



MOQA Program SKY Airline

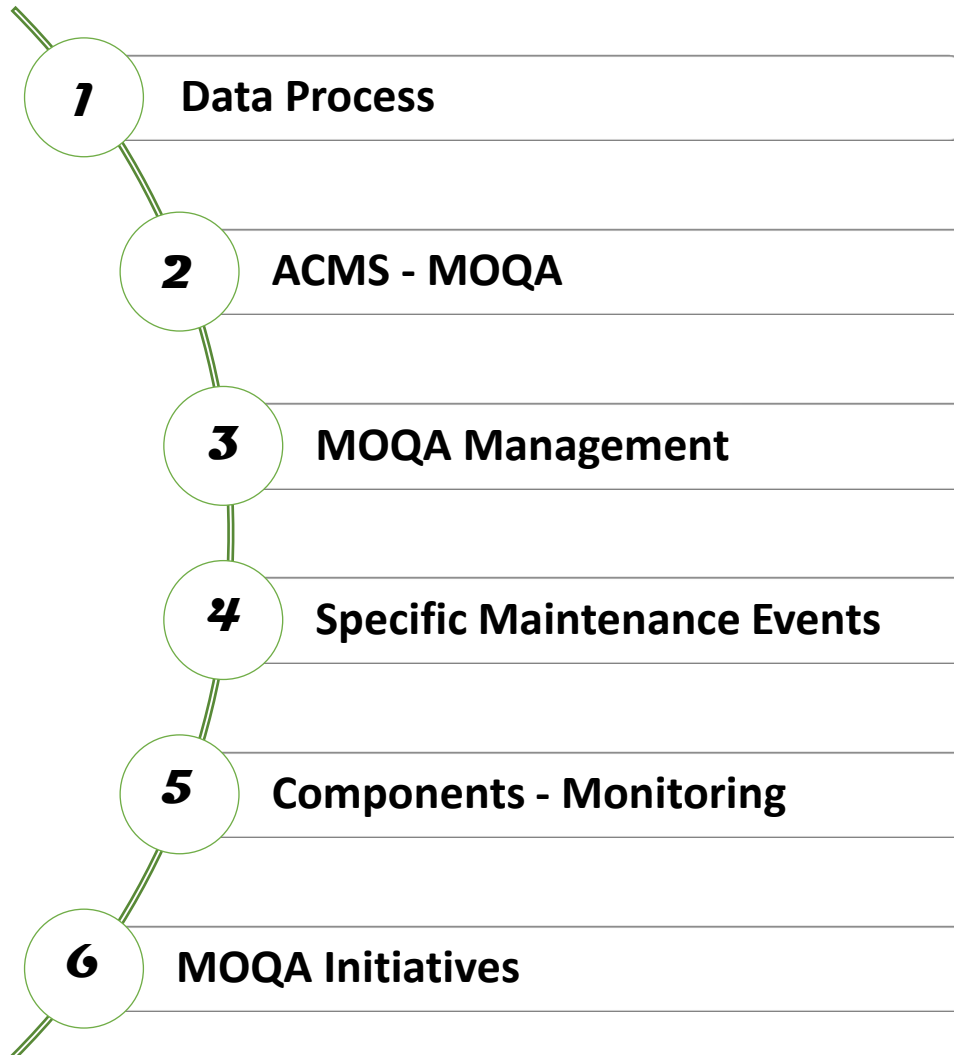
RASG-PA Flight Data Analysis Programme seminar (FDAP) | Miami Oct_16

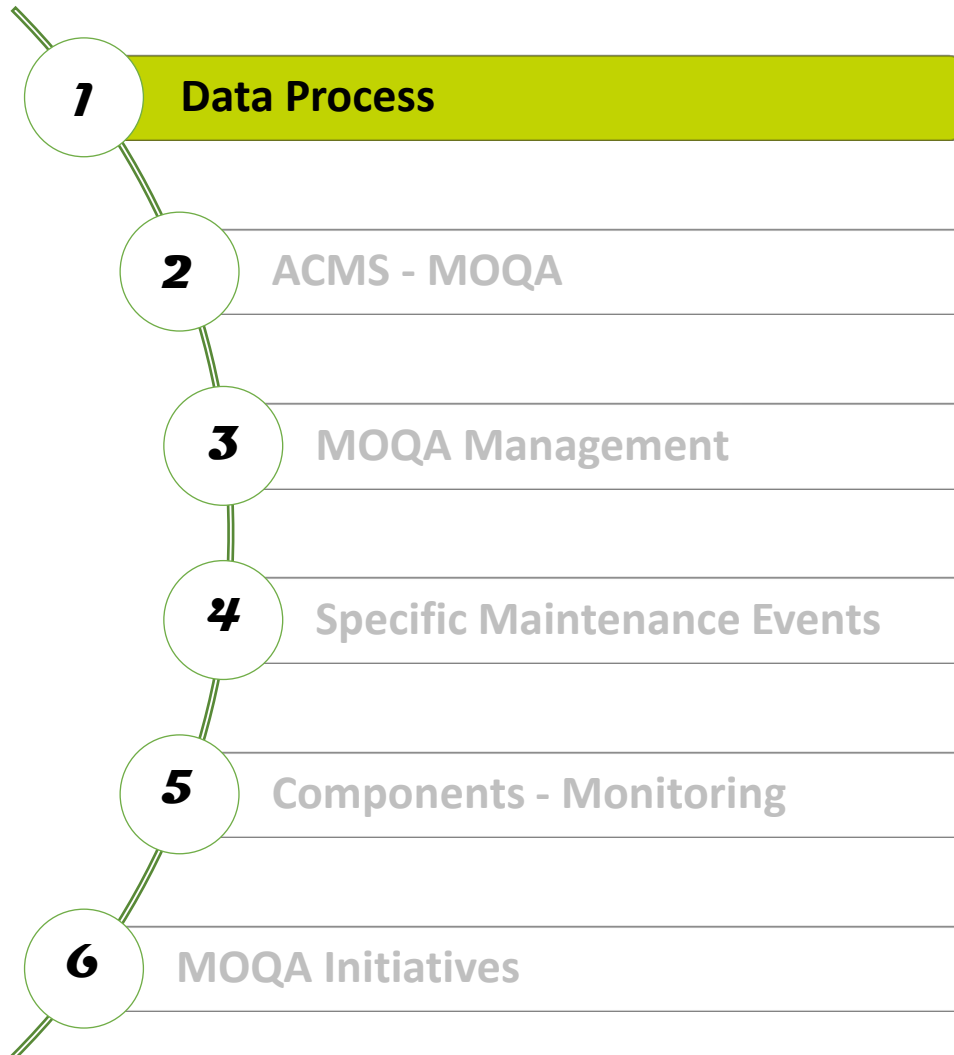


A new experience...



Claudio Tobar J.
Flight Data Monitoring Chief
claudio.tobar@skyairline.com







Data Process

Flight Data Monitoring



Flight Data Interface
Management Unit
(FDIMU)

Computador de
Adquisición de datos.



Wireless GroundLink®
(WGL) System

Computador grabador y
Transmisor de datos



Local Cell Tower



Internet



Server Data
Analysis



AirFASE® -
Aircraft Flight
Analysis &
Safety Explorer



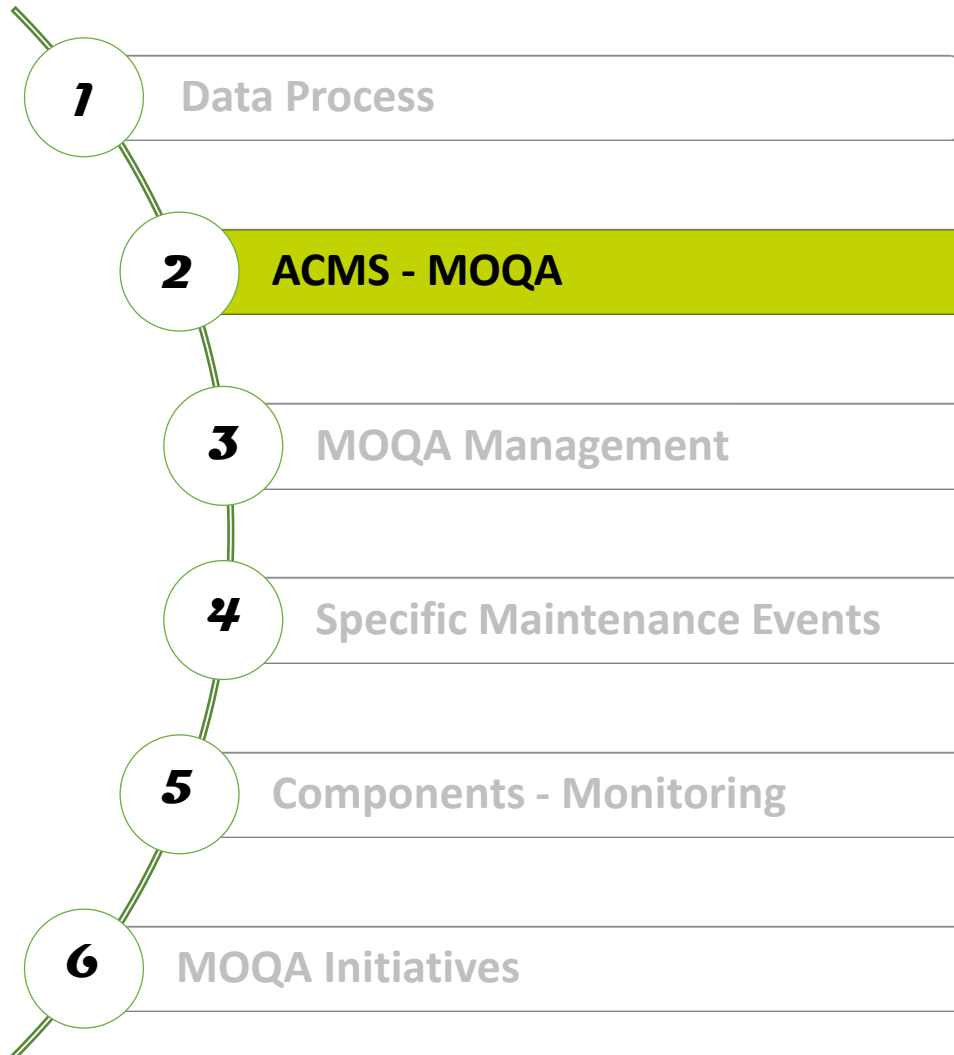
Data Analysis



Operations



Maintenance &
Engineering

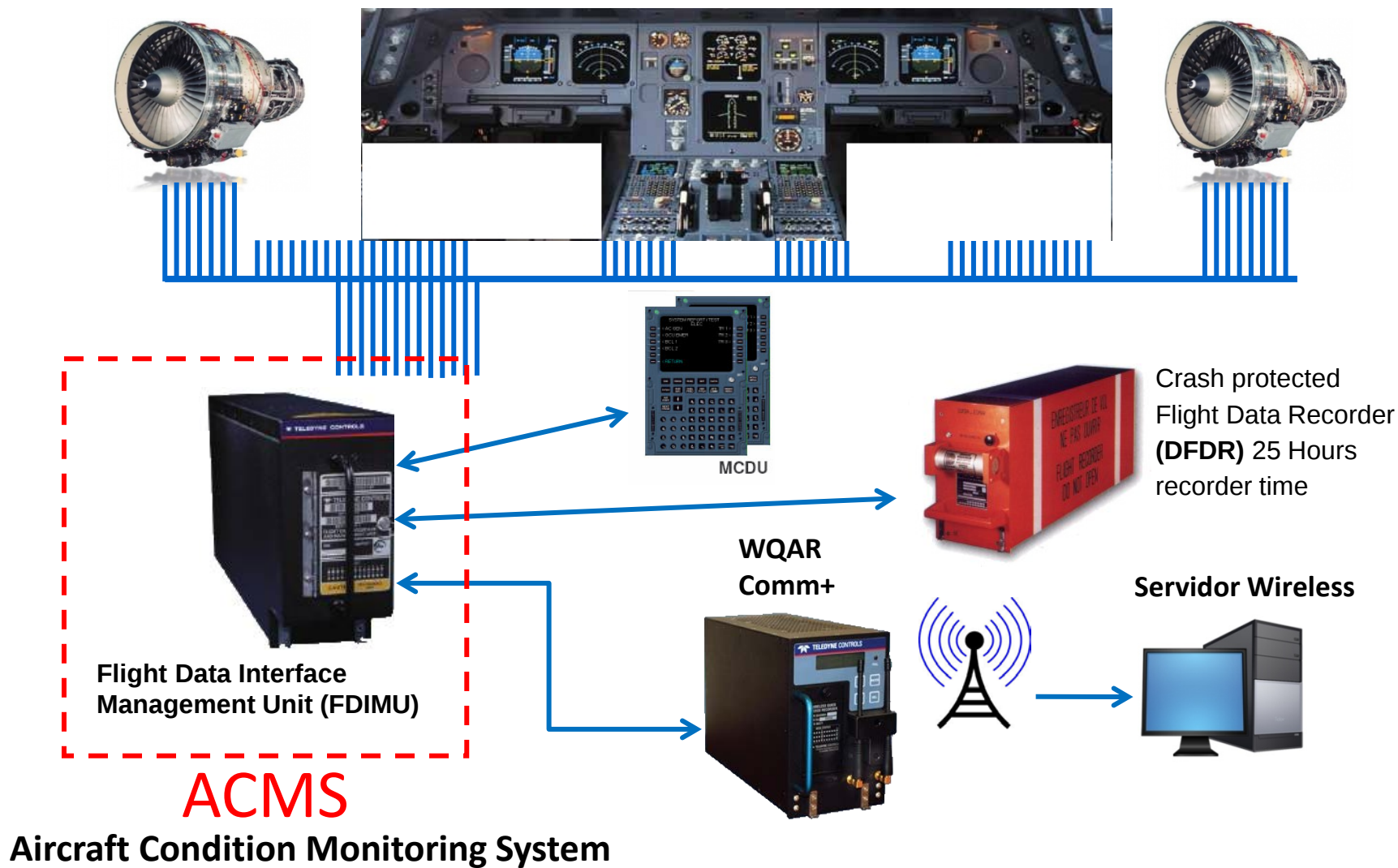




MOQA

(Maintenance Operation Quality Assurance)

Principio de adquisición de datos para MOQA



ACMS: Función de procesamiento dentro de sistemas de Adquisición, FDIMU/DMU.

Aplicaciones

Generar grabaciones de datos de vuelo no Mandatorios con Parámetros específicos a monitorear.

Crear Reportes con información específica de componentes y sistemas del avión.

Creación de nuevas MCDU Display (información entrada/salida) para las tripulaciones de vuelo.



**Flight Data Interface
Management Unit (FDIMU)**

Las principales funciones del ACMS son:

Adquisición de Parámetros

Lógica de Eventos / Trigger

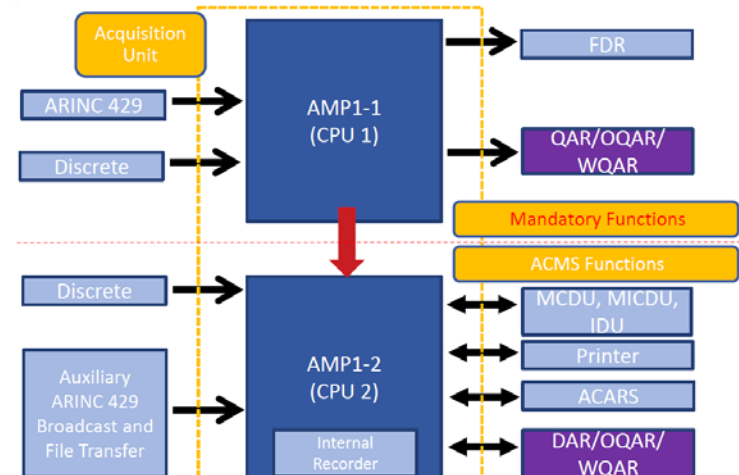
Generación de Reportes

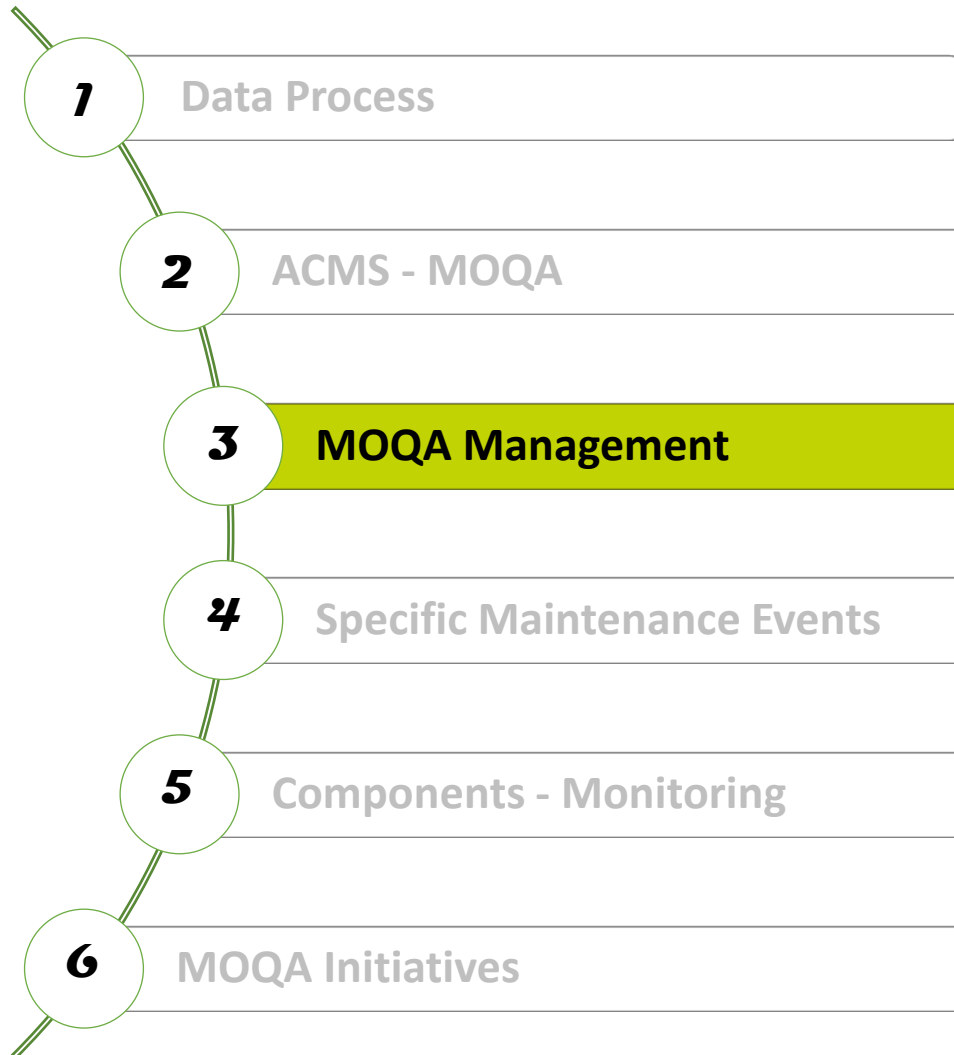
MCDU Displays

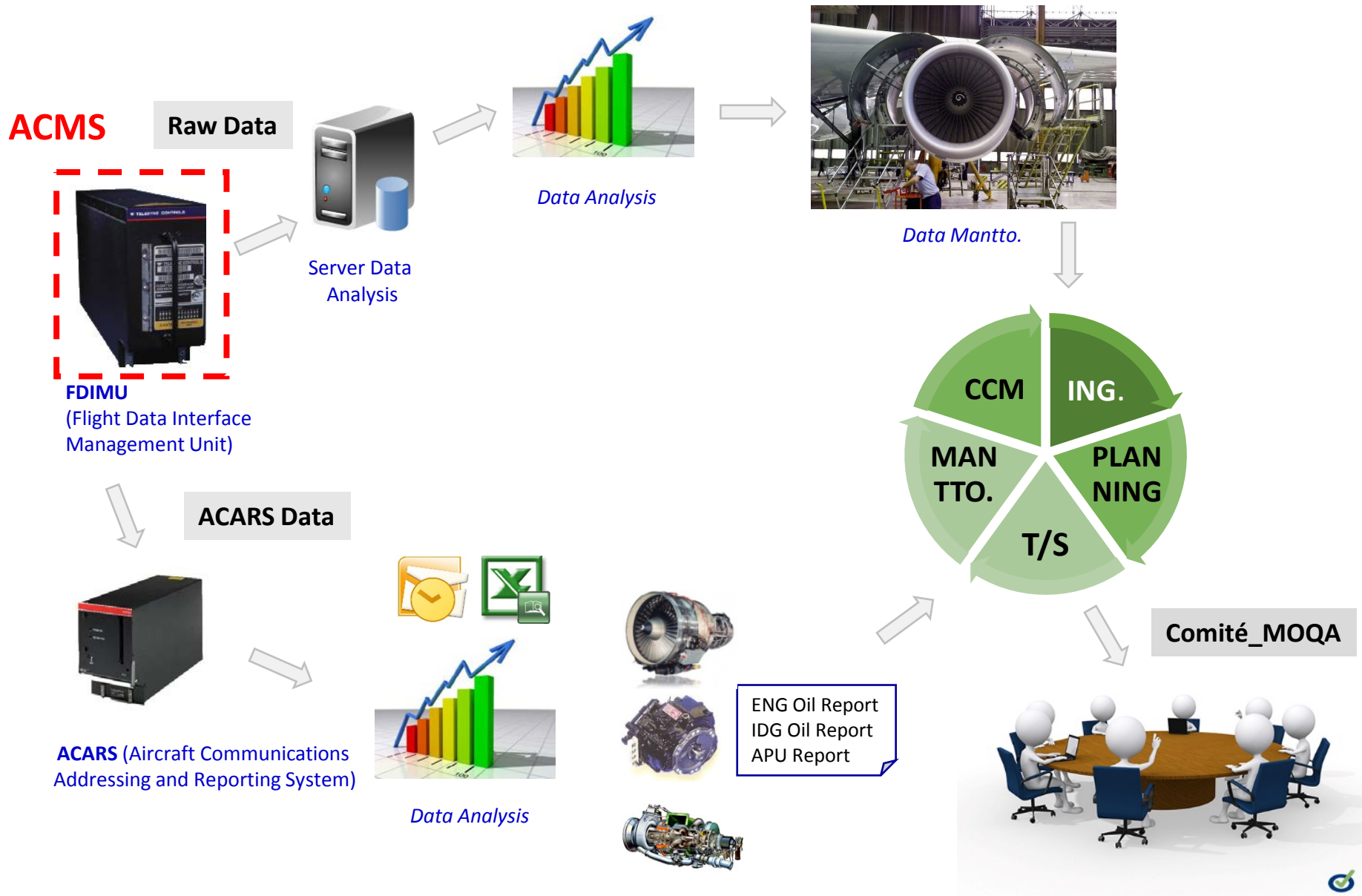
Grabación de Raw Data y Mensajes

Interfaz con:

- ACARS Management Unit
- Flight Deck Printer
- QAR (Quick Acces Recorder)
- DAR (Direct Access Recorder)







MOQA: Maintenance Operation Quality Assurance

Aumenta la disponibilidad de datos de mantenimiento.

Mejora en la disponibilidad de la aeronave, permitiendo el mantenimiento preventivo.

Mejora la detección de problemas en el avión antes de que se conviertan en riesgos para la seguridad.

Mantenimiento Preventivo



Datos Mantenimiento



Disponibilidad despacho



Fuel Saver



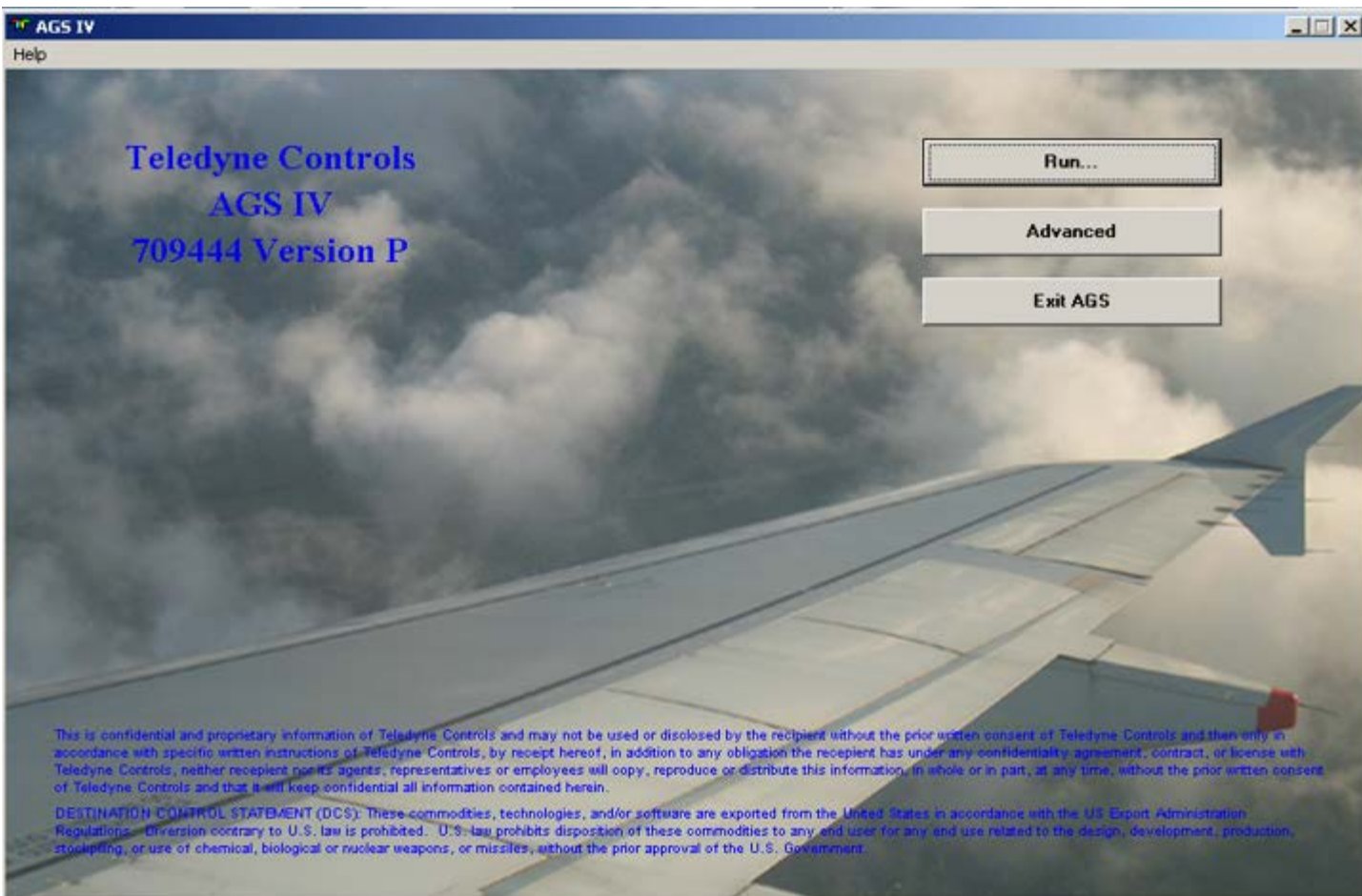
APM

Aircraft Perf. Monitoring



Software ACMS

Software data Frame A319 Fleet...

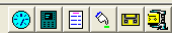




Data Frame A319

C:\Documents and Settings\Administrador\Escritorio\19-ENERO-2015\SKUsacfa.mdb

File Edit Configure Define Build Tools Disk Utilities Window Help



Recording Map Selection

Names	Subframe Size	Seconds of History	Compressed
512V1	512	8	NO

1024 wps

New Open Copy Delete

Parameter Selection

Names	Protection
APUHH23	
APUHH24	
APUHHLF	
APUHHLS	
APUHHTF	
APUHHTS	
APUHRST	
APULAT	
APULON	
APUMAX	
APUMINCT	
APUMM1	
APUMM11	
APUMM12	

New Open Copy Delete Find... Protection

Report Selection

ID	Names	Protection
354	DDORCLSD	
355	EXPWAVL	
356	APUCOM	
357	APUSTA	
358	APUSTO	
359	APUST	
360	E1STP	
361	E2STP	
362	CRANK1	
363	CRANK2	
364	E1STR	
365	E2STR	
366	GPUST	
510	LOADRPT	Read Only

New Open Copy Delete Find... Protection

512V1 Recording Map

Map View Table View General Trigger

Subframe, Word

260	WFQKG3	WFQKG3	WFQKG3	WFQKG3
261	WFQKG4	WFQKG4	WFQKG4	WFQKG4
262	WFQKG5	WFQKG5	WFQKG5	WFQKG5
263	WFQOTKG	WFQOTKG	WFQOTKG	WFQOTKG
264	OIQ1	OIQ1	OIQ1	OIQ1
265	OIQ2	OIQ2	OIQ2	OIQ2
266	OIP1	OIP1	OIP1	OIP1
267	OIP2	OIP2	OIP2	OIP2
268	OIT1	OIT1	OIT1	OIT1
269	OIT2	OIT2	OIT2	OIT2
270	BT1	BT1	BT1	BT1
271	BT2	BT2	BT2	BT2
272	BT3	BT3	BT3	BT3
273	BT4	BT4	BT4	BT4
274	LDGW8121 ..	LDGW8121 ..	LDGW8121 ..	LDGW8121 ..
275	APUMINCT	APUMINCT	APUMINCT	APUMINCT

Parameter Match

Names	Protection
MNAV2	No Delete
MNAV1	No Delete
MNAV2	No Delete
NA	No Delete
NAAV1	No Delete
NAAV21	No Delete
NAAV2P1	No Delete
NAAV31	No Delete
NAAV3P1	No Delete
NAAVP1	No Delete
MAGCTD	No Delete

Open Copy Delete Properties

APU ON OFF, Ext: P0

A/C ID DATE UTC FROM TO

APU ON TIME APU OFF TIME

NA Parameter (No Delete)

General Conversion Acquisition Derivation Comments

31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9

BUS Name Label SDI LSB 20

Primary APU 1 176 01 Length 9

Backup Acq Rate 4

Filter Constant Signed

APUST Report

Retention Downlinks Components Transcription

General Routing Formatting Collection

Hardcopy Name	Extension	Width
APU ON OFF	P0	40

New Open Copy Delete Properties

APU MES/IDLE REPORT (13) PRINT, Ext: P0 (Read Only)

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APU MES/IDLE REPORT <13>

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APU START REPORT (351), Ext: P0

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⬆️8

APU START REPORT 351

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FWD DOOR LH OPEN 353, Ext: P0

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⬆️6

FWD DOOR LH OPEN 353

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EXT PWR ON (355), Ext: P0

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⬆️8

EXT PWR AVAIL 355

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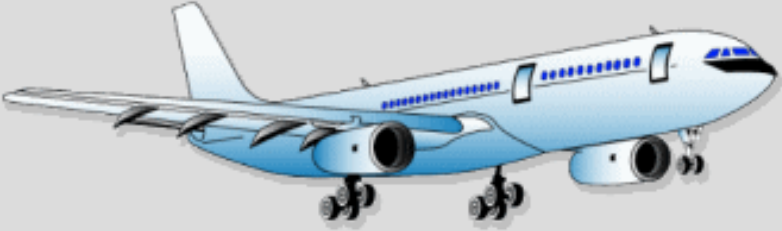
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EXT PWR AVAIL

zz:zz:zz

Ground Support Equipement



Login Name	STATION	OK	
Password		Cancel	

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Data Frame A320

Flight Data Monitoring

Ground Support Equipment - GROUND TEAM (P)

File Fleet Programming SAR Data ACMS Report Administration Window Help

Parameter List - Version 6410

Search Criteria

Parameter Name Equipment Label SDI Allowed Categories

Description Type Update Between And Aircraft

Display Parameter

Parameter Name Description

EECDSW4_1 EEC Discrete status word #4 engine #1

Format arinc 429 Type PACKED BITS Update Date 20/09/1993 Protected

Source Identification

Equip EEC-1 EeqNo 7C Sys 1 Label 273 SDI 01 Update Rate 1 Hz

Input Raw Data

SSM Rule MSB Data Bits

Display Option

Raw value Corresponding text

Display Format

Mode HEXA Units

Field Length 4

Range

Word Range Operational Range

Max 65535 65535

Min 0 0

Allowed Categories

A B C D E F G H I J K L M N O P

512 wps

Parameter Name	Equipment	Label	SDI	Update Date	Protected
1791	EECDSW3_1				
2259	EECDSW3_2				
395	EECDSW4_1				
396	EECDSW4_2				
397	EECDSW5_1				
398	EECDSW5_2				
400	EECDSW6_1				
401	EECDSW6_2				
402	EECDSW7_1				
403	EECDSW7_2				
404	EECDSW8_1				
405	EECDSW8_2				
406	EECDSW9_1				
407	EECDSW9_2				
408	EECMW1_1				
409	EECMW1_2				
410	EECMW2_1				
411	EECMW2_2				
412	EECMW3_1				
413	EECMW3_2				
414	EECMW4_1				
415	EECMW4_2				
416	EECMW5_1				
417	EECMW5_2				
418	EECMW6_1				
419	EECMW6_2				
420	EECMW7_1				
421	EECMW7_2				
422	EECMW8_1				
423	EECMW8_2				
424	EECMW9_1				
425	EECMW9_2				

Parameter Name	Equipment	Label	SDI	Update Date	Protected
EECDSW4_1	EEC-1	7C	1	273	01
EECDSW4_2	EEC-2	7C	1	273	01
EECDSW5_1	EEC-1	7C	1	273	01
EECDSW5_2	EEC-2	7C	1	273	01
EECDSW6_1	EEC-1	7C	1	273	01
EECDSW6_2	EEC-2	7C	1	273	01
EECDSW7_1	EEC-1	7C	1	273	01
EECDSW7_2	EEC-2	7C	1	273	01
EECDSW8_1	EEC-1	7C	1	273	01
EECDSW8_2	EEC-2	7C	1	273	01
EECDSW9_1	EEC-1	7C	1	273	01
EECDSW9_2	EEC-2	7C	1	273	01
EECMW1_1	EEC-1	7C	1	273	01
EECMW1_2	EEC-2	7C	1	273	01
EECMW2_1	EEC-1	7C	1	273	01
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EECMW8_1	EEC-1	7C	1	273	01
EECMW8_2	EEC-2	7C	1	273	01
EECMW9_1	EEC-1	7C	1	273	01
EECMW9_2	EEC-2	7C	1	273	01

Parameter Name	Equipment	Label	SDI	Update Date	Protected
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EECDSW4_2	EEC-2	7C	1	273	01
EECDSW5_1	EEC-1	7C	1	273	01
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EECDSW6_2	EEC-2	7C	1	273	01
EECDSW7_1	EEC-1	7C	1	273	01
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EECMW9_1	EEC-1	7C	1	273	01
EECMW9_2	EEC-2	7C	1	273	01

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EECDSW4_2	EEC-2	7C	1	273	01
EECDSW5_1	EEC-1	7C	1	273	01
EECDSW5_2	EEC-2	7C	1	273	01
EECDSW6_1	EEC-1	7C	1	273	01
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EECDSW7_1	EEC-1	7C	1	273	01
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EECMW8_2	EEC-2	7C	1	273	01
EECMW9_1	EEC-1	7C	1	273	01
EECMW9_2	EEC-2	7C	1	273	01

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EECDSW4_2	EEC-2	7C	1	273	01
EECDSW5_1	EEC-1	7C	1	273	01
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EECDSW6_1	EEC-1	7C	1	273	01
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EECMW2_2	EEC-2	7C	1	273	01
EECMW3_1	EEC-1	7C	1	273	01
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EECMW8_1	EEC-1	7C	1	273	01
EECMW8_2	EEC-2	7C	1	273	01
EECMW9_1	EEC-1	7C	1	273	01
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EECDSW4_2	EEC-2	7C	1	273	01
EECDSW5_1	EEC-1	7C	1	273	01
EECDSW5_2	EEC-2	7C	1	273	01
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EECMW2_2	EEC-2	7C	1	273	01
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EECMW3_2	EEC-2	7C	1	273	01
EECMW4_1	EEC-1	7C	1	273	01
EECMW4_2	EEC-2	7C	1	273	01
EECMW5_1	EEC-1	7C	1	273	01
EECMW5_2	EEC-2	7C	1	273	01
EECMW6_1	EEC-1	7C	1	273	01
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EECMW8_2	EEC-2	7C	1	273	01
EECMW9_1	EEC-1	7C	1	273	01
EECMW9_2	EEC-2	7C	1	273	01

Parameter Name	Equipment	Label	SDI	Update Date	Protected
EECDSW4_1	EEC-1	7C	1	273	01
EECDSW4_2	EEC-2	7C	1	273	01
EECDSW5_1	EEC-1	7C	1	273	01
EECDSW5_2	EEC-2	7C	1	273	01
EECDSW6_1	EEC-1	7C	1	273	01
EECDSW6_2	EEC-2	7C	1	273	01
EECDSW7_1	EEC-1	7C	1	273	01
EECDSW7_2	EEC-2	7C	1	273	01
EECDSW8_1	EEC-1	7C	1	273	01
EECDSW8_2	EEC-2	7C	1	273	01
EECDSW9_1	EEC-1	7C	1	273	01
EECDSW9_2	EEC-2	7C	1	273	01
EECMW1_1	EEC-1	7C	1	273	01
EECMW1_2	EEC-2	7C	1	273	01
EECMW2_1	EEC-1	7C	1	273	01
EECMW2_2	EEC-2	7C	1	273	01
EECMW3_1	EEC-1	7C			



Data Frame A320 | Reportes

Modify Format - Report 35

A/CID	DATE	UTC	FROM TO	FLT
XXXXXX	XX XX	XXXXXX	XX XX	XX XX

APU TIME USED REPORT

APU START STOP UTC TIME
APU ON APU OFF
XXXXXX XXXXXX

APU START STOP HOURS
APU H ON APU H OFF
XXXXXX XXXXXX

Data set

↑ ↓ 🔍

Cancel New Modify Delete Copy Report

Display Procedure for Start/Stop Logic

No	Description	Ex. Rate
1500	APU CONTROL (if flight mode >= 1	2 Hz

IF {APU_RPM>=15 AND APU_RPM(-1)<=15} THEN

START

ENDIF

IF({(APU_STOP=1 AND APU_STOP(-1)=0) OR (APU_RPM<=90 AND APU_RPM(-1)>=90)}) THEN

STOP

ENDIF

Error messages

Refresh

(None)

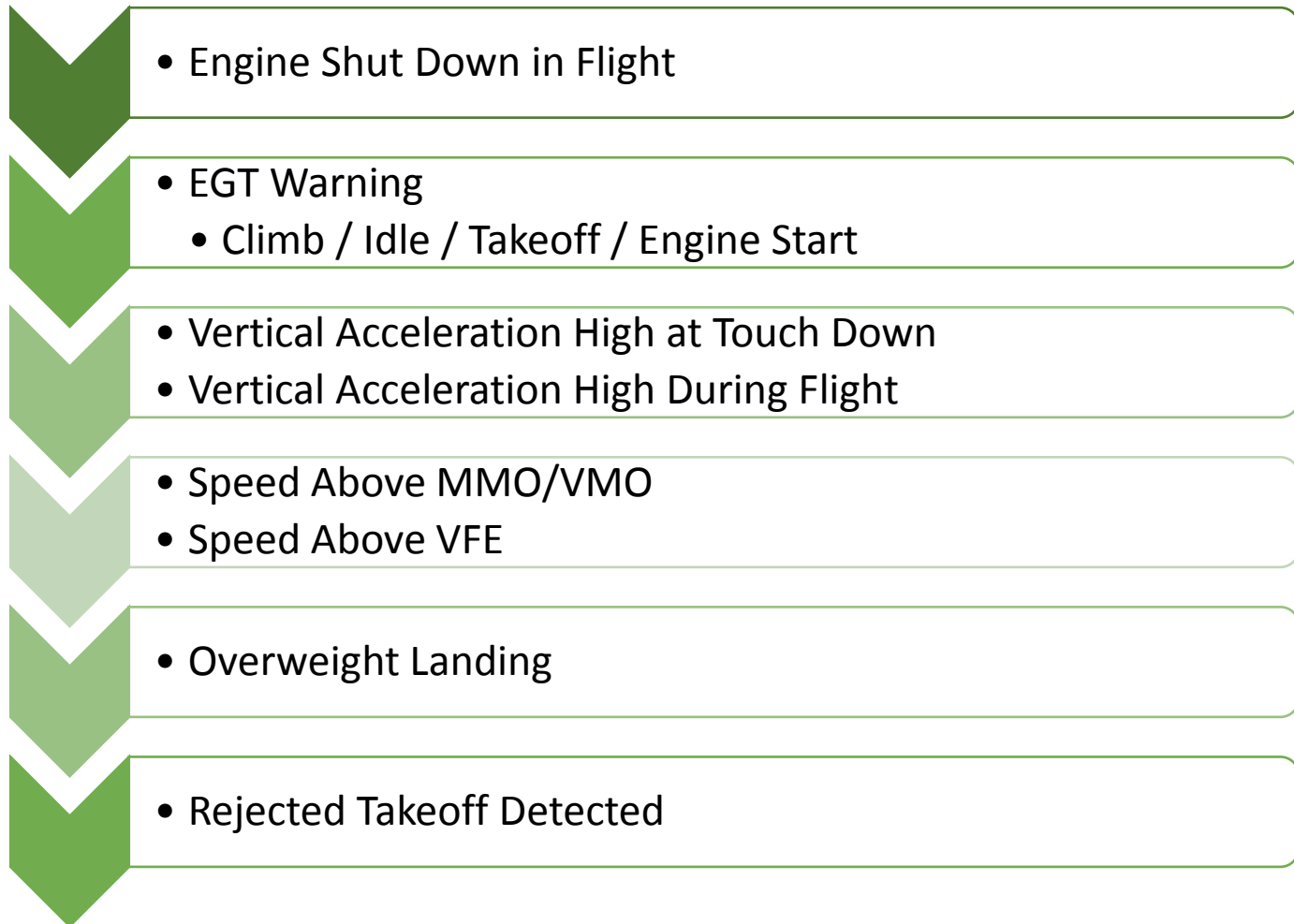
L01:C01

More >>

Flight Data Monitoring



Eventos / Parámetros MOQA



Events & Parameters

Hard Landing / Overweight Landing

VMO/MMO Exceedance / Turbulence

Engine Vibration Exceedance

Engine Parameters

Fuel Consumption

Events & Parameters

Flight Controls

Ldg Gear Operation & Position

Presurization System

Door Indicating System

NLG Steering Sys. Operation/Indication

Events & Parameters

Hydraulic System

APU Monitoring

Fuel System

Auto Pilot Operation

Slats / Flaps System

Events & Parameters

Electrical Power

Windshield Heater System

Bleed System

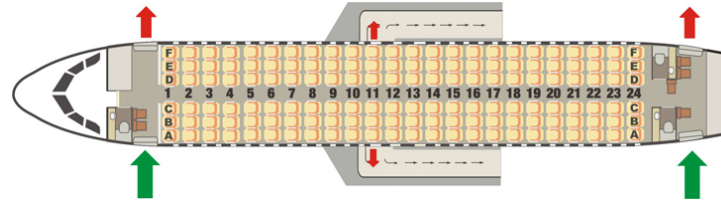
Packs System

Auto Brake / Antiskid System

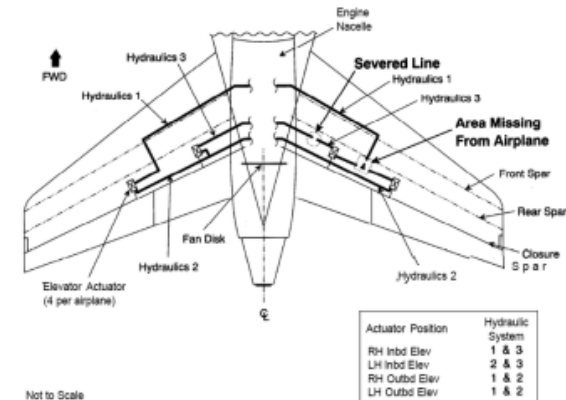
ENGINE



CABIN



HYD SYSTEM



IDG (Integrated Drive Generator)

APU (Auxiliary Power Unit)



Nuevos Parámetros en Data Frame



ENGINE

ENG 1 BLEED PB
 ENG 2 BLEED PB
 ENG2 AICE PB
 ENG1 AICE PB
 ENGINE 1 PRV POSITION
 ENGINE 2 PRV POSITION
ENG FUEL USED
 ENG FUEL USED
 ENG2 HPV POSITION
 ENG1 HPV POSITION
 ENG1 PRECOOLER INLET P
 ENG2 PRECOOLER INLET P
 ENG 1 PRECOOLER OUTLET T°
 ENG 2 PRECOOLER OUTLET T°
 SELECTED VARIABLE STATOR
 SELECTED VARIABLE STATOR
 T2.5 (LPC EXIT TEMPERATUR
 T2.5 (LPC EXIT TEMPERATUR
 T3 (HPC EXIT TEMPERATURE)
 T3 (HPC EXIT TEMPERATURE)
 T5 TEMPERATURE AT POSITIO
 T5 TEMPERATURE AT POSITIO



IDG

IDG 1 INLET TEMP
IDG 1 OUTLET TEMP
 IDG 2 INLET TEMP
 IDG 2 OUTLET TEMP
 IDG 1 DISCRETES SDAC
 STA
 IDG 2 DISCRETES SDAC
 STAT
 IDG1 DISCONNECTED
 IDG1 DISC P/B OFF
 IDG1 OIL OVERHEAT
 IDG1 OIL LOW PRESSURE
 IDG2 DISCONNECTED
 IDG2 DISC P/B OFF
 IDG2 OIL OVHT
 IDG2 OIL LOW PRESSURE



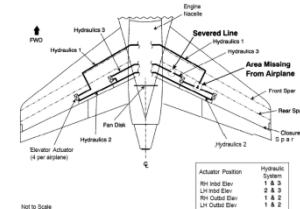
APU

APU BLEED VALVE OPEN
 APU FUEL LOW PRESSURE
APU STARTER
 APU BLEED PB
 APU FIRE SYS. 1
 APU START SWITCH
 APU STOP SWITCH
EGT (APU)
 APU OIL SUMP TEMP
 APU GEN LOAD SYS. 1
 APU GEN P/B OFF
 APU GEN FAULT
 APU GEN OVERLOAD
 APU MASTER SWITCH P/B
 OFF
 IGV ACTUATOR
 IGV LVDT
 IGV POSITION
RPM
 BLEED AIR TEMP
 BLEED AIR PRESSURE



CABIN

NO_SMOKING
FASTEN SEAT BELT
CABIN ALTITUDE
 CABIN ALTITUDE SDAC
 CABIN DIFF. PRESSURE SYS.
 CABIN PRESSURE SDAC
 EXCESSIVE CABIN ALTITUDE
 FWD CABIN COMPT TEMPERATU
 FWD CABIN COMPT TEMPERATU
 AFT CABIN COMPT TEMPERATU
 CKPT COMPT TEMPERATURE
 AFT CABIN COMPT TEMPERATU
 SELECTED CKPT COMPT TEMP
 SEL FWD CAB COMPT TEMP SY
 SEL AFT CAB COMPT TEMP SY



HYD SYSTEM

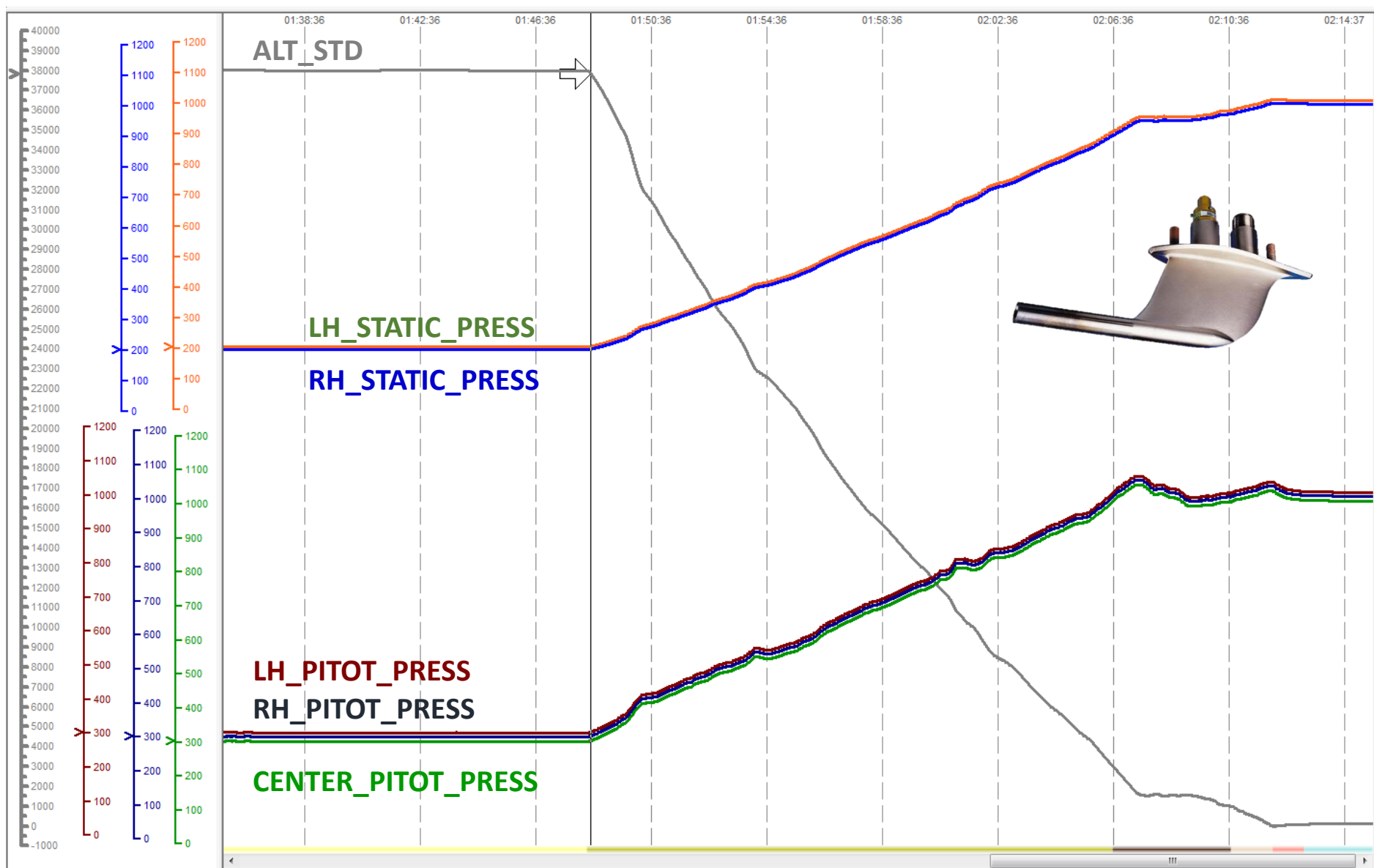
YELLOW HYD LOW PRESSURE S
 YELLOW ELECTRIC PUMP P/B
YELLOW ELECTRIC PUMP
 YELLOW ENGINE PUMP
 YELLOW SYS PRESSURE
 YELLOW RSVR QUANTITY
 YELLOW RSVR TEMPERATURE
 GREEN ENGINE PUMP
GREEN SYS PRESSURE
 GREEN RSVR QUANTITY
 GREEN RSVR TEMPERATURE
 BLUE ELECTRIC PUMP PB
 BLUE ELECTRIC PUMP
 BLUE SYS PRESSURE
 BLUE RSVR QUANTITY
 BLUE RSVR TEMPERATURE
 PTU PB
 PTU VALVE CONTROL

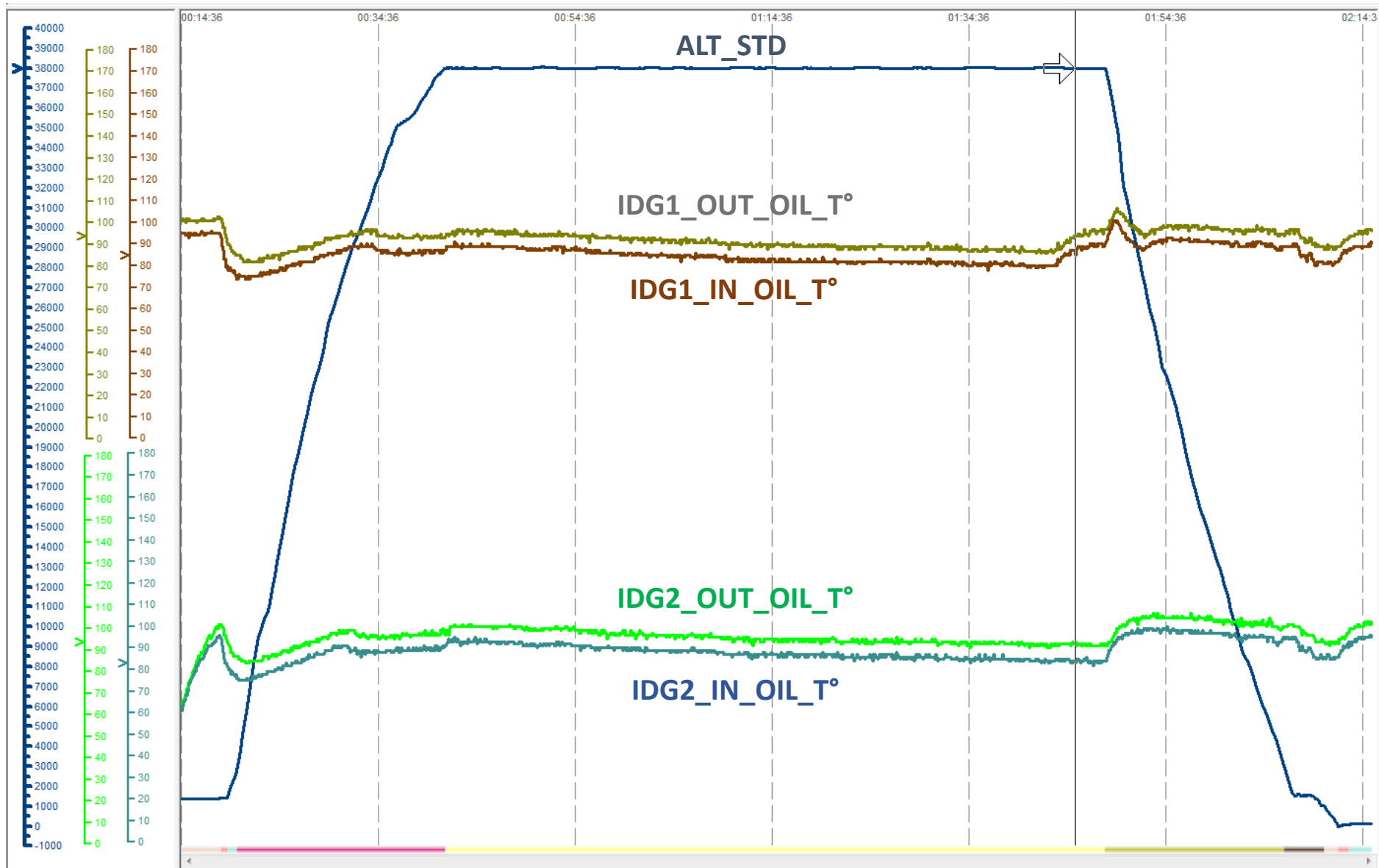


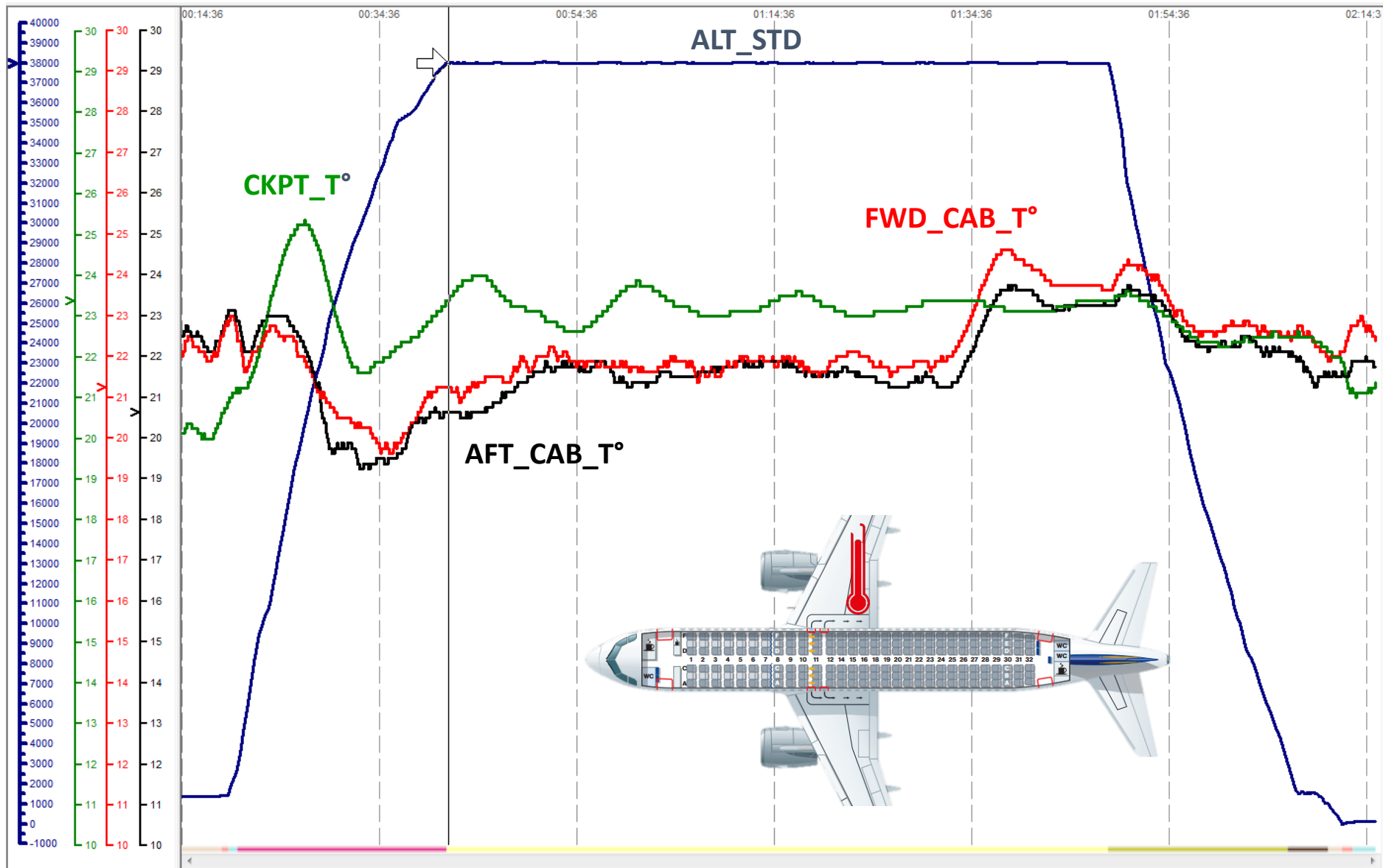
Monitoreo por ATA

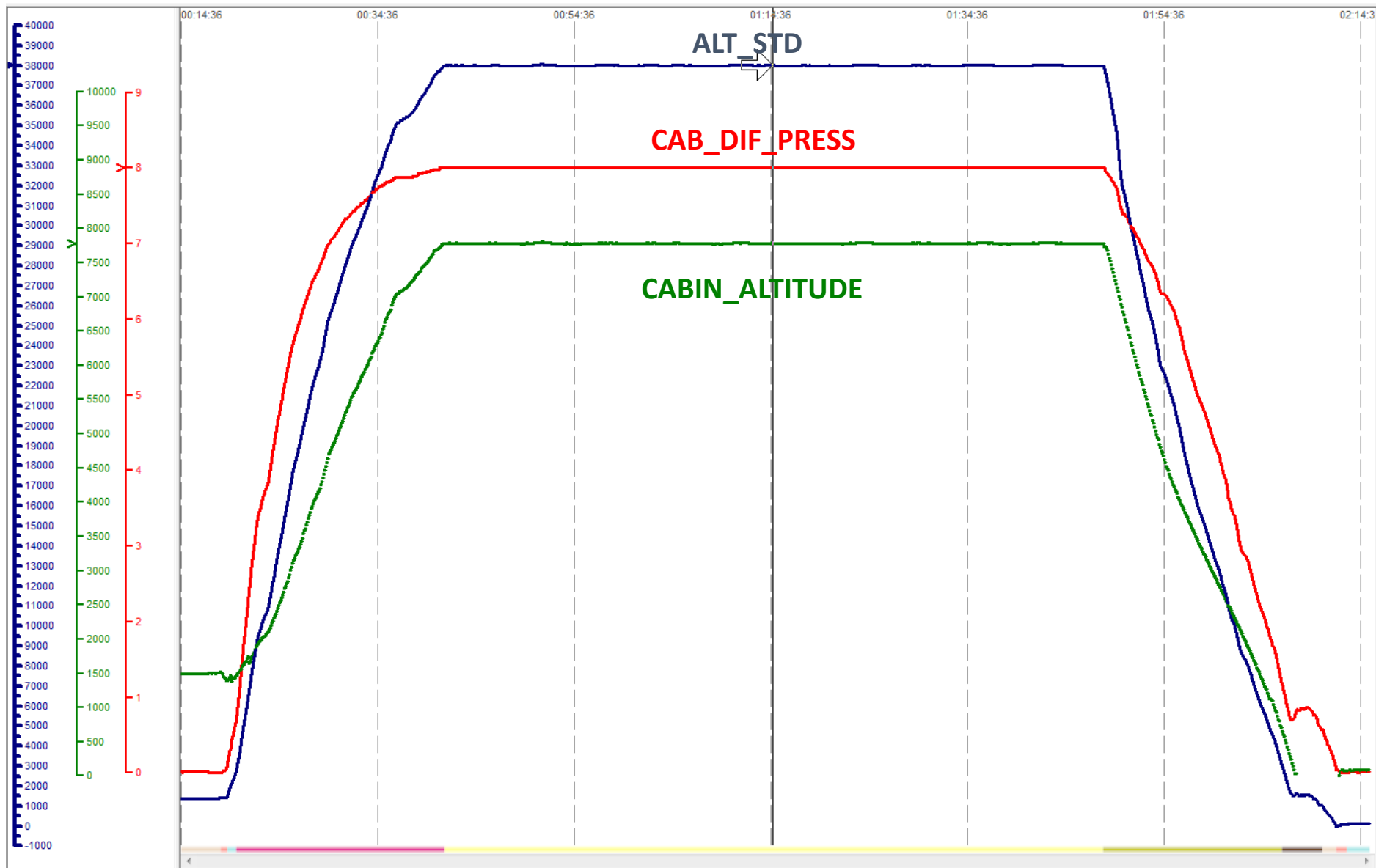
Análisis Específicos



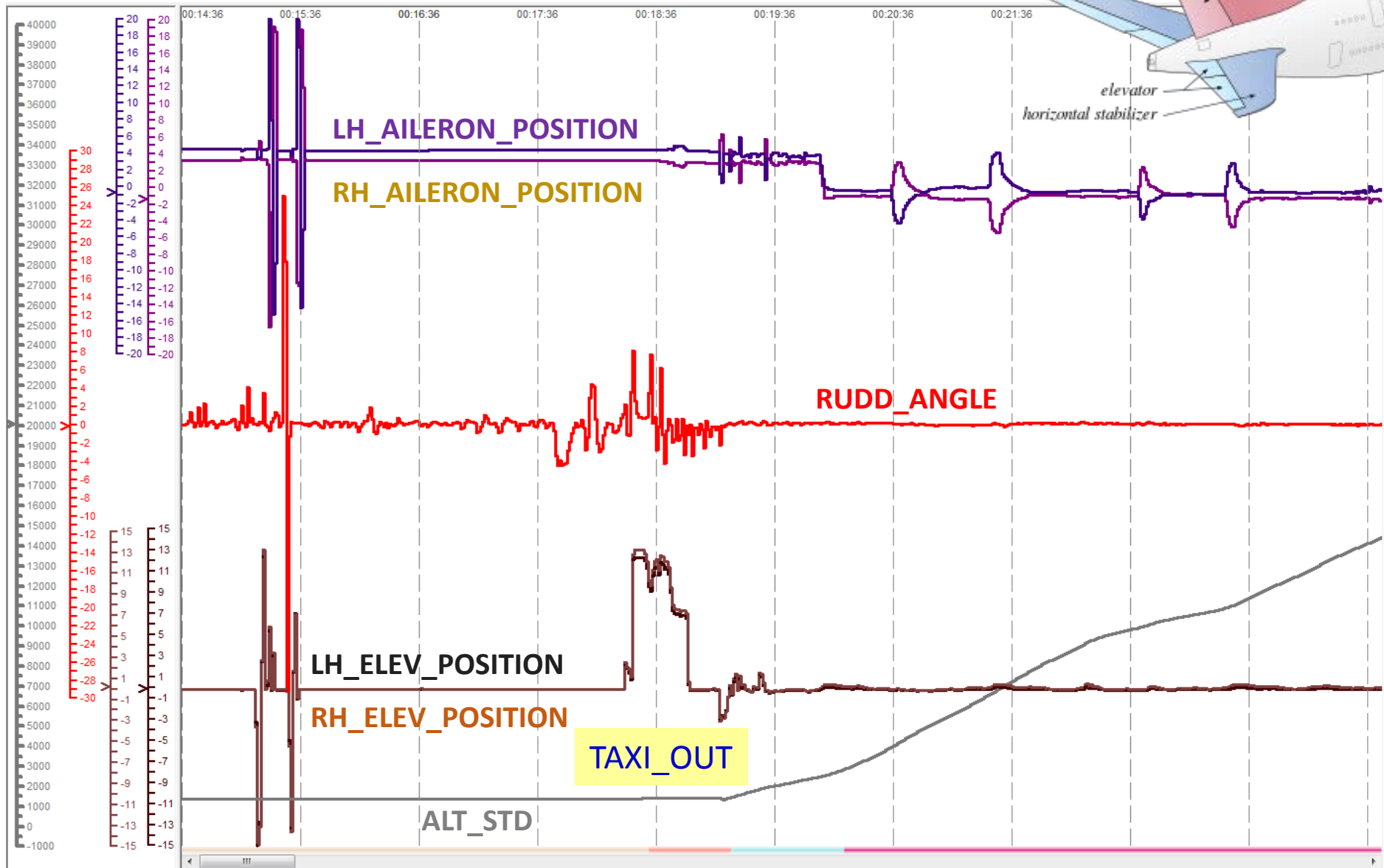
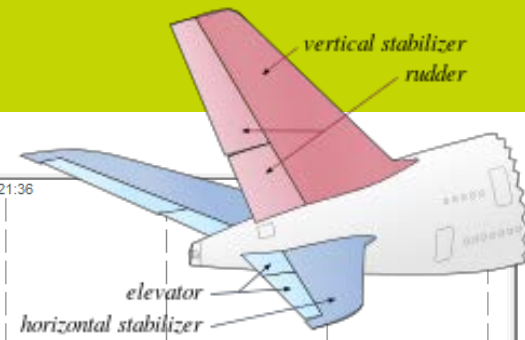




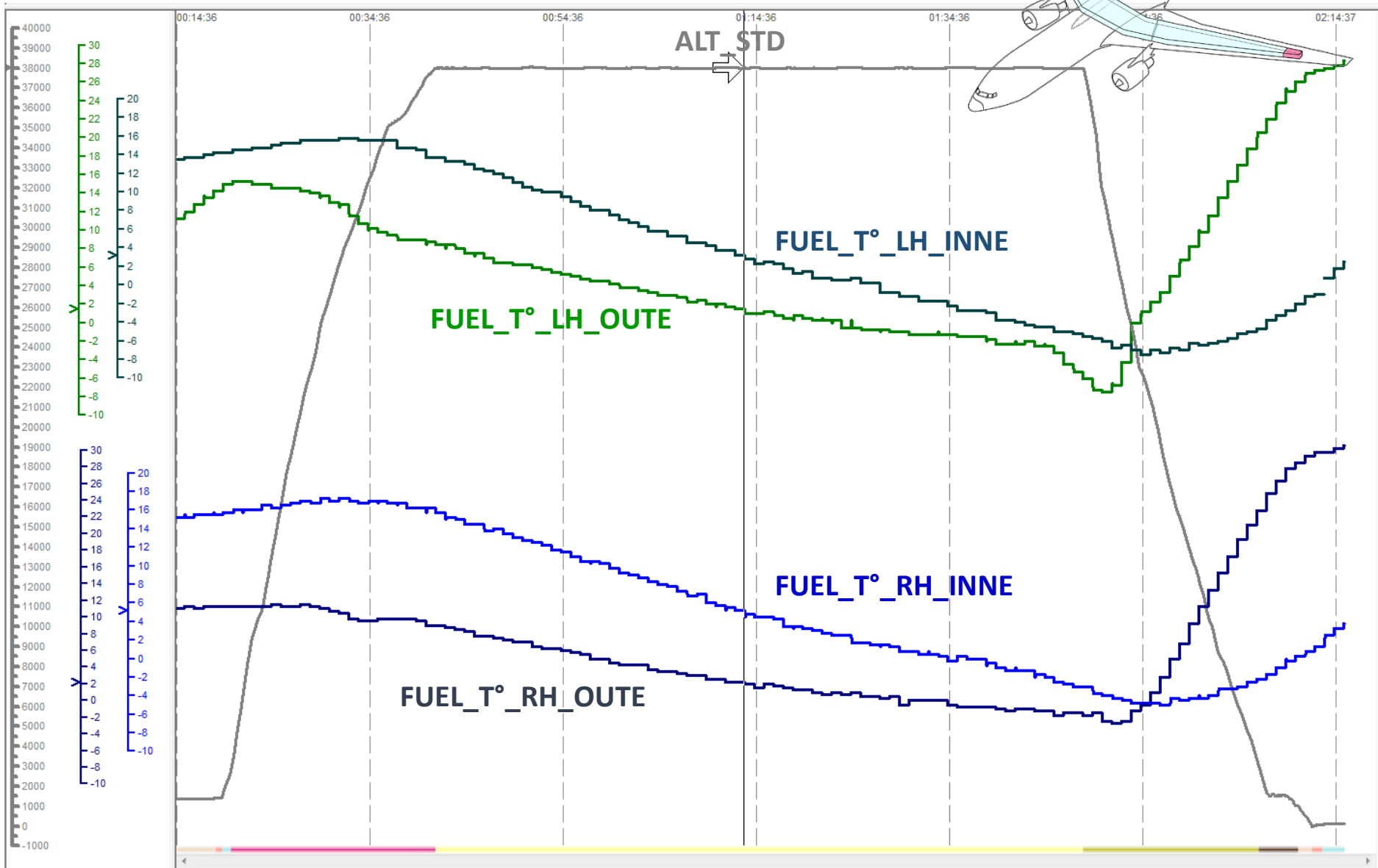
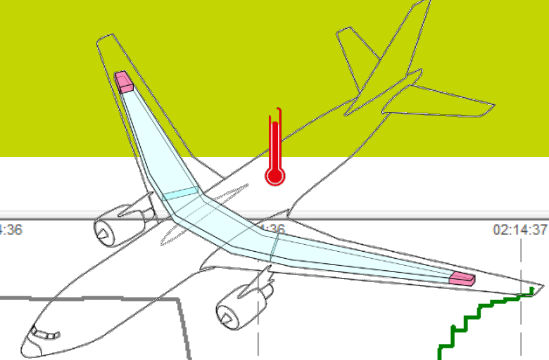




ATA 27 – Flight Controls

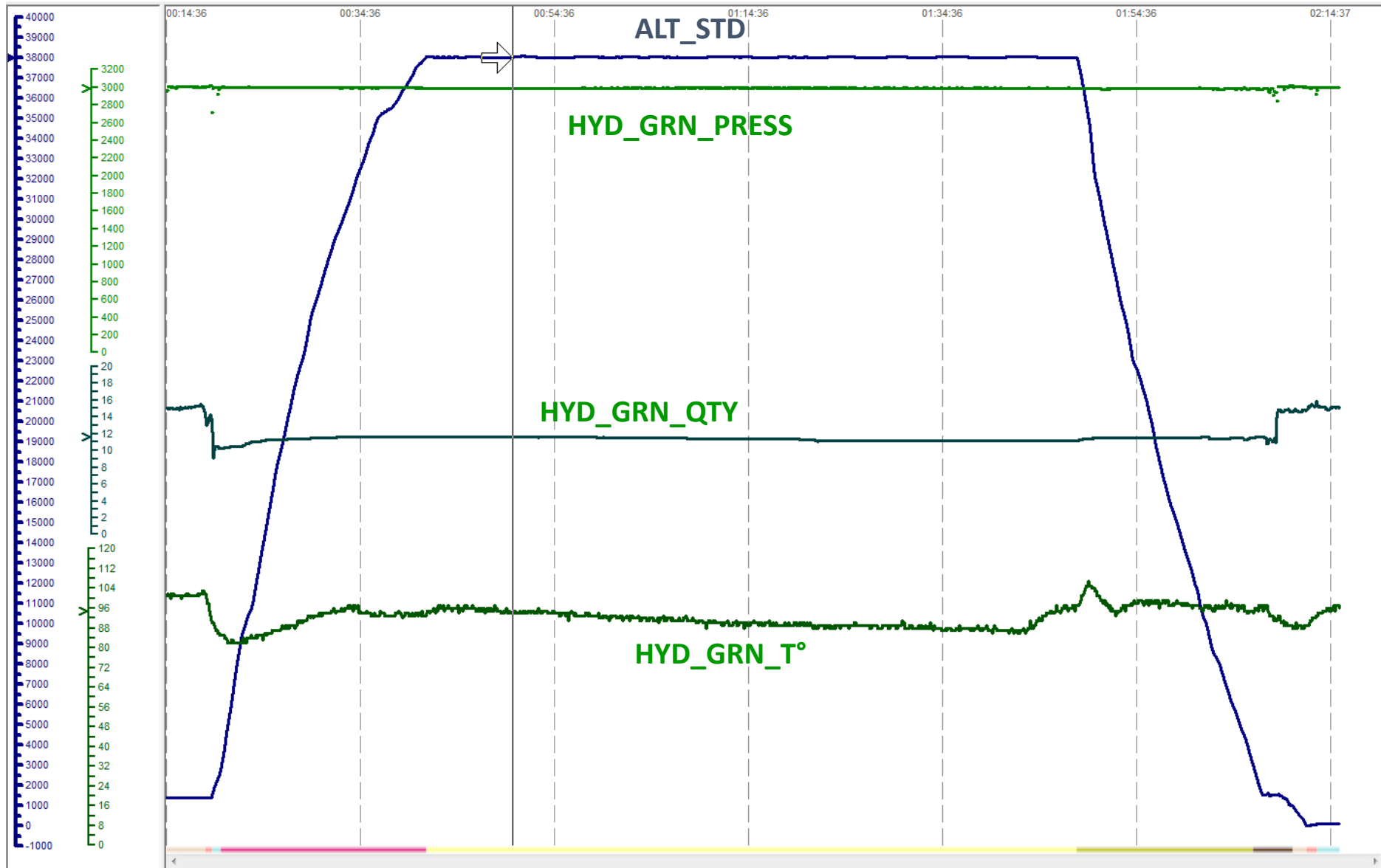


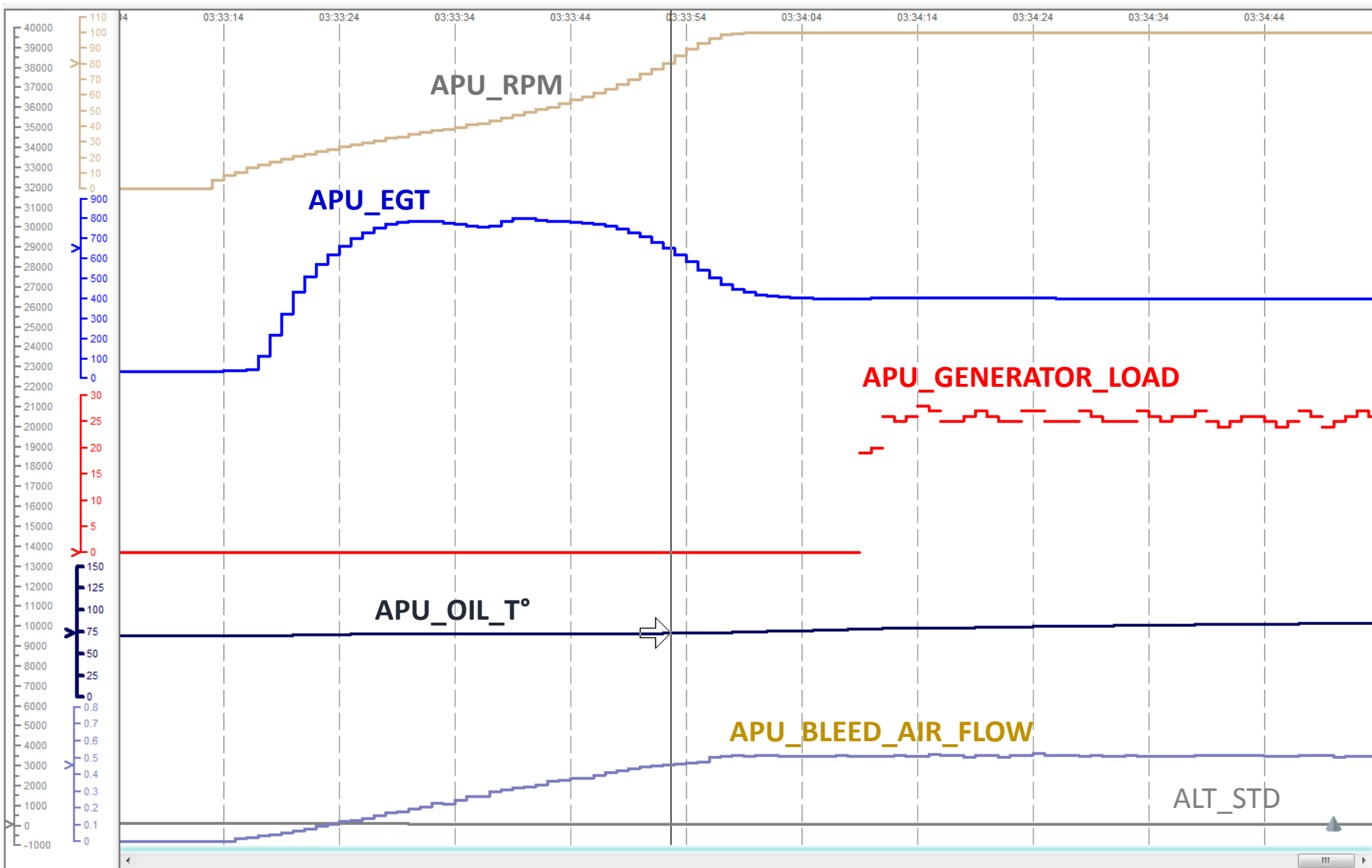
ATA 28 – Fuel Temperature

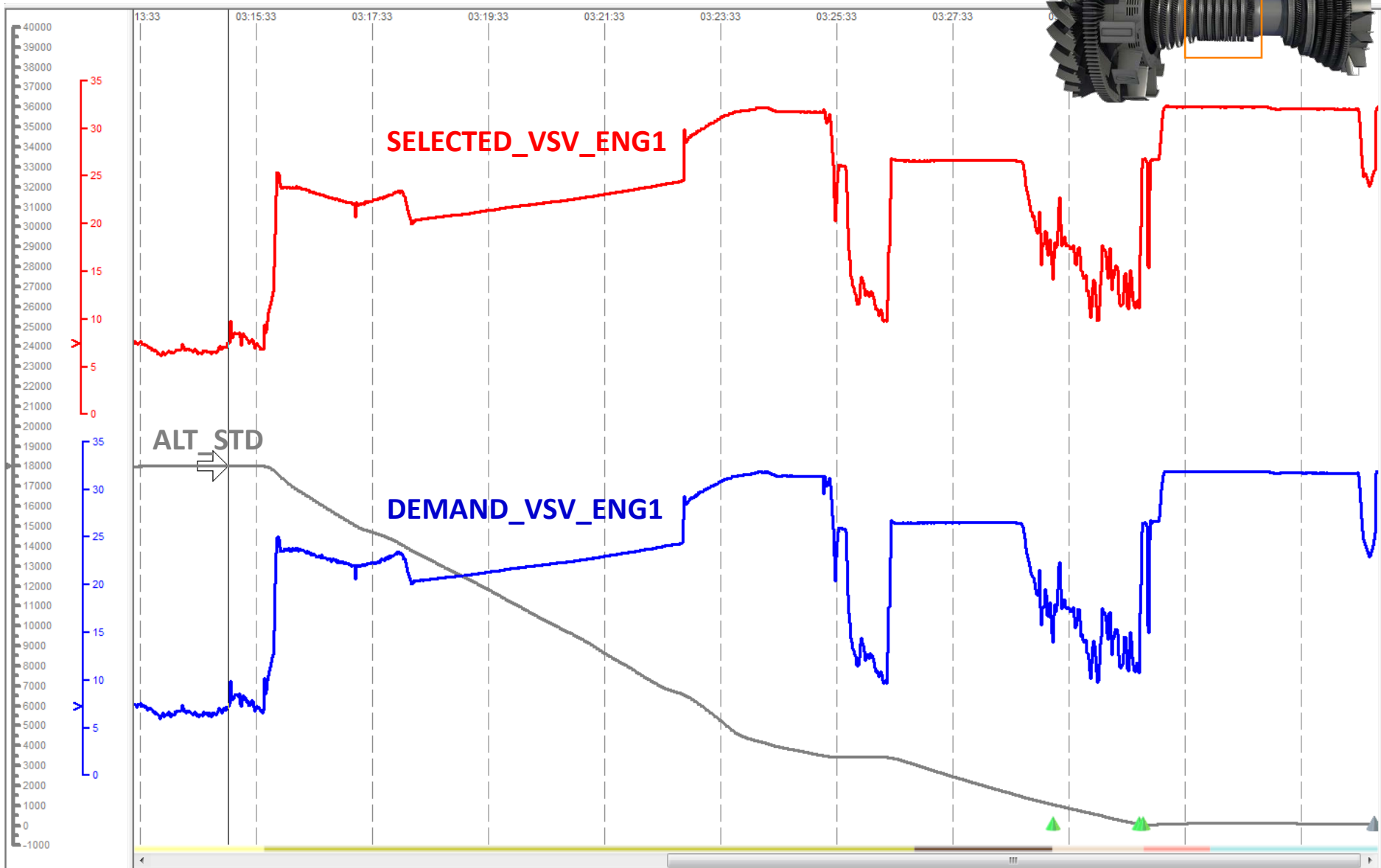


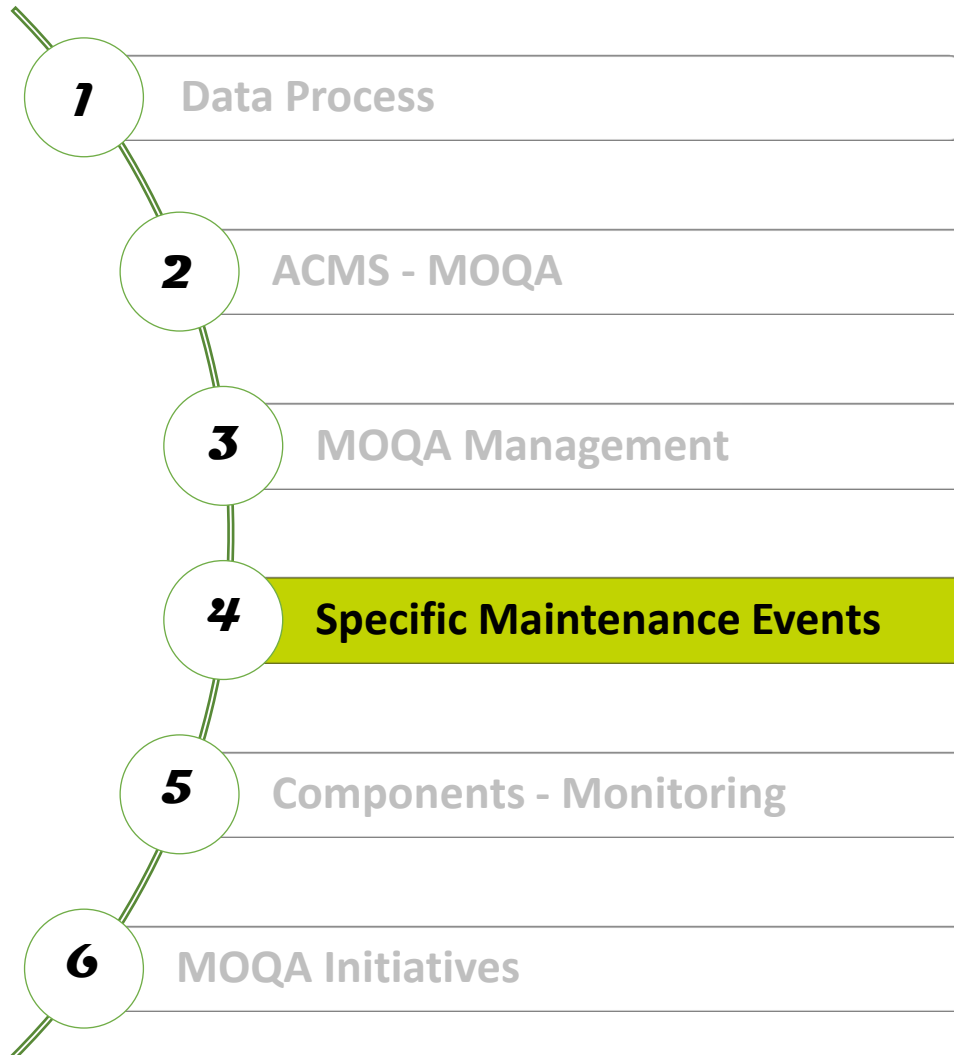


ATA 29 – HYD GRN Qty – Pressure – Temperature





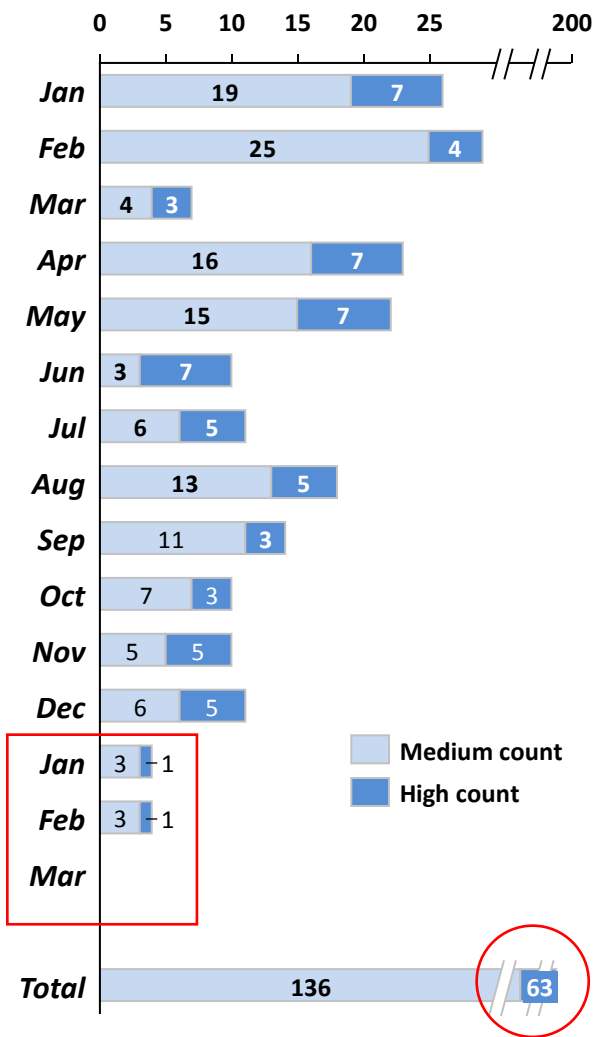




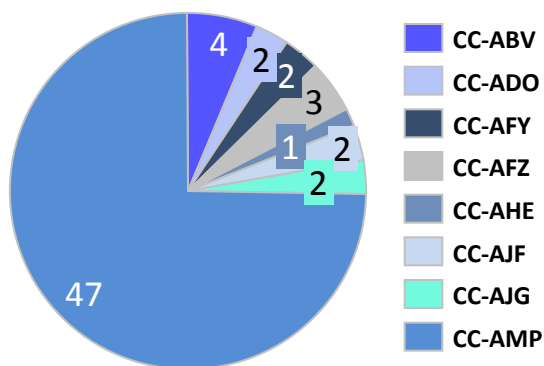


ATA 27 – Flight Controls

Events (Med_High Sev) by month



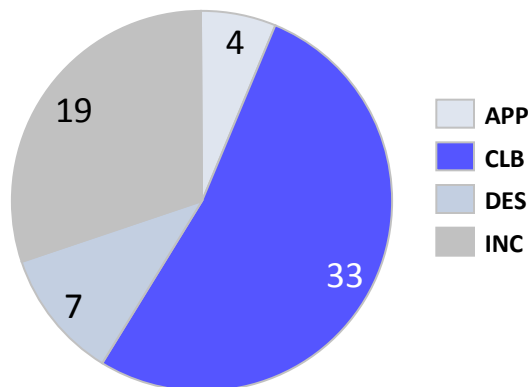
Events High Sev. by Aircraft



Event Information	
Number	1017
Description	Speed above VFE
Category	Speed

Deviation Limits	
	CAS >; TOL >= 3s
LOW	#
MEDIUM	VFE
HIGH	VFE + 4 Kts

Events High Sev. by Flight Phase



Events High Sev. by Flight Phase_AC

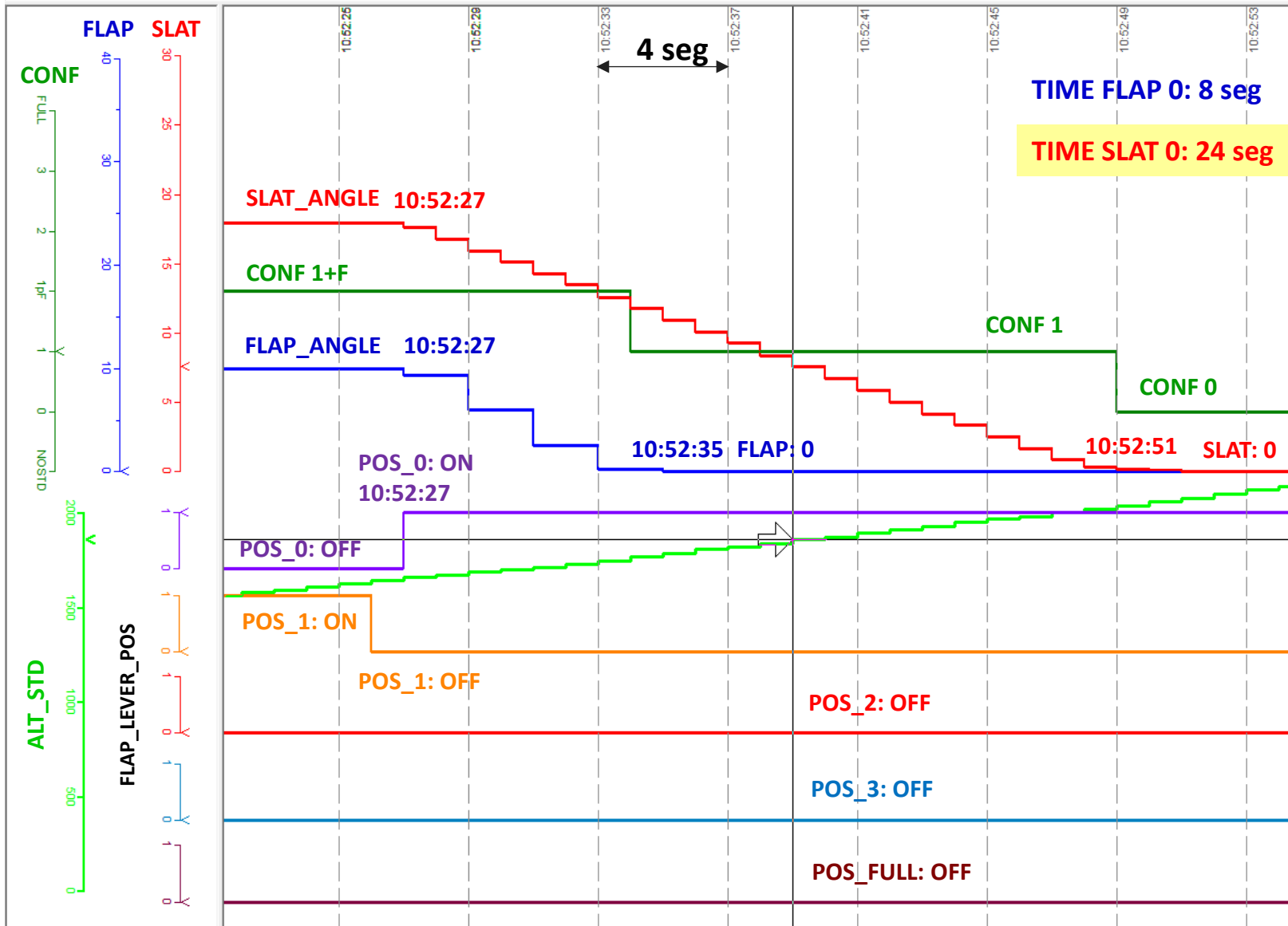
AC	APP	CLB	DES	INC	Total AC
CC-ABV	1	2	1		4
CC-ADO		1	1		2
CC-AFY			2		2
CC-AFZ	1	1	1		3
CC-AHE	1				1
CC-AJF	1		1		2
CC-AJG		1	1		2
CC-AMP		28		19	47
Total FP	4	33	7	19	63



ATA 27 – Flight Controls

Flight Data Monitoring

CC-AMP 11/13/2015 Parameter Map: A319SKU22-0-0 (v5.16) Format: SLAT_FLAP_CONF_021 (v1.00) Parameters: 17
Flight: SKU601-0 GRU-SCL T/O Frm: 248 10:51:20 AM Lnd Frm: 3694 2:41:03 PM



TASK 27-81-00-810-824-A

Slat Speed Commanded but Slat Half Speed Detected

1. Possible Causes

- 25CV
- 26CV
- aircraft wiring
- POB SOLENOID
- POB Solenoid Valve
- Hydraulic Motor of the Slat PCU
- Filters

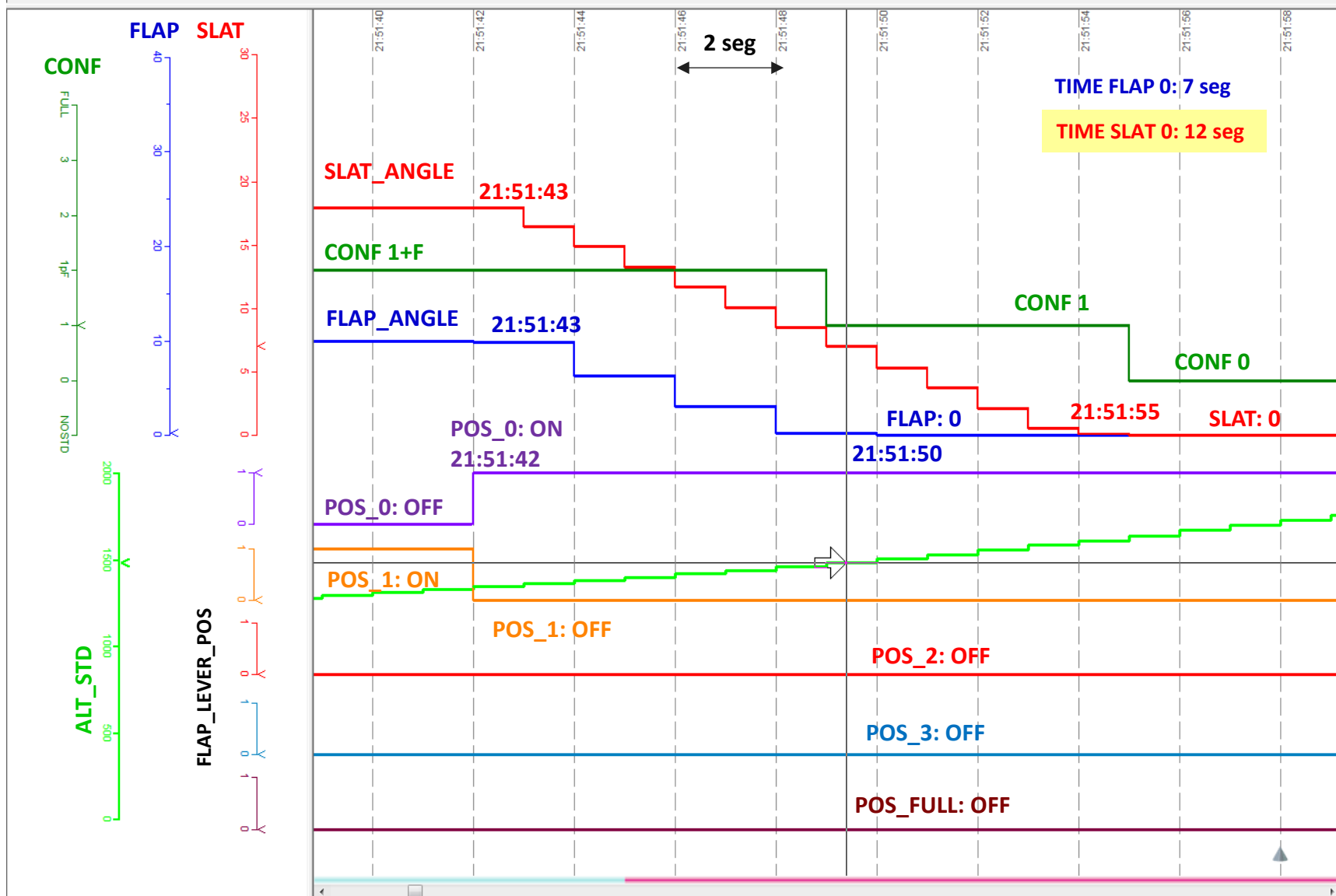




ATA 27 – Flight Controls

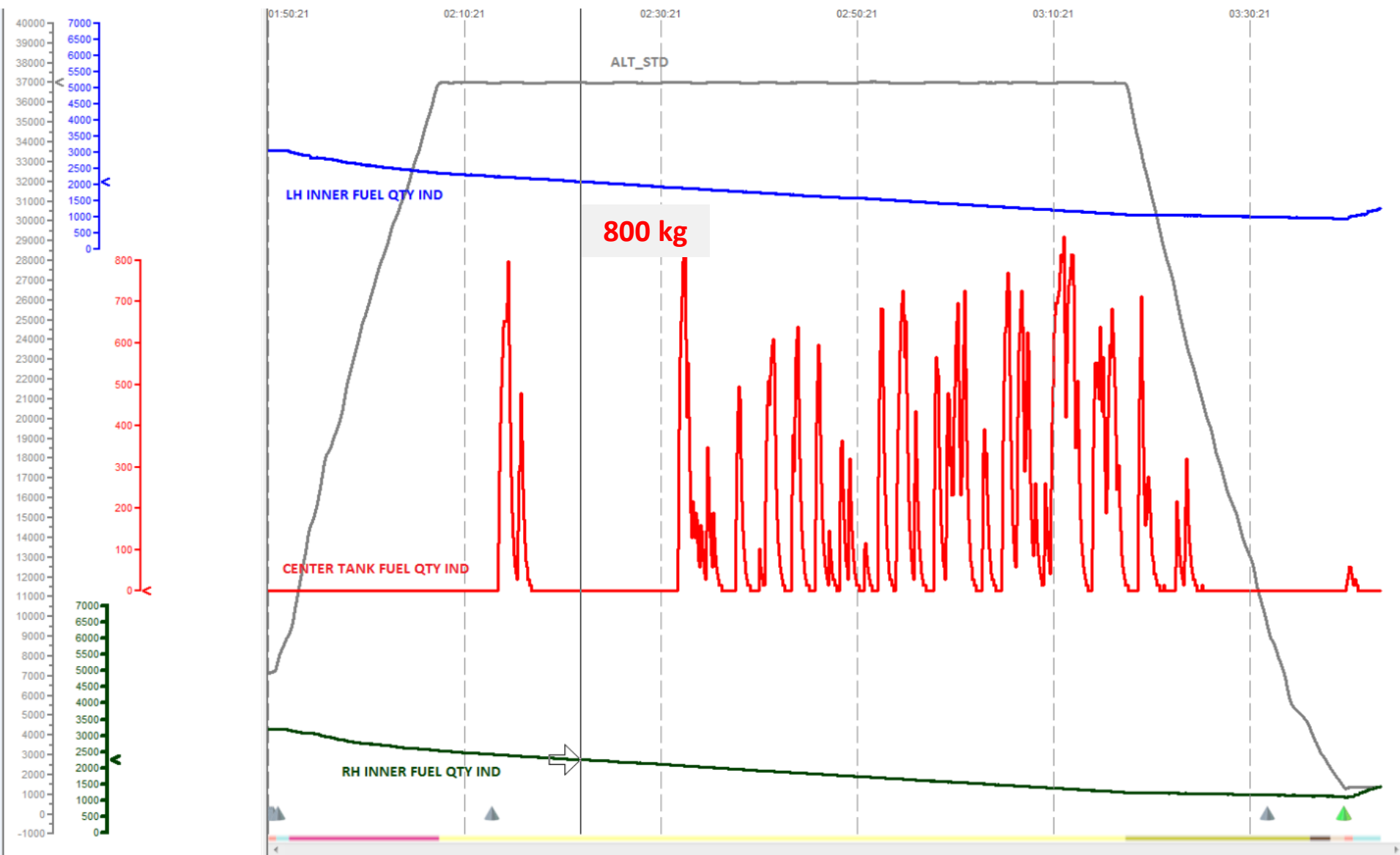
Flight Data Monitoring

CC-AMP 3/11/2016 Parameter Map: A319SKU22-0-0 (v5.42) Format: SLAT_FLAP_CONF_021 (v1.00) Parameters: 23
Flight: SKU071-0 SCL-ZCO T/O Frm: 185 9:50:53 PM Lnd Frm: 1030 10:47:23 PM





ATA 28 – Fuel



“Fused Adaptor”

CC-AMP

LOAIZA

CELIS-GALAZ

HAFEMANN

SCL

TRANSIT CHECK.

A319-53/1721 AFT CARGO FLOOR PANEL

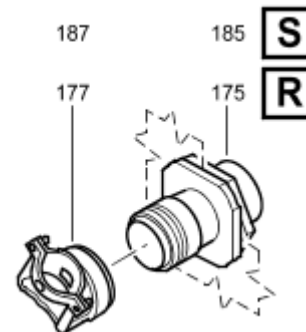
SE EFECTUO EI-2015-25-047 REMOVE LIFE LINE DECAL.

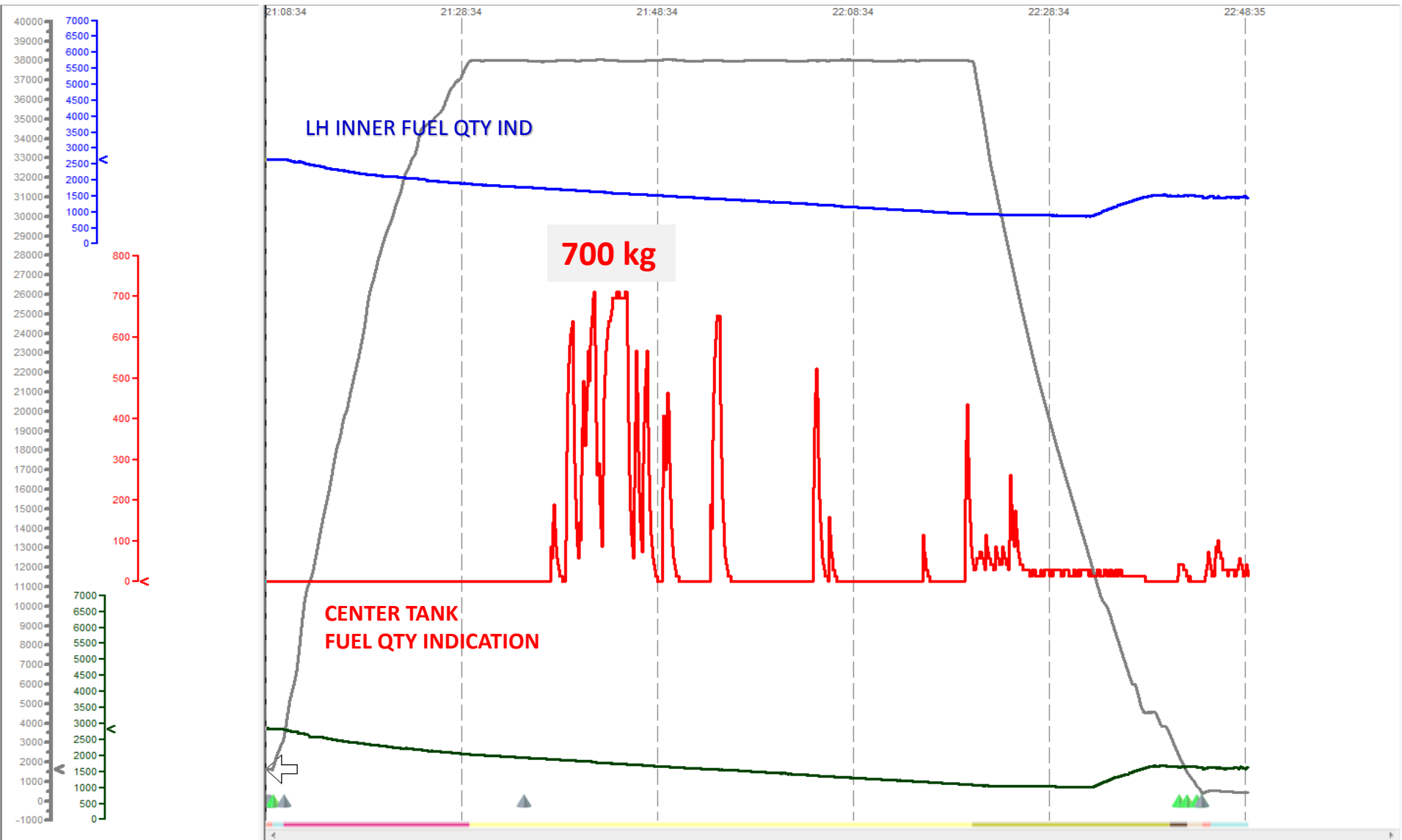
CERRADO DMI N° 131, SE REEMPLAZO SUN VISOR CLIP CAPT SIDE.

G/I AUTO FEED FAULT WITH CENTER QTY INDICATION EMPTY. SIGUIENDO EL T/SH, SE INTERCAMBIAN FUSER ADAPTOR 7509 UCB Y 7512UCB CON A/C AJG. TEST EN AMBOS OK.

CC-AMP

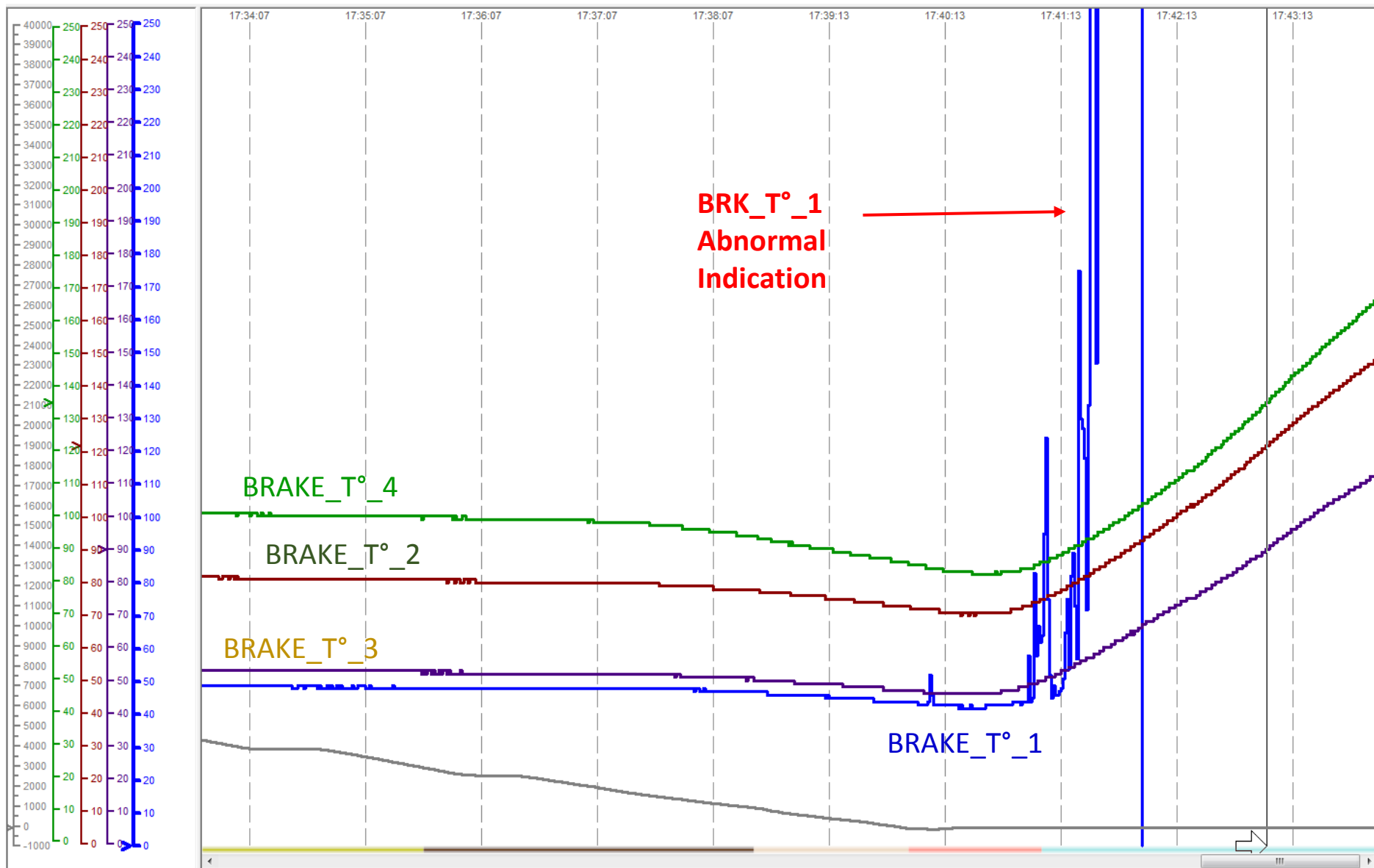
CC-AJG



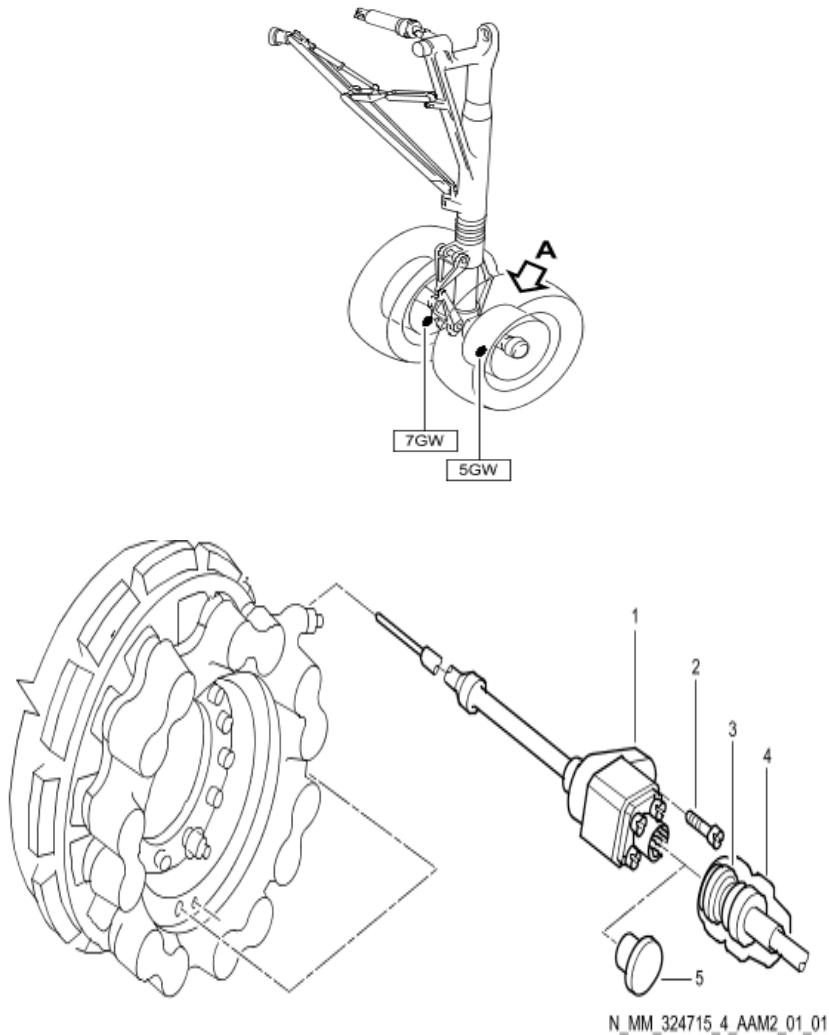




ATA 32 – Landing Gear



ATA 32 – Brake Temperature



**WIRING
DAMAGE
(conector)**



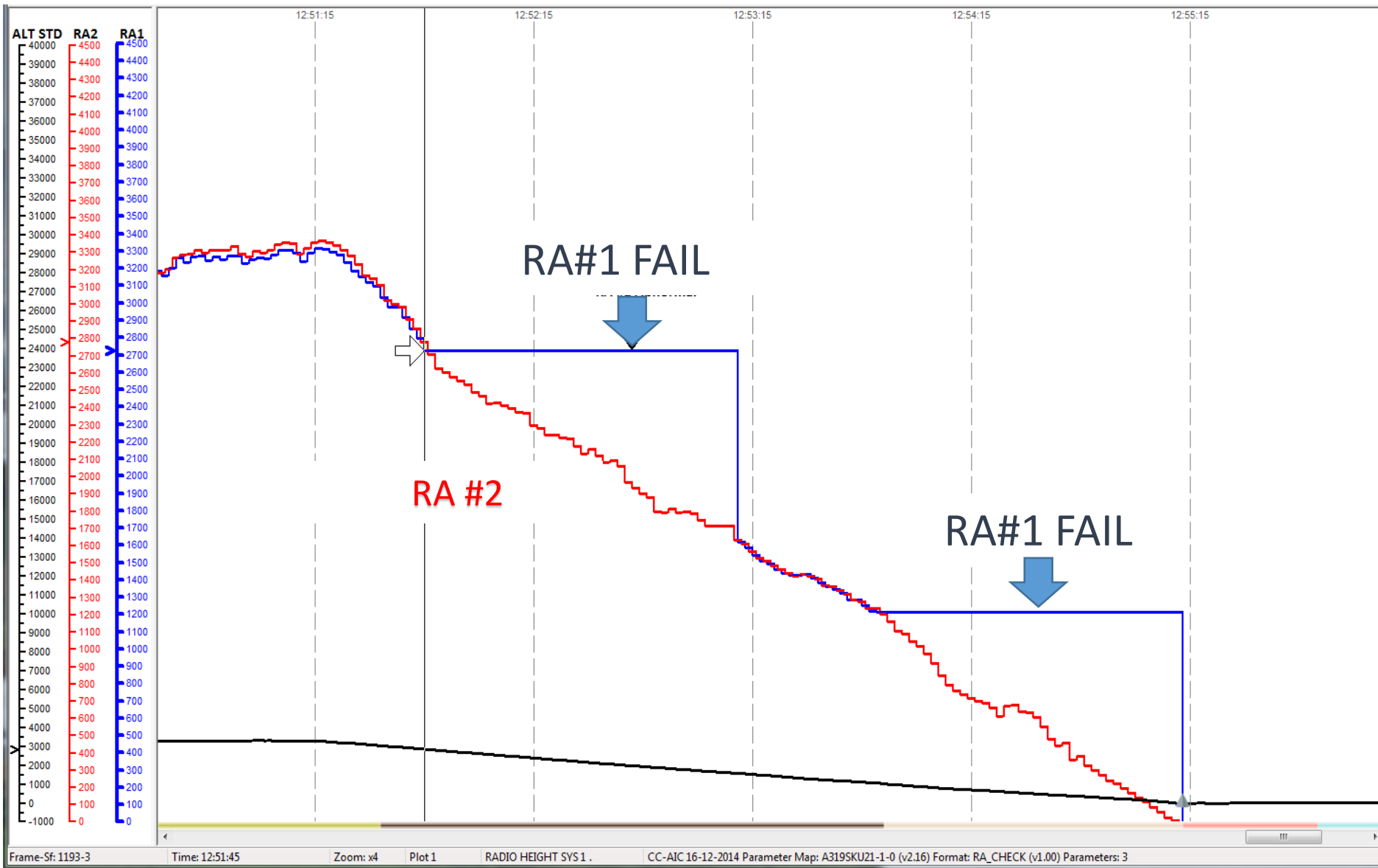


ATA 34 – Navigation

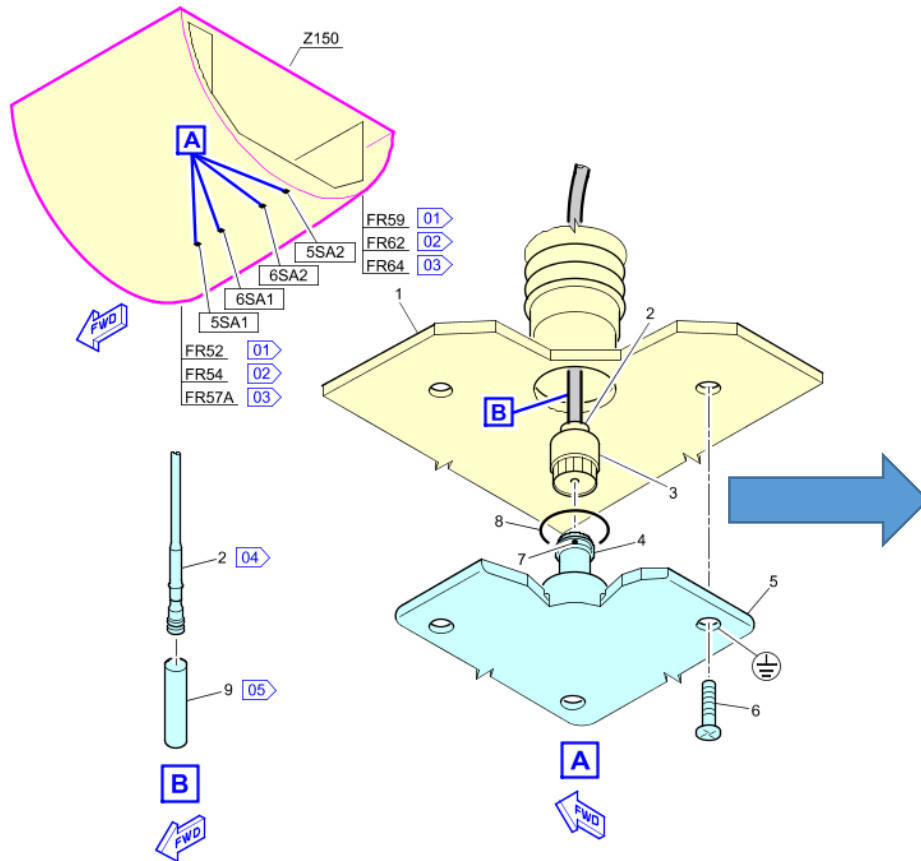


ATA 34 – Autoland Fail

Flight Data Monitoring



ATA 34 – Autoland Fail





ATA 34 – Navigation

ICE Event

Eventos Detectados hasta la Fecha.

☐ AFX_SCL-FLN (TAT & PITOT RH)

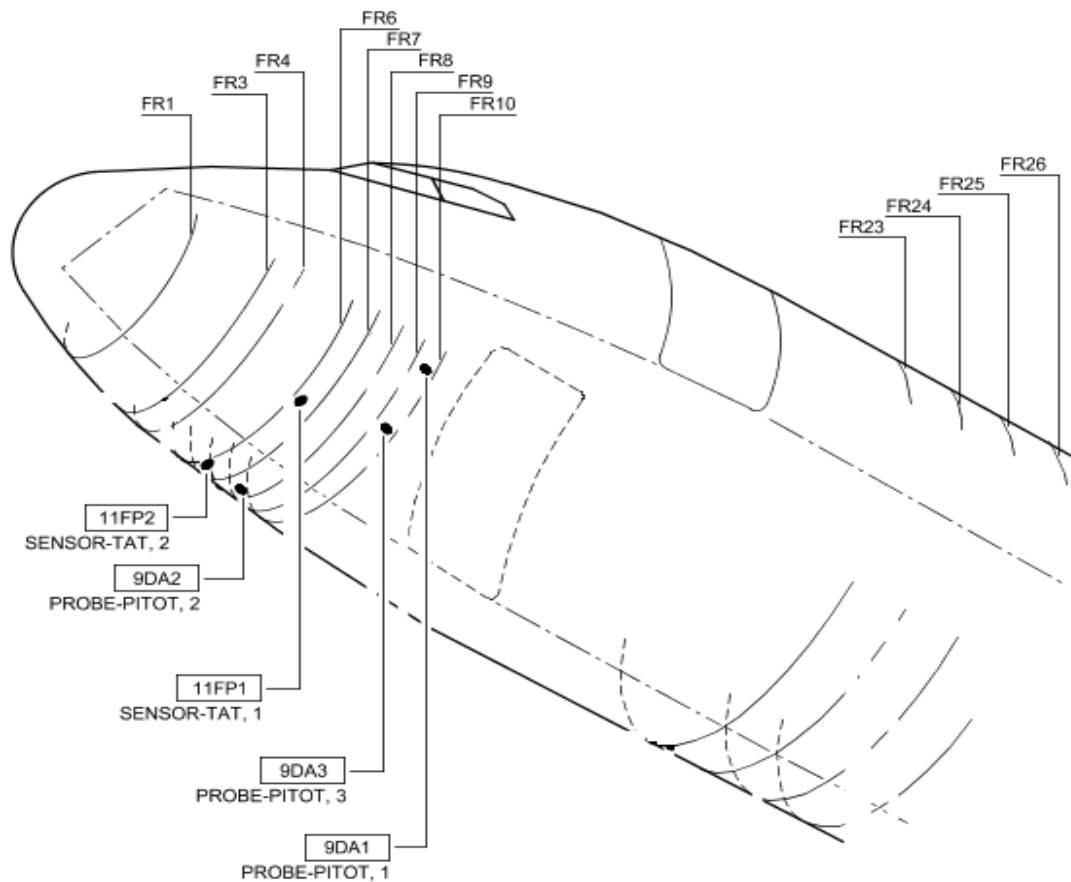
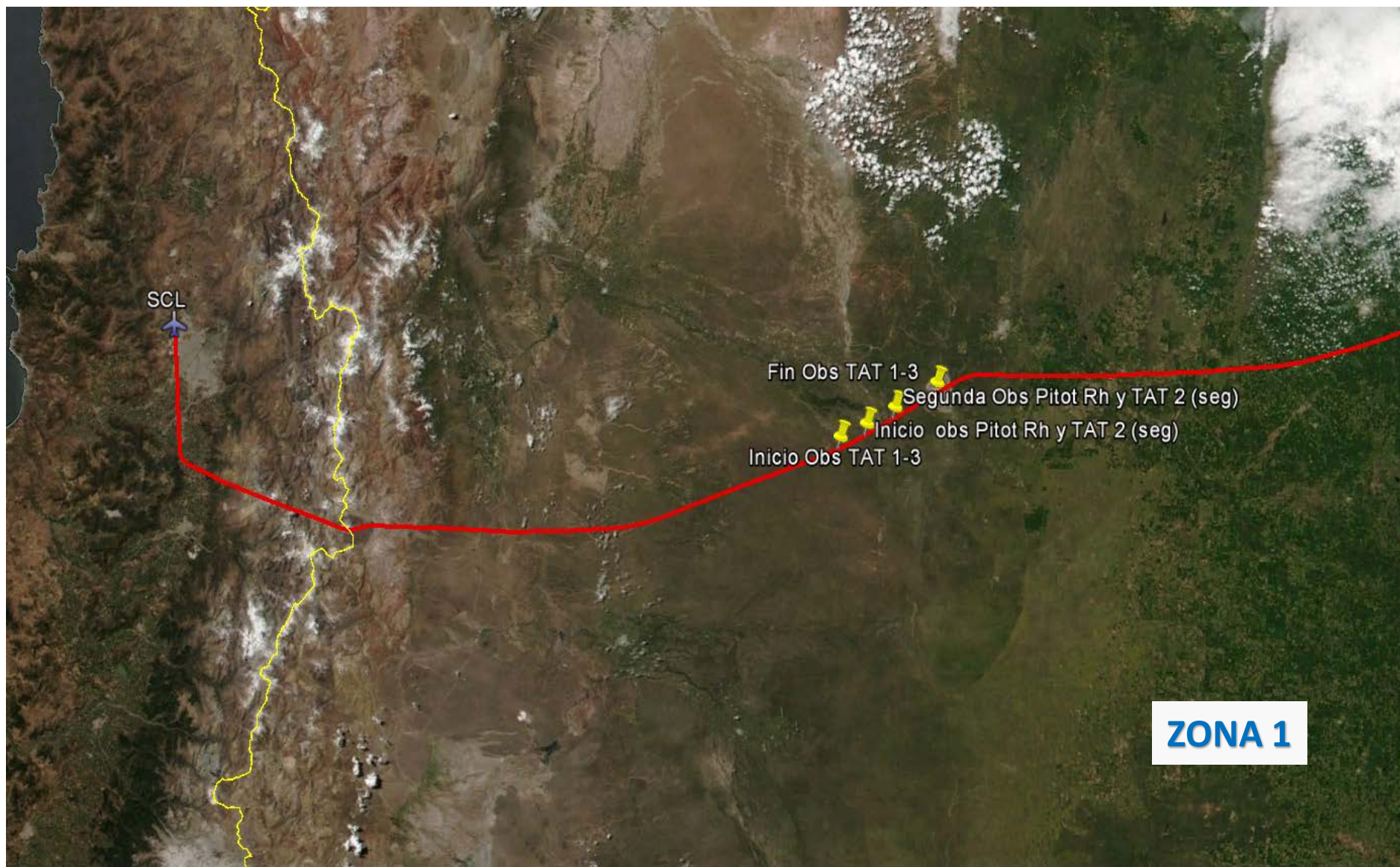
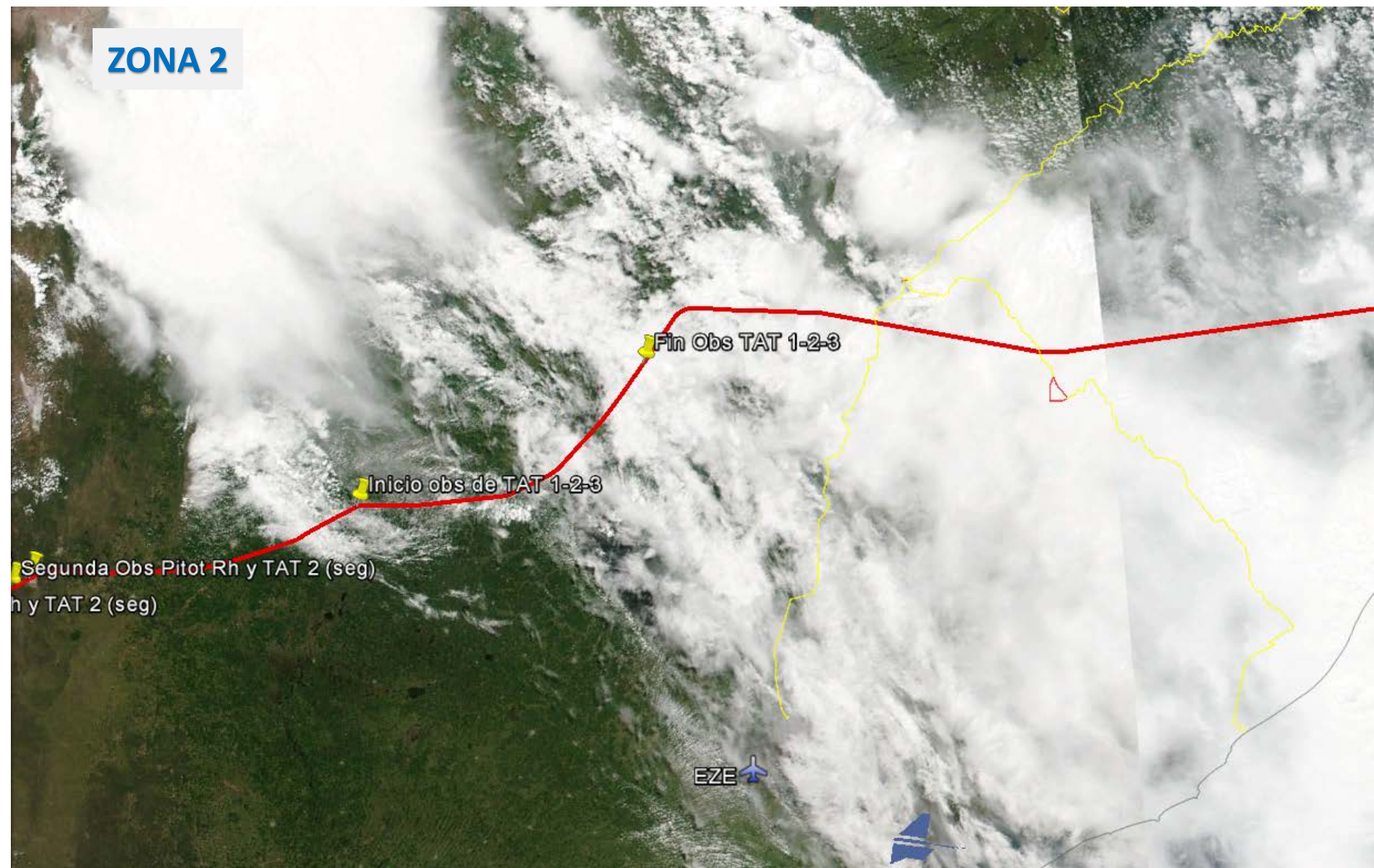


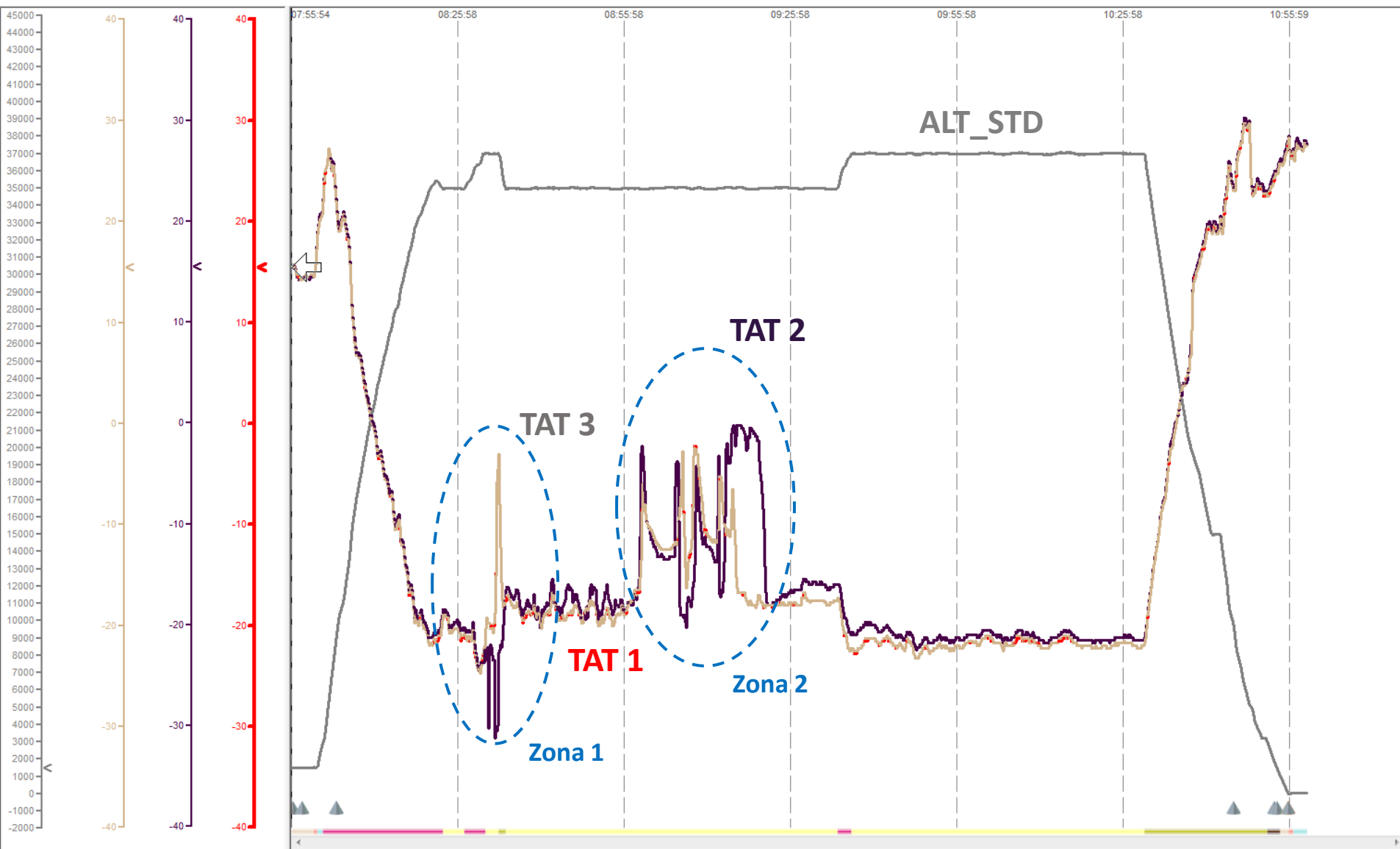
Figure 30-31-00-12400-00-A / SHEET 1 / 1 - Probe Ice Protection - Component Location

** ON A/C ALL



ZONA 2





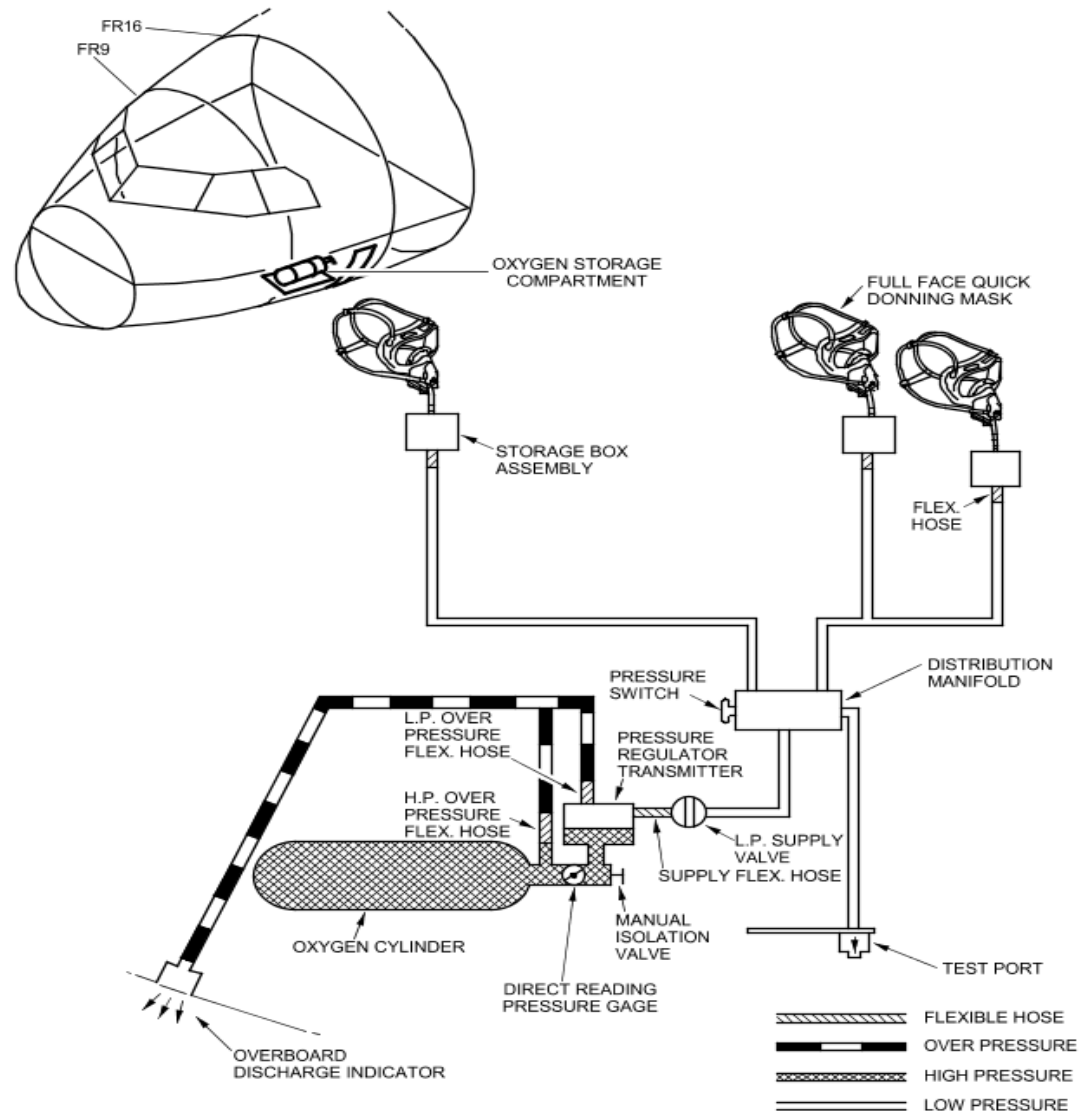
Envío de Raw Data Airbus

Análisis para Operaciones

Análisis para Ingeniería & Mantto. SKY



ATA 35 – Oxygen



N_MM_351000_0_ACM0_01_00

Figure 35-10-00-13500-00-A / SHEET 1 / 1 - Crew Oxygen System - Schematic
 ** ON A/C 001-050

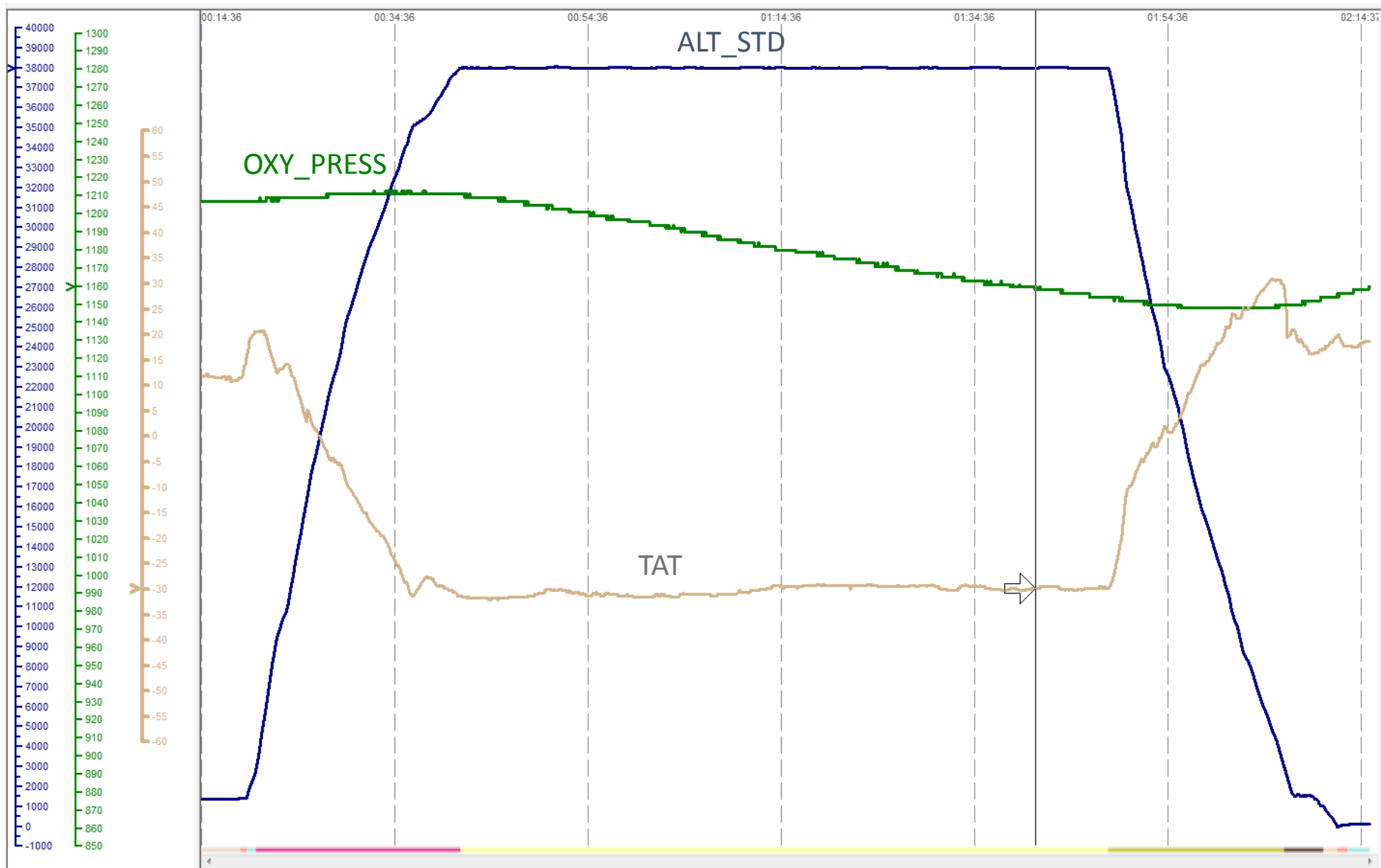
ATA 35 – Crew Oxygen Leak

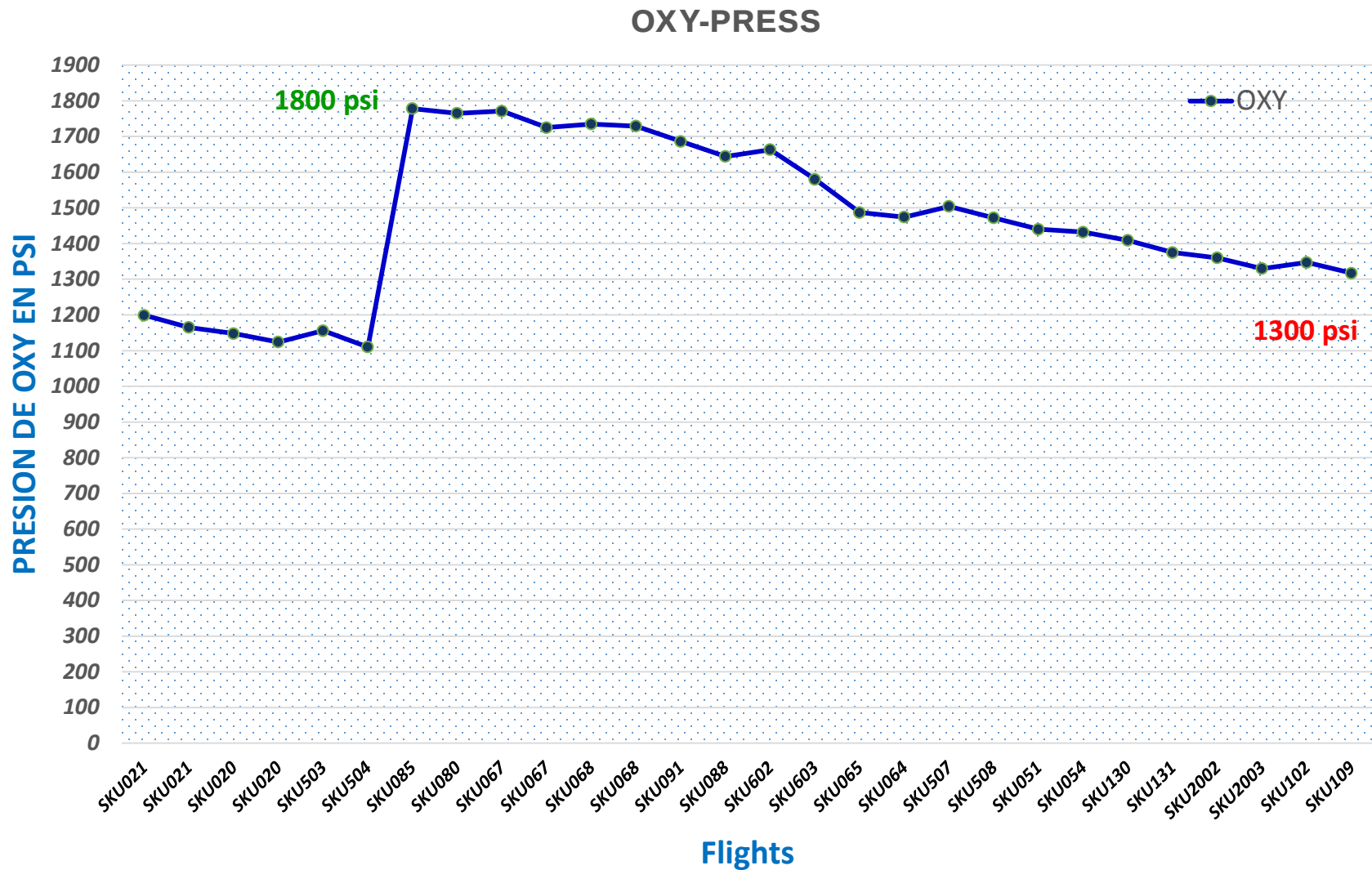


Crew Oxygen Leak

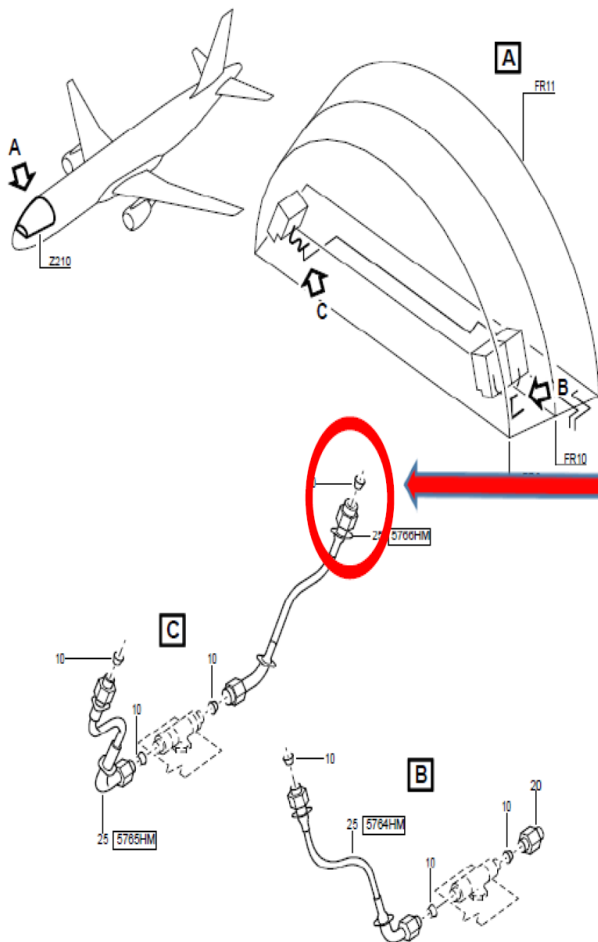


Recambio Botella



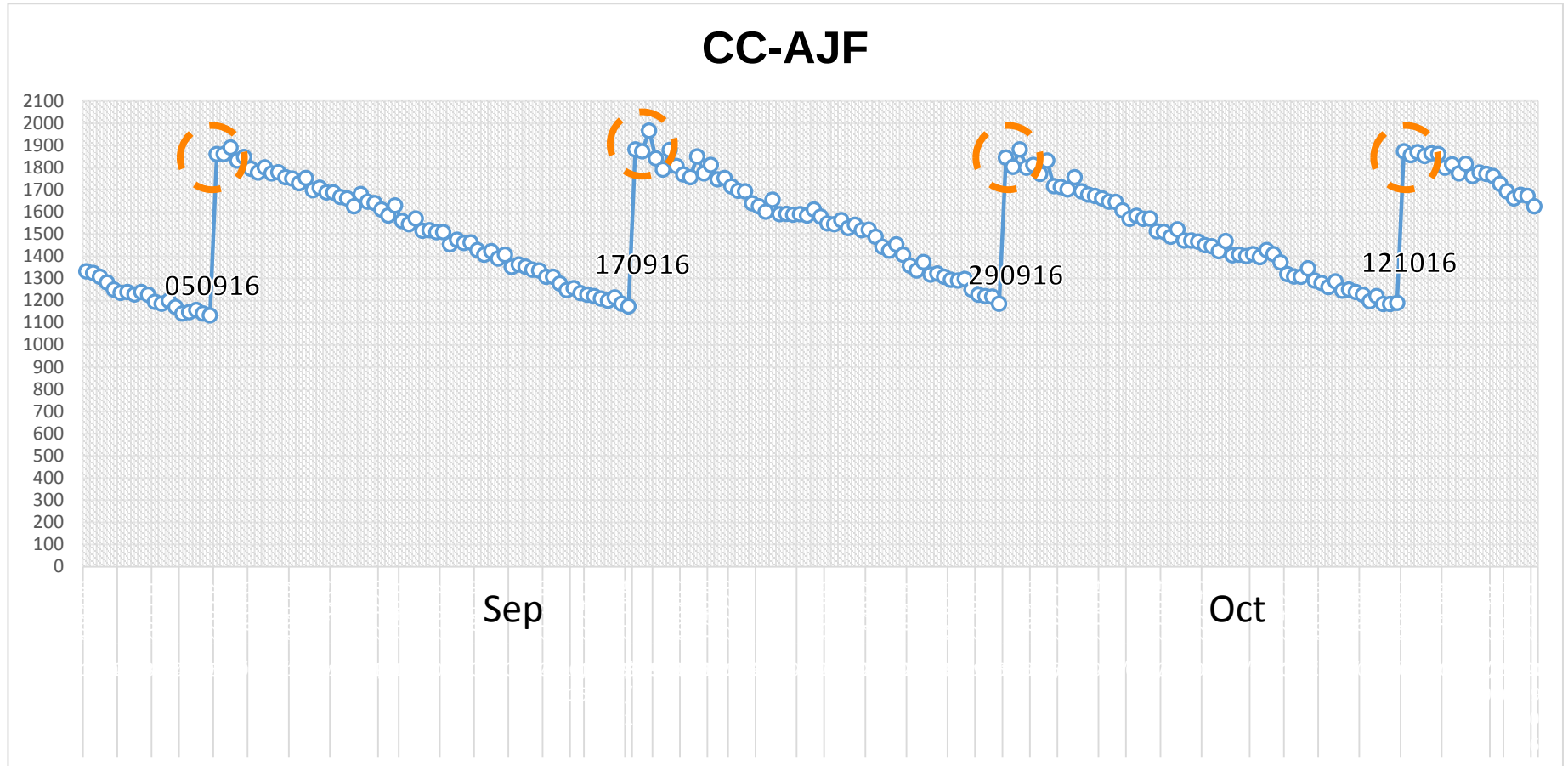


ATA 35 – Oxygen Pressure

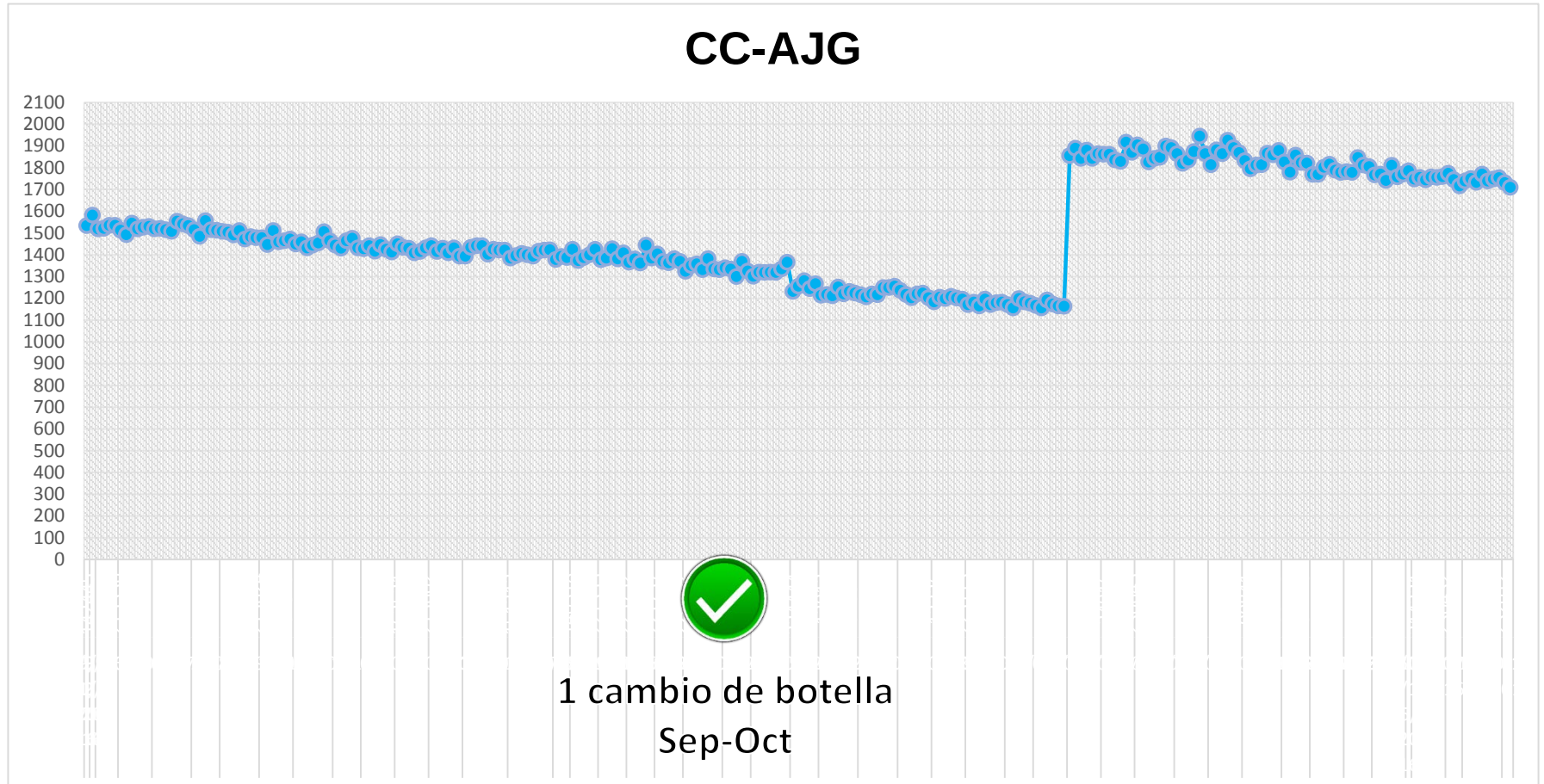


Sector de filtración por Ring de ajuste entre línea y caja del lado capitán con daño.



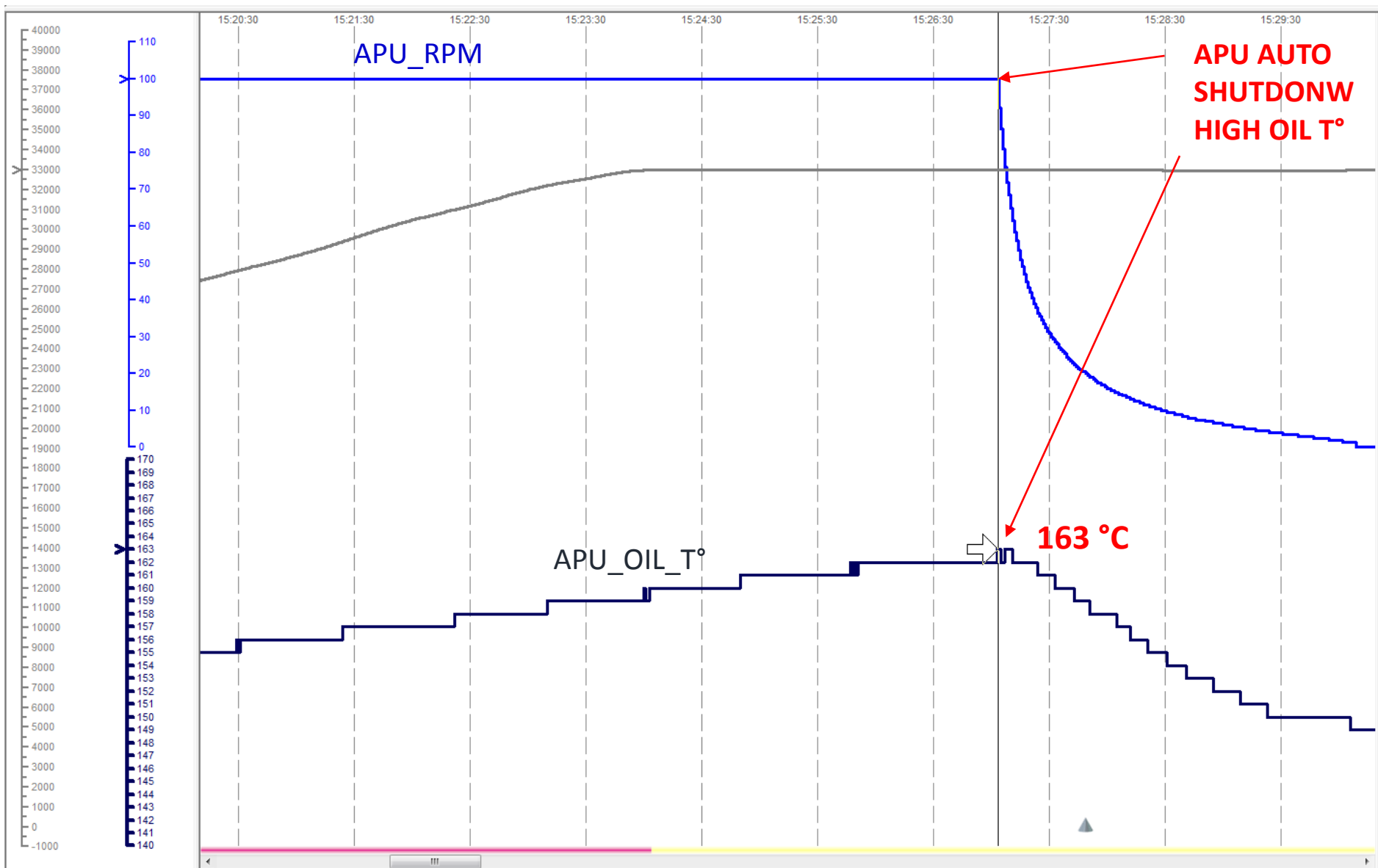


ATA 35 – Crew Oxygen Leak

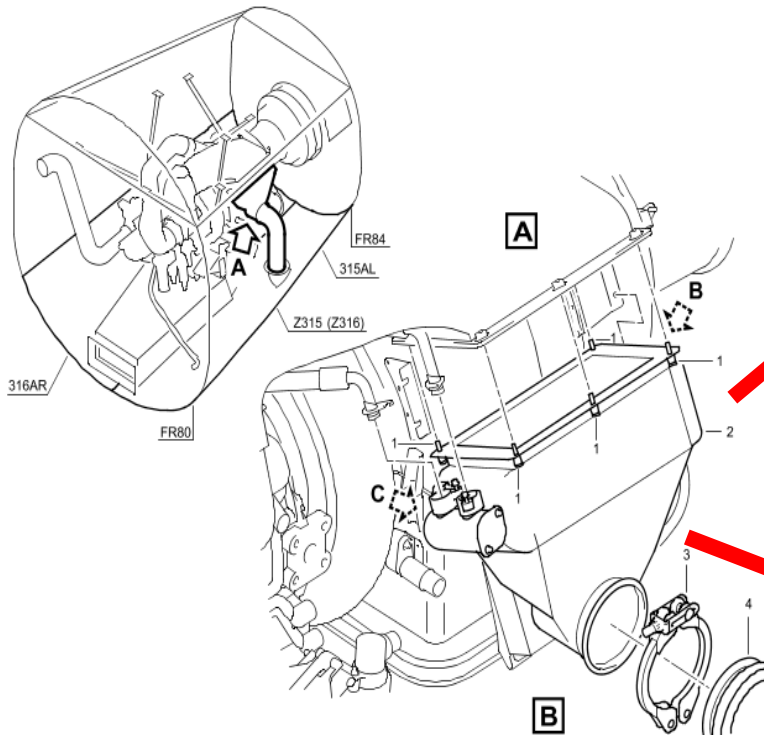




ATA 49 – APU (Auxilliary Power Unit)



APU OIL COOLER CLOGGED AND POLLUTED



Takeoff Aeropuertos
cercanos volcán Calbuco



ATA 77 – Engine Indicating

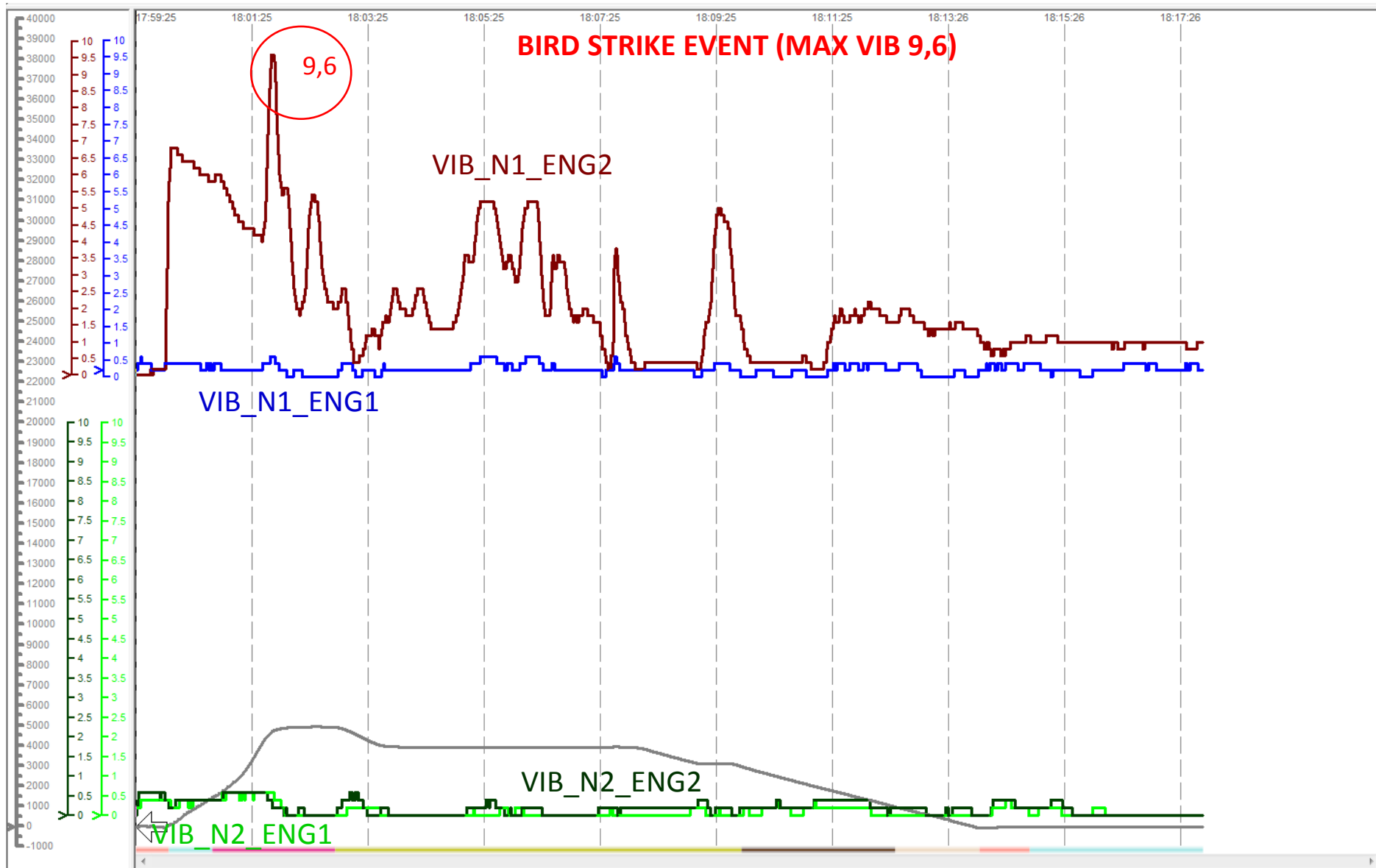
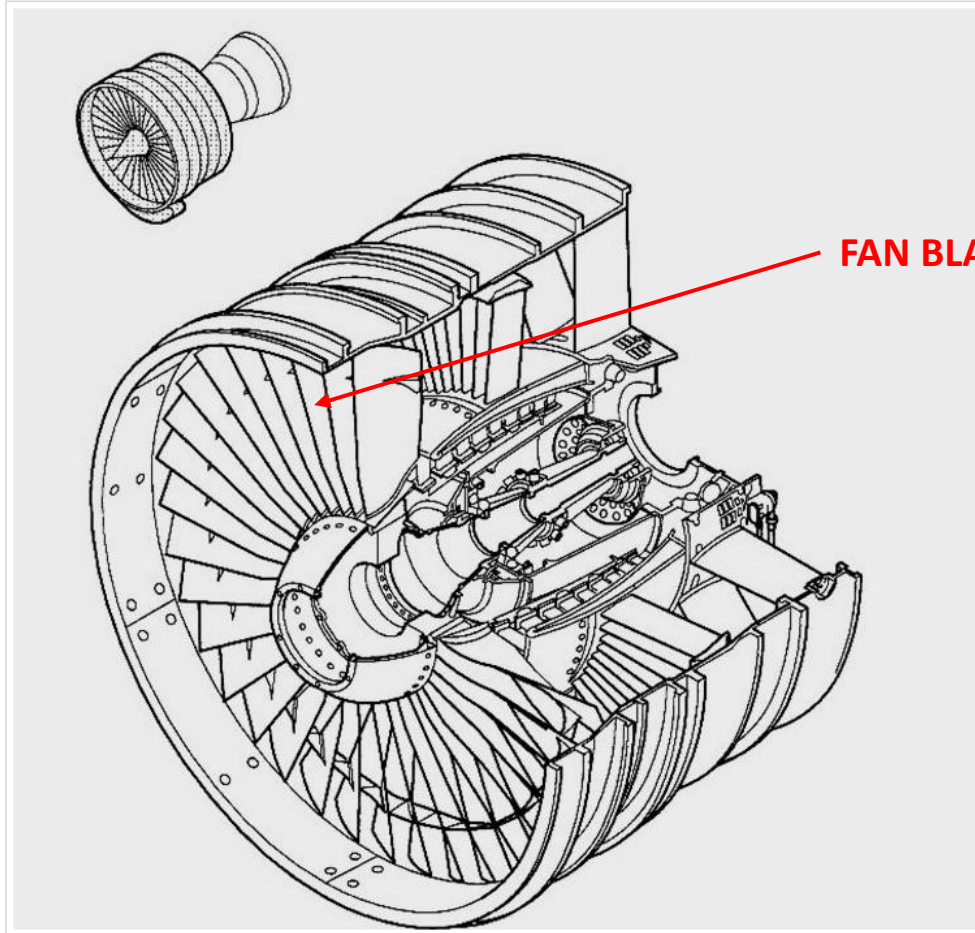


Diagram of CFM56 Fan Assembly





Hyd Green Sys Low Press

CC-AIB

History



P

Selected

Leg : -45 Flight Number : H2104
From : SCL First Transmission Date : 22 Jun 16 - 15:47
To : SCL Last Transmission Date : 22 Jun 16 - 16:45

Surrounded

Leg : -45 Flight Number : H2104
First Transmission Date : 22 Jun 16 - 15:47
Last Transmission Date : 22 Jun 16 - 16:45

CMS Data

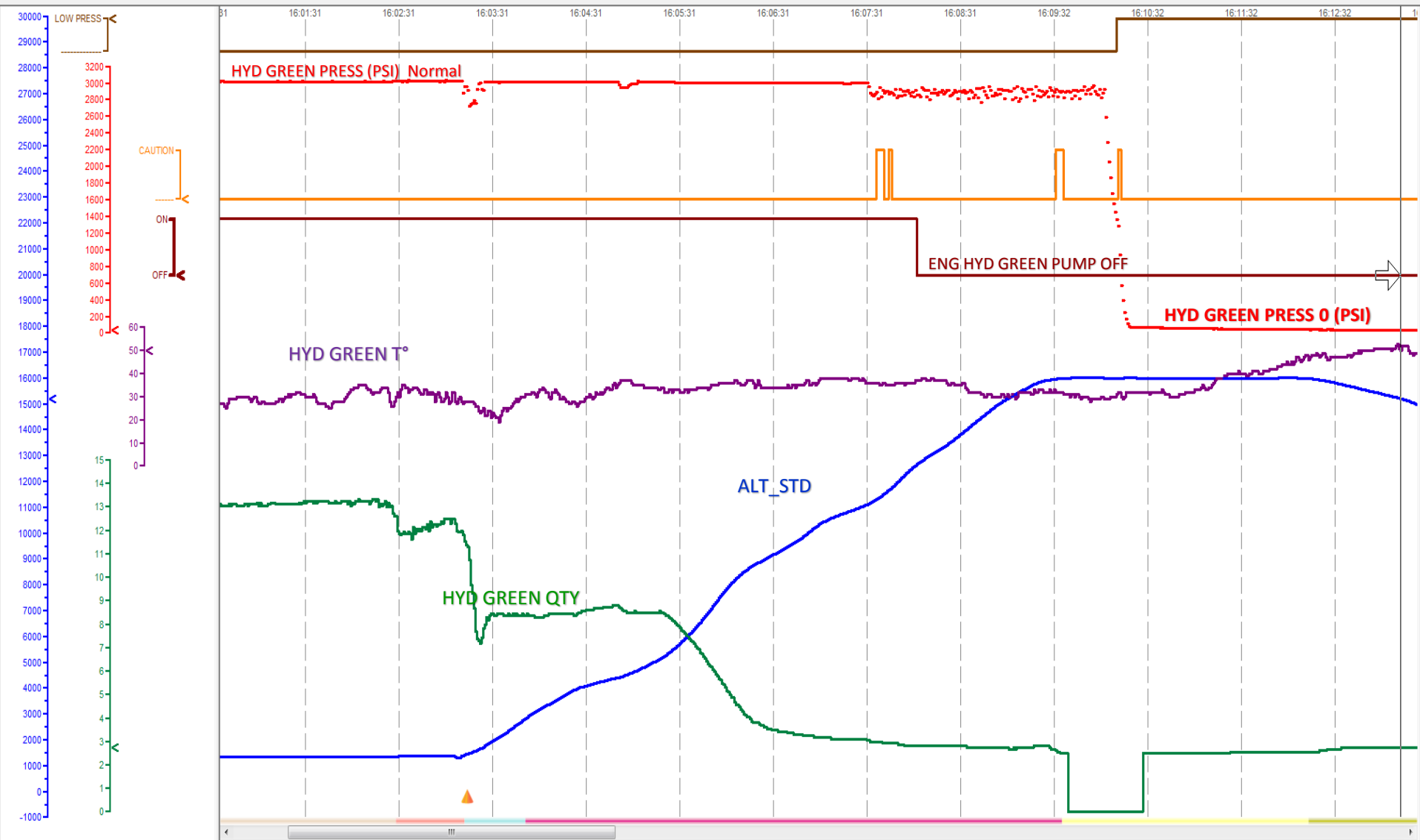
CFR PFR

Fault track...

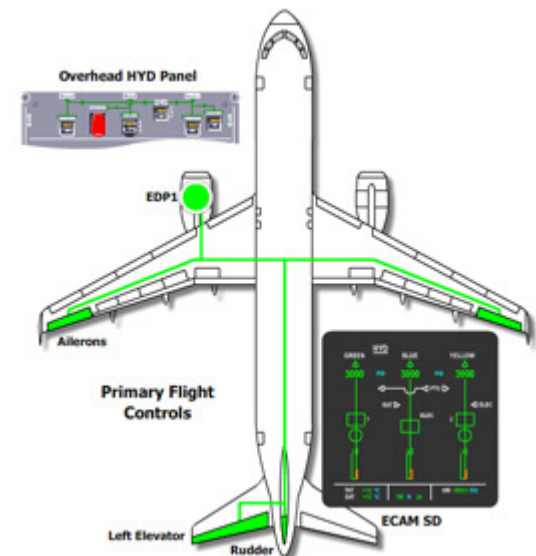
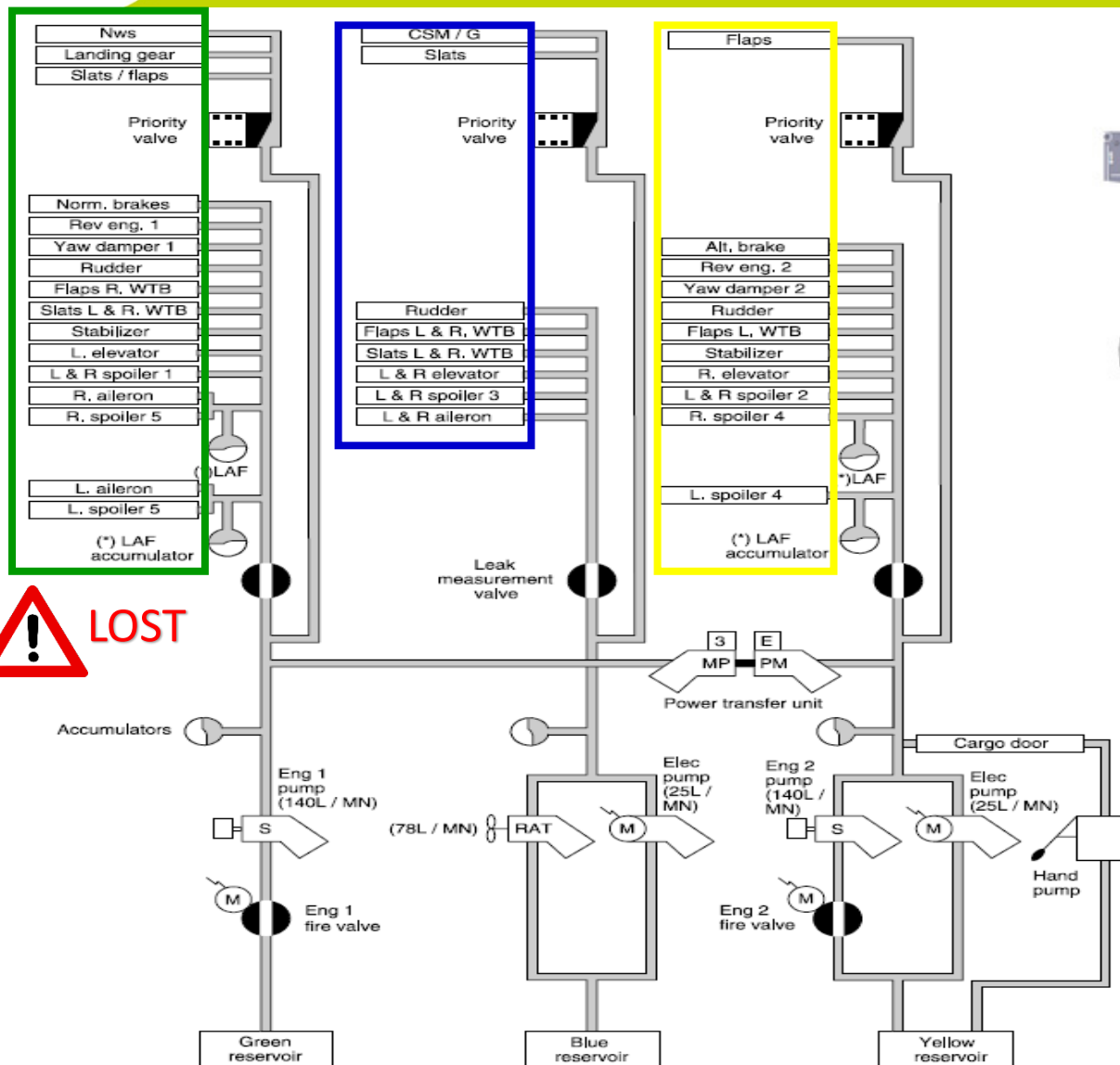
	02-ENG START	22 Jun 16 - 15:54	732160	ECAM 1	FWC2 :NO DATA FROM ECU2B						
	02-ENG START	22 Jun 16 - 15:54	237341	CIDS 1	PISA(602RH85) SR 11 R						
	05-LIFT OFF	22 Jun 16 - 16:03	261300	FDU APU	CHECK FDU APU LOOP A WARN CKT						
	06-CRUISE	22 Jun 16 - 16:07	2900		HYD G ENG 1 PUMP LO PR				M		
	06-CRUISE	22 Jun 16 - 16:09	2900		HYD G RSVR LO LVL				M		
	06-CRUISE	22 Jun 16 - 16:10	2900		HYD G SYS LO PR				M		
	06-CRUISE	22 Jun 16 - 16:10	279334	AFS	AFS:ELAC2						
	06-CRUISE	22 Jun 16 - 16:10	293212	AFS	AFS:HYD G 1151GN						
	06-CRUISE	22 Jun 16 - 16:30	275134	EPCS 2	SFCC2						
	06-CRUISE	22 Jun 16 - 16:31	3200		L/G DOORS NOT CLOSED				H		
	08-TOUCH DO...	22 Jun 16 - 16:37	7700		ENG 1 REVERSER FAULT				L		
	08-TOUCH DO...	22 Jun 16 - 16:37	783153	EIU1FADEC	HCU. TRSOV. HYD ENG1B						



Hydraulic Green System Low Press



Hydraulic Green System Low Press



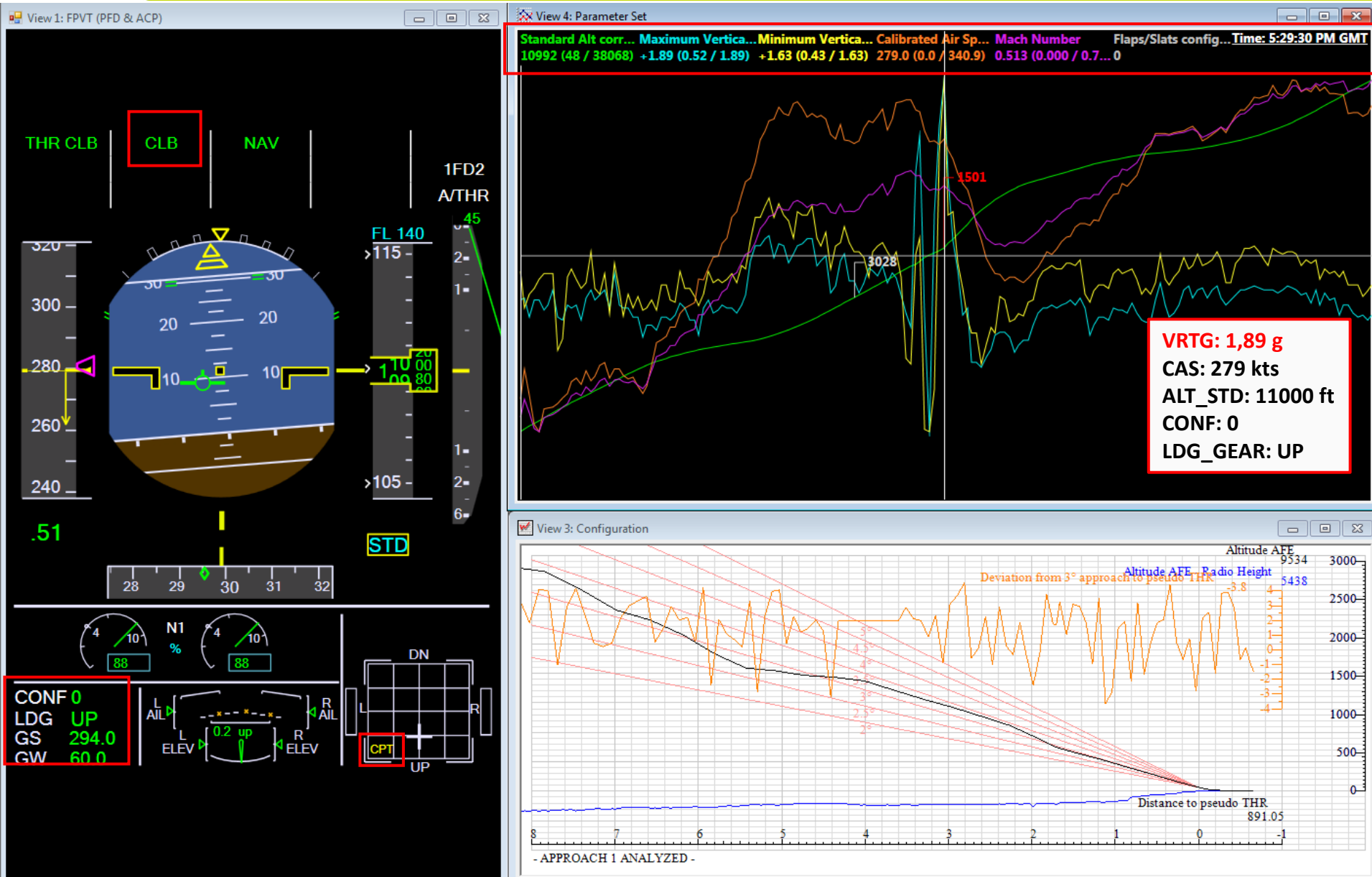


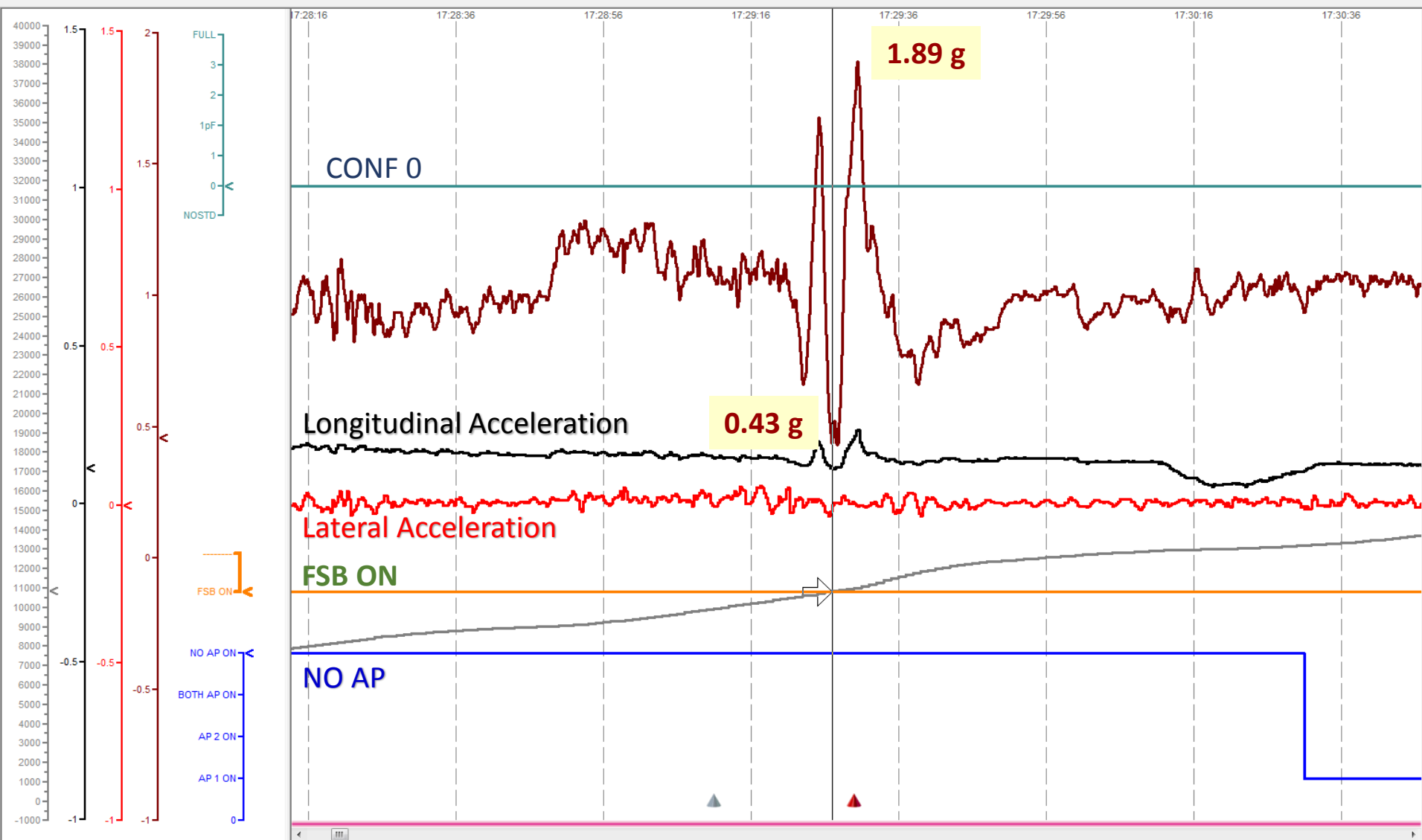
***Vertical Acceleration High in
Flight***

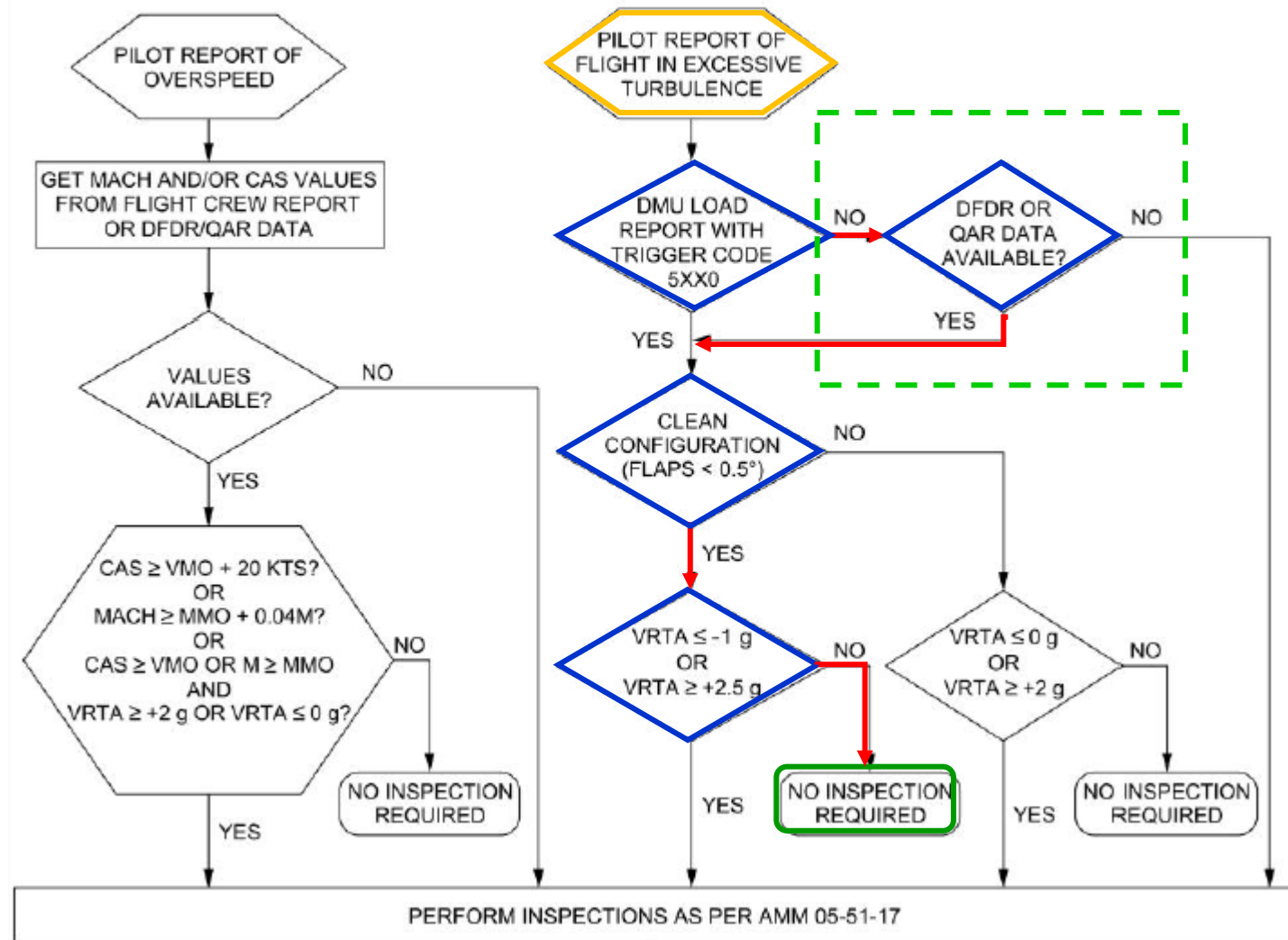


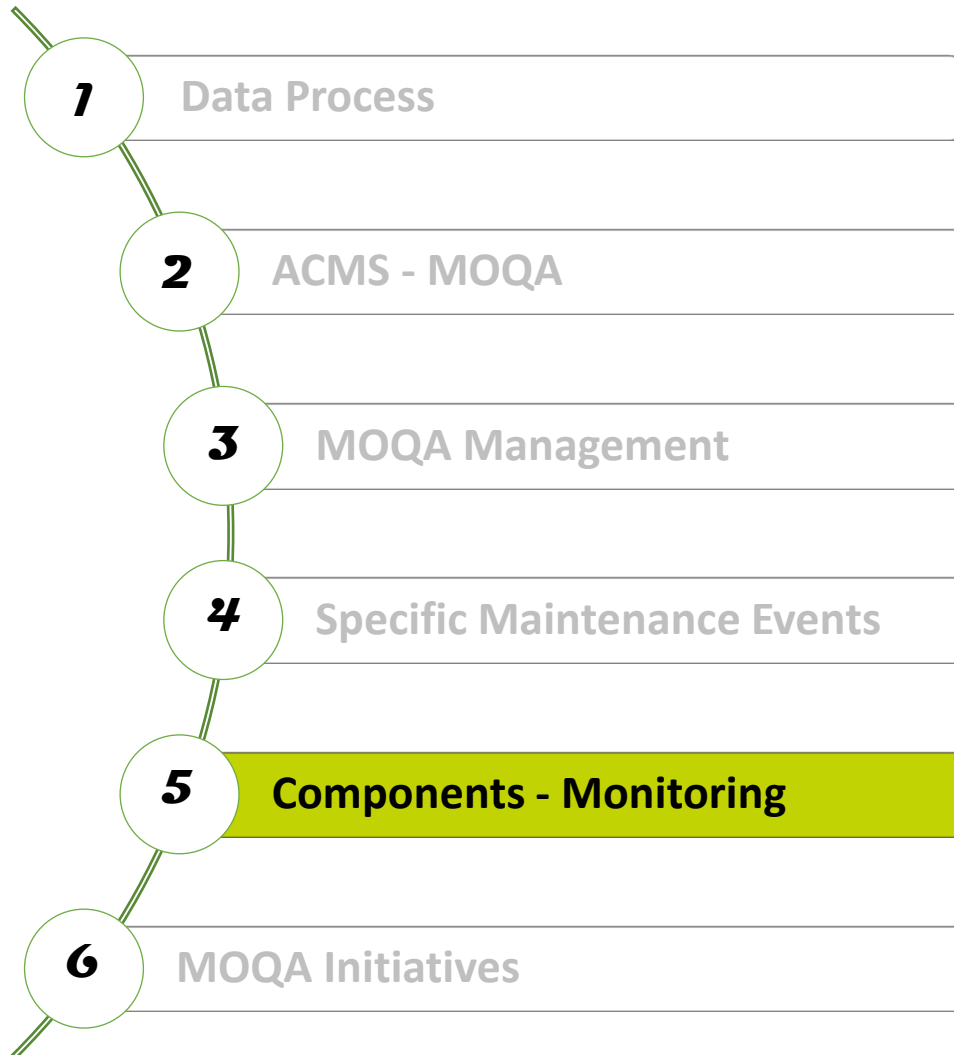
Vertical Acceleration High in Flight

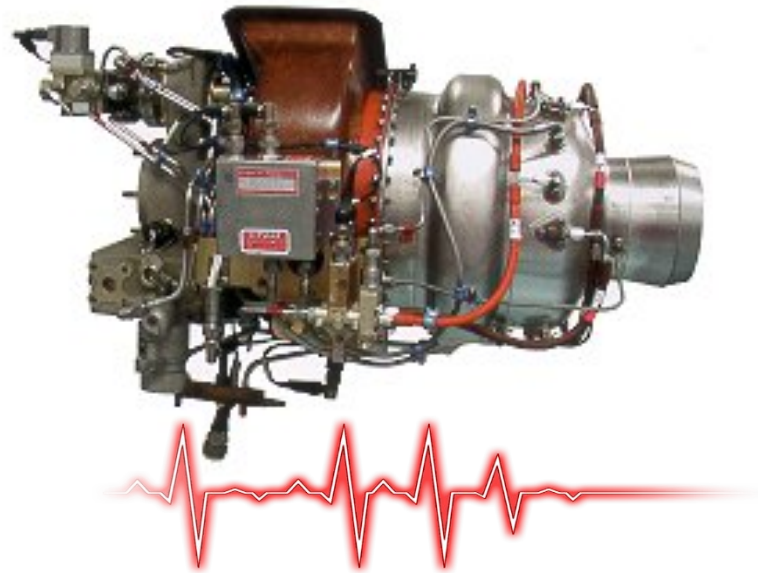
Flight Data Monitoring







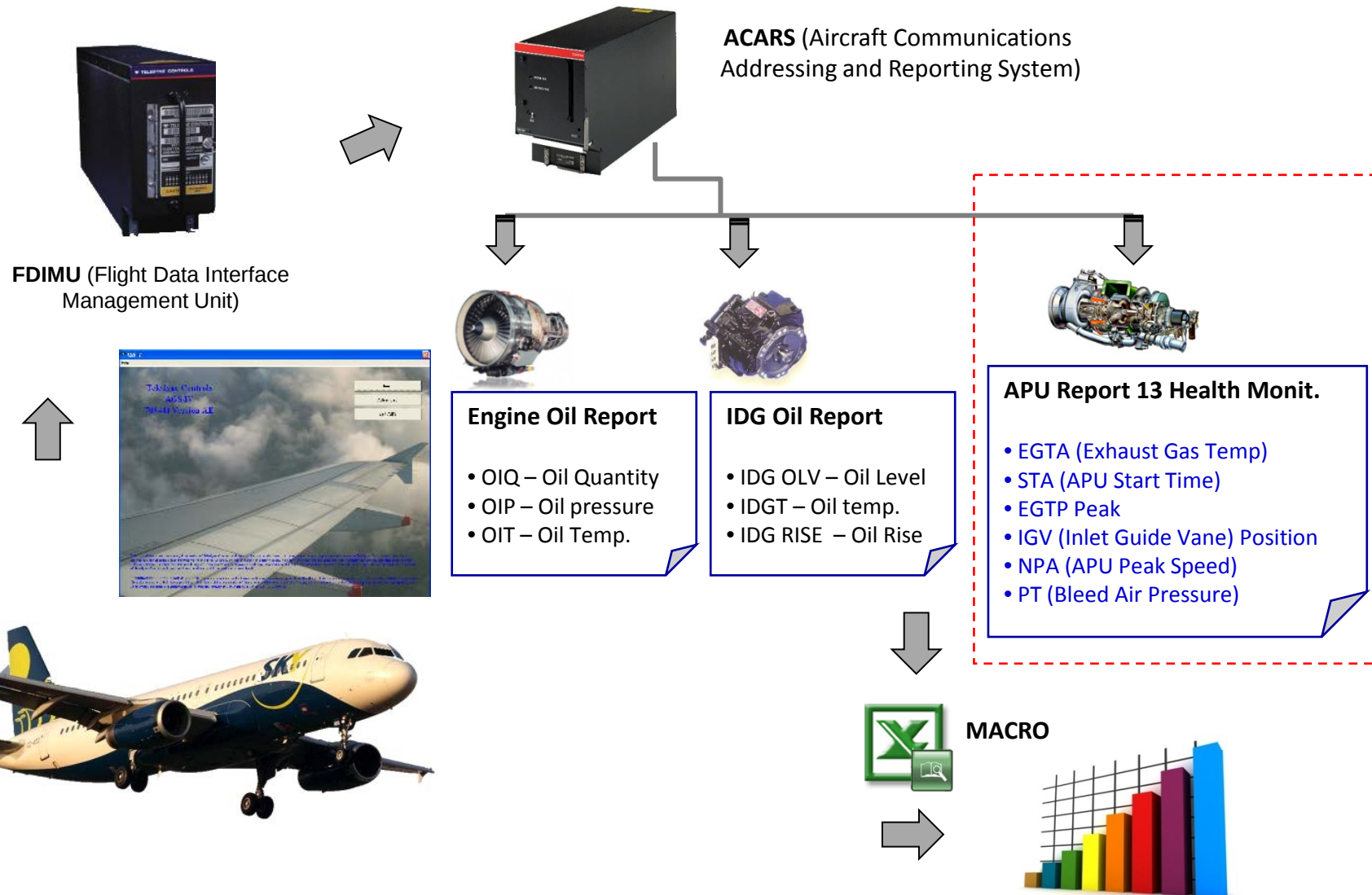




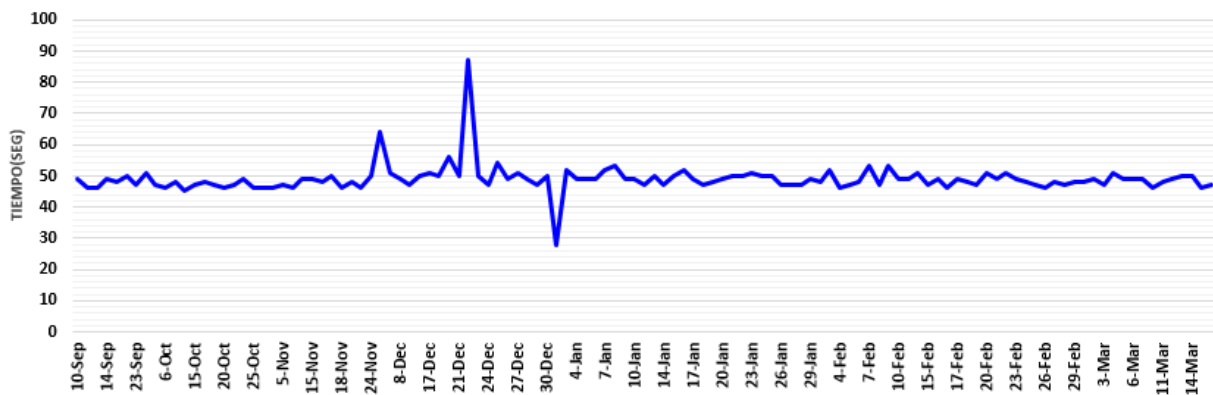
Health Monitoring APU



Health Monitoring APU



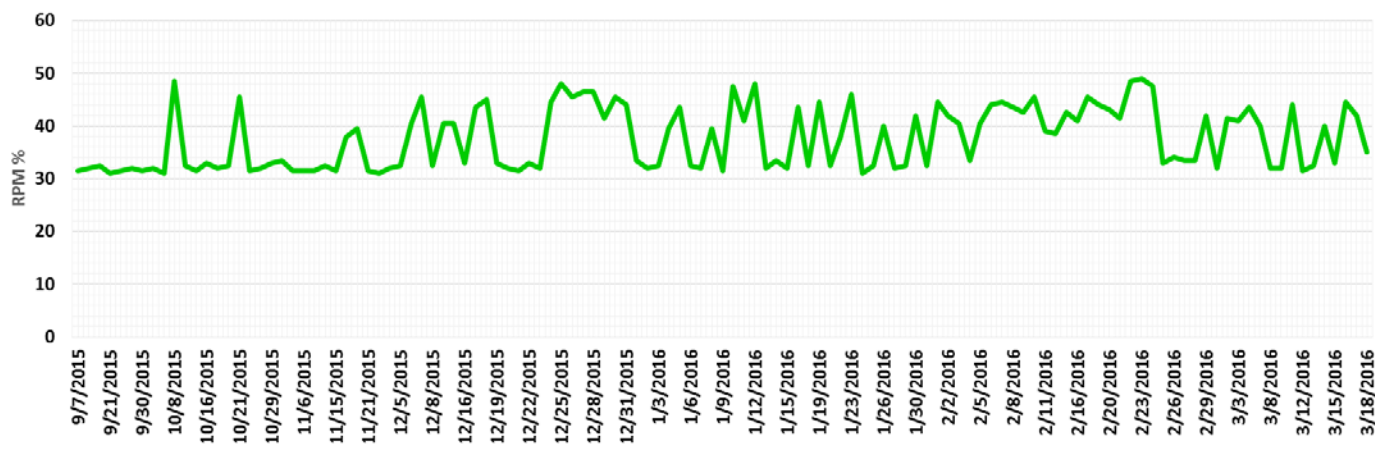
STA (APU Start Time)



A/C_ID

CC-ABV
CC-ABW
CC-AFX
CC-AFY
CC-AFZ
CC-AHC
CC-AHD
CC-AHE
CC-AIB
CC-AIC
CC-AID
CC-AIY
CC-AJF

NPA (APU Peak Speed)



A/C_ID

CC-ABV
CC-ABW
CC-AFX
CC-AFY
CC-AFZ
CC-AHC
CC-AHD
CC-AHE
CC-AIB
CC-AIC
CC-AID
CC-AIY
CC-AJF
CC-AIG
CC-AMP

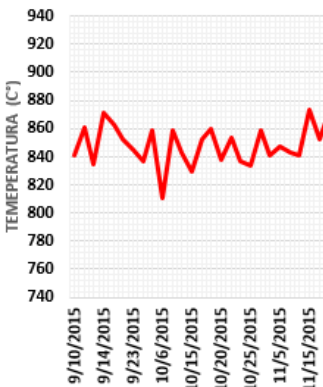
DATE

Todos los períodos

2016

APR MAY JUN JUL AUG SE

TEMPERATURA (C°)



DATE

Todos los períodos

2016

APR MAY JUN JUL AUG SEP OCT NOV DEC

2017

JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

MONTHS

DATE

Nov 2014 - Jan 2017

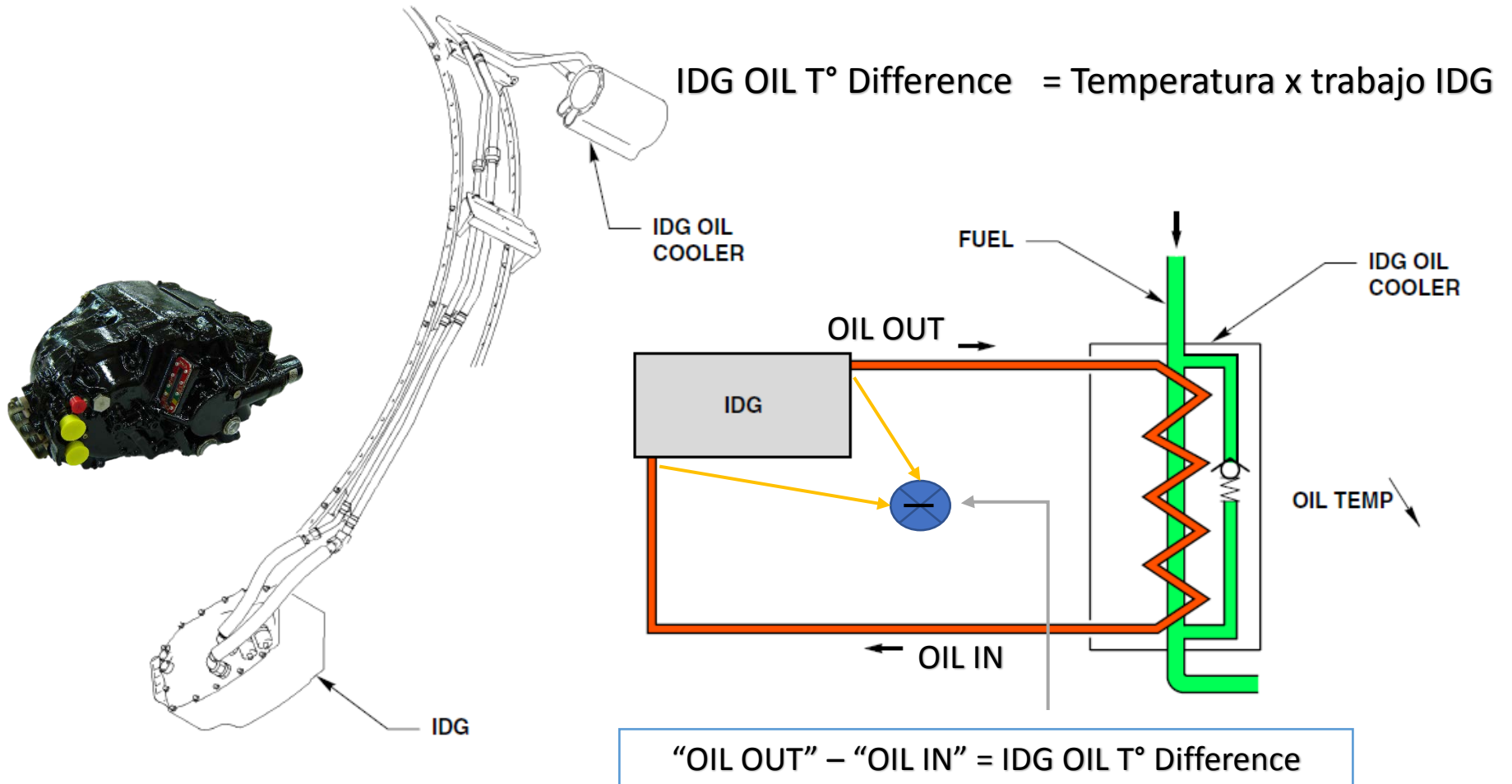
2015

MAY JUN JUL AUG SEP OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC JAN

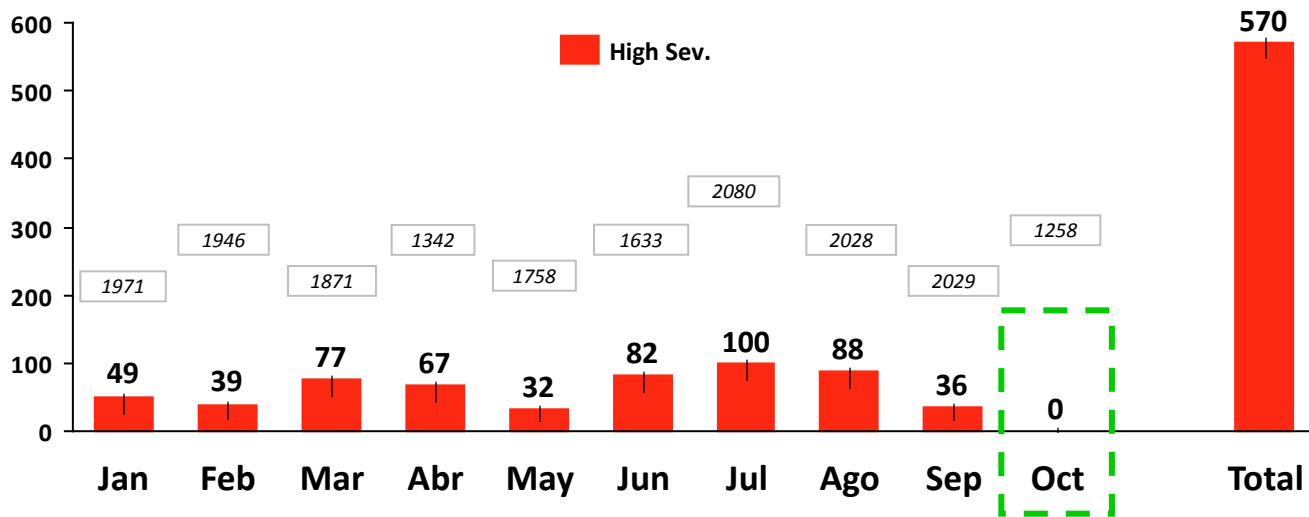


IDG

Oil Temperature Warning

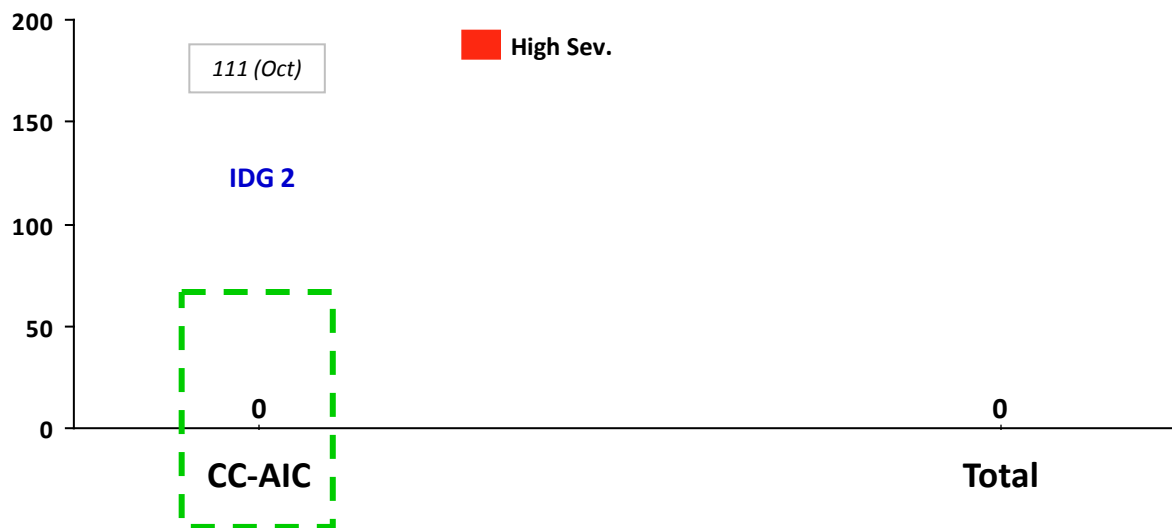


IDG Oil Temp Difference (Sal – Ent | T°)

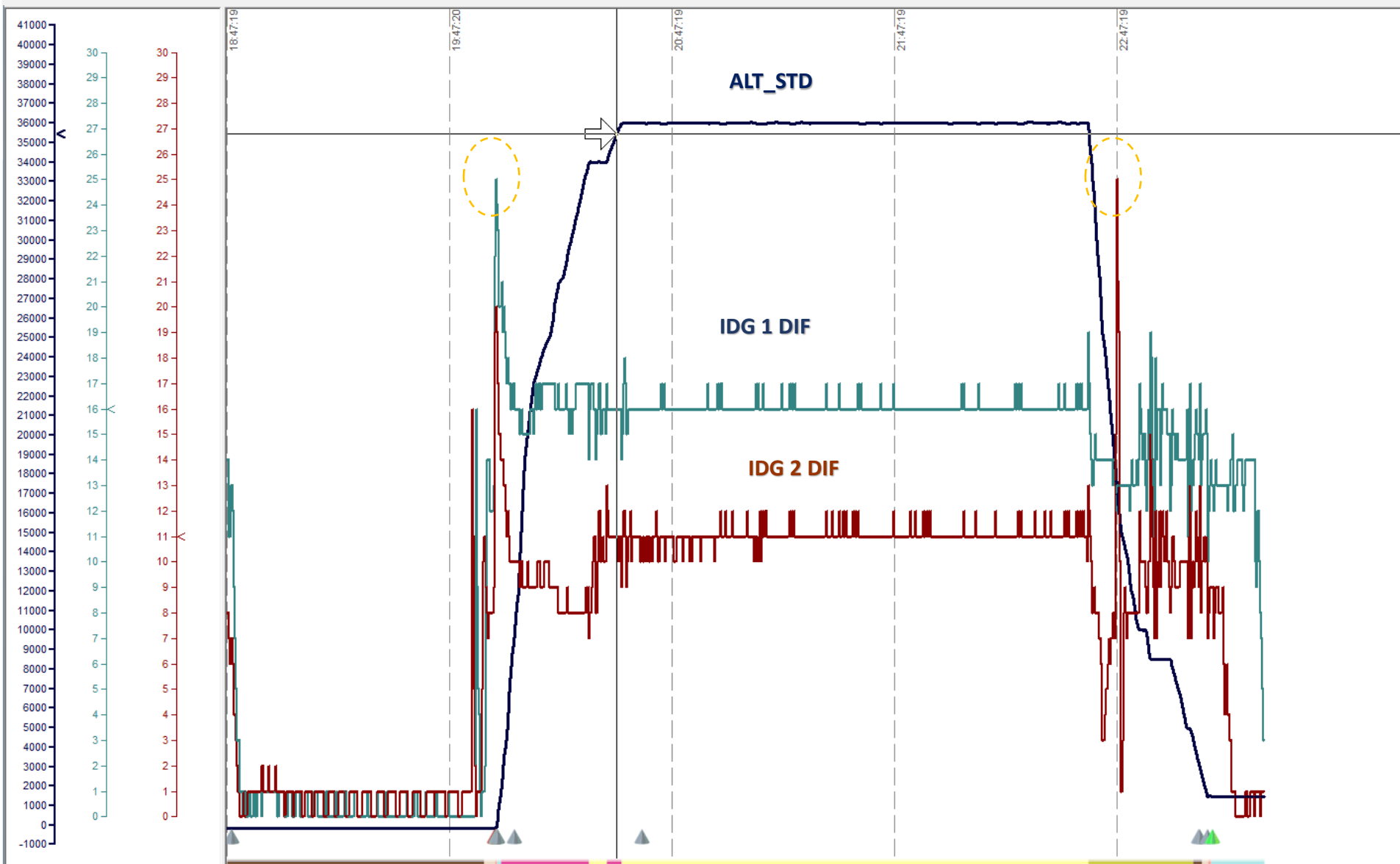


Event Information	
Number	3015
Description	IDG Oil Temp Diff 1
Category	Warning
Deviation Limits	
IDG Oil Diff 1 TOL 5s	
LOW	
MEDIUM	
HIGH	18

Oct_16



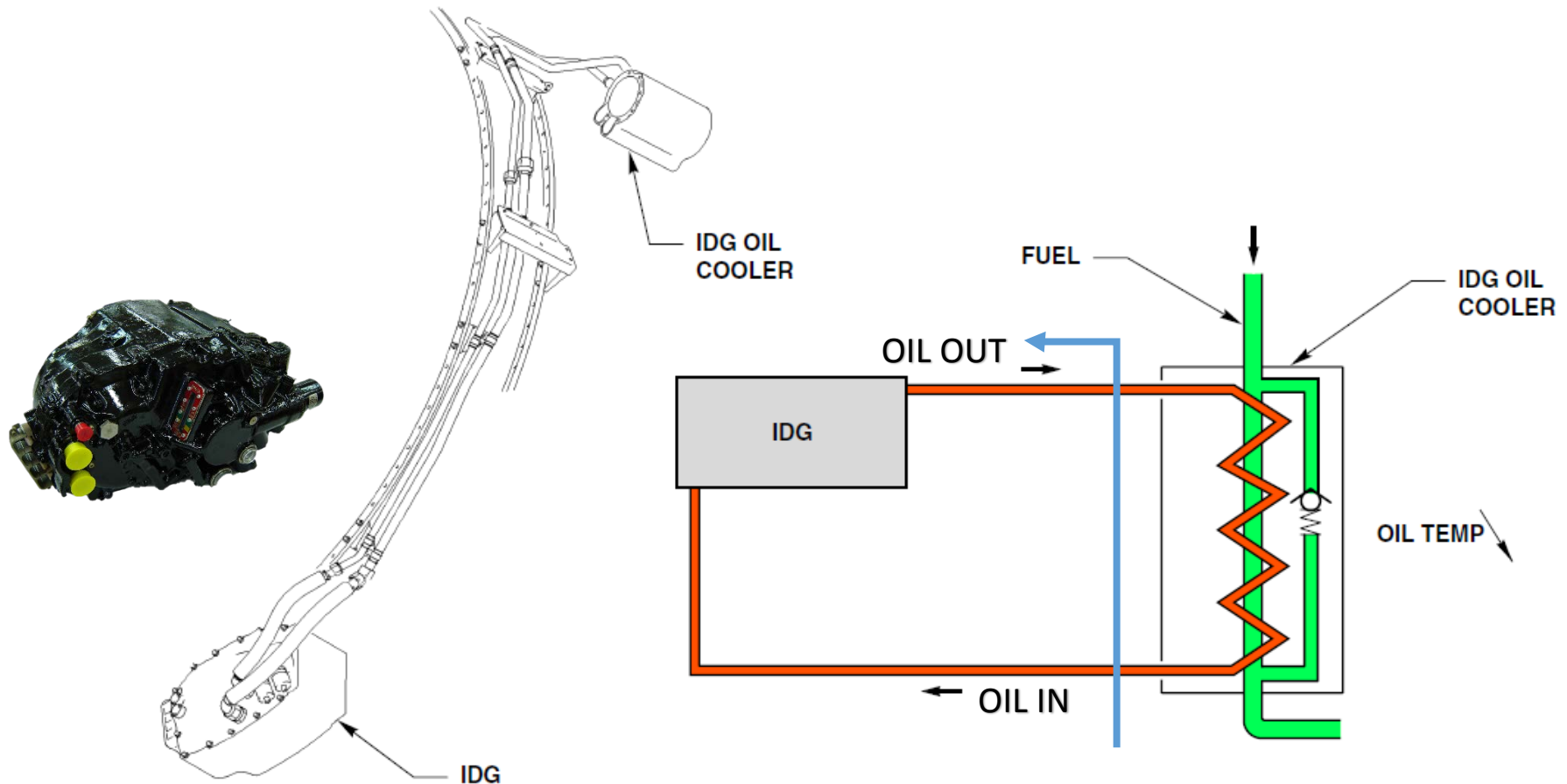
Event Information	
Number	3016
Description	IDG Oil Temp Diff 2
Category	Warning
Deviation Limits	
IDG Oil Diff 2 TOL 5s	
LOW	
MEDIUM	
HIGH	18





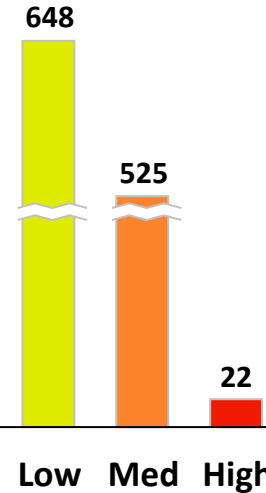
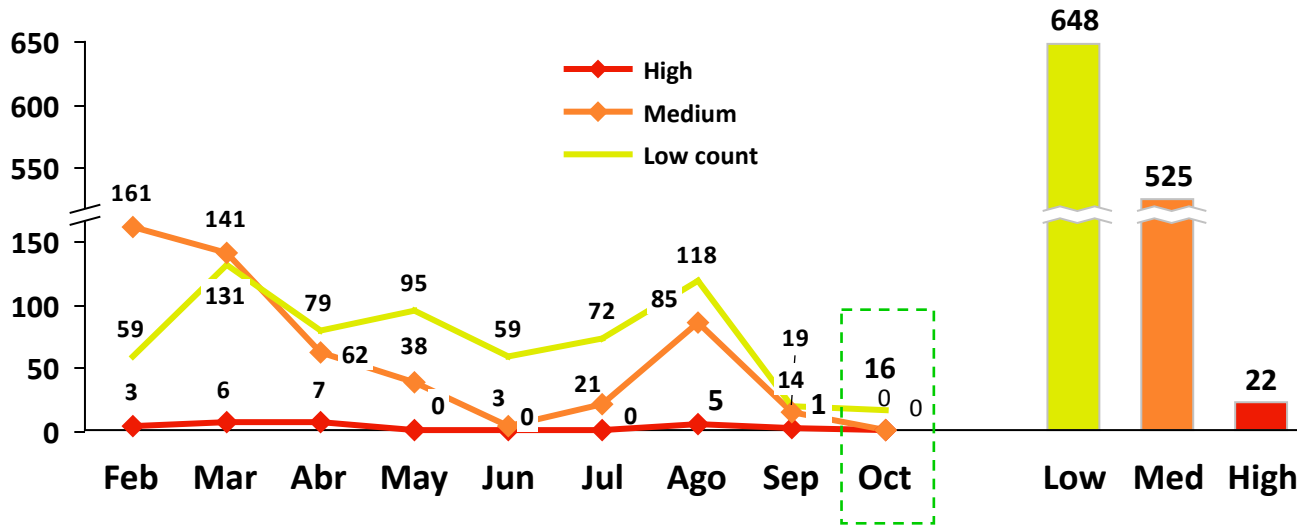
IDG Oil Cooler System

IDG OUT OIL TEMP = Temperatura de aceite de salida de la IDG

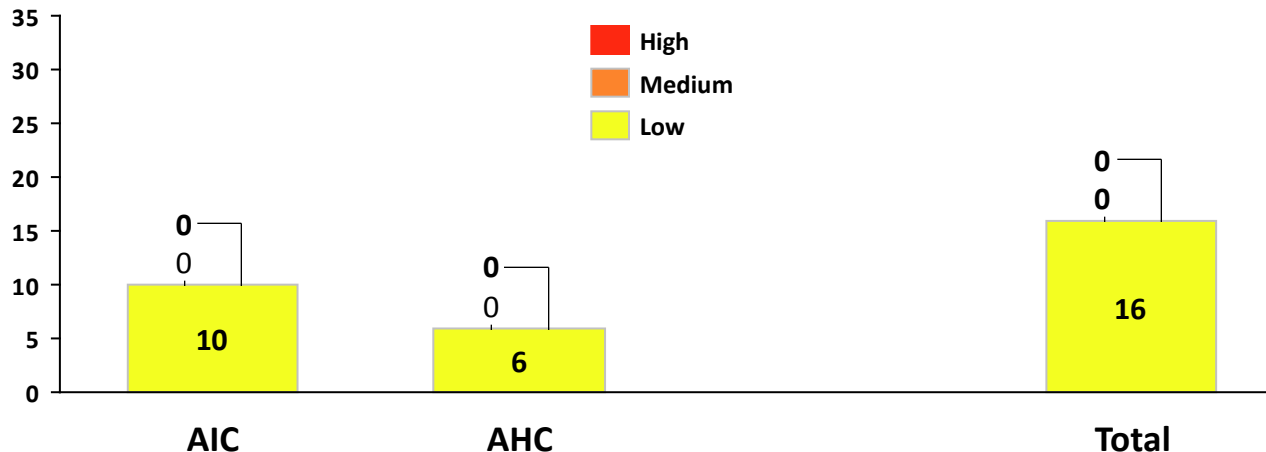


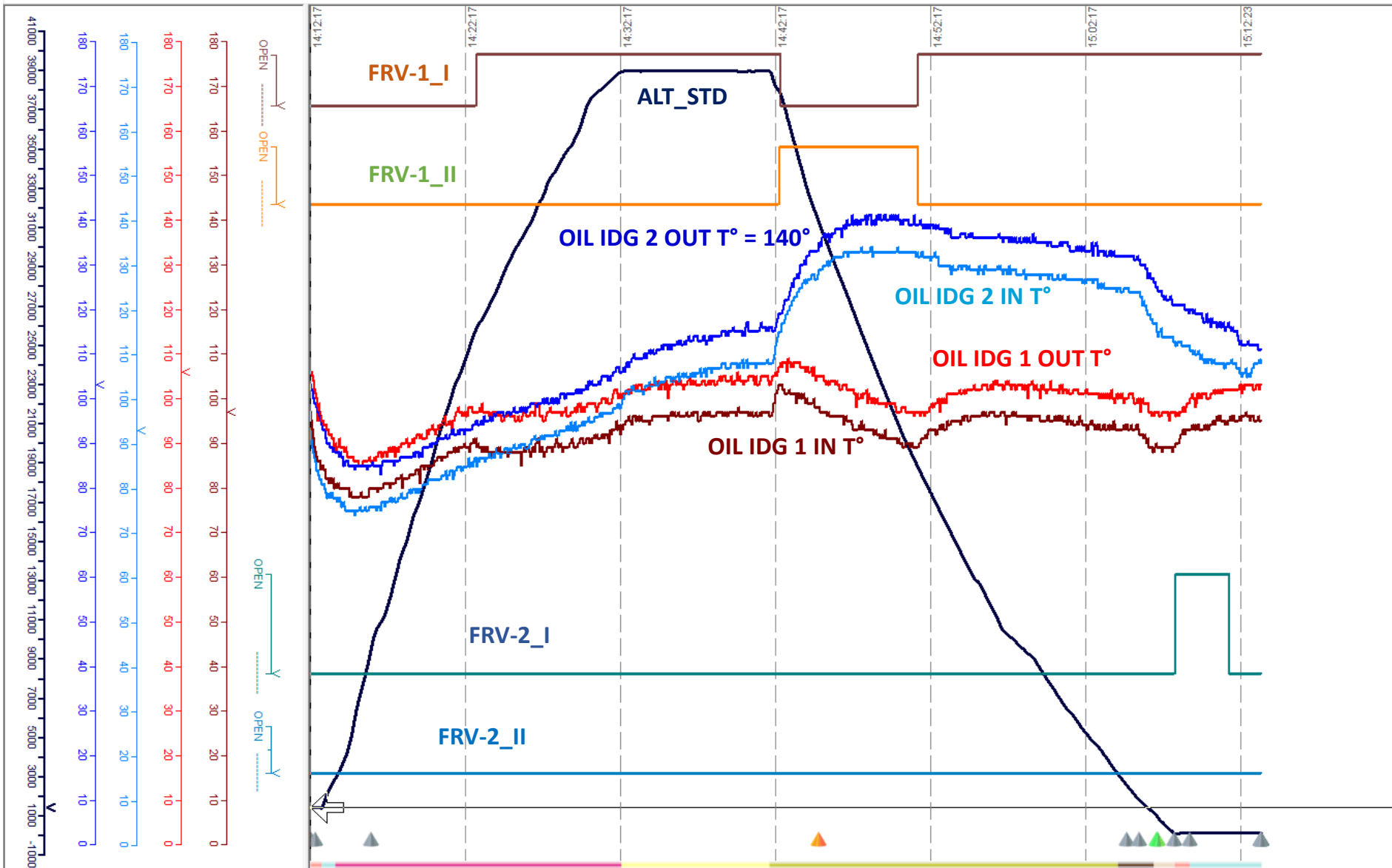
OIL OUT= T° de Aceite de Salida (incluye trabajo de cooler)

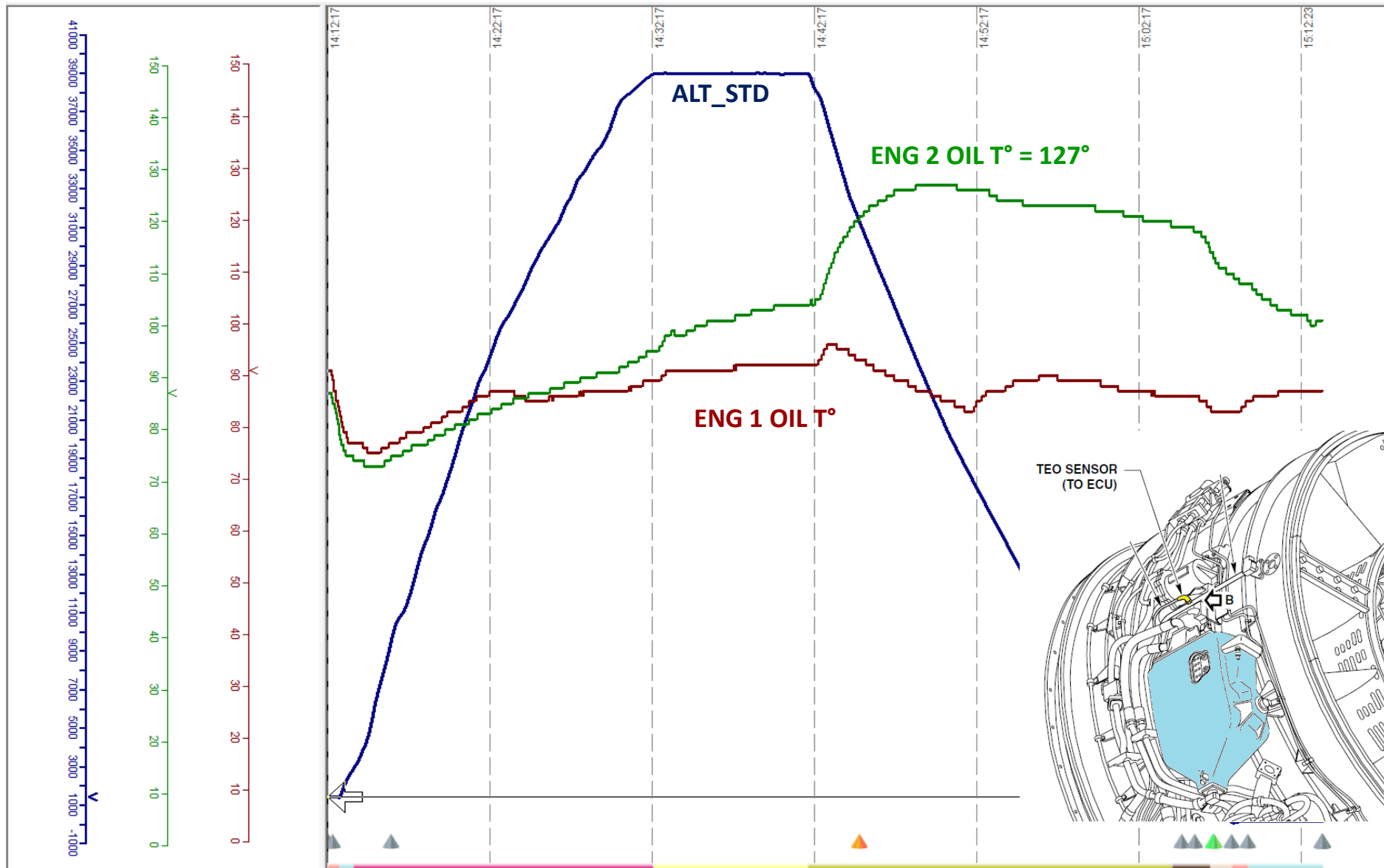
IDG Oil Temp | by Month & Severity



Event Information	
Number	3014
Description	IDG OIL TEMP WARNING
Category	Take off Risk Combinations
Deviation Limits	
IDG OIL TEMP >	
LOW	125
MEDIUM	135
HIGH	147

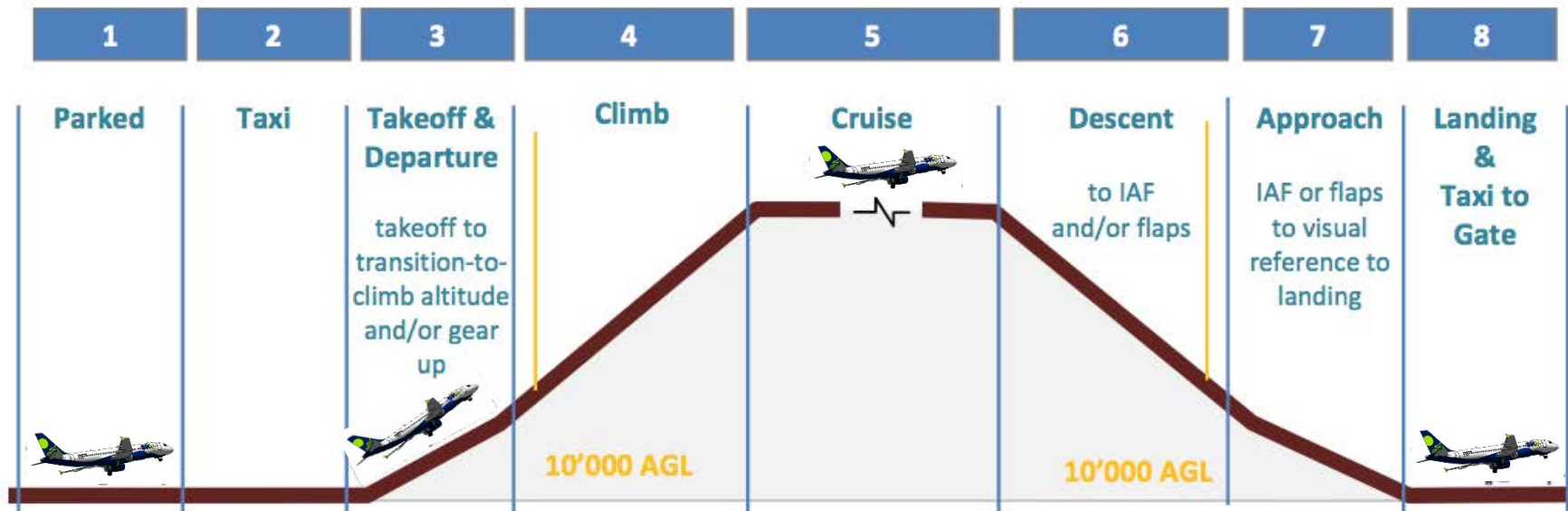
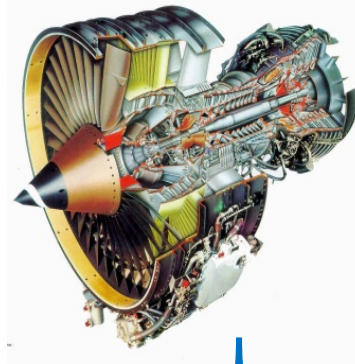








Engine Vibration

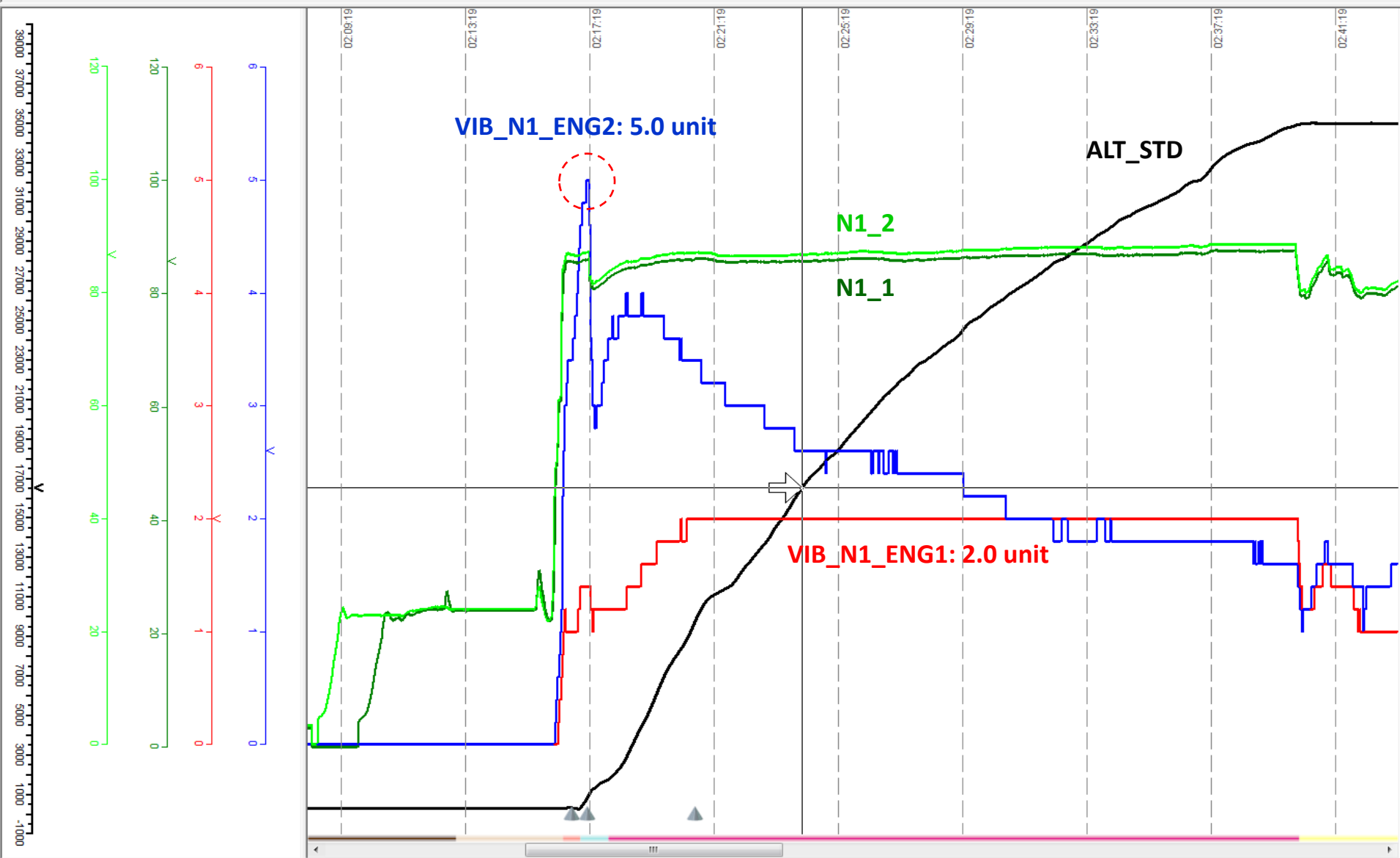




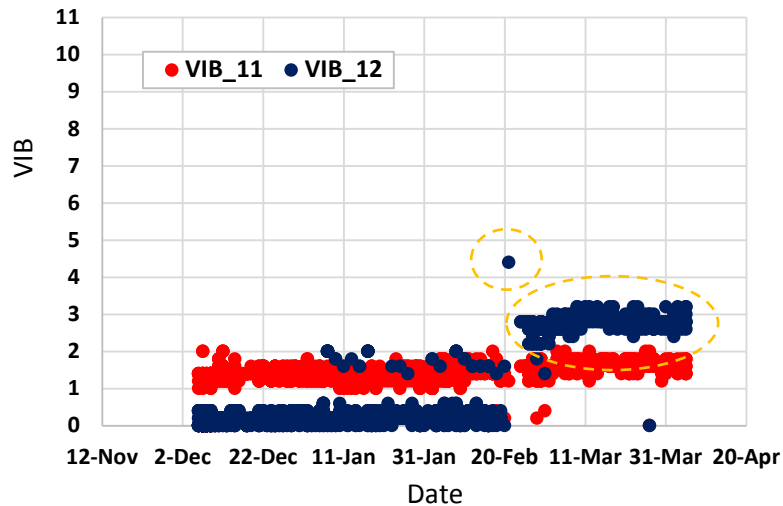
Engine Vibration (Birdstrike)

Flight Data Monitoring

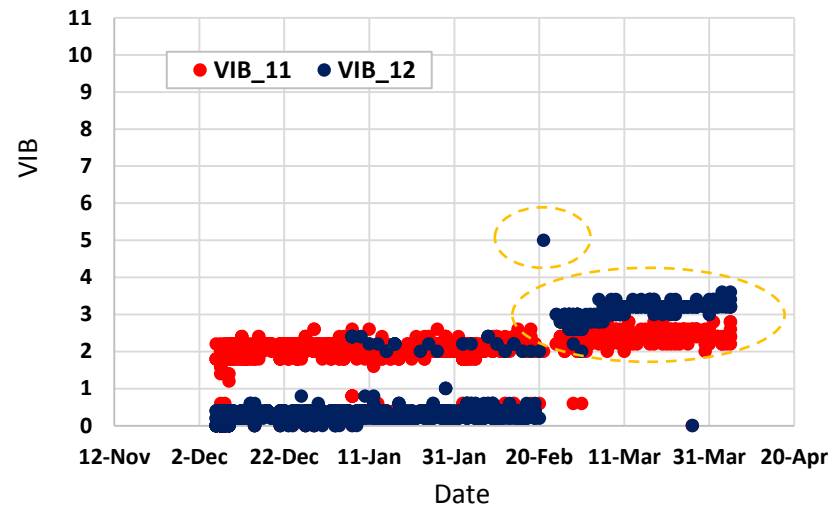
CC-ABV 21-02-2016 Parameter Map: A320TEST-2-1 (v2.30) Format: VIB_N1_N2 (v1.00) Parameters: 58
Flight: SKU007-0 PMC-PUQ T/O Frm: 13658 2:16:59 Lnd Frm: 15192 3:59:16



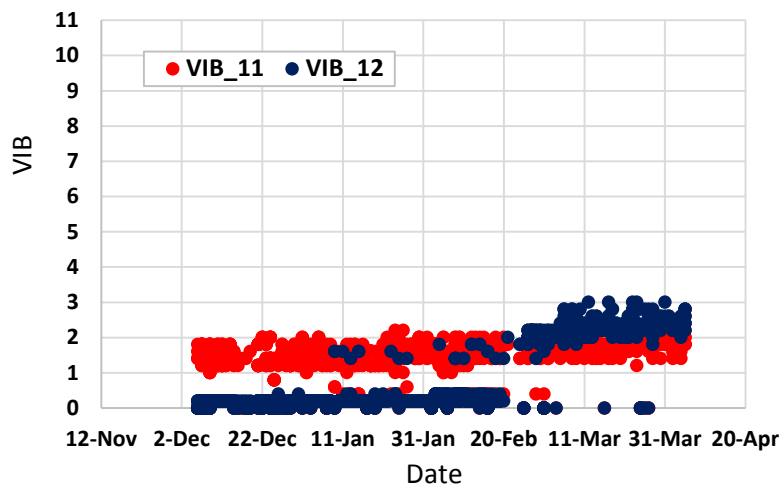
Vibración N1 / TKO



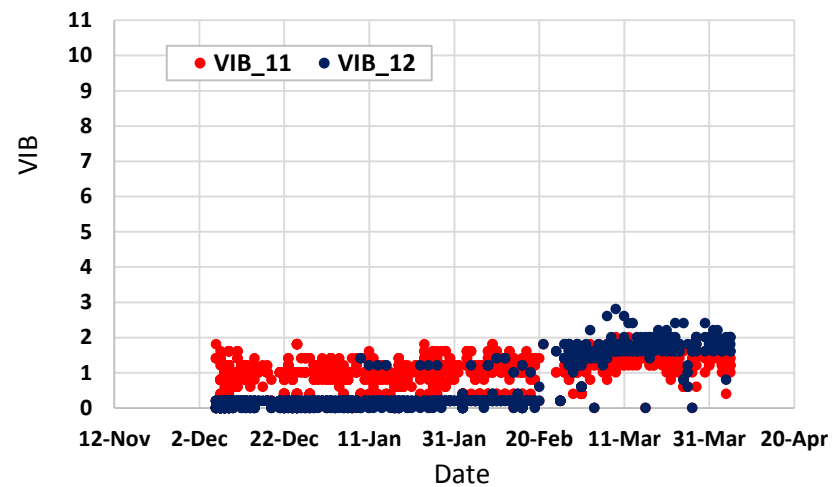
Vibración N1 / CLB

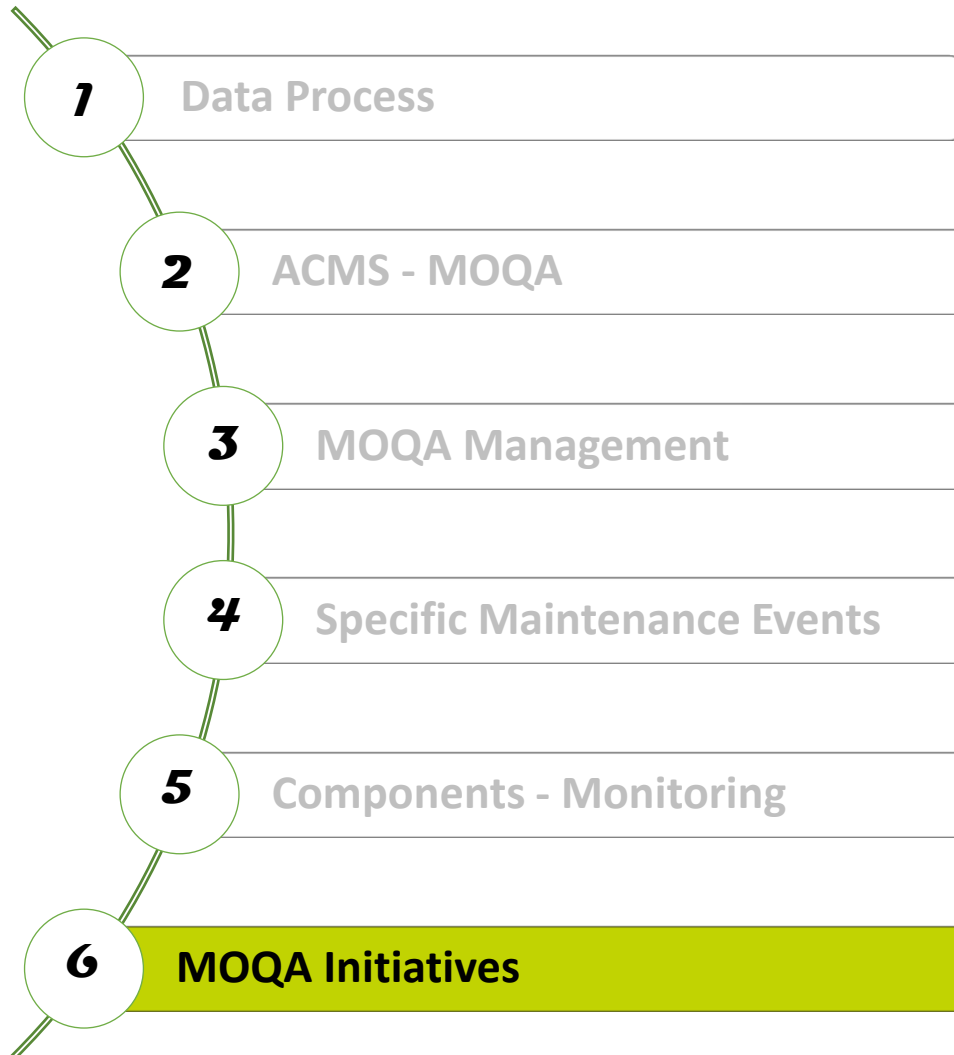


Vibración N1 / CRS



Vibración N1 / DSC





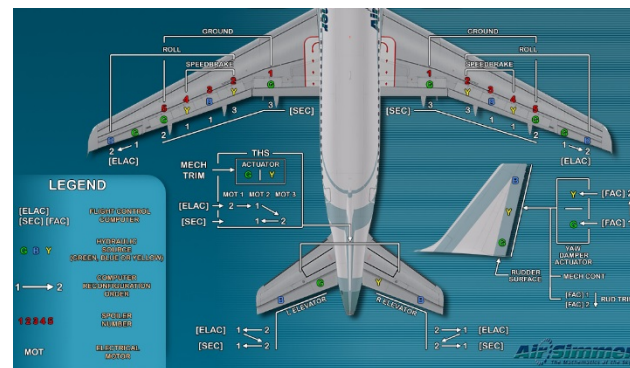
Identificación de problemas en aeronaves que generan mayor consumo de combustible, generando acciones correctivas para solucionar fallas previamente identificadas.

Rigging (Alerones, Rudder con Desviación)

Generación de Reportes ACMS: (1) **Uso de APU** por Aeropuerto y Flota. (2) Tiempo y % de conexión de energía EXT_PWR.

Generación de Data Base ACMS (A319/A320)

Rigging



Uso de APU



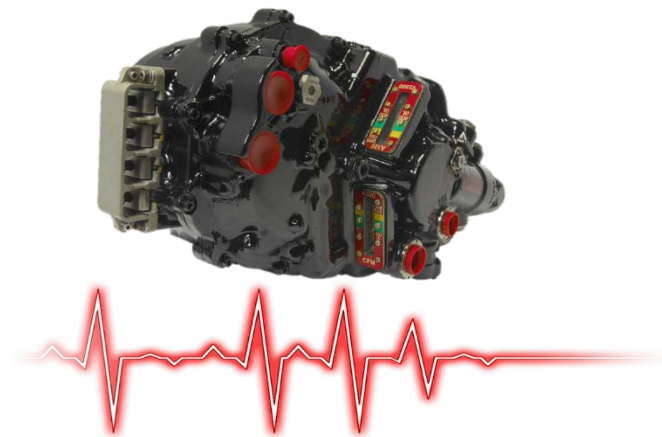
Monitoreo Continuo MOQA

Programa de Monitoreo Online y Reportes de Tendencias APU_Health Monitoring, Engine Vibration y Oil Temp. IDG.

Componentes Removidos Preventivamente.

Soporte a CCM_H24 → **Análisis eventos AOG**, Análisis eventos No AOG.

IDG Oil Temp. Monitoring



Soporte FDM eventos AOG





Questions...





Flight Data Monitoring



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IN SOUTH AMERICA
2014 / 2015

Depto. Flight Data Monitoring
E-mail: FDM@skyairline.com
Tel: (56-2) 2663 3877