A NEW PARTNERSHIP TO ADVANCE AFRICAN AVIATION

As the global aviation community recovers from the world-wide pandemic, Africa's aviation leaders have a unique opportunity to accelerate aviation development across the continent. To help foster this progress, MITRE has launched an Africa Aviation Initiative.

The MITRE-Africa Aviation Initiative: A New Partnership to Advance African Aviation

The goal of the initiative is to strengthen the global economic resilience of the aviation sector. MITRE seeks to:

- Support the aviation community in meeting and exceeding international standards and ensure the safety of all passengers
- Build global public-private partnerships to align mutual priorities, engage in problem-solving dialogue, and advance novel solutions
- Develop common frameworks for data exchange and analysis to advance aviation safety, operations, and resilience.

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MITRE is an independent, not-for-profit leading technology and research and development company. We apply our cross-domain technical knowledge and expertise to deliver a data-driven, system-of-systems engineering approach with a single shared mission: solving problems for a safer world. Our sponsors include federal, state, and local governments, such as the Federal Aviation Administration (FAA), the U.S. Department of Commerce, and the U.S. Department of Homeland Security. In addition, we collaborate and partner with international governments, industry, and academia.

In the first phase of the MITRE-Africa Aviation Initiative, we are engaged in a wide-ranging listening tour with key public and private sector stakeholders in both the U.S. and Africa to better understand Africa's most pressing aviation development issues. Our goal is to identify likeminded members of the community who are interested in co-creating a public-private partnership. As partners, each member will bring unique skills, capabilities and value to the partnership and related joint work effort. These contributions may include proprietary data, expert analysis, firsthand use cases, and executive leadership.

Based on our initial conversations with stakeholders, we have identified three potential initial focus areas for the MITRE-Africa Aviation Initiative:

Accelerating Safety Management System (SMS) implementation.

Pursuant to ICAO Annex 19, many aviation stakeholders are establishing SMS programs. An effective SMS program can transform the way an organization approaches safety. However, many organizations are challenged in terms of enhancing safety performance (i.e. setting safety objectives and defining performance indicators) and transforming safety culture. We would focus on sharing best practices and ensuring SMS programs generate tangible improvements in safety through training, safety culture assessments, and other activities.

Exploring opportunities to advance aviation assessment processes to improve engagement and information sharing. African aviation stakeholders participate in a number of discrete global assessment programs to ensure compliance with international standards and best practices. We would focus on opportunities to increase information sharing and transparency as well leveraging these processes as a means for African Civil Aviation Authorities to improve safety on a continuous basis, rather than as a one-time event.

Advancing safety and resiliency through a public private partnership utilizing global safety data. Sharing safety data, information, and metrics through an info-centric public-private partnership is a proven method to advance safety for all participants. Partnership-driven approaches work when the problem is bigger than what a single entity can see or control and when the nature of the problem requires a fundamentally collaborative solution. ADS-B has unlocked an entirely new set of aviation data that can be used to advance safety and operations. Combined with other publicly available data (weather, aviation infrastructure, etc.), new insights can be gained by leveraging local operational experience to interpret and unlock the story and true value of the data. We would partner with African leaders to generate new safety insights into operational and safety trends.

For more information about the MITRE-Africa Aviation Initiative, please contact Eugene Mwendwa, mwendwa@mitre.org

MITRE brings specific technical capabilities to the MITRE-Africa **Aviation Initiative** including:

- Experience connecting stakeholders through publicprivate partnerships
- Advanced aviation operational and safety data analytics
- Innovative safety management practices and performance programs.

MITRE's mission-driven teams are dedicated to solving problems for a safer world. Through our public-private partnerships and federally funded R&D centers, we work across government and in partnership with industry to tackle challenges to the safety, stability, and well-being of our nation.

