PRISM
SOLUTIONS, LLC

Research Topic:
Extended Overwater Flight Risk Analysis Items

- Flight path is ETOPS area of operation: An area beyond 180 minutes from an adequate airport, planned to be no more than 240 minutes from an adequate airport, in still air at normal cruise speed with one-engine inoperative.
    - There are very specific requirements for a Part 135 business jet operator to comply with for approval to fly in this regime. See AC 135-42
    - This area of operation can be modified with less or greater stringency requirements for available airfields, divert decisions, fuel management procedures
- Special MEL for extended overwater flights
    - Various redundancies in specific equipment should be considered as part of an MEL for flights in this regime, dependent upon aircraft configuration.
    - Pressurization system operation
    - Oxygen system
    - Autopilot system
    - Electrical system
    - Weather radar
    - Etc.
- Pilot currency related to flight profile/area
    - A currency parameter to be a crew member for a flight in this area of operations
    - Example: Was a flight crew member on an extended over water flight within the previous six months.
- Suitable airport list
    - A list of airports available for divert within parameters listed above
    - If an airport is not available for weather minimum or other reasons, a risk factor that may require cancelling the flight or changing the route.
- Water temperature (in the event of an aircraft ditch)
    - 50 degree water yields survival times of 2 hours or less, depending on various factors
    - Risk factor if water temp is below 50 degrees
- Reliable weather info
    - Risk factor if the flight path is through an area of unreliable weather reporting/radar coverage
- Ability to update airport weather enroute
    - If unable, forecast may change
    - Risk factor if unable
- Water survival training
    - Risk factor if crew has not participated in training