New Safety Strategy

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Aviation is the safest form of long-distance transport the world has ever known. Because aviation is already so safe, small fluctuations in the number of accidents can have a big impact on the year-on-year rate.

Therefore, the metric IATA is using to monitor safety performance is the aviation all-accident rate using a 5-year rolling average. As air traffic returns to pre-pandemic levels of growth, it’s more important than ever that we focus on safety improvement. This will ensure we avoid the potential scenario where, even though the all-accident rate continues to decrease, the number of accidents increases due an increased rate in traffic.

COVID-19 has shown, yet again, how aviation is rapidly impacted by global events. During these times of flux, the effective management of change is critical to maintaining safe operations while adapting to an evolving situation.

This has led to IATA reviewing its strategic approach to safety to enable us, supporting industry, to be even more responsive to rapid change in aviation and ensure we adapt quickly to best serve airline needs. This is how we have acted during the current pandemic over the past 18 months, where we have focused on areas as, and when, safety intelligence has indicated an emerging issue.

Finally, many big wins already have been achieved in aviation safety. Now, it’s about continuously refining our approach to safety by identifying marginal gains – those small iterations that, taken in aggregate, ensure we maintain a positive safety trajectory to continually reduce the possibility of aviation accidents and serious incidents.

The IATA Safety Strategy aims to make this theoretical aim a practical reality and we’re delighted, in the next few slides, to share our ambition here.
All industry stakeholders are focused on reducing the accident rate.

This graph shows the continued reduction in the aviation all-accident rate from 2005.

Looking at recent statistics over the pandemic, note that despite a reduction of 27% in accidents in 2020 when compared with 2019, this improvement in rate was eclipsed by a 52% reduction in flights owing to COVID-19.

The severe reduction in flight numbers magnified the impact of each accident when we calculate rates; however, it should be noted that IATA member airlines have generally improved against the 5-year metrics.

So far in Q1 2021, we have seen an improvement in the accident rate and an important recovery in the number of flights.
The new IATA Safety Strategy is focused on delivering a holistic approach to mitigating identified aviation hazards and safety risks.

This Total System Approach to aviation safety aligns priorities to ensure IATA delivers safety initiatives that serve the needs of IATA members and the wider industry.

As previously noted, aviation is considered an ‘ultra safe’ form of mass transport.

Therefore, many safety initiatives are not transformational—instead, it’s more about identifying where marginal gains may achieve an improvement in safety performance.

The Strategy also aims to ‘future-proof’ our support to industry by continually reviewing, and prioritizing issues that are of most concern to IATA members and delivering outcomes that meet industry needs.

The three ‘pillars’ of the IATA Safety Strategy are around Safety Leadership, Safety Risk and Safety Connect. All are described in detail in the following slides.
Accident investigations have identified that Safety Culture enhances safety performance and reduces the likelihood of accidents.

A positive safety culture results in more engaged employees who think and act in more safety-conscious ways - they feel personal responsibility for the safety performance of their organization.

Empirical findings in safety research have identified Leadership as the strongest factor affecting the safety behavior, especially in high-risk sectors, necessary to support safe operations.

Safety Leadership in an organization is thus a prerequisite for a positive Safety Culture enabling open reporting; a just, learning culture; and a successful, and effective, approach to managing safety.

IATA has developed the Safety Leadership program to bring together these critical elements.

It aims specifically at strengthening a Safety Leadership mindset among aviation executives to enable organizational behavior to embed, and effectively implement, a positive Safety Culture.
This requires a joint, coordinated global effort and collaboration with industry stakeholders from across aviation sectors to evolve the safety DNA in our industry.

To be successful, efforts must be turned into practical actions.
Through a network of select Safety Champions the program will promote Safety Leadership behaviors, values and practices that will be embedded in a Safety Leadership Charter.

A declaration of commitment to key guiding safety principles, the Safety Leadership Charter will encourage signatories to adopt practices enhancing the effectiveness of safety risk management.

It will encourage implementation of practical actions, further enabling a positive Safety Culture.

Safety Leadership Charter signatories will also pledge to collaboration to grow, strengthen and promote industry’s Safety DNA through Safety Talks, mentoring and experience-sharing with the industry.
COVID-19 created a number of challenges for aviation as it adapted to a rapidly changing landscape.

The IATA ‘COVID-19 Safety Risk Management Framework’ was developed to keep track of these changes and act as a central repository, for industry to share information on identified issues, and how they were being addressed during the pandemic. IATA used the ‘Framework’ to develop generic Safety Risk Assessments to share potential mitigations, as captured from industry, to new and emerging aviation hazards and safety risks.

IATA guidance material was developed, and published, to share best practices in specific areas. For safety critical issues, IATA Operational Safety Notices were created covering such topics as Unstable Approaches, Contaminated Pitot/Static Systems and Fatigue.

The ‘COVID-19 Safety Risk Management Framework’ needed to be developed quickly and without fuss – it has proved to be of value to IATA members and the wider industry.

The ‘COVID-19 Framework’ has become the ‘proof of concept’ for an IATA ‘Safety Risk Management Framework’. To ensure the IATA ‘Safety Risk Management Framework’ can evolve as more aviation hazards and safety risks are captured, a database-driven solution is required. It will interface with the IATA Global Aviation Data Management (GADM) programs to ensure any intelligence, identified from data trends, is fed into the Framework to highlight any emerging issues.

The IATA Operational Safety Audit (IOSA) is also core to the Safety Risk pillar and, looking forwards, as we move from being compliance-based to risk-based, we aim for IOSA to provide safety insights from audits that will feed, de-identified, into the Framework.

And finally, as a ‘one-stop shop’, it will continue to provide links to other valuable resources from other industry stakeholders.

The ‘Framework’ is core to the IATA Safety Pillar of Safety Risk.
The IATA Safety Risk Management Framework captures:

- Specific areas of interest and will be aligned to the CAST/ICAO Common Taxonomy Team (CICTT), supporting cross-referencing of the issues identified;
- Displays the number of issues per subject area and where those issues sit;
- The specific issue as captured within the Framework;
- Annotating if an issue includes analysis through a Safety Risk Assessment (SRA);
- Links to any guidance material developed by IATA or other stakeholder;
- Permits users to share information on an issue not currently captured within the framework or that has been updated within their own organization.
IATA represents the interests of 290 member airlines distributed around the world.

Adding to these are airlines on the IOSA Registry connecting nearly 500 airlines to IATA in total.

The IATA Governance structure including our Board of Governors, Advisory Councils and Working Groups connects a multitude of IATA members but not all of them.

Safety Connect is focused on ensuring all IATA members are easily connected to what we’re doing in initiatives delivering safety improvements and providing an effective conduit to enable IATA members to reach out to us whenever they need support.

Safety Connect is not short on ambition and, as highlighted above, it aims to bring collective industry knowledge, skills and experience together for the benefit of aviation safety.
In summary, the 3 pillars of IATA Safety Strategy offer a holistic approach to safety, supporting industry to manage aviation hazards and safety risks to remain focused on reducing the all-accident rate in aviation.

Safety Leadership, with the active sponsorship of industry executives, provides the means and ways to underpin and evolve safety culture across aviation. It shows how everyone plays a critical safety role – all have a responsibility to identify and protect their organization and passengers against aviation hazards and safety risks. This individual sense of responsibility, by knowing you work for an organization that supports open reporting and a learning culture, empowers individuals to report observations and events with confidence.

Enhanced reporting leads to greater granularity on the issues that may impact safety; deeper understanding of causal factors; and the design of more effective mitigations. The Safety Risk repository of aviation hazards and risks, captured from across industry, allows for better analysis of systemic safety issues through detailed Safety Risk Assessments using IATA and industry expertise. It will interface with IATA GADM programs to ensure any intelligence, identified from data trends, is fed into the Framework to highlight new and emerging issues.

This analysis, and collation, of hazards and risks in one place provides industry with an improved risk picture - the sharing of information supports collective understanding of issues and their effective management. This approach is currently being taken with our examination of unstable approaches, as highlighted within the IATA Operational Safety Notice, and I’m pleased at the collaboration across industry to address this issue.

Safety Connect, as a driver for more active industry engagement, is focused on bringing collective industry knowledge, skills and experience together for the benefit of aviation safety. It is focused on the two-way exchange of intelligence, sharing individual experiences, to identify and prioritize IATA safety initiatives that meet industry needs and lead to improved safety performance.

The approach taken for the new IATA Safety Strategy will deliver better safety outcomes to achieve a continued reduction in the all-accident rate in aviation.