International Civil Aviation Organization
North American, Central American and Caribbean Office
Second North American, Central American and Caribbean Working Group Meeting (NACC/WG/2)
Ocho Rios, Jamaica, 12-16 May 2008

Agenda Item 2:   **ATM Developments**
                      2.5   Follow-up on the Progress Achieved in Search and Rescue

LIST OF QUESTIONS FOR SEARCH AND RESCUE (SAR) QUALITY ASSURANCE PROGRAMME

(Presented by the Secretariat)

SUMMARY
This working paper presents for review by the Meeting a proposal of list of questions to establish Quality Assurance Programme in SAR services
References
• Report of the CAR SAR Meeting/Workshop (Santo Domingo, Dominican Republic, 28 March-01 April 2005) • Report of the Twenty First Meeting of Directors of Civil Aviation of the Eastern Caribbean (British Virgin Islands, 11 to 14 February 2008).

1.   Introduction

1.1   The Twenty First Meeting of Directors of Civil Aviation of the Eastern Caribbean noted that the ICAO NACC Office distributed States/Territories in the Caribbean Region a "State SAR Matrix" as part of the Quality Assurance SAR Manual in early 2004.

1.3   The Directors General agreed that this matrix would be a useful tool for the Caribbean States to use to gauge the capacity of individual State SAR systems and to sustain government support for SAR services. The meeting requested ICAO NACC Office to redistribute the related information through Conclusion 21/4- *Actions to improve the SAR System in the E/CAR.*

2.   **SAR Quality Assurance Evaluation**

2.1   In light of the requirement for service providers to establish safety management programmes. **Appendix A** contains a questionnaire to establish SAR Quality Assurance Programme in SAR services, in order to allow States make an assessment of the SAR service provided in their jurisdiction. The States/Territories should also provide ICAO Secretariat current reports in order to keep up-to-date the regional information and assistance required to improve the search and rescue system.

2.   **Suggested Action**

2.1   The meeting is invited to review and approve the contents of this working paper.

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APPENDIX

**SEARCH AND RESCUE QUALITY ASSURANCE PROGRAMME
LIST OF QUESTIONS**

The following key indicators must be used to evaluate the level of implementation of SARPs:

A – Not implemented
B – Initial implementation
C – Meets Annex 12 requirements (or other relevant ICAO / IMO provisions) in some areas
D – Meets Annex 12 requirements (or other relevant ICAO / IMO provisions) in most areas
E – Fully meets Annex 12 requirements (or other relevant ICAO / IMO provisions).

Such aspects must be responded with simple 'Yes / No'.

The response **'not evaluated'** does not necessarily imply the existence of a shortcoming, and **'not applicable'** might cover important shortcomings. Additionally comments can be included, as required.

Code	Reference	Aspect to be evaluated	Implementation	Comment
ORGANISATION				
Legislative Acts governing national SAR activities				
Org.act.1	Annex 12 Chap 2 Doc 8733 Doc 9731 Vol I Chap 1 and 5	Are there legislative acts governing SAR activities?	❑ A ❑ B ❑ C ❑ D ❑ E ❑ Not applicable ❑ Not evaluated	
Org.act.2	Annex 12 Chap 2 Doc 8733 Doc 9731 Vol I Chap 1 and 5	If there are legislative acts governing SAR activities, are they up-to-date?	❑ A ❑ B ❑ C ❑ D ❑ E ❑ Not applicable ❑ Not evaluated	
Org.act.3	Annex 12 Chap 2 Doc 8733 Doc 9731 Vol I Chap 1 and 5	Do the above acts organise SAR services in such a way that tasks and responsibilities are precisely and efficiently distributed?	❑ A ❑ B ❑ C ❑ D ❑ E ❑ Not applicable ❑ Not evaluated	

Code	Reference	Aspect to be evaluated	Implementation	Comment
SAR Plan – Administrative SAR Units				
Org.1	Annex 12 Chap 2 para 2.2 Doc 9731 Vol I Chap 2 para 2.3.15	Are SRR and FIR boundaries coincident?	❑ A ❑ B ❑ C ❑ D ❑ E ❑ Not applicable ❑ Not evaluated	
Org.2	Annex 12 Chap 2 para 2.3 Doc 9731 vol I Chap 2 Para 2.3	Is the State equipped with a RCC?	❑ A ❑ B ❑ C ❑ D ❑ E ❑ Not applicable ❑ Not evaluated	
Org.3	Annex 12 Chap 2 para 2.3 Doc 9731 vol I Chap 2 Para 2.4	Is the State equipped with one or several RSC?	❑ A ❑ B ❑ C ❑ D ❑ E ❑ Not applicable ❑ Not evaluated	
Org.4	Annex 12 Chap 3 para 3.2 Doc 8733	Has a SAR point of contact (SPOC) been designated?	❑ A ❑ B ❑ C ❑ D ❑ E ❑ Not applicable ❑ Not evaluated	
Org.5	Annex 12 Chap 2 para 2.4	Are there radio/coastal stations?	❑ A ❑ B ❑ C ❑ D ❑ E ❑ Not applicable ❑ Not evaluated	
Org.6	Annex 12 Chap 2 para 2.4	If the answer is positive, are radio/coastal stations known and listed?	❑ A ❑ B ❑ C ❑ D ❑ E ❑ Not applicable ❑ Not evaluated	

Code	Reference	Aspect to be evaluated	Implementation	Comment
National SAR Plan				
Org.pla.1	Doc 9731 Vol I Chap 5 para 5.2	Is there a national SAR plan?	❑ A ❑ B ❑ C ❑ D ❑ E ❑ Not applicable ❑ Not evaluated	
Org.pla.2	Doc 9731 Vol I Chap 5 para 5.2	If the answer is positive, is it up-to-date?	❑ A ❑ B ❑ C ❑ D ❑ E ❑ Not applicable ❑ Not evaluated	
Organizational Authorities in charge of SAR Services				
Org.aut.1	Doc 9731 Vol I Chap 1er para 1.5 Doc 9731 Vol II Chap 1er para 1.2	Has the State designated an Authority to be in charge of SAR services coordination?	❑ A ❑ B ❑ C ❑ D ❑ E ❑ Not applicable ❑ Not evaluated	
Org.aut.2	Annex 12 Chap 2 Doc 8733 Doc 9731 Vol I Chap 1er para 1.5 Doc 9731 Vol II Chap 1er para 1.2	Does the above Authority have the legal means to discharge its responsibilities?	❑ A ❑ B ❑ C ❑ D ❑ E ❑ Not applicable ❑ Not evaluated	
SAR Committee / Civilian – military coordination				
Org.coo.1	Doc 9731 Vol I Chap 5 para 5.2 and 5.3 Doc 9731 Vol I Chap 6 para 6.3	Has a national SAR Committee been established?	❑ A ❑ B ❑ C ❑ D ❑ E ❑ Not applicable ❑ Not evaluated	

Code	Reference	Aspect to be evaluated	Implementation	Comment
Org.coo.2	Doc 9731 Vol I Chap 5 para 5.2 and 5.3 Doc 9731 Vol I Chap 6 para 6.3	Does the SAR national Committee hold regular meetings?	❑ A ❑ B ❑ C ❑ D ❑ E ❑ Not applicable ❑ Not evaluated	
Org.coo.3	Doc 9731 Vol I Chap 5 para 5.2 and 5.3 Doc 9731 Vol I Chap 6 para 6.3	Does it include representatives of civilian and military Authorities?	❑ Yes ❑ No ❑ Not applicable ❑ Not evaluated	
Notification of difference(s) to ICAO Annex 12				
Org.not.1	Doc 7300 (Convention de Chicago) Article 38	Has the State notified any difference to ICAO Annex 12?	❑Yes ❑ No ❑ Not applicable ❑ Not evaluated	
SAR data published in AIP				
Org.aip.1	Annex 12 Chap 3 para 3.3 Doc 8733 Doc 9731 Vol I Chap 4 para 4.5	Does the State AIP include SAR data?	❑ A ❑ B ❑ C ❑ D ❑ E ❑ Not applicable ❑ Not evaluated	
Aviation / maritime SAR coordination				
Org.mar.1	Doc 9731	Are there maritime SAR services in the State?	❑Yes ❑ No ❑ Not applicable ❑ Not evaluated	
Org.mar.2	Annex 12 Chap 3 para 3.2 Doc 8733	Has a coordination mechanism been established between the aviation and maritime SAR services?	❑ A ❑ B ❑ C ❑ D ❑ E ❑ Not applicable ❑ Not evaluated	

Code	Reference	Aspect to be evaluated	Implementation	Comment
International SAR agreements and Conventions				
International SAR related Conventions				
Acc.conv.1	Not applicable	Has the State ratified the Convention on International Civil Aviation?	❑Yes ❑ No ❑ Not applicable ❑ Not evaluated	
Acc.conv.2	Not applicable	Has the State ratified the Safety of Life at Sea (SOLAS) Convention?	❑Yes ❑ No ❑ Not applicable ❑ Not evaluated	
Acc.conv.3	Not applicable	Has the State ratified the International Convention on Maritime Search and Rescue?	❑Yes ❑ No ❑ Not applicable ❑ Not evaluated	
International SAR agreements				
Acc.acc.1	Annex 12 Chap 3 para 3.1 Resolution A33-14 Appendix O Doc 8733 Doc 9731 Vol I Chap 1er para 1.6 and 1.7 Doc 9731 Vol I Chap 5 para 5.1 Doc 9731 Vol I Chap 6 para 6.3.6	Has the State signed SAR agreements with neighbouring States?	❑ A ❑ B ❑ C ❑ D ❑ E ❑ Not applicable ❑ Not evaluated	
Operational procedures				
Aerodrome Emergency plan				
Ops.airp.1	Annex 14 para 9.1 Doc 9731 Vol II Chap 7 para 7.7	Are international aerodromes equipped with appropriate emergency plans?	❑ A ❑ B ❑ C ❑ D ❑ E ❑ Not applicable ❑ Not evaluated	

Code	Reference	Aspect to be evaluated	Implementation	Comment
Ops.airp.2	Annex 14 para 9.1 Doc 9731 Vol II Chap 7 para 7.7	Are domestic aerodromes equipped with appropriate emergency plans?	❑ A ❑ B ❑ C ❑ D ❑ E ❑ Not applicable ❑ Not evaluated	
Ops.airp.3	Doc 9731 Vol II Chap 7 para 7.7	Is there appropriate coordination between SAR and aerodrome services?	❑ A ❑ B ❑ C ❑ D ❑ E ❑ Not applicable ❑ Not evaluated	
National Emergency plan				
Ops.org.1	Not applicable	Has the State enforced regional or national emergency plans?	❑ A ❑ B ❑ C ❑ D ❑ E ❑ Not applicable ❑ Not evaluated	
National SAR Manual				
Ops.man.1	Doc 9731 Chap 5 para 5.2.11 to 5.2.18	Has the Authority responsible for SAR services developed a national SAR manual?	❑ A ❑ B ❑ C ❑ D ❑ E ❑ Not applicable ❑ Not evaluated	
RCC operations plans				
Ops.cond.1	Annex 12 Chap 4 para 4.2 Doc 9731 Vol I Chap 5 para 5.2 Doc 9731 Vol II Chap 1er para 1.5	Has a RCC operations plans been developed and updated?	❑ A ❑ B ❑ C ❑ D ❑ E ❑ Not applicable ❑ Not evaluated	

Code	Reference	Aspect to be evaluated	Implementation	Comment
Procedures / Alerting phase				
Ops.aller.1	Annex 12 Chap 5 para 5.2 Doc 9731 Vol II Chap 3 para 3.3 Doc 9731 Vol II Appendix E	Have special procedures dedicated to alerting phases been implemented?	❑ A ❑ B ❑ C ❑ D ❑ E ❑ Not applicable ❑ Not evaluated	
Funding				
Fin.mec.1	Doc 9731 Vol I Chap 5 para 5.4	Has the State implemented a SAR activities funding mechanism?	❑ A ❑ B ❑ C ❑ D ❑ E ❑ Not applicable ❑ Not evaluated	
Fin.mec.2	Doc 9731 Vol I Chap 5 para 5.4	Does this mechanism ensure adequate funding of SAR services complying with international standards?	❑ A ❑ B ❑ C ❑ D ❑ E ❑ Not applicable ❑ Not evaluated	
Equipments				
Compliance with the Air Navigation Plan				
Equ.afi.1	Doc 8733	Are available equipments in line with the available equipment list of the CAR/SAM Air navigation plan?	❑ A ❑ B ❑ C ❑ D ❑ E ❑ Not applicable ❑ Not evaluated	
Navigation means of the SAR units				
Equ.nav.1		Are SAR Units equipped with on-board radio direction-finding stations?	❑ A ❑ B ❑ C ❑ D ❑ E ❑ Not applicable ❑ Not evaluated	

Code	Reference	Aspect to be evaluated	Implementation	Comment
Survival equipments				
Equ.surv.1	Annex 12 Chap 2 para 2.6 Doc 9731 Vol I chap 2 para 2.5 Doc 9731 Vol II chap 6 para 6.4 and 6.5 Doc 9731 Vol II appendix G	Are SAR Units equipped with functional survival equipments?	❑ A ❑ B ❑ C ❑ D ❑ E ❑ Not applicable ❑ Not evaluated	
RCC / RSC equipments				
Equ.rcc.1	Doc 9731 Vol I Chap 2 para 2.3 Doc 9731 Vol I Chap 5 para 5.2 Doc 9731 Vol II Chap 1er para 1.7	Are RCC / RSC equipped with SAR technical documentation (IAMSAR Manual and other technical documentation)?	❑ A ❑ B ❑ C ❑ D ❑ E ❑ Not applicable ❑ Not evaluated	
Equ.rcc.2	Doc 9731 Vol I Chap 2 para 2.7 Doc 9731 Vol II Chap 1 para 1.11	Are RCC / RSC equipped with computers and SAR dedicated software?	❑ A ❑ B ❑ C ❑ D ❑ E ❑ Not applicable ❑ Not evaluated	
Communications				
Equ.com.1	Annex 12 Chap 2 para 2.4 Doc 9731 Vol I Chap 4 Doc 9731 Vol II Chap 2	Is the RCC equipped with adequate communication means with air traffic services?	❑ A ❑ B ❑ C ❑ D ❑ E ❑ Not applicable ❑ Not evaluated	
Equ.com.2	Annex 12 Chap 2 para 2.4 Doc 9731 Vol I Chap 4 Doc 9731 Vol II Chap 2	Is the RCC equipped with adequate communication means with RSC?	❑ A ❑ B ❑ C ❑ D ❑ E ❑ Not applicable ❑ Not evaluated	

Code	Reference	Aspect to be evaluated	Implementation	Comment
Equ.com.3	Annex 12 Chap 2 para 2.4 Doc 9731 Vol I Chap 4 Doc 9731 Vol II Chap 2	Is the RCC equipped with adequate communication means with position fixing and radio direction-finding stations?	❑ A ❑ B ❑ C ❑ D ❑ E ❑ Not applicable ❑ Not evaluated	
Equ.com.4	Annex 12 Chap 2 para 2.4 Doc 9731 Vol I Chap 4 Doc 9731 Vol II Chap 2	Is the RCC equipped with adequate communication means with radio/coastal stations?	❑ A ❑ B ❑ C ❑ D ❑ E ❑ Not applicable ❑ Not evaluated	
Equ.com.5	Annex 12 Chap 2 para 2.4 Doc 9731 Vol I Chap 4 Doc 9731 Vol II Chap 2	Is the RCC equipped with adequate communication means with Cospas-Sarsat mission control centres?	❑ A ❑ B ❑ C ❑ D ❑ E ❑ Not applicable ❑ Not evaluated	
Equ.com.6	Annex 12 Chap 2 para 2.4 Doc 9731 Vol I Chap 4 Doc 9731 Vol II Chap 2	Is the RCC equipped with adequate communication means with Rescue teams operations centres?	❑ A ❑ B ❑ C ❑ D ❑ E ❑ Not applicable ❑ Not evaluated	
Equ.com.7	Annex 12 Chap 2 para 2.4 Doc 9731 Vol I Chap 4 Doc 9731 Vol II Chap 2	Is the RCC equipped with adequate communication means with adjacent RCCs?	❑ A ❑ B ❑ C ❑ D ❑ E ❑ Not applicable ❑ Not evaluated	
Equ.com.8	Annex 12 Chap 2 para 2.4 Doc 9731 Vol I Chap 4 Doc 9731 Vol II Chap 2	Is the RCC equipped with adequate communication means with MET or MET Watch office?	❑ A ❑ B ❑ C ❑ D ❑ E ❑ Not applicable ❑ Not evaluated	

Code	Reference	Aspect to be evaluated	Implementation	Comment
Equ.com.9	Annex 12 Chap 2 para 2.4 Doc 9731 Vol I Chap 4 Doc 9731 Vol II Chap 2	Is the RCC equipped with MF communication means with SAR Units when employed on SAR operations?	❑ A ❑ B ❑ C ❑ D ❑ E ❑ Not applicable ❑ Not evaluated	
Equ.com.10	Annex 12 Chap 2 para 2.4 Doc 9731 Vol I Chap 4 Doc 9731 Vol II Chap 2	Is the RCC equipped with HF communication means with SAR Units when employed on SAR operations?	❑ A ❑ B ❑ C ❑ D ❑ E ❑ Not applicable ❑ Not evaluated	
Equ.com.11	Annex 12 Chap 2 para 2.4 Doc 9731 Vol I Chap 4 Doc 9731 Vol II Chap 2	Is the RCC equipped with VHF communication means with SAR Units when employed on SAR operations?	❑ A ❑ B ❑ C ❑ D ❑ E ❑ Not applicable ❑ Not evaluated	
COSPAS / SARSAT				
Equ.cosp.1	Doc 8733 Doc 9731 Vol II Chap 2 para 2.15	Is the State managing and updating a database of Cospas-sarsat users registered on its territory?	❑ A ❑ B ❑ C ❑ D ❑ E ❑ Not applicable ❑ Not evaluated	
Equ.cosp.2	Annex 6, Parts I, II and III; Annex 10, Vol III, Part II, Chapter 5; Annex 10, Vol V, Chapter 2, para 2.1	Has the State adopted a regulation making the carriage of 406 MHz beacons compulsory?	❑ A ❑ B ❑ C ❑ D ❑ E ❑ Not applicable ❑ Not evaluated	
Removal of wreckage				
Equ.epav.1	Annex 12 Chap 4 para 4.5	Is the State equipped with removal of wreckage facilities?	❑ A ❑ B ❑ C ❑ D ❑ E ❑ Not applicable ❑ Not evaluated	

Code	Reference	Aspect to be evaluated	Implementation	Comment
Human Resources				
SAR personnel				
Rh.per.1	Doc 9731 Vol I Chap 5 para 2.3.11 and 5.4.9 to 5.4.16	Is SAR personnel sufficient and properly trained in the State?	❑ A ❑ B ❑ C ❑ D ❑ E ❑ Not applicable ❑ Not evaluated	
Training				
Current training plan(s)				
Rh.for.1	Doc 9731 Vol II Chap 1er para 1.8	Is a training plan currently applied to coordinating SAR mission staff?	❑ A ❑ B ❑ C ❑ D ❑ E ❑ Not applicable ❑ Not evaluated	
Rh.for.2	Doc 9731 Vol II Chap 5	Is a training plan currently applied to pilots involved in SAR missions?	❑ A ❑ B ❑ C ❑ D ❑ E ❑ Not applicable ❑ Not evaluated	
Rh.for.3	Doc 9731 Vol II Chap 1er para 1.8	Is a training plan currently applied to staff involved in rescue missions?	❑ A ❑ B ❑ C ❑ D ❑ E ❑ Not applicable ❑ Not evaluated	
Scheduled training plans				
Rh.for.4	Doc 9731 Vol I Chap 6 Doc 9731 Vol II Chap 1er para 1.8	Has a training plan been scheduled for coordinating SAR mission staff?	❑ A ❑ B ❑ C ❑ D ❑ E ❑ Not applicable ❑ Not evaluated	

Code	Reference	Aspect to be evaluated	Implementation	Comment
Rh.for.5	Doc 9731 Vol I Chap 6 Doc 9731 Vol II Chap 1er para 1.8	Has a training plan been scheduled for pilots involved in SAR missions?	❑ A ❑ B ❑ C ❑ D ❑ E ❑ Not applicable ❑ Not evaluated	
Rh.for.6	Doc 9731 Vol I Chap 6 Doc 9731 Vol II Chap 1er para 1.8	Has a training plan been scheduled for staff involved in rescue missions?	❑ A ❑ B ❑ C ❑ D ❑ E ❑ Not applicable ❑ Not evaluated	
Qualification / certification procedure				
Rh.for.7	Doc 9731 Vol I Chap 6 Doc 9731 Vol II Chap 1er para 1.8	Has a standard Qualification / certification procedure for SAR staff been implemented?	❑ A ❑ B ❑ C ❑ D ❑ E ❑ Not applicable ❑ Not evaluated	
Training venue(s)				
Rh.for.8	Doc 9731 Vol I Chap 6 Doc 9731 Vol II Chap 1er para 1.8	Have training venues been certified?	❑ A ❑ B ❑ C ❑ D ❑ E ❑ Not applicable ❑ Not evaluated	
English language proficiency				
Rh.ang.1	Doc 9731 Vol II Chap 1er para 1.8	Are RCC and RSC staff proficient in the use of the English language?	❑ A ❑ B ❑ C ❑ D ❑ E ❑ Not applicable ❑ Not evaluated	

Code	Reference	Aspect to be evaluated	Implementation	Comment
		QUALITY CONTROL / EXERCISES		
Quality control procedure				
Qua.proc.1	Annex 12 Chap 5 para 5.11 Doc 9731 Vol I Chap 5 Doc 9731 Vol I Chap 6 Doc 9731 Vol II Chap 8 para 8.6	Has the State established a quality control mechanism for its SAR services?	❑ A ❑ B ❑ C ❑ D ❑ E ❑ Not applicable ❑ Not evaluated	
Exercises				
Qua.ex.1	Annex 12 Chap 4 para 4.4 Doc 8733 Doc 9731 Vol I Chap 3 para 3.3 Doc 9731 Vol II Chap 1er para 1.8	Does the State organize SAR exercises on a regular basis?	❑ A ❑ B ❑ C ❑ D ❑ E ❑ Not applicable ❑ Not evaluated	
Qua.ex.2	Doc 8733 Doc 9731 Vol I Chap 3 para 3.3 Doc 9731 Vol II Chap 1er para 1.8	If the answer is yes, are the SAR exercises conducted in conformity with ICAO recommendations?	❑ A ❑ B ❑ C ❑ D ❑ E ❑ Not applicable ❑ Not evaluated	
SAR actions				
Qua.pha.1	Annex 12 Chap 5 para 5.11 Doc 9731 Vol II Chap 1er para 1.7 Doc 9731 Vol I Chap 5 and 6	Are reports established and critical analysis conducted about passed SAR actions?	❑ A ❑ B ❑ C ❑ D ❑ E ❑ Not applicable ❑ Not evaluated	

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