

CAAB Discussion Paper

ATS Coordination Meeting (3 – 5 February 2015)

Johannesburg, South Africa

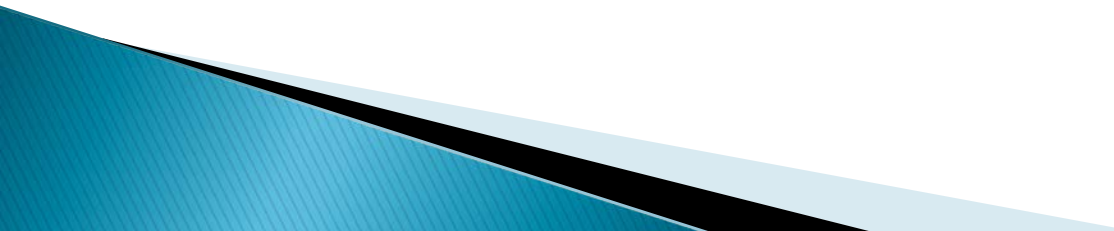
Oabitsa Molefi and Gaedupe Pule

Item 1: ATM Coordination Issues

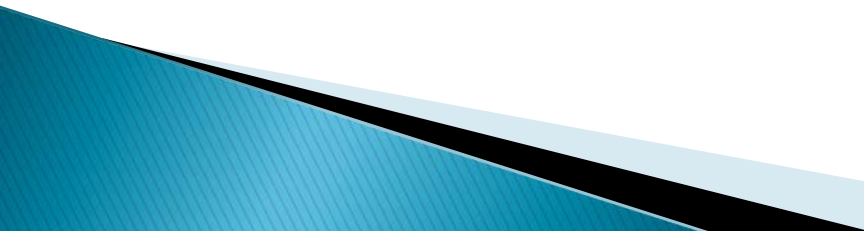
Gaborone FIR Re-structuring

- ▶ Gaborone FIR is restructured in line with the VHF communication upgrade.
- ▶ The sector line is been relocated from RUDAS-BONAL to 25 NM parallel to the West of UM731 centre line.
- ▶ The re-sectorization will minimize coordination between ATS sectors i.e. Gaborone Area East/West, ACC and Approach, thereby improving efficiency.

Coordination Issues

- ▶ Currently, coordination demands that traffic operating along the UB540 and traffic along Kasane – Francistown to undergo a chain of coordination process based on the complexity of the airspace.
 - ▶ These airspace sectors are predominately controlled by more than one ATC units which could be Kasane or Gaborone or Victoria Falls or Livingstone or Harare.
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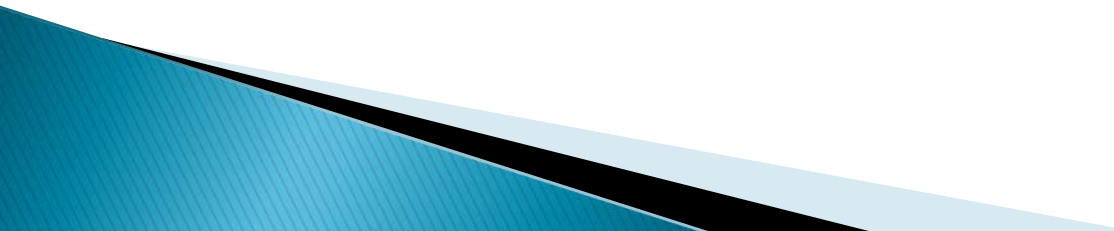
Coordination Issues

- ▶ In the new sectorization the complex airspace will be under one sector, which is ACC (East).
 - ▶ Traffic operating along Kasane – Francistown route; and traffic along UB540 will be issued ATC clearance by ACC (East).
 - ▶ This will alleviate coordination problems even during weather avoidance
 - ▶ [See Gaborone FIR Map Restructured Airspaces](#)
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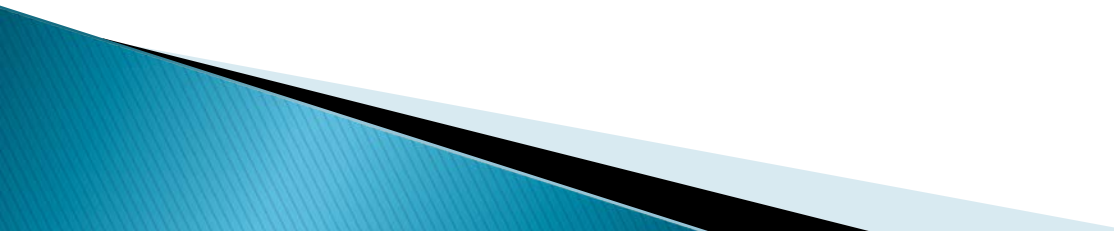
Climb and descent coordination area

- ▶ Johannesburg – Gaborone Climb and Descent Coordination Area has been designated at an area of 50 NM from the GBV, minimum altitude of 7 000 feet, width of 20 NM.
- ▶ Proposal; From GBV to 20 NM laterally the minimum altitude shall remain at 7000 feet; and from 20 NM to 50 NM the minimum altitude shall be FL 090 and the upper limit to be FL 245.
- ▶ Restrictions, traffic departing and arriving Gaborone along this area are to cross 20 NM from GBV FL 100 or above.

Climb and descent coordination area

- ▶ Traffic departing FBSK to FAOR to route to position PEDIL via UZ10.
 - ▶ Traffic to FBSK to route via AVIKI via UQ24.
 - ▶ The width to be extended to west by approximately 10 NM to include UZ10 at 50 NM.
 - ▶ See [Climb and Descent Coordination Area](#)
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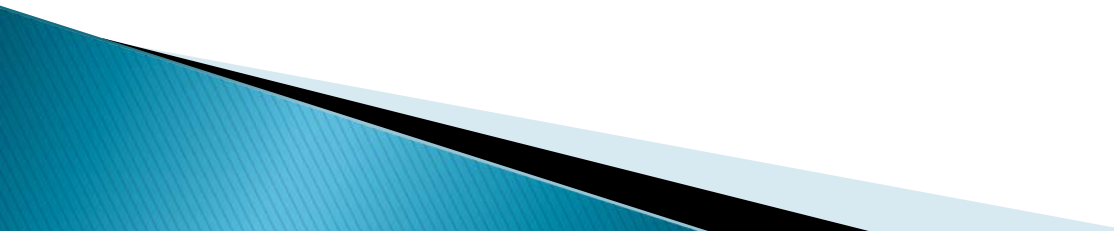
Establishment of New Routes

- ▶ Maun – Kasane (UY 99)
 - ▶ Francistown –Gaborone (UY 93)
 - ▶ Gaborone – Kasane (UY 95)
 - ▶ See [Gaborone FIR Map Restructured Airspaces](#)
 - ▶ Proposal, RNP 10 route from FBMN to FACT
 - ▶ RNP 10 over UA 409
 - ▶ See [Proposed RNP Routes](#)
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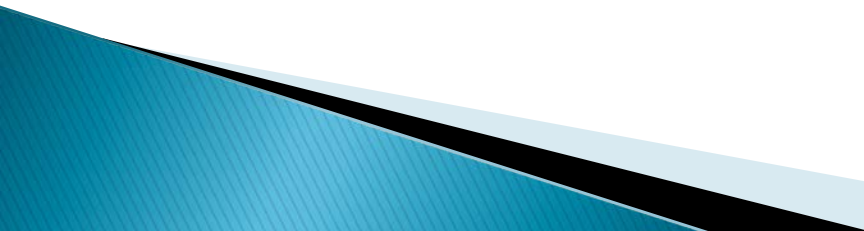
EXTENSION OF Kasane and Maun TMA_s

- ▶ Kasane and Maun TMA_s have been extended laterally towards each other and merge at the centre, 82 NM from MNV.
- ▶ Coordination of traffic below FL 245 will be coordinated between the two units. Gaborone ACC will no longer handle traffic below FL 245 between the two sectors.
- ▶ [See Gaborone FIR Map Restructured Airspaces](#)

Extension of Francistown TMA

- ▶ Francistown TMA has been extended to include airspace over Selibe–Phikwe airport and airspace from AXIKO.
 - ▶ Coordination of Selibe–Phikwe traffic will be done through Francistown.
 - ▶ See [Gaborone FIR Map Restructured Airspaces](#)
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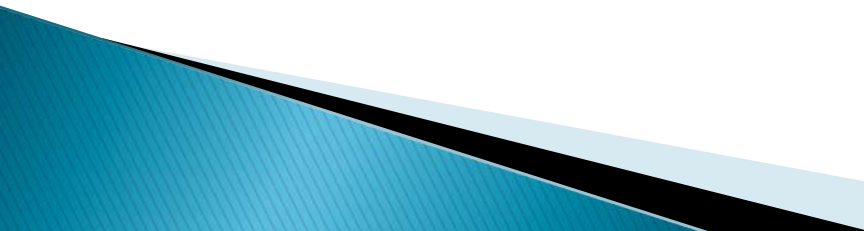
Communications Facilities Issues

- ▶ Ground–Ground coordination between Kasane and Livingstone; Kasane and Victoria Falls is a challenge due to the problems with communication infrastructure.
 - ▶ The three ATS units erected VHF Radio infrastructure for coordination purposes. CAAB facilities are serviceable, a review of problems with Livingstone and Victoria Falls need to be carried, identify possible solutions.
 - ▶ Currently, a PSTN line is used however it is costly to maintain. A hotline is preferred.
 - ▶ Lack of proper coordination facilities between these two areas is exposing traffic between these areas to safety risks due to lack of estimates information.
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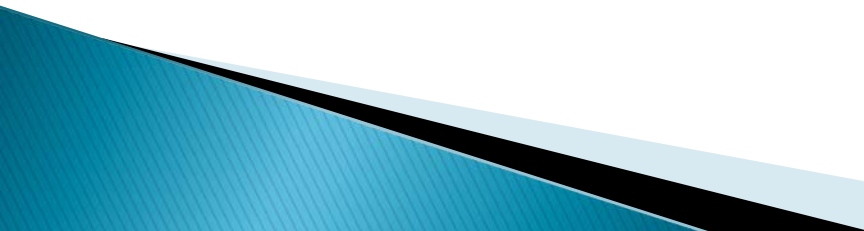
Communications Facilities Issues

- ▶ The existing ATS–DS Gaborone–Johannesburg line is heavily constrained, hence some of the coordination is performed through the use of PSTN lines which are costly. Additional ATS–DS line is proposed, with costs shared between ATNS and CAAB.
- ▶ Estimates for implementing this exercise were tendered in 2012 and no further action was taken. A review of those estimates need to be carried out for the purposes of reaching an agreement with regards to technical requirements and financial agreement.

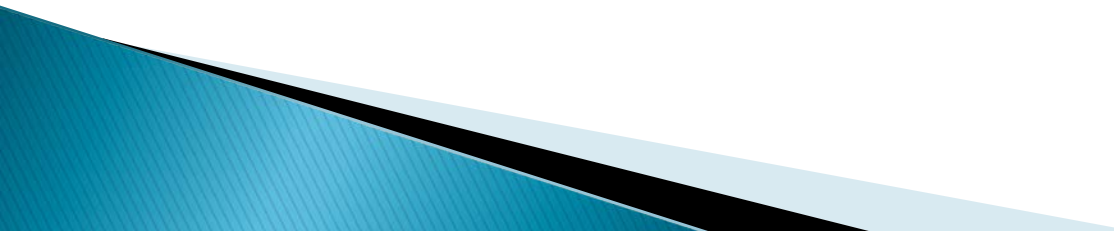
Communications Infrastructure Development

- ▶ CAAB has improved Air/Ground Communications facilities for lower airspace communications. ACC-L (West) has been allocated 129.0 MHz and ACC-L (East) has been allocated 128.4 MHz.
 - ▶ Use of these frequencies will start immediately after testing phase is complete.
 - ▶ LoP/LoAs need to be updated accordingly to reflect this development.
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RVSM ISSUES

- ▶ Gaborone ACC has not had any challenges with regards to cooperating with TAG and ARMA.
 - ▶ Incidents which occur within Gaborone FIR are captured by DATCO in the ATC log book.
 - ▶ Gaborone ACC Officer in Charge investigates then evaluates the incident, mitigate and respond to ARMA or report to ARMA for investigation if the incident is caused by Adjacent FIR.
 - ▶ All the incidents are captured in the ASR database for monitoring. This also provides exposure to Operational Controllers for learning purposes.
 - ▶ Mitigations are monitored to issue effectiveness and review if so required.
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Contingency Plan

- ▶ Contingency Coordination Committee Team has been formed consisting of CAAB ANS, CAAB ACRO, MET, Military, Police and Airlines.
 - ▶ A plan has been drafted which includes Volcanic Ash (Appendix G) and Public Health Emergency (Appendix H).
 - ▶ [See Draft Contingency Plan.](#)
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LoPs,

- ▶ Improvement of communication in the Lower Airspace necessitates addition of ACC – L Frequencies in the LoPs.
- ▶ Proposal to include passing of SSR codes prior to transfer of control.
- ▶ Copies with proposed amendments have been exchanged with the adjacent FIRs i.e. Johannesburg, Harare, Windhoek, Lusaka and Luanda FIR.

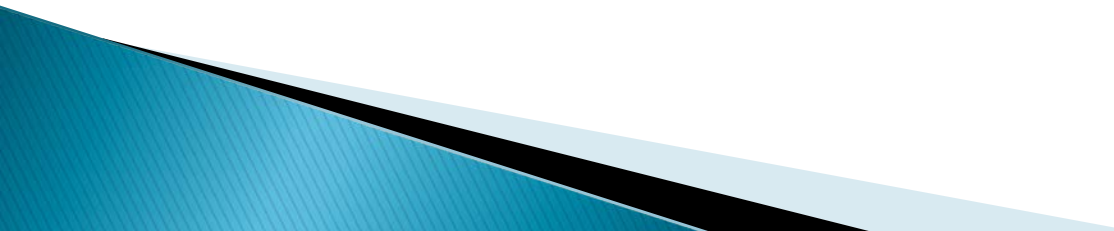
Missing Flight Plans

- ▶ Internally, a Team comprising of ATC, AIS and CNS has been formed.
 - ▶ Missing flight plans survey forms have been distributed to all ATC units and all AIS stations to capture rejected and missing flight plans.
 - ▶ This information will be forwarded to the identified AIS Officer as the contact person, she collects all the populated survey forms and present to the Team Weekly.
 - ▶ The Team investigate missing flight plans data and develop mitigation processes.
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Missing Flight Plan

- ▶ Externally, CAAB agreed with ATNS to exchange missing flight plan data on monthly basis, the proposal will be effective end of this January.
- ▶ Proposal, CAAB would like to extend this exercise with Harare, Windhoek, Lusaka and Luanda FIRs.

SAR Coordination

- ▶ Botswana signed the SAR Coordination agreement with Namibia, Zambia and South Africa.
 - ▶ Botswana has not signed coordination agreement with Zimbabwe. The issue is being handled at Ministerial Level.
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Item 4: PBN ASBUs and the (AORTA) Initiative

- ▶ See Attachment: [ASBU Block 0 Elements](#)