

Institutional changes and better national government understanding of the issues are preconditions for progress.

Putting Safety First

High accident rates are the most visible consequence of sub-Saharan Africa's struggling aviation safety system. It has been said that an underlying cause of the distressing accident rate in this part of the world is lack of political will at the highest levels of government for taking proactive steps on behalf of aviation safety. However, in most cases it may not be that simple.

Often, the key political officials are not the authorities responsible for safety in aviation. Other government branches play a critical role in enabling much-needed legislative changes and empowering the civil aviation department. Institutional problems, lack of communication, difficulty in understanding the international regulatory regime and the economic consequences of not meeting its standards, and outdated regulatory frameworks must be overcome

before determination at the top of the political establishment can be effective.

Some consequences of the current situation in Africa can be seen in the International Civil Aviation Organization (ICAO) audits of states' government civil aviation departments or independent civil aviation authorities (CAAs). Audit results were formerly confidential but became public March 1, 2008. Another consequence has been the blacklisting of some African airlines by the European Union.¹

Various African states are working towards improving their safety oversight systems on the basis of the findings of ICAO audits. However, many African civil aviation departments, those lacking the autonomy of CAAs, need the international aviation community to work with them in creating an enabling environment. That support will help African aviation professionals get

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in AFRICA

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the essential political backing from their governments and legislative bodies. Such a campaign to provide the preconditions for political will must focus on a number of issues.

Creating Political Momentum

Quite a few African countries have an established safety oversight system based on an outdated legal framework. The laws and regulations sometimes date back to the 1950s or 1960s. They were developed for a completely different era of the aviation industry. Such legal instruments may, for example, be geared to looking at purely technical solutions to safety issues. At best, they may take account of human factors. But hardly any are sufficiently current to tackle the issue of organizational weaknesses, as today's safety management systems do.

Civil aviation departments may face political reluctance when they try to realize fundamental changes toward the modern legal codes needed for adequate safety oversight. They may meet similar political reluctance when trying to restructure the system in the direction of independent CAAs. The civil aviation department may have to persuade its parent ministry, the cabinet and parliament that regulatory independence or regionalization is a critical step to more effective supervision and aviation safety improvements.

Quite a number of East and Southern African states have members of parliament who represent a district constituency. In such electoral systems, not only in Africa but throughout the world, some members of parliament are influenced by whether they can see political gain in supporting a particular legislative or

administrative change to aviation safety oversight legislation. Moreover, members of parliament belonging to the political opposition may sometimes be reluctant to support changes favored by the ruling party.

Regular changes of a minister or secretary of transport will often mean new aviation policies and new managers of the civil aviation department. That, in turn, may result in having to start over again in familiarizing the new officials with aviation safety issues and the need to push for changes in laws and regulations or for regulatory independence from politics.

Members of parliament, however, usually remain in office for their full term. They are a more constant force in government. It would certainly help aviation departments to have explanatory documentation written for a non-aviation audience to sensitize new members of parliament and ministers about the roles and international responsibilities of the aviation regulators. Such documentation should also explain the relevance of aviation safety to possible blacklisting and subsequent consequences for tourism and trade. That may also help win the support of key political players.

Civil Service Realities

Resistance to restructuring of aviation departments may come from many professional corners. A typical middle management civil servant in many African states may earn no more than US\$500 per month, while there are opportunities for aviation inspectors to earn considerably more by moving to a commercial aviation job. In such a situation, it is difficult for

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a government to justify why a particular class of civil servants or experts, namely those in aviation, should earn significantly more than others.

More and more, the international aviation community considers the regionalization of safety oversight to be the best way to solve deficiencies in safety supervision. However, regional cooperation brings up issues of national independence and pride in Africa, just as it does elsewhere in the world, so the road to regionalization is not easy. An added complication in the case of African countries with a district electoral system is that decisions about these solutions may be put to members of parliament who may have no direct political interest in approving them.

While regional cooperation is a very constructive path, it should not lead to delaying the building of national capabilities. This is particularly true since lengthy development times are usually involved with such regional solutions. Capability build-up at a national level can very well be gradually integrated into the regional entity in due time.

Another temporary solution could be salary top-ups — a supplemental income — for key safety oversight experts. Salary top-ups are a contentious issue but may provide a bridge to more structural solutions such as regional oversight organizations. In fact, even the ICAO Cooperative Development of Operational

Safety and Continuing Airworthiness Program (COSCAP) projects rely indirectly on salary top-ups.

Salary top-ups are used in other economic sectors, such as health care. They help keep professionals with international qualifications available for critical civil service positions. In some cases, top-ups are supported by the international community. Examples from other sectors seem to indicate that the costs involved in salary top-ups could be borne fairly easily by the international community.

Sharing Experiences of Regulatory Independence

A wave of political and financial independence for government departments throughout Africa in the early 1990s has brought mixed experiences. In the case of financial independence, the civil aviation authority is allowed to keep part or all of its income from air traffic control and landing charges. Political independence means that the organization can operate outside the political mainstream. It then no longer has to devote precious resources to routinely addressing purely political issues.

In some countries, the aviation industry may be too small to generate sufficient revenues for a financially independent CAA. In those cases, regionalization of safety oversight may be a solution.

The African region can be helped by assistance in the form of tools to build an economic case for an independent civil aviation authority. Parliaments in Africa may want to know what are the credible sources of income for an authority. The amount of revenue that is generated by a particular level of industry activity is quite often difficult to quantify, however.

A number of documents² describe the tasks of a civil aviation authority, but they provide no logical explanation of the *raison d'être* for a civil aviation authority and its critical function in aviation safety based on state responsibilities. The international aviation safety community should consider organizing a program that enables countries in the region to learn from countries that already have established a CAA.

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The AviAssist Foundation is preparing to contribute to such a program through a workshop on regulatory independence.

Raising Public Awareness

Often the news media do not report, or incorrectly report, the international safety oversight responsibilities that have to be met by aviation authorities and are of little educational assistance. Each year, for example, numerous articles are written in which the responsibilities and powers of ICAO are misinterpreted. The media often do not understand the international expertise that is required to provide adequate safety oversight. Such experts can easily seek greener pastures in a growing industry in Africa or in other regions of the world, such as the Middle East.

Some news stories may be based on little or no research, encouraging unjustified public resistance to establishing financially and politically independent authorities and higher salary structures based on international standards.

Specific attention is often paid to the deficiencies in air navigation services in some countries, as well as the inconsistency between deficiencies and the charges for these services. The most notorious subject is radar coverage. Since it is one of the most visible pieces of infrastructure, the media eagerly pick up the issue, followed by calls for better navigation facilities

and VHF radio communication coverage in controlled areas.

A number of countries, including Tanzania, have taken the important step of organizing aviation familiarization workshops for the media. That will help gain public appreciation of the international regulatory requirements through informed reporting. In turn, this public appreciation may help build parliamentary goodwill for well-organized and well-funded civil aviation authorities.

Data and Analysis

Very little information is available on the extent to which African aviation departments and authorities harvest comprehensive safety data other than accident statistics.

Safety data management and analysis have helped identify safety trends around the globe. They can be highly efficient in predicting where action is best taken to prevent incidents and accidents. However, data-driven safety management has not yet influenced aircraft operations in Africa on a large scale. Working toward a common collection of safety data will allow the detection of meaningful safety trends and eventually prevent incidents from developing into accidents. In most African countries, the practice will require a change in legislation to give aviation safety professionals sufficient confidence in the proper use of the data they provide. The legislators have



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to be educated about nonpunitive data collection to be able to strike a delicate balance between protection of aviation professionals in the interest of safety and criminalization of accident investigations if there is a case to answer.

However, such data can also assist in building a rationale for devoting adequate resources to a CAA. Figures and graphs make it easier to explain safety needs to key political players who have little aviation background. They may make clear to people outside the industry the added value of a competent CAA. In that manner, such data may help build a case for a restructured civil aviation authority or a transition to a regional safety oversight organization.

Nonspecialist Language

Communication is a critical component of safety management. Safety management also focuses on looking at the interfaces between organizations and processes in the aviation industry. However, the aviation community has to do a much better job in making its world understandable for aviation outsiders who nonetheless play a critical role in improving aviation safety. The interaction between the technical specialists of the aviation community

and the government is not always well organized, and mutual understanding should be improved.

Governments may not always find it easy to determine what constitutes safety and lack of safety. Also, its officials may not be aware of the increasing international pressure to improve aviation safety. This is due to lack of plain-language documentation on such issues. The international element so important in aviation does not come into play nearly as much in other government sectors such as health or domestic commerce, where little if any international regulation is a factor.

Explanatory documentation also must make the link between aviation safety and related national economic interests such as tourism. African tourism boards usually try to attract U.S. and European tourists to their countries, some of the most affluent holiday spenders. However, to establish flight connections between an African country and tourists' home regions, aviation authorities outside Africa have to be convinced that the country meets its safety oversight obligations under ICAO standards. Governments may not be aware of that requirement.

Role of ICAO

A related challenge for the international aviation community is to produce publications that make all this more or less self-evident. Plain-language leaflets will have to describe why a regional oversight organization or an independent civil aviation authority can better take care of safety oversight than a politicized government department.

ICAO itself is being restructured into an organization that will focus on implementation of its standards. The African region can benefit from such standards-implementation assistance.

The ICAO Africa Comprehensive Implementation Plan (ACIP) offers good prospects for a coordinated approach. Important work is being done in cooperation with the Industry Safety Strategy Group on implementing the *Global Aviation Safety Roadmap*. The implementation of ACIP will provide a thorough test of whether ICAO can effectively execute its new implementation role.

The AviAssist Foundation and Flight Safety Foundation will focus on solutions and campaign for wide political appreciation of aviation safety in Africa. It is time to start sharing solutions instead of merely holding meetings on challenges. The AviAssist Foundation is proud to act at the forefront of African aviation safety and be part of the solutions. ➤

Tom Kok is director of the AviAssist Foundation.

Notes

1. ICAO has audited or is planning a comprehensive safety audit of the civil aviation departments or CAAs of 20 African countries. The European Union has black-listed all airlines from the Democratic Republic of Congo, Equatorial Guinea, Liberia, Sierra Leone and Swaziland, and one airline each from Angola, Rwanda and Sudan.
2. For example, *ICAO Safety Management Manual*, DOC 9859, Chapter 3.

The AviAssist Foundation

The AviAssist Foundation is the regional affiliate of Flight Safety Foundation for East and Southern Africa. As an independent nonprofit organization, the AviAssist Foundation relies on contributions of stakeholders to identify threats to safety, analyse the problems and work on practical solutions to them.

"Some countries and companies have done a brilliant job in improving their systems and can't wait to tell their stories," says AviAssist's director, Tom Kok. "The current system hides those heroes. The AviAssist Foundation will support others in their efforts to replicate such success stories."

AviAssist has a representative in Zambia. The AviAssist Foundation can be contacted at <info@aviassist.org> and has a Web site at <www.aviassist.org>.

— Rick Darby