

# NATIONAL REPORT ON SAR ACTIVITIES IN BELIZE.

January 19, 2009

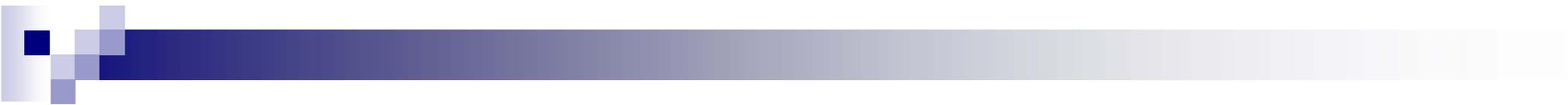
Presented by

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# SAR Agreement

- On Aeronautical and/or Maritime Search and Rescue between Belize Department of Civil Aviation and Belize Defence Force Rescue Sub-Centre
- (BDF - RSC)
- In compliance with ICAO Annex 12 Chapter 3 and IAMSAR Document 9731-Vol 1, AN/958 Appendix I SAR Agreements.



# Objectives

- This document establishes the operational procedures that should be observed by the signatories of this agreement for the oral and written coordination of messages and any other information related to search and rescue coordination services between the Belize Department of Civil Aviation and Belize Defence Force Rescue Sub-Centre (BDF-RCS) within Belize boundaries and territorial waters.



# Areas of Cooperation

- The parties agree to co-operate in the following areas:
- Make, and respond to, requests for operational assistance between the Central American Rescue Co-ordination Centre (RCC) or Rescue Sub-centres (RSCs) of the region as capabilities allow;
- Develop procedures and communications appropriate for co-ordination among facilities of both parties responding to the same distress incident, and for co-ordination between the Central American RCC or RSC;
- Normally apply the guidance of the International Aeronautical and Maritime SAR manuals regarding SAR operational procedures and communications.



# Areas of Cooperation

- Work to establish agreed procedures, which balance concerns for sovereignty and for saving lives, regarding entry of various types of SAR facilities into the territory of the other party, solely for a search or a rescue operation; and
- Enter into other collaborative SAR efforts which may include:
  - Mutual visits by SAR personnel of the parties;
  - Joint training or exercises
  - Co-operation in development of SAR procedures, techniques, equipment, or facilities;
  - Exchange of pertinent SAR or communications information and
- - Participate in meetings, workshops and any other SAR related activity.



# AREAS OF RESPONSIBILITY:

- The signatories of this agreement agree to observe the following jurisdiction:
- Belize Air Traffic Services which operates under the responsibility of the Department of Civil Aviation and whose area of jurisdiction is the territorial airspace of Belize.
- Belize RSC: Rescue Sub-centre whose area includes Belize territory and territorial waters.



# OPERATING PROCEDURES

- Belize Air Traffic Services will carry out the alerting functions by maintaining a close relationship with the RSC, related to the provision of search and rescue services. In this case the coordinate will be made available through aeronautical/maritime messages and information related with SAR Services that will affect Belize land territory, airspace and territorial waters.





# OPERATING PROCEDURES

- Belize RSC will coordinate all available SAR aeronautical messages and information that may affect the Central American Search and Rescue Region (SRR).
- Both parties shall give the transmission of messages and information related to any SAR event the highest priority.



# OPERATING PROCEDURES

All related SAR messages and information will be coordinated by the Department of Civil Aviation SAR Coordinator and in his absence, by the ATS shift supervisor or ATCO in charge of the shift.



# Belize Air Traffic Services

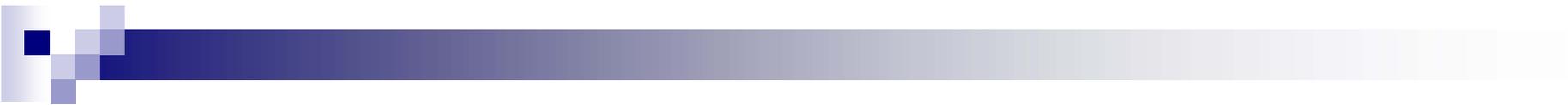
## alerting services

- Alerting service shall be provided:
- for all aircraft provided with air traffic control service;
- in so far as practicable, to all other aircraft having filed a flight plan or otherwise known to the air traffic services and



# Belize Air Traffic Services alerting services cont'd

1. to any aircraft known or believed to be the subject of unlawful interference.

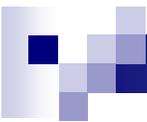
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- When air traffic controllers have reason to believe that an aircraft is in an emergency or when no report from an aircraft has been received, under his/her control shall give immediately all available information to the following:

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- Belize Rescue Sub-Centre (RCS), BDF Airwing EXT 408, VSAT # 4028.
  - AFTN address MZBZYCYX
  - Director of Civil Aviation (DCA).
  - Chief Air Traffic Control Officer (CATCO)/Deputy Director of Civil Aviation (DDCA) in charge of SAR matters).
  - Inspectors in the Department of Civil Aviation (Operation Section).



# Notification of Belize Rescue Sub-Centre (RSC)

- Without prejudice to any other circumstances that render such notification advisable, air traffic services shall notify the Rescue Sub-Centre, which is located at the Belize Defence Force Airwing, when an aircraft is considered to be in a state of emergency in accordance with the following three distinct phases that exist in an emergency situation.



# *Uncertainty phase (INCERFA)*

## when

- no communication has been received from an aircraft within a period of thirty minutes after the time a communication should have been received, or from the time an unsuccessful attempt to establish communication with such aircraft was first made, whichever is earlier, or when
- an aircraft fails to arrive within thirty minutes of the estimated time of arrival last notified to or estimated by air traffic services units, whichever is later, To develop customer intuition engage in continuing dialogue with customers before – during – after service



## *Uncertainty phase* **(INCERFA)**

cont'd

- except when no doubt exists as to the safety of the aircraft and its occupants.
- During this phase the Belize RSC is activated. It collects and evaluates reports and information pertaining to the case.



## *Alert phase (ALERFA) when:*

following the uncertainty phase, subsequent attempts to establish communication with the aircraft or inquiries to other relevant sources have failed to reveal any news of the aircraft, or when



## *Alert phase (ALERFA) cont'd*

- an aircraft has been cleared to land and fail to land within five minutes of the time landing clearance is given and communication has not been re-established with the aircraft and
- information has been received which indicates that the operating efficiency of the aircraft has been impaired but not to the extent that a forced landing is likely,



## *Alert phase (ALERFA) cont'd*

- 4. an aircraft is known or believed to be the subject of unlawful interference.
- During this phase the Belize RSC will immediately alert the appropriate SAR services units and initiate the necessary action. By placing the customer at the centre of the

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- The notification shall contain the following information as is available in the order listed:
  - INCERFA, ALERFA or DETRESFA as appropriate to the phase of emergency;
  - nature of the emergency
  - significant information from the flight plan;
  - unit which made last contact, time and means used;

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- last position report and how determined;
  - colour and distinctive marks of aircraft if known;
  - any action taken by the Air Traffic Services Reporting Office; and any other pertinent remarks.

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- *Distress phase (DETRESFA)* when:
  - following the alert phase, further unsuccessful attempts to establish communication with the aircraft and more widespread unsuccessful inquiries point to the probability that the aircraft is in distress, or when
  - the fuel on board is considered to be exhausted, or to be insufficient to enable the aircraft to reach safety, or

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- when information is received which indicates that the operating efficiency of the aircraft has been impaired to the extent that a forced landing is likely, or when
  - information received or it is reasonably certain that the aircraft is about to make or has made a forced landing.
  - Except when there is reasonable certainty that the aircraft and its occupants are not threatened by grave and imminent danger and do not require immediate assistance.

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- During this phase, the Belize RSC is responsible for taking the action necessary to assist the aircraft and to determine its location as rapidly as possible.
  - The aircraft operator, State of Registry, RCC and the appropriate accident investigation authorities are informed by the Search and Rescue Co-ordinator (SC).
  - In the case of Maritime distress received by ATC by means of aircraft, ATC shall immediately inform the RSC so they can inform the appropriate maritime authorities for necessary action.



# SEARCH AND RESCUE SUPPORT

- Ports Commissioner has given his assent to support the Department of Civil Aviation in its search and rescue efforts whenever there is an aircraft accident, or maritime emergency within Belize's territorial waters. The Belize Port Authority (BPA) is equipped with the below listed communications equipment at the National Maritime Communication Center (NMCC) to conduct its operations including search and rescue whenever the need arises. ATCOs can be called on these numbers via the Department telephones during the week. The Maritime emergency line can be obtained by using a cellular telephone.

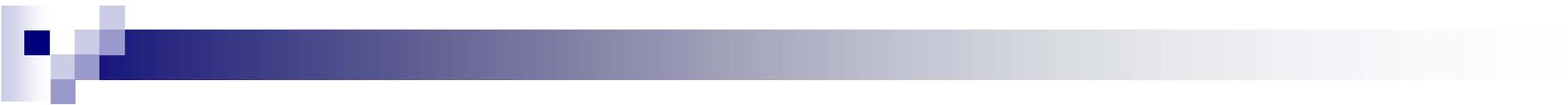


# SEARCH AND RESCUE SUPPORT

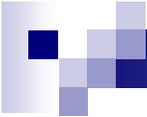
- **Telephone links – Three lines**
- **Maritime emergency line    999**
- **NMCC Watchkeeper            223-2292**
- **Operations Manager            223-2309**

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- **Ordinary VHF**
  - Marine VHF channel 16
  - Trunccking VHF (with a secure system for the Authrity's operational communication)
  - **HF** - Monitors 2182 maritime emergency frequency

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- **VSAT TELEPHONE EXTENSIONS IN THE RADAR ROOM AND SEARCH AND**
  - **RESCUE (SAR) SUB-CENTRE AND AN AFTN ADDRESS AND NETWORK AT THE ATS REPORTING OFFICE.**

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- As how Belize is a member state of COCESNA which is Central American Corporation for Air Navigation Services. They are incharge of all Air Navigation in Central America. They provided a VSAT telephone extension and a AFTN service through a computer that is now connected at the Search And Rescue (SAR) Sub-centre which is located at the Belize Defence Force (BDF) Airwing.

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- Both extension and AFTN are now connected to the different Central American Stations and are now officially in use. The basic purpose of this extension and AFTN is to facilitate the coordination of air traffic service for SAR Purpose only.

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- The authorized extension is **4028** for the Belize BDF SAR Sub-centre and the AFTN service address is **MZBZYCYX**.  
**The control tower, Terminal approach room a direct VSAT links and telephone extension with the SAR Sub-Centre.**  
**The ATS Reporting Office have a AFTN link to the Sub-Centre also.**