

Juba, South Sudan

A Case Study in Aviation Assistance

During March, 2010, the Aviation Safety Unit of the World Food Programme (WFP) contacted the Flight Safety Foundation regarding aviation safety problems in the emerging nation of South Sudan. The Foundation has an ongoing agreement with the WFP to provide technical assistance in aviation safety matters, but it was clear from the outset that this would be a special case.

The WFP has been providing humanitarian airlift to South Sudan for many years. In the last two decades, it is estimated, two million people have died from conflict with North Sudan and associated starvation and disease. The Comprehensive Peace Agreement signed in 2005 — and supervised by the United Nations (UN) Security Council — created a path towards independence for South Sudan, a separation from the northern part of the nation. The agreement allowed a vote for independence that occurred in January, 2011. This vote, overwhelming in favor of independence, enabled the formal creation of a new nation of South Sudan on July 9, 2011. The UN and nations around the world announced their intention to recognize the new nation on this date.

All of this has understandable impacts on aviation. When the peace agreement was signed in 2005, the government in the North Sudan capital of Khartoum — who operated the aviation infrastructure of the south — became disenfranchised. The meager aviation infrastructure in the south was left to decay to a dangerous state. The only navigation aid failed and was never restored. Khartoum withdrew all but a single air traffic controller with one failing radio. All flight plans and information were routed through Khartoum, but support from Khartoum was unreliable at best.

This situation posed several internal problems. First, aviation was the primary means of transporting security and peacekeeping forces in the country. Second, most of the population was dependent on food and humanitarian aid that is supplied almost exclusively by air. Third, the future of the nation's economy was hinged on the development of petroleum and mineral resources that rely on air transport. Finally, the new government of South Sudan needed aviation links to pull together the loose regional and tribal authorities together into a functioning federal structure.

Other problems emerged that spilled outside of the borders of the troubled new nation. Earlier this year, looking at the approaching situation when the new nation came into being on July 9, it became obvious that a large chunk of vital African airspace would no longer fall under the auspices of the Chicago Convention. Therefore:

- All the rules governing international aviation would be immediately suspended.
- The basic rules of liability that allow aircraft to be operated and insured would be suspended, impacting 4 international carriers.
- Air traffic control (ATC) services for upper airspace would be suspended since adjoining countries would not be able to clear aircraft without agreements into the new sovereign airspace. This was particularly critical since the airspace was essential to emergency air

navigation plans being used to work around the airspace disruptions of the “Arab Spring” in North Africa.

- On July 9, 80 heads of state and senior delegations planned to visit Juba to celebrate the birth of the new nation in its capital. These VIP flights would have arrived to find no ATC, marginal facilities, no weather observations, no contingency plans and no ability to coordinate with adjacent countries for flight plans or diversions.

The Flight Safety Foundation was one of the only organizations in the world capable of fully recognizing the scope and urgency of the problem. The Foundation was formed in the same year as the International Civil Aviation Organization (ICAO), and has had experiences dealing with global problems, such as the restructuring of aviation safety following the breakup of the Soviet Union. In addition, the Foundation has a massive network of contacts and support in capitals around the world. Foundation President Bill Voss initiated coordination with all of the key stakeholders. At the Foundation President’s urging, the secretary general of ICAO agreed to assign a regional office to the emerging nation even though it had not yet been officially recognized, an unprecedented commitment. The U.S. State Department and others pledged financial support. African neighbors pledged in-kind assistance.

In early May, the Foundation president traveled to the capital of South Sudan in Juba and Nairobi to meet with government of South Sudan (GOSS), UN Representatives, and ICAO. The dire nature of the situation was clearly validated during that visit and communicated by the Foundation across the region and industry. The GOSS agreed to initiate the appropriate international requests and ICAO agreed to initiate a task force. Various donors and neighboring countries agreed to provide support.

As a result, the following things occurred between May 9 and July 9, 2011:

- The U.S. Department of State donated \$1 million to ICAO to support South Sudan Aviation Development. Additional funding was pledged by the French government.
- ASECNA, The West African Air Navigation Service Provider, supplied a technical team to repair and replace critical communication infrastructure, provide direct ATC support and train future ATC personnel.
 - New ATC radios were put in place.
 - Navigation facilities were repaired.
 - Satellite links to transmit aviation safety information and flight plans to adjacent countries were established.
 - Weather observation equipment was installed and made available via internet.
 - New ATC procedures were established.
 - Special local procedures were developed to allow for the massive influx of VIPs on Independence Day, July 9.
- ICAO Regional Office
 - Established agreements with adjacent states and put in place special international coordination procedures to deal with the influx of VIPs during July 9.
 - Issued appropriate notices to airmen (NOTAMs) and information regarding the transition of airspace in the new nation.

- Ensured that the upper airspace was kept open so air navigation routes across the continent were not disrupted.
- Through heroic efforts, 80 VIP flights were accommodated without incident on July 9.

In summary, the situation that evolved in South Sudan was extraordinary and was completely unnoticed by the organizations that should have addressed it. If no action had been taken, a dangerous and potentially catastrophic situation with lasting humanitarian and political impact would have developed. In contrast, a plan to develop a sustainable air navigation system for South Sudan is now in place, and a VIP celebration that would have been tragically dangerous was managed safely.

By using its insight and international standing, the Flight Safety Foundation was able to bring this dangerous situation to light and drive the appropriate organizations to take action. The Flight Safety Foundation is the only organization in the world that is dedicated solely to the advancement of aviation safety, and, as such, was uniquely positioned to address this problem. It has no lobby group, political affiliation or agenda. Therefore it was allowed to play a global coordination role without question or suspicion.

The creation of a new country is a rare event, but this is one of several examples over the past few decades. With a certain level of instability present in some regions of the world, it may happen again. It is vital that a seamless and safe transition of aviation services be a part of discussions and treaties as far in advance as possible. While the South Sudan situation ultimately did work out, that was due to a tremendous amount of effort on the part of the Foundation and all of the other participants who provided crucial assistance. Everybody won.