

CANARIAS ACC OCEANIC SECTOR: COORDINATION AND COMMUNICATION LIMITATIONS

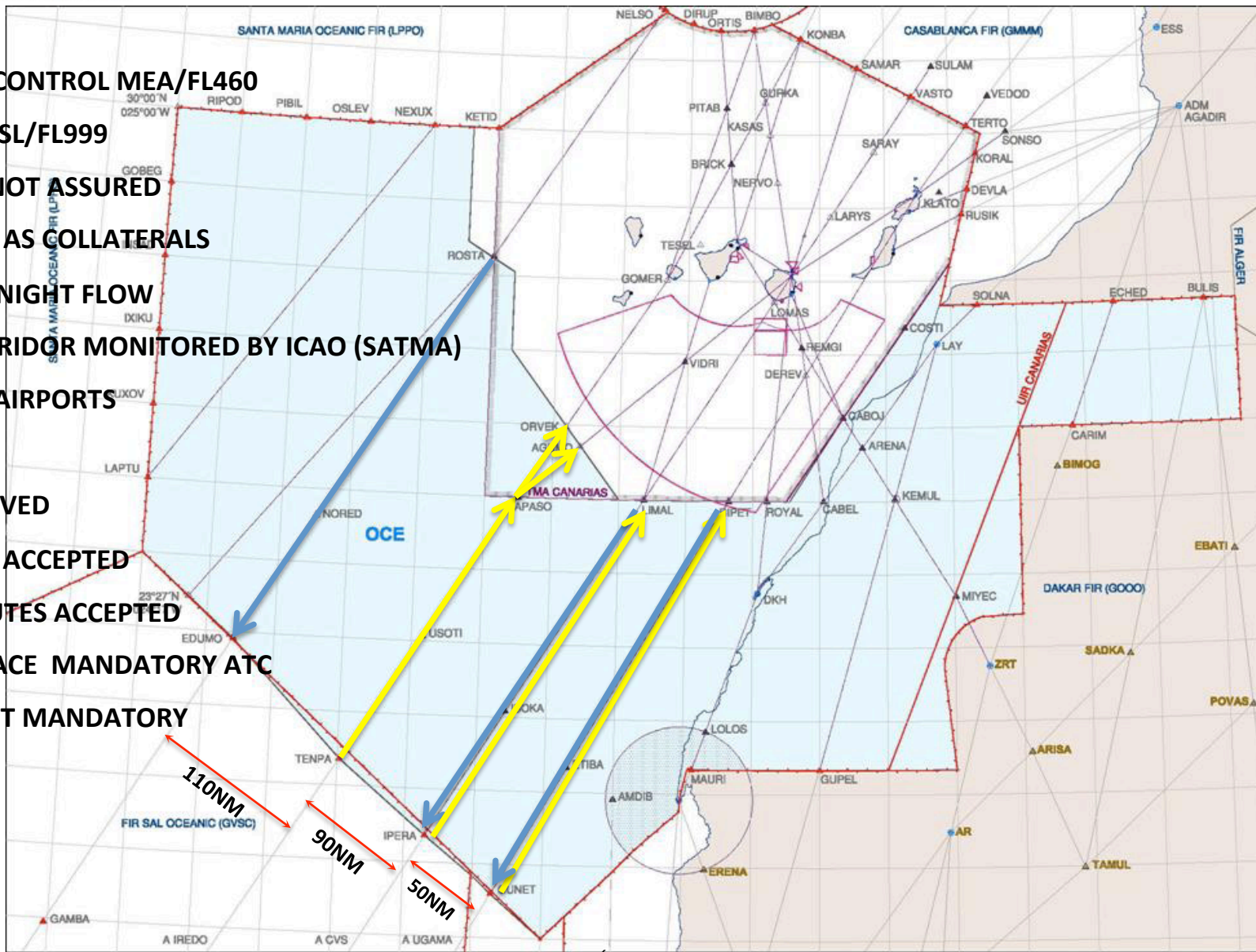


SAFETY HOTSPOT?

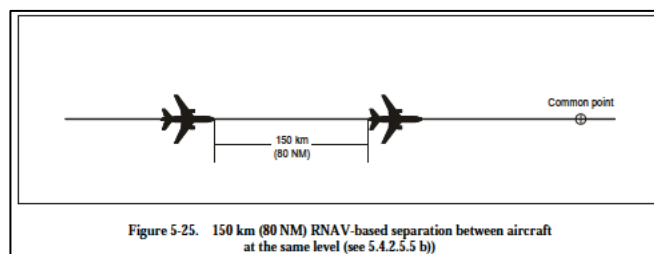
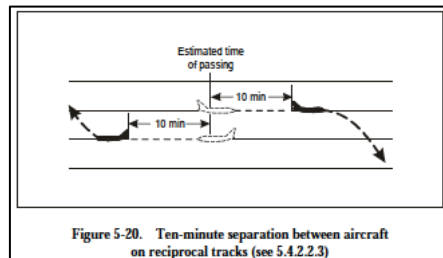
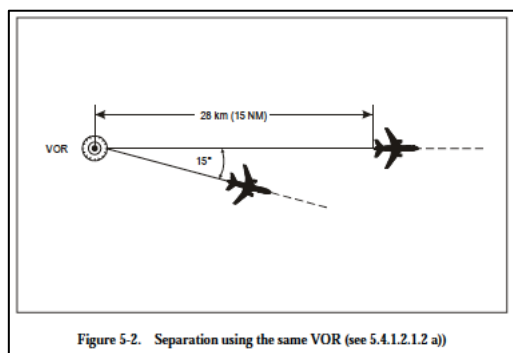
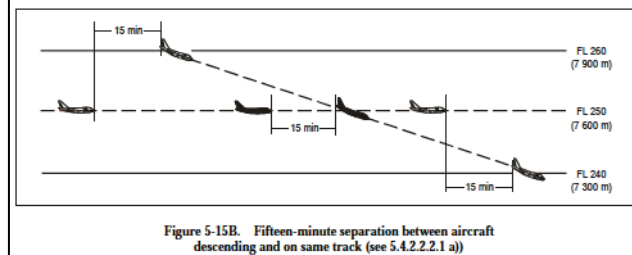
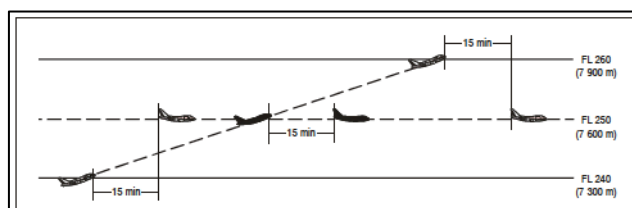
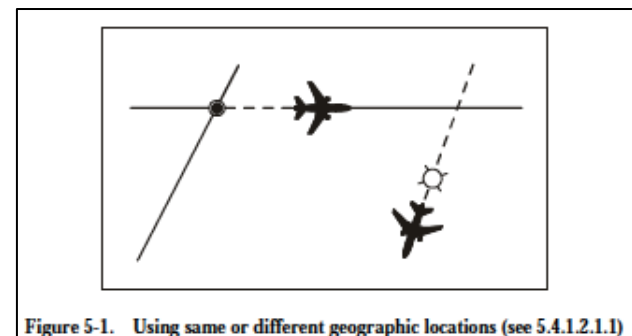
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GCCC *OCE* SECTOR FACTS

- **NON RADAR**
- **PROCEDURAL CONTROL MEA/FL460**
- **LIMITS GND-MSL/FL999**
- **VHF/HF COM NOT ASSURED**
- **6+2 ATS UNITS AS COLLATERALS**
- **DAY FLOW vs. NIGHT FLOW**
- **EUR/SAM CORRIDOR MONITORED BY ICAO (SATMA)**
- **ARR+DEP @ 2 AIRPORTS**
- **RVSM+RNP10**
- **OFFSET APPROVED**
- **FREE ROUTE IS ACCEPTED**
- **RANDOM ROUTES ACCEPTED**
- **CLASS F AIRSPACE MANDATORY ATC**
- **ADS-CPDLC NOT MANDATORY**



- FL CHANGES NOT RECOMMENDED
- TIME BASED SEPARATION W/MACH NUM IN EUR/SAM CORRIDOR
- GEOGRAPHIC AND VOR SEPARATION
- TIME BASED AND RNAV LONGITUDINAL SEPARATION
- ADS-C BASE SEPARATION NOT ALLOWED (SACCAN ONLY FOR MONITORING)
- PSEUDOTRACKS SEPARATION NOT ALLOWED
- ADS-PSEUDOTRACK SEPARATION NOT ALLOWED
- SECTOR RESPONSABLE TO COMPLY W/LoA



GCCC OCE WORKING POSITION FACTS

- **SACCAN:** Sistema Ads/Cpdlc de CANarias

- **SACTA:** Sistema Automático de Control de Tránsito Aéreo

- **SACCAN HMI ≠ SACTA HMI**

- **ACTIONS BY EC NOT SENT TO PC**

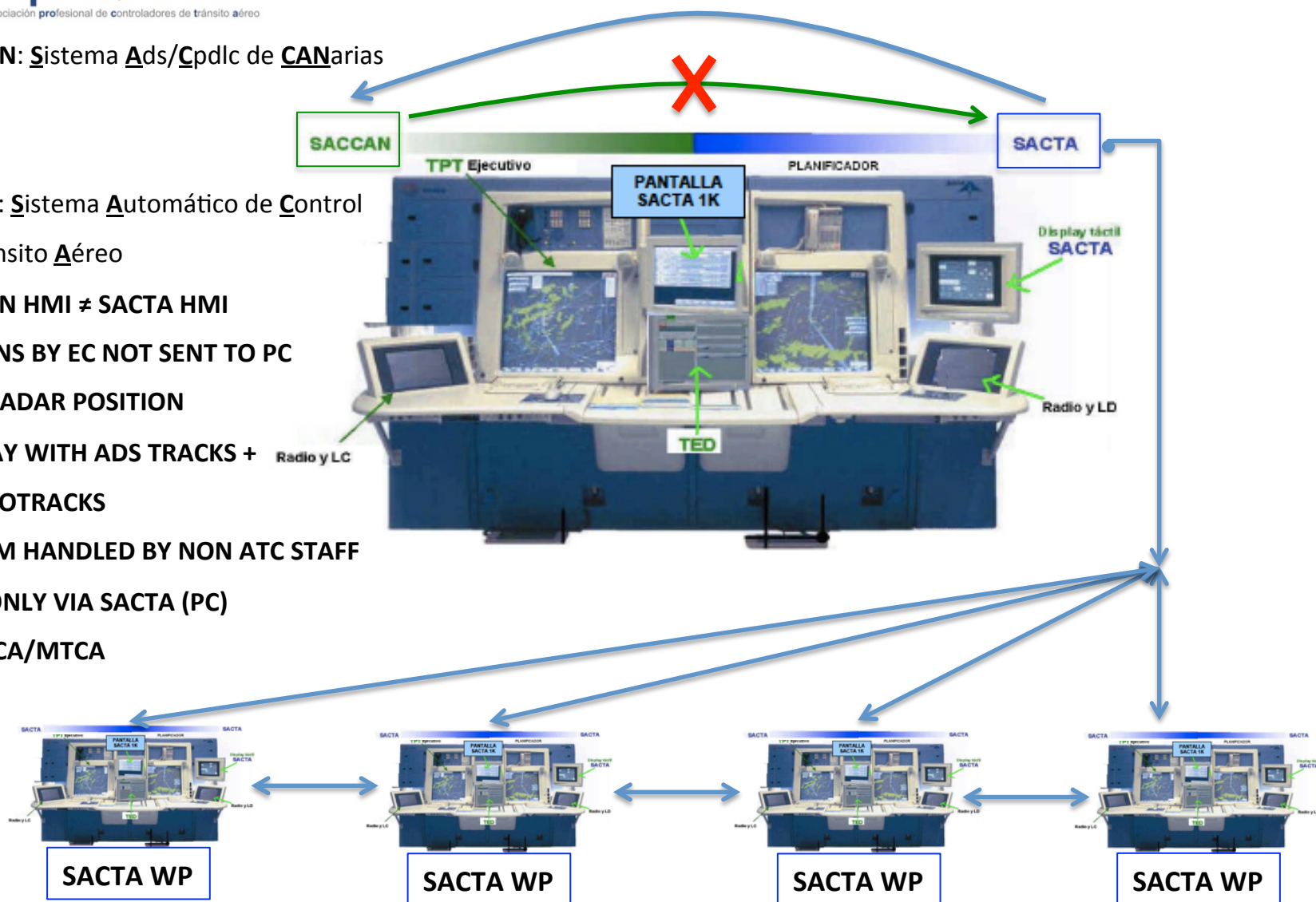
- **NON RADAR POSITION**

- **DISPLAY WITH ADS TRACKS + PSEUDOTRACKS**

- **HF COM HANDLED BY NON ATC STAFF**

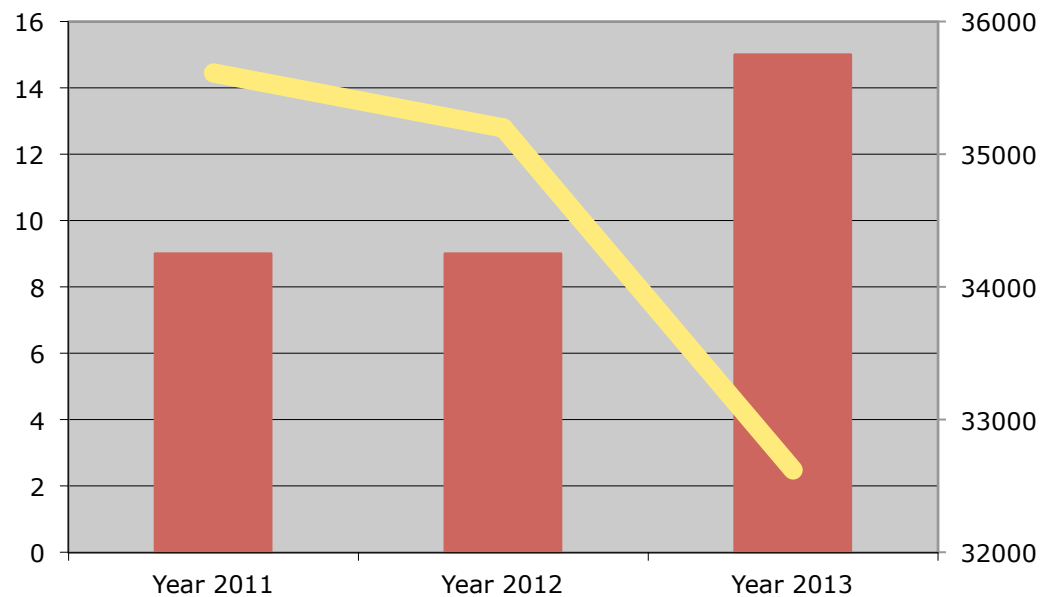
- **OLDI ONLY VIA SACTA (PC)**

- **NO STCA/MTCA**

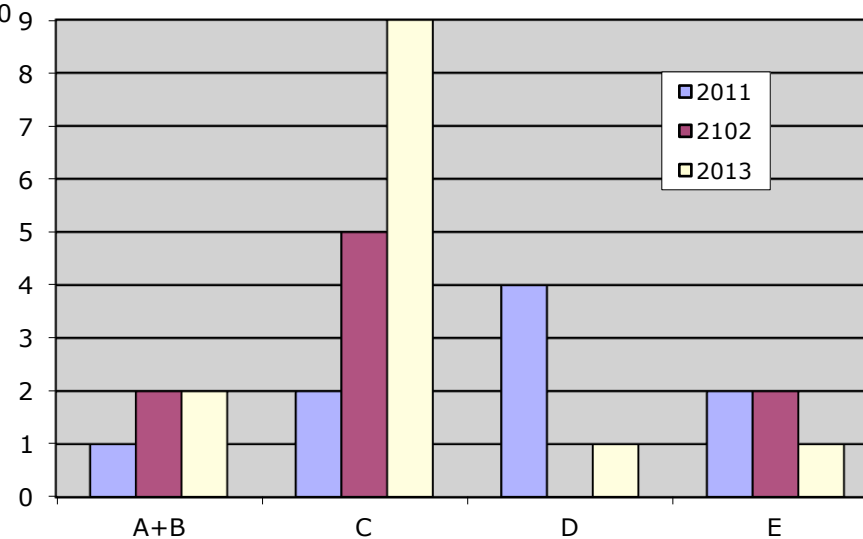


GCCC OCE REPORTED INCIDENTS

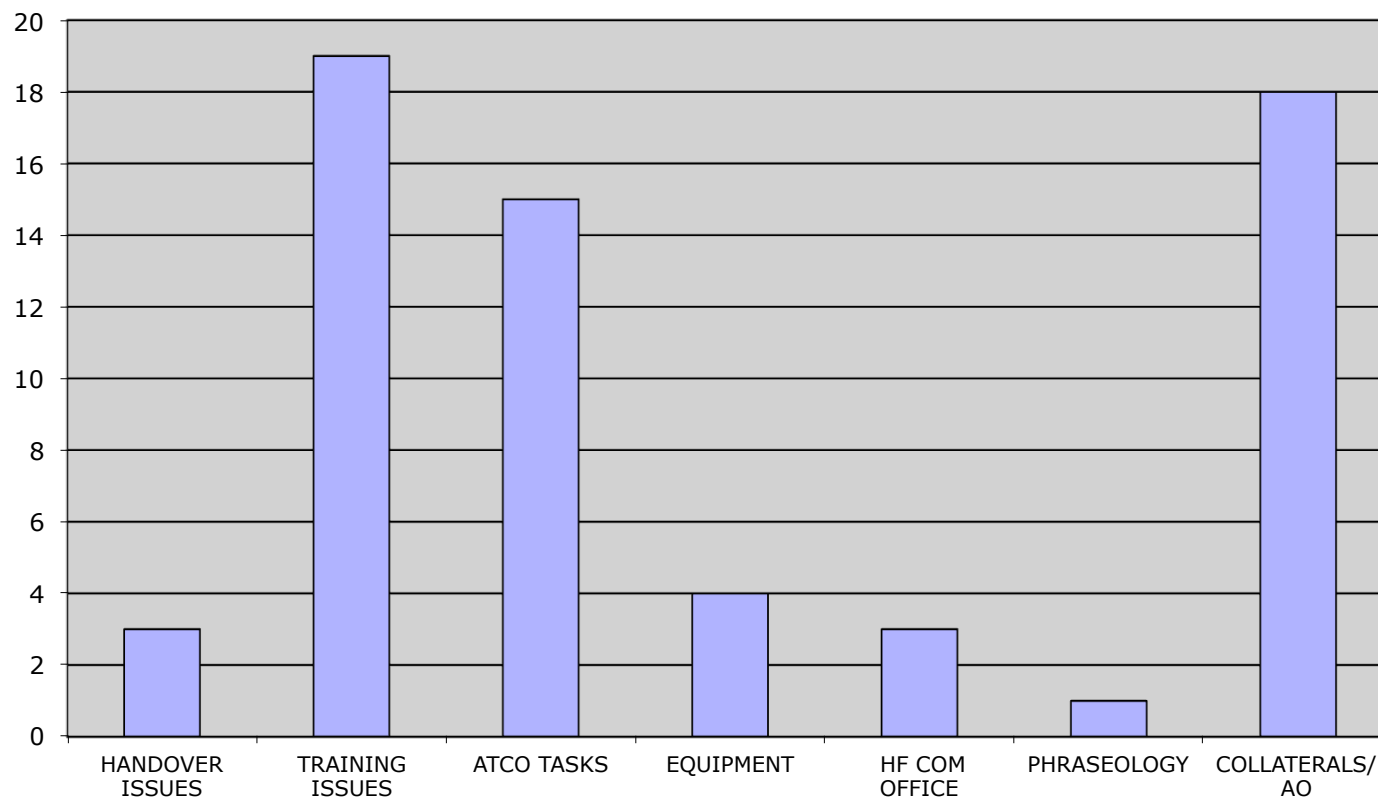
REPORTED INCIDENTS vs. TRAFFIC



SEVERITY OF INCIDENTS/YEAR



RECOMMENDATIONS RELATED TO



- AENA handovers every 37.5 minutes vs. average time flying at the sector is 45 minutes (M078): [SECTOR ROTATION](#)
- Minimum time for ATCO at OCE is 40'/60 days (usually the standard).
- Max sector occupancy happens at 01am to 03am.
- Number of non-ATS tasks to be done by ATCO in SACCAN are increasing.
- CPDLC HMI prone to error when selecting aircraft callsign: [CPDLC HMI](#)
- Bad VFH/HF COM coverage in non-radar sector enhances limitations for ATCO actions (both for GCCC-GVSC FIR/UIR boundary).
- Canarias HF radio station operates on the FPL w/o checking with crew.
- **SACCAN PHASE 3 (May 2012): HMI SIMILAR TO SACTA (RADAR).**

- ATCO works for SACCAN, not SACCAN for ATCO.
- Too many professionals involved in the decision-making: 2 ATCO and 1 radio operator only with verbal coordination.
- Non-ATS task overload in a non friendly HMI impacts on traffic and system monitoring (flight strips, ADS, CPDLC, SACCAN, SACTA and OLDI).
- Non radar working procedures (flight strips) left as secondary vs. SACCAN.
- SACCAN does not monitor/updates pseudotracks FPL; ADS tracks only every 15'; SACTA does it with radar tracks.
- **CONCLUSION: OCE has become a bureaucratic sector**


WHY ARE THERE MORE INCIDENTES EVERY YEAR?

APROCTA's PoV:

- 1. INCREASE IN NON-ATS TASKS TO BE DONE INCREASE THE CHANCE TO MAKE ERRORS: SACCA IMPLIES WORKLOAD W/O A REAL BENEFIT ON SAFETY?**
- 2. “AUTOMATION” DOES NOT HELP DECREASE WORKLOAD**
- 3. DECREASE IN ATCO PROFICIENCY DUE TO:**
 - 1. VERY FEW (QUALITY) HOURS IN THE SECTOR.**
 - 2. CLOSE TO NONE SECTOR TRAINING OVER THE YEARS.**
 - 3. ATCO COMPETENT ASSESSMENT WITHOUT TRAFFIC.**


ICAO SATMA ABOUT 2011-2012 EUR/SAM

CORRIDOR FPL DEVIATIONS: 99% are operational coordination errors in the ATC to ATC transfer or control responsibility: HHFF ISSUES



Detail of the operational coordination errors (56 LHD's)


- 30 LHD's are due to entry into airspace at incorrect Flight Level
- 01 LHD is due to entry into airspace at incorrect estimate & Flight Level
- 11 LHD's are due to total lack of data (traffic without estimate over the boundary fix point)
- 14 LHD's are due to no revision by the transferring ACC of the estimate over the boundary fix point
- 2 LHD's are due to estimate for different COP
- 1 LHD is due to flight crew climbed without ATC Clearance.
- 1 LHD is due to technical issues



REPORT OF THE LHD MONITORING TEAM

EUR/SAM Corridor

ANALYSIS OF REPORTED LHD DURING 2012



ARE THE RECOMMENDATIONS ISSUED POINTING AT THE RIGHT DIRECTION?

EFFECTIVE vs. INEFFECTIVE

- HANDOVER CHECKLIST
- PROCEDURE REFRESHING TRAINING
- ADS TASK CHECKLIST
- PUBLISHING THE ASR INVESTIGATION ONLINE (INTRANET)
- NON SPECIFIC INCIDENT REVIEW

2011: Aprox 50% of safety recommendations were just some kind of a “reminder” to ATCOs

2012: 65%

2013: 67%...

HOW TO REALLY IMPROVE COORDINATION AND COMMUNICATION LIMITATION?

- **MANDATORY ADS-C/CPDLC IN THE CORRIDOR**
- **SPLIT EUR/SAM ROUTES FROM EUR-GVSC ROUTES
(MEDIUM HAUL A/C NOT ADS EQUIPPED)**
- **REAL SACCAN AUTOMATION UNTIL SACTA
INTEGRATION**
- **ATCO TRAINING: ON-THE-JOB + SIMULATOR**
- **SWITCH POSITIONS IN THE CWP**