

# 4th ANNUAL NATIONAL SAFETY SEMINAR

13 OCTOBER 2010

BEYOND  
**SMS**  
THEORY

Decision Making  
& Managing Risk

*SOUTH AFRICAN*



*CIVIL AVIATION  
AUTHORITY*

# Welcome



4th ANNUAL NATIONAL SAFETY SEMINAR

SOUTH AFRICAN



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# Flight Plan

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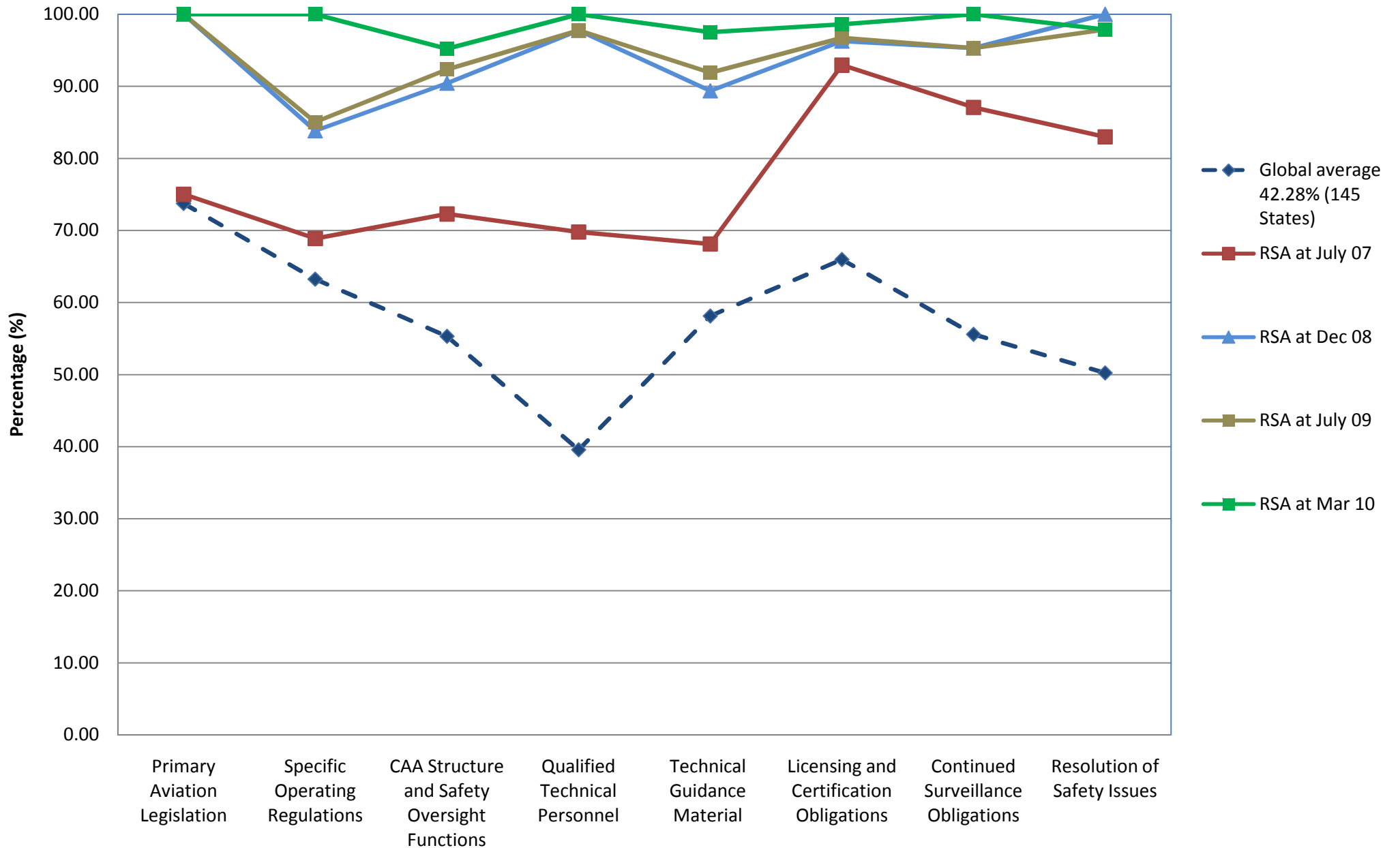
# Taking stock

- The FAA audit in August 2007 revealed that the CAA lacked certain critical skills.
- Legislation, staffing and enforcement were the first challenges to be tackled to improve the oversight of flight operations and airworthiness of aircraft.
- The consolidation of aviation legislation pertaining to the Authority was required to make it more accessible, user-friendly and non-contradictory. The Civil Aviation Act came into effect on 31 March 2010.

# Taking stock (*continued*)

- The consultation process for regulations were improved by means of the SCORR process and CARCom working group.
- Parts of the revised CAR were approved and promulgated in 2008.
- The aviation safety oversight system in South Africa is now exceeding minimum global standards. The last ICAO audit revealed the high level of SA compliance with international standards. A subsequent FAA assessment confirmed SA as a Category 1 country.

# ICAO's standards: Effective implementation of eight critical elements (%)



# Challenges overcome

- In this process the SACAA surpassed the threshold Flight Ops Inspector staffing level required for ICAO-compliant safety oversight.
- Improvements in the auditing of AMOs included reducing the period of validity of AMO approval for foreign-based AMOs, in line with ICAO requirements.
- All inspectors received training as required by the Inspector Qualifications Framework.

# Challenges overcome (*cont.*)

- Various innovative solutions were found over the past few years, such as networking with the Industry Liaison Forum (ILF) and finding new answers to general aviation problems with the General Aviation Safety Initiative (GASI).
- GASI has inter alia facilitated improved regulation and standardising of training and the use of NTC aircraft in PPL training; radio telephony standards and human factor training for AMEs. The team is still hard at work with matters such as aeronautical decision-making, instruction and helicopter accident rates.

# Challenges overcome (*cont.*)

- In November of 2008, the then Minister of Transport, Honourable Jeff Radebe, formalised the designation of the Recreation Aviation Administration South Africa (RAASA) as an entity to oversee the recreational aviation sector on behalf of the CAA.
- In October 2009, Parts 109 and 110, regulating aviation security in terms of training and screening were promulgated. By April 2010 all operators in South Africa were required to have screening and training certificates from the SACAA.

# OR Tambo International Airport, Johannesburg, busiest in Africa



# Challenges overcome (*cont.*)

- Some of the challenges which the SACAA dealt with, were incidents involving SA Airlink in December of 2009, resulting in a request for a Corrective Action Programme from the airport authority.
- The occurrences at the time highlighted the fact that there is seldom a single cause associated with accidents.
- During the course of ironing out these problems, the George runway came under scrutiny and was restored to an acceptable condition of runway friction under wet conditions.

# Successes

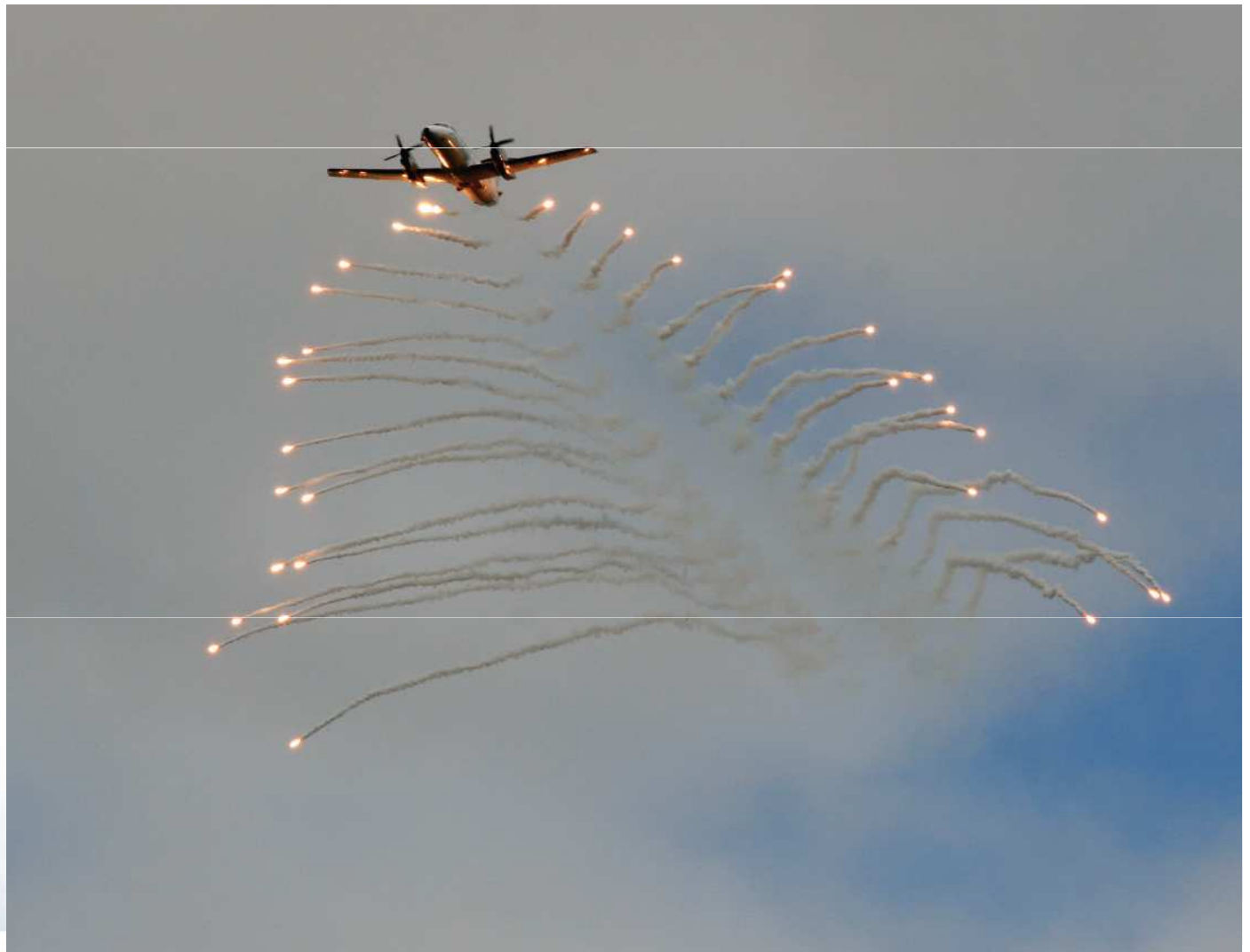
- The CAA distinguished itself in the medical arena in May 2008, when South Africa was appointed as the coordinator for the Cooperative Arrangement for the Prevention of Spread of Communicable Disease through Air Travel (CAPSCA) for East and Southern Africa. This dealt with pandemic preparedness plans.
- During this time the CAA took a proactive step by establishing the Unmanned Aircraft Systems Coordinating Committee to oversee the impact of these systems on our airspace.

# Successes(*continued*)

- On 14 April 2010, the CAA issued its first type certificate (for the Jonker sailplanes) since its inception in 1998.
- In the same month the CAA launched the Aeromedical Committee, an impartial body for making rulings on medical cases.
- During this time, a much simplified system for delivering foam, which exceeds ICAO standards in terms of its application, was developed by an SA fire tender refurbisher in collaboration with the CAA.

# Successes(*continued*)

- South Africa has developed an anti-missile system for commuter aircraft, developed by a South African Company and certified by the SACAA.
- These aircraft are being used by the UN World Food Programme to transport its staff.

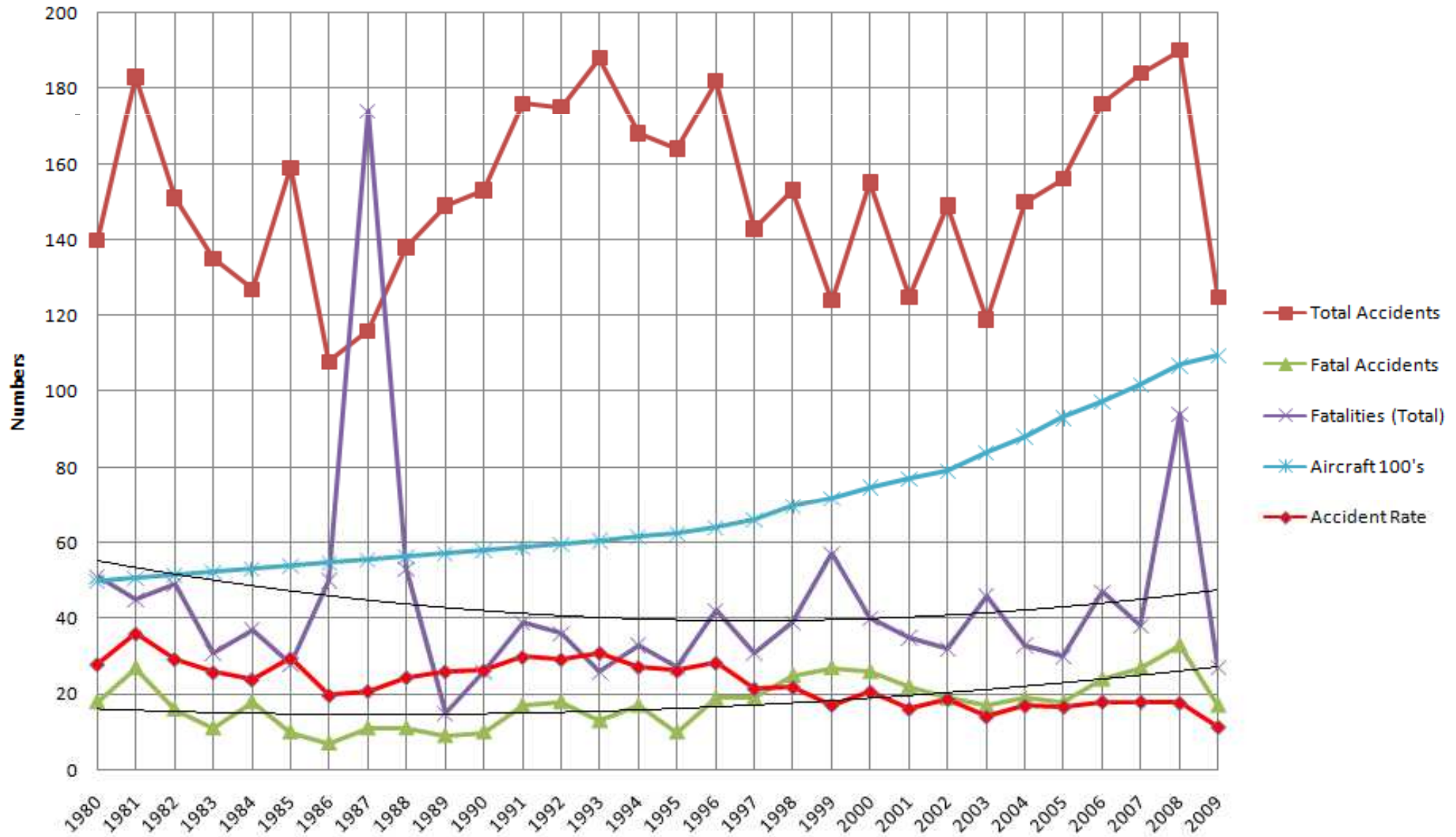


# Successes(*continued*)

- The SACAA fully supports fostering regional cooperation to improve safety standards in the region. At least 80% of aviation activities take place in SADC take place in South Africa.
- A very positive trend was that for various reasons, the accident rate in general aviation took a downturn in South Africa and on the continent between 2008 and 2009.

# Aircraft Accidents in South Africa

South African Civil Aviation Accident Statistics 1980 - 2009



# Successes (*continued*)

- During the FIFA World Cup this year, South Africa hosted 64 matches which attracted 3.1 million spectators.
- The CAA had 33 inspectors deployed over 3 cycles to 13 host airports around the country during this time.
- Aviation played a vital role to keep it all running smoothly, to the extent that the CAA recently received Brazilian visitors who came to learn the secrets to our success.

# Lanseria during the World Cup



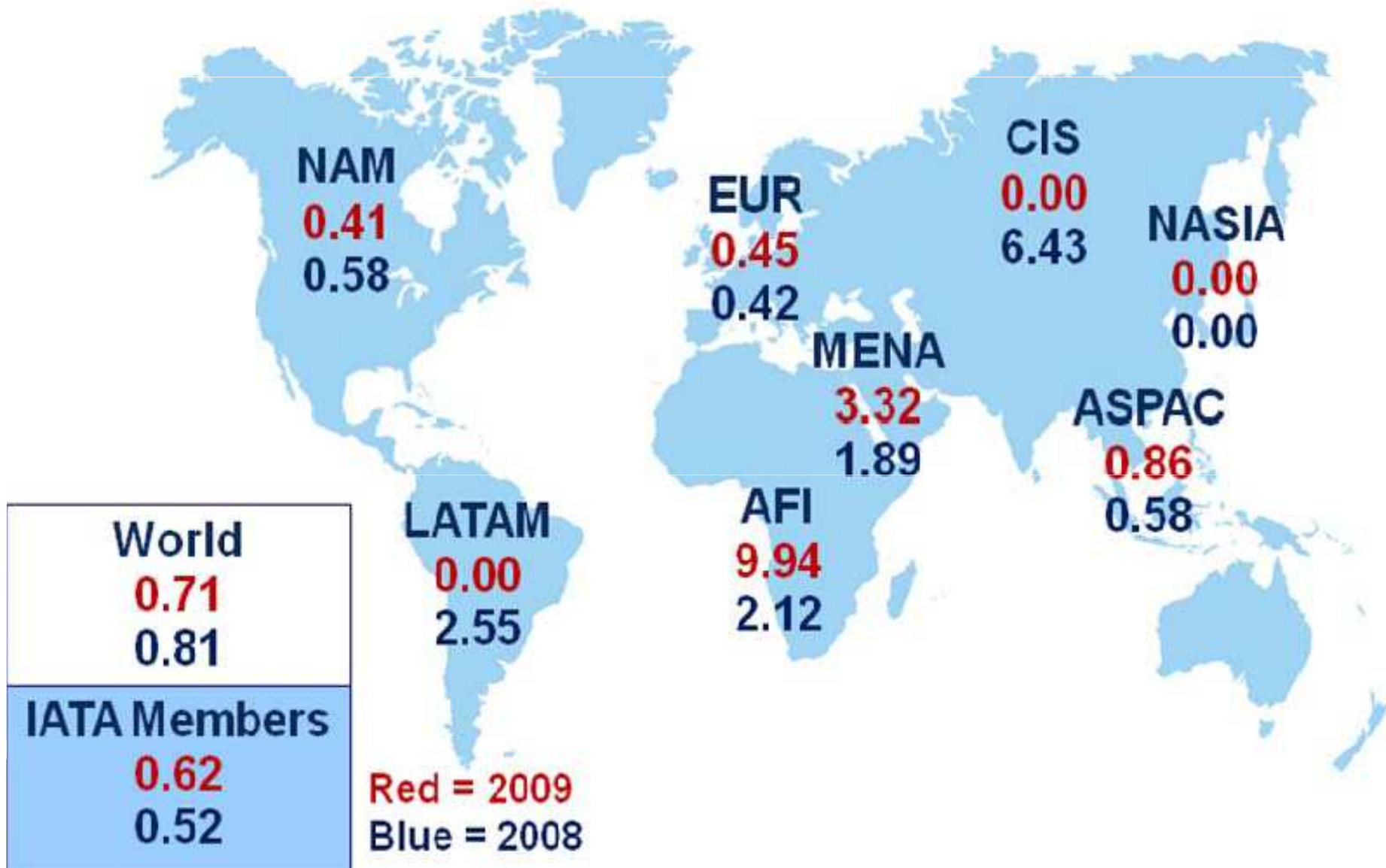
# The Team

- The SACAA has achieved many of its objectives over the past few years. Credit must go to former Minister Radebe for recognising that top level intervention was required to ensure that South Africa would be able to meet its international obligations. This has been re-enforced by our current Minister, the Honourable Sibusiso Ndebele
- We have established a good foundation for the future. The Minister in his recent speech at ACSA emphasised that the development of air services is paramount for the future of Africa.

# Looking ahead

- IATA has announced that the aviation safety performance for 2009 showed the year's accident rate for Western-built jet aircraft as the second lowest in aviation history.
- However, Africa had an accident rate of 9.94, significantly higher than its 2008 rate of 2.12 – again the worst rate of accidents in the world, with five Western-built jet hull losses with African carriers. The continent's carriers constitute 2% of global traffic, but 26 per cent of global western-built jet hull losses.

# IATA 2009 Safety Statistics



# Looking ahead (*continued*)

- But statistics can be misleading.
- In the 5 hull losses referred to in the IATA report, only 1 (one) member of the travelling public lost his or her life.
- In one of the hull losses, the worst injury was a sprained ankle (the Airlink Embraer accident in George).
- ICAO and IATA have been requested to standardise accident reporting so as to prevent misleading impressions.

# Looking ahead (*continued*)

- It is clear that there is still much to be done in General Aviation. Technological advances provide concurrent challenges to pilots.
- The continuing world-wide recession has also necessitated the implementation of budget cuts. Although the core business of the CAA continues without respite, many beneficial measures towards safer skies will be hampered by the economy until such time as the recession abates.

# Today's theme

- This is the fourth National Safety Seminar to be hosted by the CAA, and we have decided to discuss the theme of Safety Management Systems, since this is such a critical component in the aviation safety of a country. Let's make sure that SMS doesn't only remain theory, but becomes a practical part of the world of aviation. Louise and the panel working with this will outline the challenges, target-setting and the implementation of SMS.

# Programme

- Our programme for today will include deliberations on the impact of SMS on the accident rate; and target-setting and performance measurement will also be discussed within this context.
- There will be a case study on SMS application in the AMO environment as well as in the airport environment
- This will be followed by further case studies on an airline and an AMO for General Aviation. The ever-important relationship between ATC and the pilot will be discussed by a representative from ATNS

# Conclusion

- SMS is a tool with which to do risk evaluation
- The data that we get provides us with the ability to pinpoint problem areas to work on.
- This proactive method is vital in aviation, where there is so little room for error.
- I wish you all a robust debate at this significant seminar.
- Thank you for your attention.