



# Panel 3: Integration of Maritime Surveillance Systems as a keystone for Maritime Security

Bg. Gen. José María Orea Malo  
Head Operations Division  
Spanish Air Force Staff

# Overview

- ✓ Maritime Surveillance
- ✓ C<sup>2</sup> SAR
- ✓ C<sup>2</sup> CSAR / SARMIL / MEDEVAC / MPA (AMC)
- ✓ National & International Agreement
- ✓ Example AE Mission Vessel "Petrel"



# MARITIME SURVEILLANCE

- **Maritime Surveillance Mission within the State Action, assist in the protection of national interests, and in support of civil authorities.**

## **Maritime Activities :**

- Deterrent Pressure
- Maritime Surveillance of Areas of Interest
- Maritime Patrol and Surveillance in support of Sp Navy's (ARMADA) missions
- Air Maritime Coordination (AMC)

## **•Collaboration:**

- **Maritime Policing** illegal immigration
  - Noble Centinela Op. (MoD)
  - Guardia Civil (FRONTEX-EU)
    - HERA Op. (Senegal)
    - HERA Op (Mauritania)
    - INDALO Op. (Mediterranean Sea)
  - **Home Affairs**
    - Maritime Analysis and Operations Center-Narcotics (Lisbon)
  - **Environmental Safety** (pollution)
  - **Civil Defence**
    - In support of Civil Authorities



## **Air Force Operates a/c**

- Guardia Civil
- Customs Surveillance Service

## **Relationship with other Agencies:**

- Police**
- SASEMAR
- Red Cross

C<sup>2</sup> (i)

**SAR OPERATION**

**MAGEN**

**JESAR**

**RCC  
Palma**

**801 SQN  
PALMA**

**Dest.  
San Javier**

**RCC  
Madrid**

**803 SQN  
MADRID**

**Dest.  
Zaragoza**

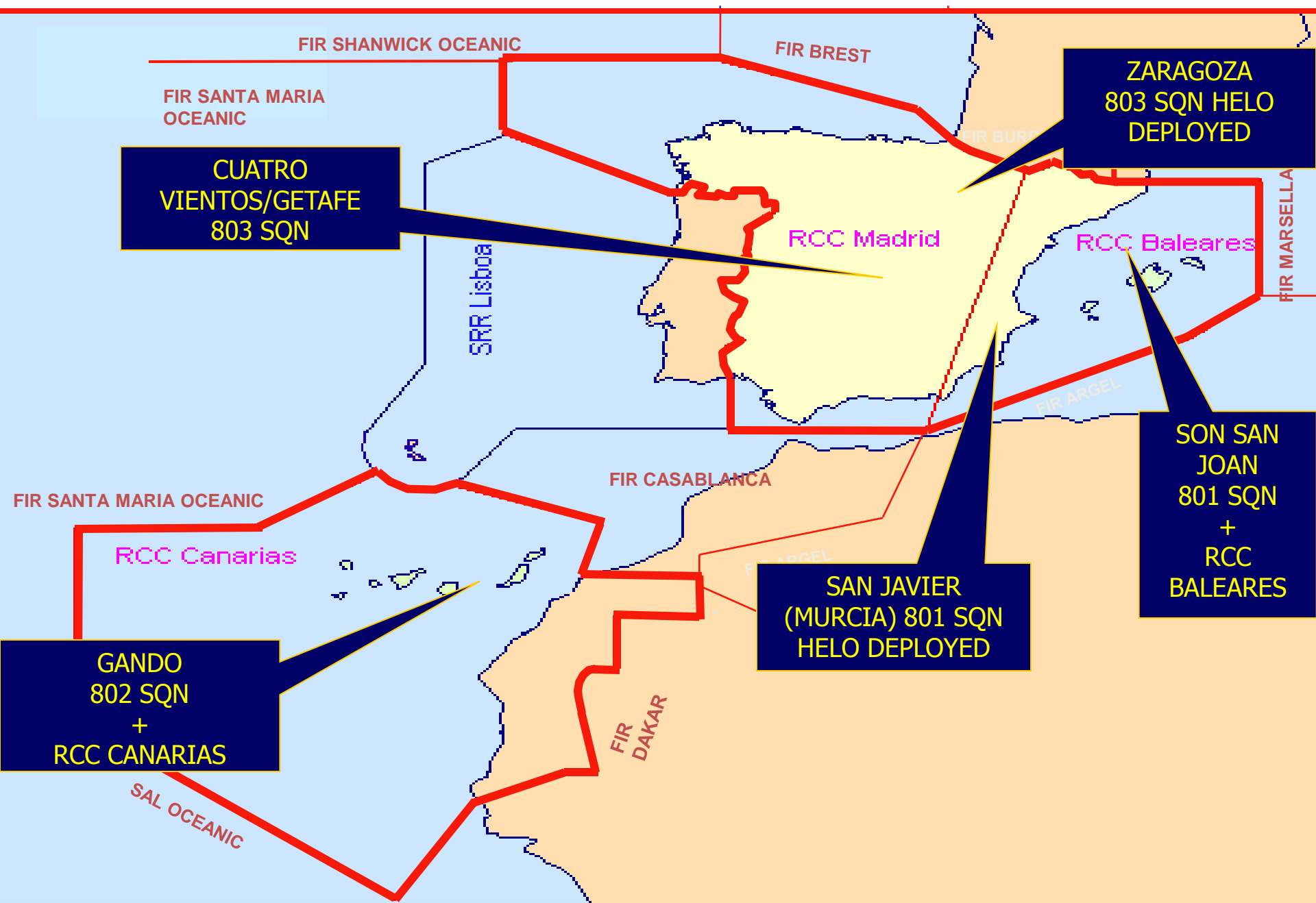
**RCC  
Canarias**

**802 SQN  
GANDO**





# SAR RESPONSIBILITY REGIONS AND RCC



# VIGMA/SAR/CSAR

4x C212 SAR



10x AS332 SUPER PUMA



7xAS330 PUMA



7xAS332 SUPERPUMA (CSAR)



3X FOKKER 27



6x CN235 VIGMA



# COSPAS-SARSAT



**803 SQN Madrid**



**801 SQN Baleares**



**GRUPO 22 Sevilla**



**802 SQN Canarias**



**SPMCC**

SAR ALERT TO

## SPMCC SERVICE AREA

ASCENSIÓN	GAMBIA	NIGERIA
BENIN	GHANA	REP. CENTRO AFRIC.
CAMERÚN	GUINEA	STO. TOMÉ Y PRÍNCIPE
CABO VERDE	GUINEA BISSAU	SENEGAL
CONGO	GUINEA ECUAT.	SIERRA LEONA
COSTA DE MARFIL	LIBERIA	TOGO
ESPAÑA	MALI	
GABON	MAURITANIA	

Alert out of Service Area contact with other Reg. MCC

# SAR COMMAND&CONTROL

**1x MCC (MAS PALOMAS)**  
3000 km radius (from Northern Ireland to Ecuador and from the Adriatic Sea to the near the coast of Brazil)



**JESAR (COMMAND SAR)**



**3x RCC (4x CAM)**  
RCC MADRID  
RCC BALEARES  
RCC CANARIAS



# VIGMA/SAR 2<sup>ND</sup> ROLE

7x P3 ORION (MPA)



6x C212 (SVA)



13x C 295



2XCN235 VIGMA (GC)



8x SIKORSKY S76



17x CL215T/CL415



EZAPÀC (PJ, PARAMEDICS, )





C<sup>2</sup>(ii)

SARMIL/CSAR/MEDEVAC  
OPERATIONS

MACOM

JESAR

801  
SQN

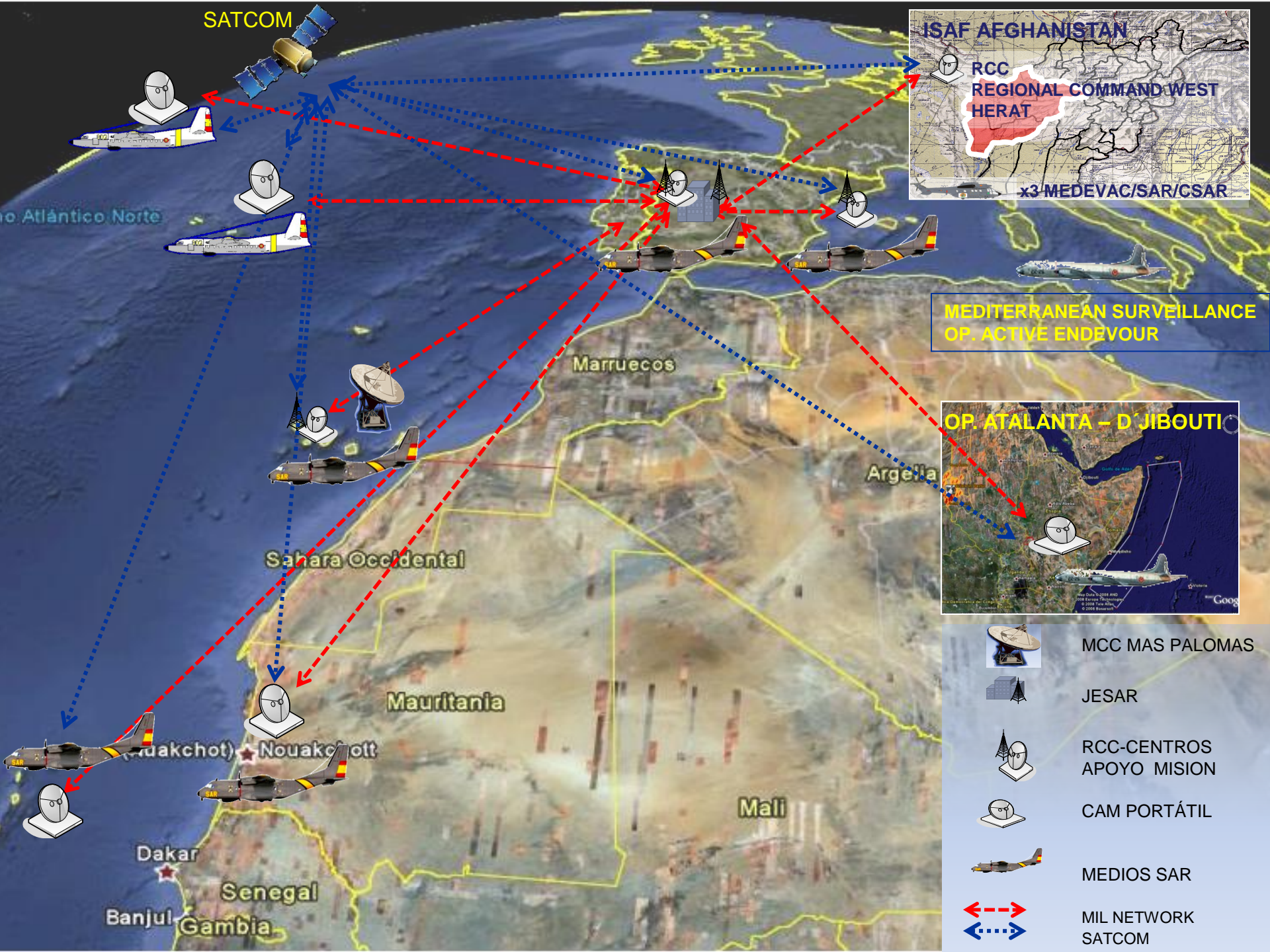
803  
SQN

802  
SQN

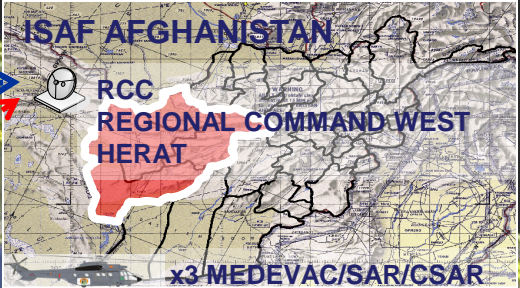
23-08-2009 14:52

1 13:11

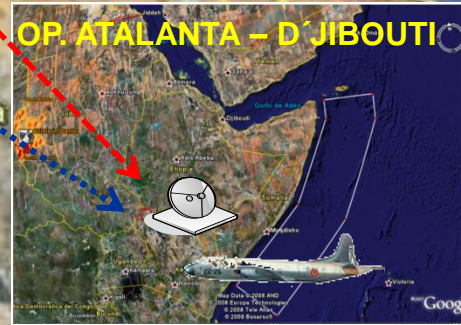




SATCOM



MEDITERRANEAN SURVEILLANCE  
OP. ACTIVE ENDEVOUR



MCC MAS PALOMAS



JESAR



RCC-CENTROS  
APOYO MISION



CAM PORTÁTIL



MEDIOS SAR



MIL NETWORK  
SATCOM

ISAF AFGHANISTAN

RCC  
REGIONAL COMMAND WEST  
HERAT

x3 MEDEVAC/SAR/CSAR

OP. ATALANTA - D JIBOUTI

Marruecos

Argelia

Sahara Occidental

Mauritania

Mali

Dakar

Senegal

Banjul

Gambia

Nouakchott

o Atlántico Norte



# NATIONAL AGREEMENT

- Spanish Red Cross (CRUSAR Ex.)
- Civil Defence
  - Emergencies
- Navy
  - Maritime Patrol
- Guardia Civil
  - Agreement Air Operations (GC Aircrafts)
  
- Minister of Employment and Immigration:
  - Hospital Ship Esperanza del Mar.
- Minister of Development:
  - Agreement between SAR and SASEMAR
- Minister of Home Affairs:
  - Agreement in the Field of Anti-Drug
- Govern Balear
  - Emergencies



# INTERNATIONAL AGREEMENT

SAR MED/OCC (Technical Agreement)( Italy, France y Spain)

- Exercises: CERNIA, TRUCHA, DAUPHIN, SQUALO, AVOCETTE, GRIFONE

SAR Cooperation Agreement:

- Algeria (SAMAR Ex.)
- Cape Verde (CABSAR Ex.)
- Morocco (ATLAS Ex.)
- Portugal (MORSA Ex.)
- UK
- Senegal (DAKARCAN Ex.)
- Tunisia (HANNIBAL Ex.)
- Malta (CANALE Ex. - 5+5 Initiative)





# JSAR INTERNATIONAL RELATIONS

❖ NATO: NATO SAR PANEL (SAR, CSAR AND SERE)

❖ EAG: EUROPEAN AIR GROUP (BE, FR, GE, IT, NL, SP, UK)

❖ ECAP: EUROPEAN CAPABILITY ACTION PLAN (ECAP CSAR PROJECT GROUP OF EU) at present in progress to EUROPEAN DEFENCE AGENCY

# CSAR EXERCISES

A military helicopter is shown in the process of landing on a sandy, desert-like terrain. The helicopter is positioned in the center-left of the frame, and its landing gear is partially visible. A massive, billowing cloud of dust and sand is kicked up by the rotor wash, obscuring the lower half of the helicopter and extending across the middle ground. In the background, there are rolling sand dunes under a clear, bright blue sky. To the right of the dust cloud, a person wearing a red safety vest and dark clothing stands with their arms outstretched, likely acting as a spotter or ground crew member. The overall scene depicts a high-intensity military exercise in a remote, arid environment.

❖ VOLCANEX (EAG).

❖ EAG CSAR STANDARDISATION COURSE.

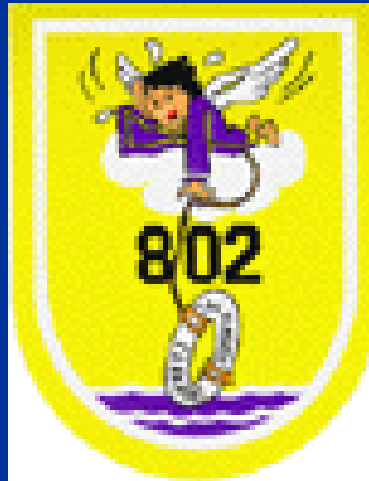
❖ RED FLAG.

❖ DAPEX.



# ***MEDICAL EVACUATION***

***“PETREL”***



**Initial position**  
33°24 N  
013. 04 W

**Rescue position**  
32°49.7 N  
013. 11.6 W

**314 NM**

**233 NM**











16 14:50



