## Global Ministerial Summit, Riyadh 29 to 31 August 2016

# Banjul Accord Group Accident Investigation Agency (BAGAIA) -

A regional accident investigation organization (RAIO) in West Africa

**Presented by Caj Frostell** 

#### International framework

- Convention on International Civil Aviation (Chicago Convention)
- Annexes to the Convention, in particular Annex 13 – Aircraft Accident and Incident Investigation
- Objective of investigation
- Functional independence from the regulator (Civil Aviation Authority)
- ICAO audit requirements

### Objective of investigation

- The sole objective of the investigation of an accident or incident shall be the prevention of accidents and incidents (Annex 13)
- It is not the purpose of this activity to apportion blame or liability (Annex 13)

#### Consider also:

- Confidence by the public and the aviation industry that accidents are well and independently investigated
- To fulfill the country's international obligations
- The report is the official record of the accident
- Tourism the resulting effect of an accident?



## BAGAIA Agreement

(Cape Verde, Gambia, Ghana, Guinea Conakry, Liberia, Nigeria, Sierra Leone)

Signed by the Ministers of Transport in 2009

### **The BAGAIA Agreement**

- Preamble, definitions (1), establishment (2), scope (3)
- Objectives (4)
- Functions (5)
- Composition (6)
- The Commissioner (7)
- Establishment, composition and functions of the Commission (8)
- Meetings of the Commission (9)
- Office of the Commissioner (10)
- Role of the Council of Ministers (11)
- Role of Member States (12)
- Financial provisions (13)
- Neutrality of personnel (14), Privileges and immunities (15), Settlement of disputes (16), Arbitration (17), etc.

## The BAGAIA Agreement

- Strengthen cooperation and collaboration between member States in respect to investigation of accidents and serious incidents
- Develop a common set of regulations (compliant with Annex 13), and taking into account delegation of the conduct of investigations to BAGAIA
- Develop common guidance materials and investigator handbooks, manuals and checklists
- Develop and implement procedures for sharing of information on accidents and serious incidents
- Develop and implement procedures to facilitate relations between BAGAIA teams and local authorities

### **BAGAIA functions (Article 5)**

- Coordinate, where required, accident investigation activities amongst member States
- Support accident and incident prevention efforts
- BAGAIA shall mobilize and solicit technical and financial resources from external sources
- Monitor the accident investigation activities of the member States (to ensure they are in line with ICAO)
- Monitor and provide inputs to member States on the formulation of ICAO SARPs re. accident investigation
- Establish appropriately equipped and trained accident investigation teams

## **BAGAIA functions (Article 5)**

- Conduct, either in whole or in part, an investigation into an aircraft accident or serious incident upon delegation by a State of Occurrence in the BAG subregion, by mutual arrangement and consent between the State of Occurrence and BAGAIA
- Provide technical and on-the-job training for accident investigators
- Make a report on its activities to the Council of Ministers at least once every six months
- Perform any other function that may be necessary for the proper investigation of accidents and serious incidents under the BAGAIA Agreement

## **BAGAIA** composition (Article 6)

- Commissioner
- Commission
- Office of the commissioner (in Praia, Cape Verde)
- Such other bodies and officers as the Council of Ministers may approve

## Establishment, composition and functions of the Commission (Article 8)

- 1) The Council of Ministers shall establish a Commission to act as an advisory body to the Commissioner;
- 2) The Commission shall consist of the following members:
  - a) the Commissioner; and
  - b) One member from each of the BAG Member States;

## Establishment, composition and functions of the Commission (Article 8)

- 3) Members of the Commission ... shall be nominated by the Minister responsible for civil aviation in each of the Member States
- 4) Members of the Commission ... shall:
  - a) have a minimum experience of ten years in a technical position in the aviation industry; and
  - b) have been appointed as an Investigator-In-Charge by the Minister responsible for civil aviation in their respective Member States

Note.- Most important – very good connections to the Ministry and the CAA

## Financial provisions (Article 13)

- (1) The funds of the BAGAIA shall consist of the following:
- a) contributions of the Governments of Member States;
- b) donations, grants or loans from sources approved by the Council of Ministers;
- c) revenue derived from the activities of the BAGAIA, to include fees charged for the conduct of investigations, training, consultancies and other services performed; and
- d) any other sources as may be approved by the Council of Ministers

## BAGAIA accident investigation training courses (two weeks – 80 hours of training)

- Praia, Cape Verde May 2013
- Accra, Ghana June 2014
- Lagos, Nigeria Nov 2015
- Abuja, Nigeria Nov-Dec 2015

Note.- About 200 investigators trained, but .....

Practical (on-the-job) training and experience required

## Other training courses? Are BAGAIA funds available or a sponsor?

- Flight recorder readout workshop (in Abuja, Nigeria)?
- Incident investigation and safety risk management courses?
- Human factors workshop?
- Ramp safety workshop?
- Is there a need for further Accident Investigation Courses (BAGAIA has held four AAI courses)?
- Is there a need for investigation management courses?
- Is there a need for "specialty" courses (investigation of engines, systems, fire and explosions, human factors)?

## Immediate implementation issues to resolve (scenario)

- If there is a major airline accident tomorrow (with 200 fatalities), how do we initiate the investigation?
  - ✓ Does the country of occurrence have an IIC ?
  - ✓ Will the country of Occurrence request assistance from BAGAIA (investigation team, resources) ?
  - ✓ Who pays? (what investigation services do the regular/annual contributions to BAGAIA by member States include?)

#### Immediate implementation issues

- Appointment of a Deputy Commissioner to manage the BAGAIA Office in Praia (ICAO/TCB is evaluating the applications)
- The BAGAIA Commission has been nominated, one member by each State; first BAGAIA Commission meeting from 20 to 22 Sept 2016 in Banjul, Gambia
- Establishment of investigation teams that can be called upon (list of qualified investigators)

## **Direct investigation costs - personnel**

- Travel costs
- Per diem (hotel and food)
  - ✓ UN "Daily Subsistence Allowance" list or another mechanism ?
- Salaries ?
  - ✓ Receiving country pays?
  - ✓ Donor country covers salaries ?
  - ✓ BAGAIA funds ?
  - ✓ Salary scale ?

## For how long time is assistance required?

- How many investigators and for how long?
- Major airline accident average time 1 year ?

Note that investigators like to be involved in the beginning (accident site), but rather sooner than later, they may have other interests (?)

Always keep in mind that in the end you will need 4-5 key investigators to write the final report several months after the field investigation is finished

### Investigator powers - BAGAIA

- Delegation to BAGAIA to investigate
- Assistance (investigators) from / through BAGAIA
- BUT, a country will still need:
  - ✓ Ideally, the investigator-in-charge (IIC) should be from the State of Occurrence
  - ✓ Legal rights of local investigators delegated to the BAGAIA investigators, and local focal point coordinators from CAA and the Ministry

## Organizational models

ICAO Annex 13: All States must establish a "permanent" accident investigation authority

"Small countries" (based on aviation activity)

- An investigation unit in the Ministry
- Investigation commission appointed by a Minister using essentially non-CAA staff
- Delegation to or assistance by BAGAIA

## **Investigation unit in Ministry**

- A one-person investigation unit in the Ministry;
   appropriately trained and familiar with Annex 13
- Establish, train and manage an investigator-in-charge and investigation team members
- Ensure Annex 13 international requirements are implemented and adhered to
- Maintain regulations and accident investigation policy and procedures manual
- Advise the Ministry/Minister in matters dealing with aircraft accidents

## Investigation commission using non-CAA staff

## Local investigation commission team members may not be familiar with Annex 13:

- Delegation to or assistance by BAGAIA
- Retired from CAA, airport or the industry (age?)
- Air Force and the aviation industry staff?
- Are there sufficiently trained and knowledgeable investigators outside the CAA?

Note.- The role of CAA ---- comparable to the role of FAA in NTSB investigations ?)

# Other accident investigation regional cooperation programs in Africa

- Southern Africa (draft agreement)
- Eastern Africa
- Western and Central Africa (ICAO WACAF)
- Economic Community Of West African States (ECOWAS) (about 15 countries)
- Discussion of enlargement of BAGAIA to cover Western and Central Africa (perhaps 15 – 20 countries)

#### **Conclusions**

- The Global Ministerial Summit is invited to endorse the concept of Regional Accident Investigation Organizations (RAIOs)
- Countries that already have a functionally independent accident investigation authority also have an important role in a RAIO
- RAIOs should not be limited to small countries with limited resources

# Questions?

Imagination is more important than knowledge.
Knowledge is limited. Imagination encircles the world.
(Albert Einstein)