary Safety Reporting Matters

Voluntary safety reporting is important for a similar reason that mandatory reporting is:

-  Mandatory reporting is your safety reporting culture **baseline** – in other words:
 - Do you have the basic culture you need for a reasonable safety reporting system?
-  Voluntary safety reporting reflects how mature your safety reporting culture is – in other words:
 - How advanced are your safety reporting practices?

Improving voluntary safety reporting activities is something all of us should focus on after the aviation players are clearly reporting mandatory safety issues **most or all of the time.**

Why Voluntary Safety Reporting Matters

Voluntary safety reports are not to be discounted, as they add value in:

- ✈ Continuously improving operational processes;
- ✈ Keeping staff engaged in the SMS' proactive risk management activities;
- ✈ Alerting management of potential opportunities that extend beyond safety
- ✈ Minor safety issues and close calls become increasingly valuable when one considers the 1:600 rule.

For every major accident, there will be **over 600 close calls and minor incidents** to "practice" refining your operational processes before the organization suffers from the major event. These minor incidents typically make up those close calls and minor incidents.





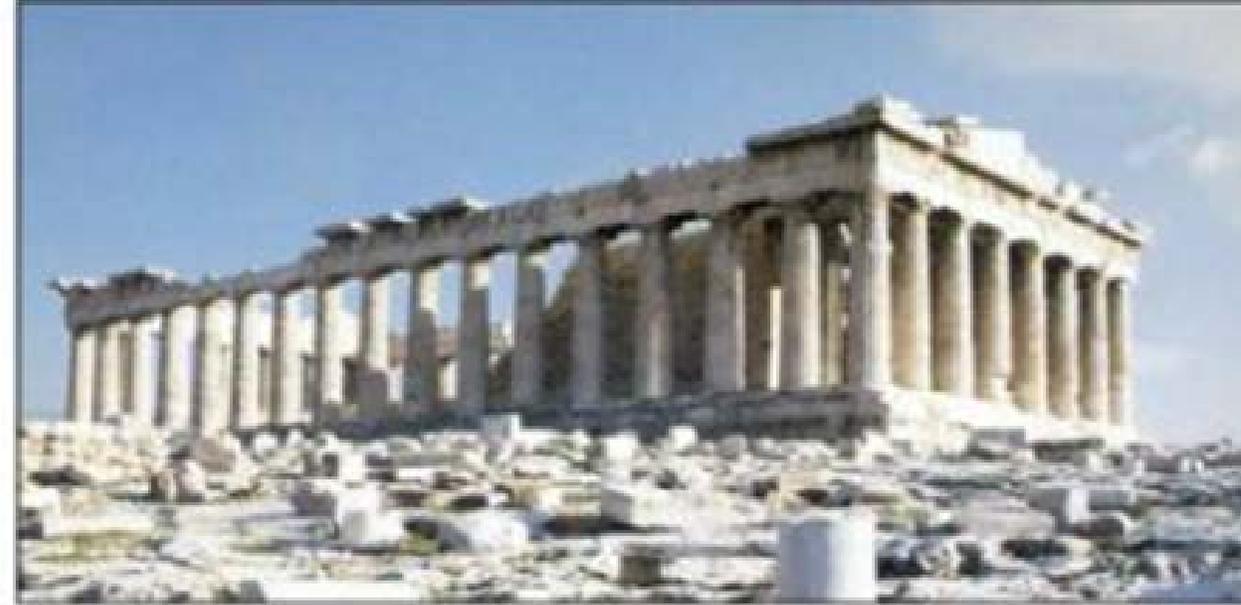
Benefits of Voluntary Reporting

Incident & Accident Investigation Perspective

BENEFITS OF VOLUNTARY REPORTING



REPORT OCCURRENCES?



Without occurrence reports

all we can do is guess!

BENEFITS OF VOLUNTARY REPORTING

Aviation voluntary reporting provides numerous benefits for both the aviation industry and accident and incident investigators.

For the industry, it allows for the identification and resolution of potential safety issues before they become major problems, which can ultimately improve overall safety and efficiency.

For accident and incident investigators:

- provides valuable data and insights into potential safety issues
- help to better understand the causes of accidents and incidents
- develop more effective prevention strategies in the future.

These databases are a treasury of information which is unavailable from any other source



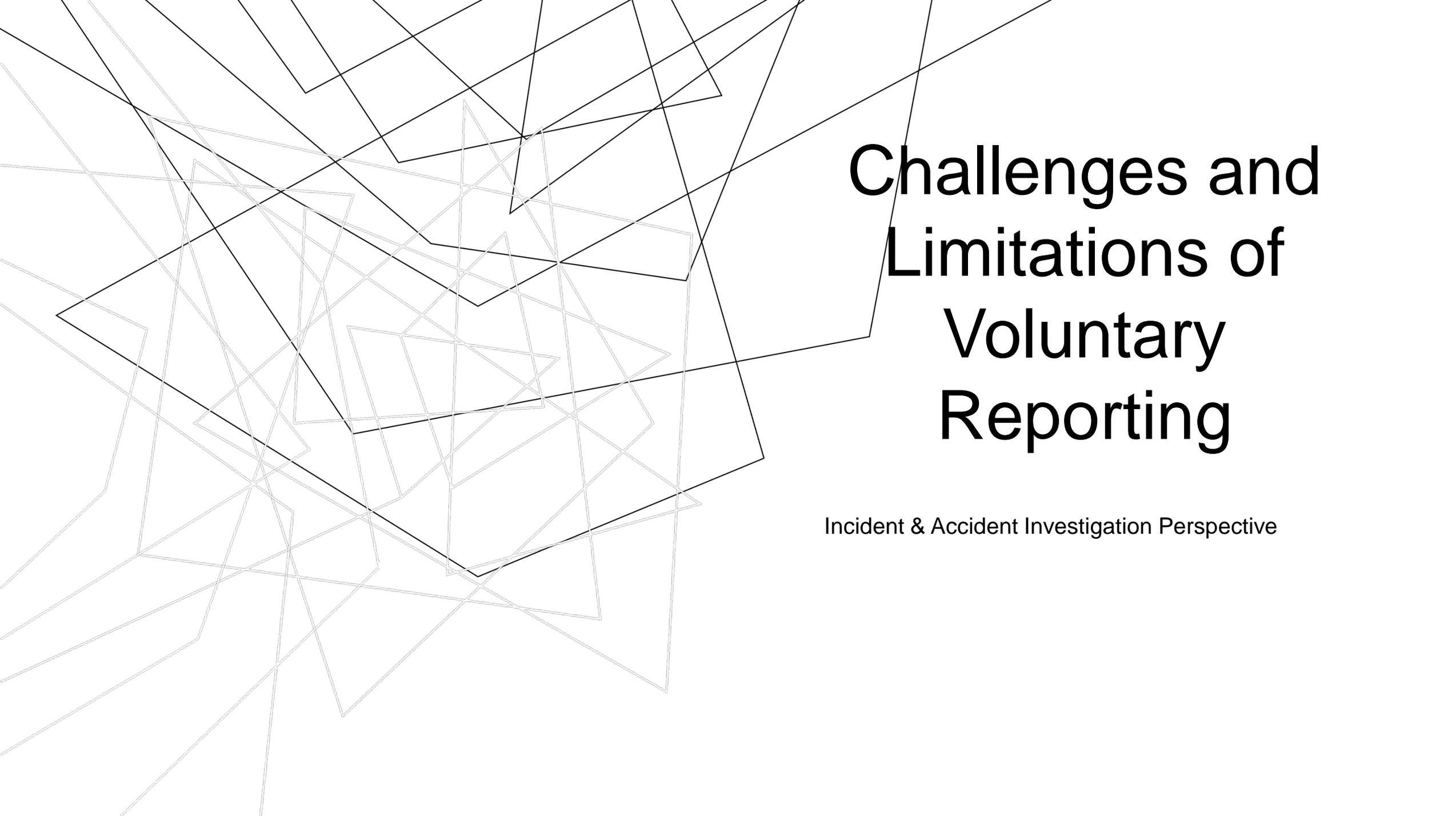
BENEFITS OF VOLUNTARY REPORTING

The Use of Incident Data

- ✈ Ideally suited for proving the existence of a safety issue
- ✈ Supports the understanding of the possible causes
- ✈ Enables defining potential intervention strategies as a proactive action
- ✈ Tracking the safety consequences once the intervention has begun

Voluntary, confidential reporting programs are probably the best available source of data on human error.





Challenges and Limitations of Voluntary Reporting

Incident & Accident Investigation Perspective



Challenges and Limitations of Voluntary Reporting

Despite the benefits there are also challenges and limitations that can impact the accident investigation process:

-  Individuals may be hesitant to report potential safety hazards due to fear of punishment or retribution.
-  May be concerns about the confidentiality of reports and how they will be used.

To address these challenges and limitations:

-  Important to establish a culture of safety within organizations
-  Essential to create a culture of safety that encourages open and honest reporting.
-  Standardize reporting procedures and provide training to aviation personnel

Challenges and Limitations of Voluntary Reporting

The system should be administered by an agency other than the State civil aviation regulator.

✈ Most of the VOR systems worldwide are managed by the Civil Aviation Regulator

- Only with a strong reporting culture is avoided the perception that the regulator may use the information reported to take action against specific individuals
- Likely to inhibit the number and comprehensiveness of the reports submitted.

In many countries where the system is more consolidated an independent third party namely, the Accident Investigation Authority administers the system.





Challenges and Limitations of Voluntary Reporting

The Limitations of Using Incident Data for Safety Investigations

-  **Information not validated**
In some countries, voluntary, confidential reports can be fully investigated and information from **other sources** brought to bear on the incident.
-  The **confidentiality** of some systems precludes any additional investigation and reports **go unverified**.
-  **Poor coordination** in data sharing from the Administer of the system and the Accident Investigation Authority
-  Reporters may have a **tendency to understate** their errors and blame the occurrence on other parties.
-  Incidents may be **embellished** to benefit the reporters.



Best Practices

- ✈ To ensure the successful implementation and use of voluntary reporting systems, it is important to establish clear guidelines for reporting, provide training for employees, and **ensure that reports are reviewed and acted upon in a timely manner.**
- ✈ It is also important to **communicate the benefits** of voluntary reporting systems and create a culture of safety within organizations.
- ✈ By following these best practices, **organizations can enhance the accident investigation process and improve aviation safety.**



Occurrence Reporting rule of thumb – report every time, when in doubt.

CONCLUSION

Incident & Accident Investigation Perspective

VRS



- ✈ For a voluntary confidential reporting scheme to be successful the aviation industry **must feel** that it is a **worthwhile endeavour**.
- ✈ If the industry perception is that the information provided is not acted on, then it is **unlikely** that personnel **will continue to submit** reports.
- ✈ Obtaining safety reports (MOR /VOR) from a workforce is often considered the **first key aspect of an SMS** yet - if there is not adequate **safety promotion**, then reports are likely to dry up.
- ✈ At its root is a great safety culture but this must be supported and cultivated with **user-friendly technology**, incisive **safety promotion** and **observance of 'just culture'**.

CONCLUSION

- ✈ Understanding the link between aviation voluntary reporting and accident investigation process is crucial in maintaining aviation safety.
- ✈ Voluntary reporting systems can provide valuable information that enhances the accident investigation process and helps identify potential safety hazards before they cause accidents.
- ✈ It allows aviation personnel to report safety incidents and near-misses without fear of punishment or retribution



It must be encouraged all aviation personnel to participate in voluntary reporting and help improve aviation safety for everyone.

Agreeing with our Brazilian CENIPA friends Flight Safety slogan:

“In accident prevention, there are no secrets, nor flags”

Fundamental that there is a culture of exchanging sensitive information and safety action plans within the aeronautical community “**on-demand**”.

It is facilitated by a positive Safety Culture and Just Culture. Still, these sensitive information and safety action plans adopted by each organization are restricted to its sole database and operational security management platform.





**AN EVENT IS NOT
ALWAYS A DISASTER**

NOT REPORTING ONE COULD BE

**THANK YOU FOR
YOUR ATTENTION**

MERCI
pour votre attention
**Avez-vous
des questions ?**