



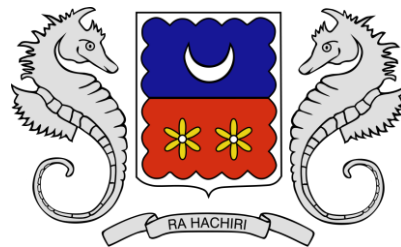
**MINISTÈRE
CHARGÉ
DES TRANSPORTS**

*Liberté
Égalité
Fraternité*



PATIENT TRANSPORTATION IN TRANSFORMED AIRCRAFT

March 2, 2023



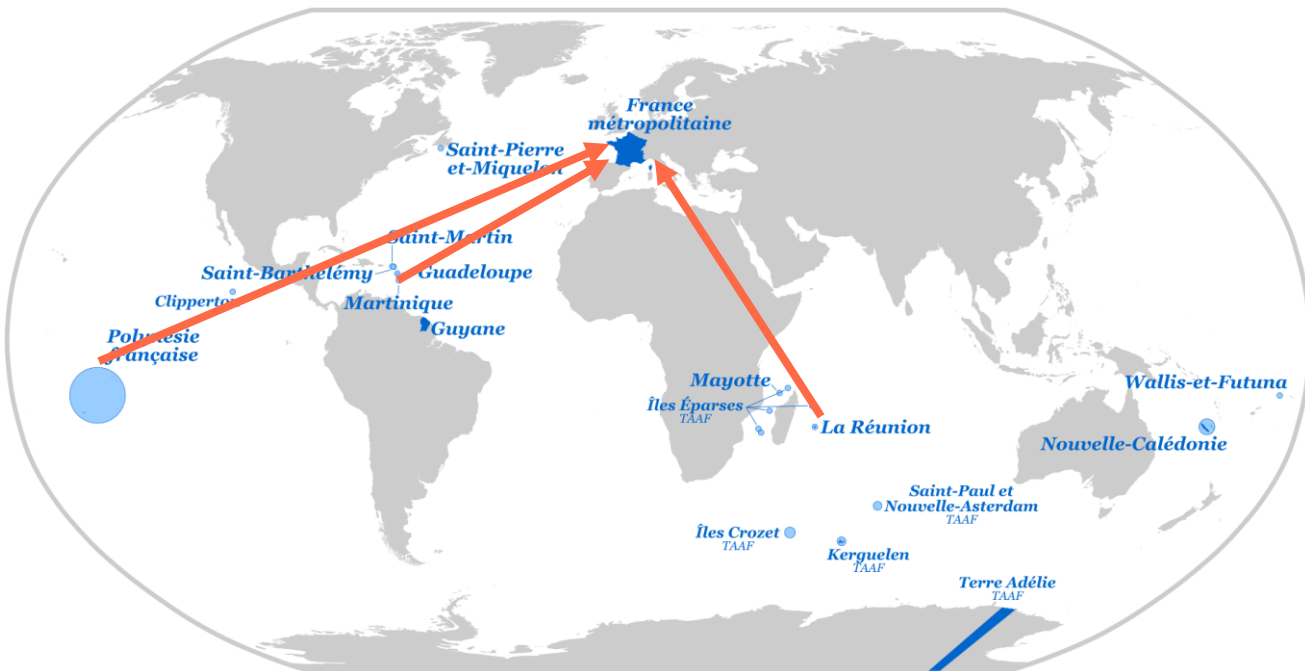
Operation « Hippocampe »

an air bridge between the French West Indies and Paris

From health requirements to suitability of the aircraft regarding safety requirements.

- May 2020 : Mayotte - Reunion airlift (EMB 135/145)
- March 2021: 1 flight from Reunion to Paris (Air Austral B787)
- August 2021: sanitary tensions in the French West Indies (A350 Air Caraïbes Atlantique)

La Réunion/Paris : 9300 km/12 flight hours
French West Indies/Paris : 6800 km/9 flight hours
French Polynesia/Paris (via PTP) : 16000 km/18 flight hours



- Three main risks
 - Evacuation management
 - Transportable oxygen quantity: modeling of possible failures
 - Use of transported electrical appliances
- Rare initial references
 - On A330 MRTT, transport of live fishes in hold for oxygen supply conditions
- The constraint: flight carried out by a civil airline
 - safety standard « equivalent » to commercial air transport flights

- Airlines involved:
 - An airline selected by the Ministry of Health for evacuations from the French West Indies: Air Caraïbes Atlantique in A350.
 - Other files investigated by French DGAC in case of additional needs: Air France in B777, Air Calédonie International in A330
- A progressive approach adopted
 - First flight authorizations: 6 stretchers/12 bottles of 3250 liters/32kg
 - Then 8 stretchers/14 bottles, 10 stretchers/14 bottles
 - Finally 12 stretchers/18 bottles
 - Authorization given for 8 missions/16 flights over 30 days



- An approach to risks shared and assumed jointly by DGAC, the Ministry of Health and the airline

CONFIGURATION 1 : AIR CARAIBES A350-900 LAYOUT







- Flights performed:
 - French West Indies (FDF and PTP): 11 missions formed - 118 patients evacuated.
 - Polynesia: 1 flight - 8 patients on flights via the French West Indies (PTP)
- Satisfactory conditions regarding transport
 - A350: pressurization capabilities/low oxygen consumption of patients.
- Safety and flight satisfaction
 - Rich feedback from the companies involved
- We know how to do... we will capitalize on this experience.