



ICAO AFI INTER-REGIONAL SEARCH AND RESCUE WORKSHOP, 17 TO 21 JUNE 2024, LUANDA, ANGOLA

SESSION 2.2 : States' experience related to SAR 18 June 2024

Cameroon experience: A strong Civil – Military Cooperation

Presented by Mr. **Patrick BEMBA KOUDAOU**,
Head of Airspace Surveillance and Aviation Crisis Management Unit,
Cameroon Civil Aviation Authority (CCAA)







OUTLINES

- INTRODUCTION
- ORGANIZATION
- RESCUE SUB CENTER
- SAR EVENTS
- COORDINATION AND COOPERATION
- CHALLENGES AND PERSPECTIVES





SAR System Requirements

- ➤ Optimum Performance
- ➤ Cost-effective and
- **≻**Safe





In the case of Cameroon,

the optimum performance, the costeffectiveness and the safety of operations is seeked through a strong

Civil - Military Cooperation





As a nation, Cameroon had two major painful SAR events:

> Flight 3701, Camair, B 737-200, 1995







As a nation, Cameroon had two major painful SAR events:

- Flight 3701, Camair, B 737-200, 1995
- > Flight 507, Kenya Airways, B 737-800, 2007





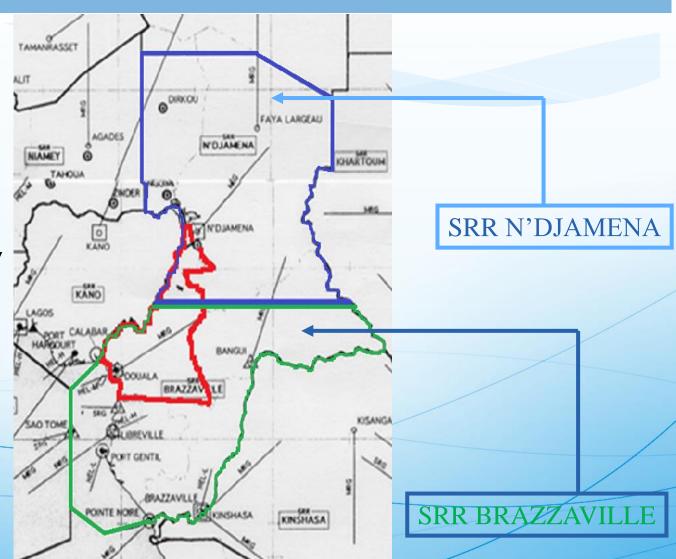






ORGANIZATION

The cameroonian territory is shared between the search and rescue region (SRR) of N'Djamena (N'Djamena FIR), and the SRR of Brazzaville (Brazzaville FIR).









ORGANIZATION

NATIONAL SAR POLICY

It is defined by the Ministry of Transport (Civil Aviation Authority) with regard to general organization and administration, and the Ministry of Defense (Air Force) for operational aspects.

Consultation between all the organizations and administrations involved in the SAR service is ensured through a national SAR committee.





The RSC is both a civil and military organization

Ministry of
Transports / Civil
Aviation Authority

Ministry of Defense /
Air Force

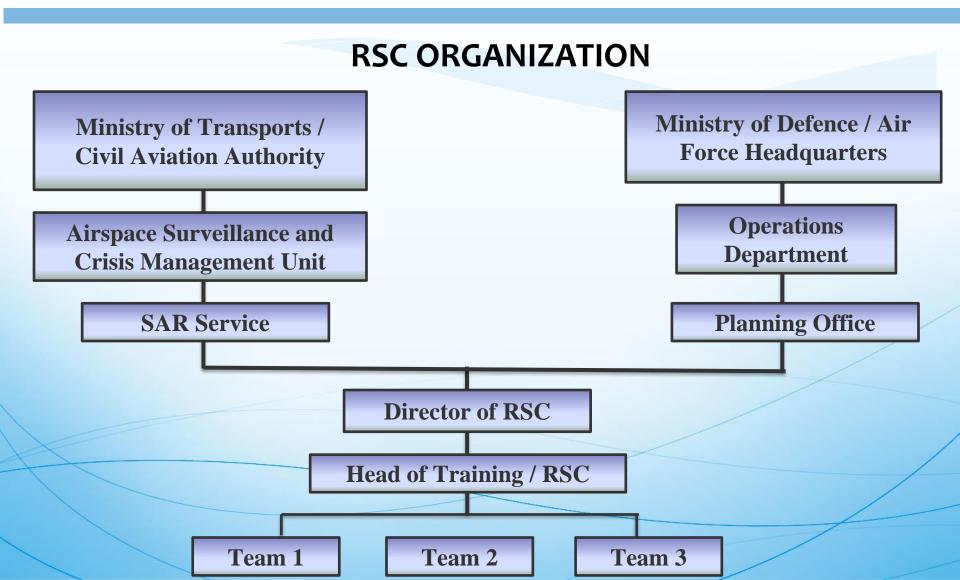
Administration

Operational

RSC











CIVIL/MILITARY COORDINATION

Expenses borne by the Civil Aviation Authority:

- Office supplies;
- Incentive for RSC staff;
- Training of SAR personnel;
- Fuel for RSC vehicles.

Expenses borne by the Air Force:

- Acquisition and maintenance of SAR equipment (Distress beacon, survival equipment, life jackets, life boats, etc ...);
- Expenses related to the participation in SAR operations.







- Located at the Air Force
 Base in Yaounde;
- Operational since June 2012;
- 24/7 operation.









SAR Point of Contact (SPOC) of COSPAS SARSAT system







PERSONNEL AND TRAINING

The RSC staff is provided by the Ministry in charge of Defence (Air Force Headquarters).

Number of RSC staff: 17











PERSONNEL AND TRAINING

All RSC staff attended a SMC (SAR Mission Coordinator) training course.

Cameroon hosted three SMC training courses delivered by EAMAC of Niamey and relocated at Yaounde RSC in 2012, 2015 and 2019.







PERSONNEL AND TRAINING

The Cameroon Civil Aviation Authority Training School has developed a SMC training course.

The first session took place from 18 to 29 September 2023.









PERSONNEL AND TRAINING

To date, the Cameroon Civil Aviation Authority has trained 43 personnel as SAR Mission Coordinators (SMC), including:

- 27 militaries;
- 16 civilians.

In addition, 04 personnel (civilian and military) received the qualification of SAR Administrator and ICAO TRAINAIR PLUS Instructor.





PERSONNEL AND TRAINING

The Cameroon Civil Aviation Authority Training School has developed an English Language Proficiency Test for SMC.

Required levels:

- level 4 for the Director of the RSC and the Head of Training;
- level 3 for operators.









PERSONNEL AND TRAINING

Training courses are organized every year for the Air Force crews to enhance their operational readiness.











PERSONNEL AND TRAINING









PERSONNEL AND TRAINING

The Cameroon Civil Aviation Authority Training School has developed a SAR Inspector course.









EXERCISES

Communications exercises are regularly organised by the RSC (quarterly).

A coordination exercise has been organised in 2023.

Two full-scale exercises has been organized in 2013 and 2017.







EXERCISES



















SAR ASSETS

Cameroon does not have specialized SAR resources (aircrafts permanently assigned to the SAR service).

The assets used for search and rescue belong to military and civilian agencies (Army, Gendarmerie, Police, Fire Brigade, Aircraft Operator, Navy, etc...)









SAR ASSETS



RESCUE EQUIPMENT

- Rescue boat;
- Largable SAR Chain;
- Dry suits;
- ...etc.







SAR ASSETS

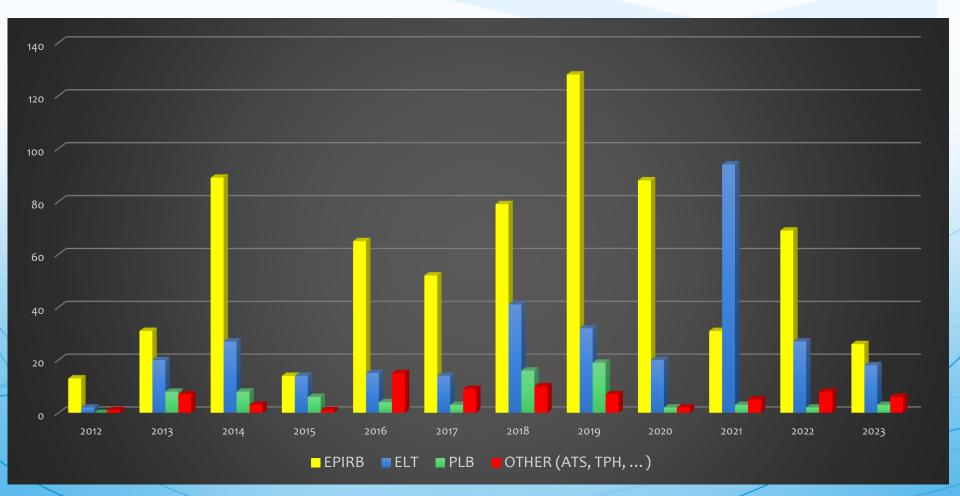


RESCUE EQUIPMENT

- Survival kits;
- Life jackets;
- Distress signals;
- Survival rations.



STATISTICS OF DISTRESS ALERTS BY YEAR AND ORIGIN FROM 2012 TO 2023







THREE REAL CASES

REAL CASE 1

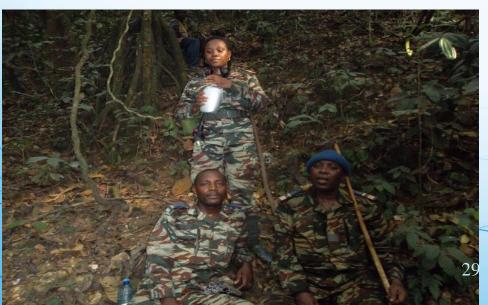
- Operation N° 142 of 22 June 2014 regarding the CESSNA C172 registered N9748L;
- 70 hours 20 minutes of aerial search;
- Wreckage found after 9 months and 24 days.







REAL CASE 1













REAL CASE 1













- Operation N° 165 of 12 August 2014 regarding the CESSNA C182 registered DEKQO;
- Wreckage found on Mount Cameroon (Altitude : 4100 m).





















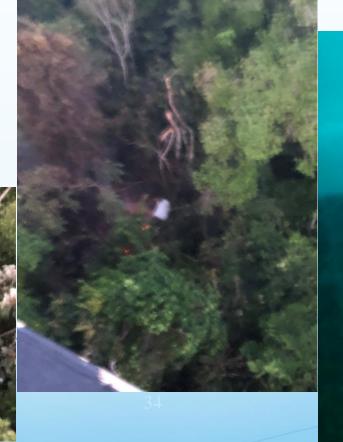
- Operation No. 1211 of 11 May 2022 regarding the DHC-6-400 registered TJ-TIM operated by CAVERTON and chartered by COTCO, 11 pax;
- Wreckage found in the middle of the forest;
- Difficulty for coordination: many stakeholders;
- big media coverage.



















COORDINATION AND COOPERATION

SAR Agreements have been signed between Cameroon and the following neighboring states: Congo, Gabon, Equatorial Guinea and Chad.

The draft SAR Agreements between Cameroon and the following neighboring States have been validated and are ready for signature: Nigeria and Central African Republic.









COORDINATION AND COOPERATION

- Working arrangement between the Mission Control Centre (MCC) of Las Palmas and the RSC of Yaounde for the distribution and reception of COSPAS-SARSAT distress alert data for search and rescue;
- Memorandum of understanding between the RSC and the ATS providers. Its purpose is to describe the terms of sharing responsibilities between the RSC and the ATS provider.

IMODELE DEL

Protocole d'[accord/ arrangement/entente/autre]

Entre

Le Centre de contrôle de mission Cospas-Sarsat [Pays/Adjectif]

Le Point de Contact SAR [Aéronautique / Maritime / Terrestre / Conjoint / Autre] + [Nom du SPOC]

Pour la distribution et la réception des données d'alerte de détresse <u>Cospas-Sarsat</u> pour les recherches et le sauvetage

DEFINITIONS

[« Accord/Arrangement/Entente/autre »] signifie le présent [Accord/Entente/Arrangement/autre]

« Balises » correspond aux instruments d'alerte de détresse conçus pour être activés lors d'une détresse et pour transmettre un signal radioélèctrique sur la fréquence 406 MHz, selon des caractéristiques répondant aux exigences des dispositions de l'Union Internationale des Télécommunications et des soécifications du Programme Cospas-Sazsat;

Un « Centre de contrôle de mission (MCC) », correspond à un système informatique établi pour traiter, les données provenant d'une station terrienne à utilisation locale (LUT) et transmettre l'alerte de détresse et les données de localisation aux autorités appropriées, et dans le cadre de ce protocole, à faom du SPOCI:

Un «Fournisseur de segment sol» est un Etat fournissant et exploitant un équipement de segment sol et qui utilise le Système, selon les termes de l'Accord relatif au Programme international CORPAS-SEGRAT (ICSA), et dans le contexte de cet accord, [Nom du pays du MCC].

Un « Point de contact SAR (SPOC) » correspond à un centre de coordination de sauvetage ou tout autre point de contacts national officiel, acceptant la responsabilité de recevoir des données d'alerte COMPANSAIGAE d'în de permettre le sauvetage de personnes en détresse ;

« Search And Rescue (SAR) » correspond aux opérations de recherches et sauvetage coordonnées par un centre de coordination de sauvetage, faisant appel à du personnel et à des moyens disponibles pour localiser et atteindre des personnes en dêtresse, leur donner les soins initiaux et les mêtre en lieu sûr ;

« [xx]MCC » correspond au MCC [du pays/adjectif] défini comme centre de remplacement (backup) pour le [xx]MCC [du pays/adjectif] (voir document C/S A.001, section 5.3.[xx];

Une «station terrienne à utilisation locale (LUT)» correspond aux antennes et matériel informatique installés pour recevoir et traiter les signaux retransmis par les satellites afin de déterminer la position d'une balise:







CHALLENGES AND PERSPECTIVES

CHALLENGES

- Geographical Challenges: Remote or rugged terrain, inhospitable areas (forest, mountain, etc.);
- Coordination with RCCs in the SRRs;
- Coordination with maritime organizations;
- Very slow regulatory process;
- Many false alerts.







CHALLENGES AND PERSPECTIVES

SHORT-TERM ACTIVITIES

 Construction of a new RSC, more suitable for the activities of the Center, and equipped with modern facilities;









CHALLENGES AND PERSPECTIVES

SHORT-TERM ACTIVITIES

- Construction of a new RSC, more suitable for the activities of the Center, and equipped with modern facilities;
- Organization of the second session of the SMC training course;
- Organisation of a full scale SAR exercise in 2024.





THANK YOU FOR YOUR KIND ATTENTION