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European Aviation Safety Agency

# Use of Mandatory vs Non-mandatory OSD data.

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# Topics

- Competent Authorities access to OSD Reports;
- Compliance with the Mandatory and Non-mandatory items in the OSD reports and Part-FCL;
- Documentation of OSD data in training programmes;
- Implementation of OSD data in training delivery.



# Access to OSD Reports

- How do Competent Authorities (CA) get access to OSD reports:
  - ATO provides this together with the Training Programme;
  - OEM provides automatically all CA with the report.
  
- How are the CA informed about changes or updates of the report:
  - OEM provides this automatically to the CA !
  - OSD reports made available by EASA via CIRCABC!



# Access to OSD Reports

- Issues from the Competent Authority point of view:
  - How to deal with a Training programme if the ATO does not have the OSD report and the training programme is not in compliance:  
(such as the case for a high number of small independent ATOs);
  - How to support the applicant if the NAAs cannot disclose the content of the OSD reports:  
Should we just Inform the applicant that the training programme is not compliant with the OSD report and leave them in the dark?
  - There could be a high number of training programmes that will not be compliant from the 18<sup>th</sup> December 2017:  
Do the NAAs have to suspend those training programmes?



# Use of OSD date in Training programme.

- How is the Mandatory and Non-Mandatory items from the OSD report documented in the training manual:
  - Mandatory (M) Items are essentially items that as well includes TASE items.
  - Non – Mandatory (AMC) must as well be included in the training programme, however for those items an ATO or Operator can apply for an AltMoc to achieve the same level of knowledge or performance demonstrating how they will ensure an equal safety level.
- Who should assess the AltMoc?
  - The AltMoc can only be made against the AMC items in the OSD report.
  - The CA for the ATO who apply, will handle and assess the AltMoC, the outcome should be communicated to EASA for opinion as for all other AltMocs.



# Training documentation & delivery

- How does the CA verify that all the applicable OSD data are integrated elements in the training delivery?
  - Documentation can be checked by reviewing:
    - Compliance list of Mandatory items including TASE;
    - “Briefing items” for the various sessions where the OSD training elements are highlighted in **BOLD** or marked by an asterisk (\*).
- Implementation shall demonstrate that Special emphasis is given during:
  - Initial instructor training and /or
  - Standardisation programmes to explain on how to handle and teach OSD specific items, with focus on the TASE.



# training documentation & delivery

Training Area of Special Emphasis	Reference	Course Reference
Functionality and use of the side stick controllers with special emphasis on the relationship between the two controllers, dual inputs, priority switching, transfer of control, and AP engagement	OSD 5.2.1.1	Flight Controls CBT module
Trim functionality and interaction with AP engagement	OSD 5.2.1.1	Flight Controls CBT module
Approach functionality and limitations (e.g. regarding circling approaches / sidestep landings initiated below 2000ft AGL from ILS approach)	OSD 5.2.1.1	Simulator Sessions 6, 7
IFIS and optional HUD, if applicable [Note: IFIS is not currently certified for the ]	OSD 5.2.1.1	HUD CBT module HUD Briefing Classroom Module
TAWS modes and functionality	OSD 5.2.1.1	Navigation CBT module
Windshear (including predictive and reactive wind shear guidance)	OSD 5.2.1.1	SI Session 7
ACARS and CPDLC functionalities	OSD 5.2.1.1	ACARS – Operator Responsibility CPDLC – optional CPDLC CBT module (if applicable)
Computerized AFM Data (CAFM), mass and balance, QRH Performance, dispatch data	OSD 5.2.1.1	Classroom modules 2 thru 9
Systems Integration Training	5.2.1.2	



# training documentation & delivery

TASE Item	Training Reference
Actions in response to ACAS Resolution Advisory;	FFS 2
Actions in response to EGPWS <u>windshear</u> and terrain warnings;	FFS 4
Use of secondary pitch trim system;	FFS 1
Approach, landing and emergency braking following loss of DC Power;	FFS 3
Emergency Descent Mode.	FFS 6
Approaches/Landings with reduced flap settings;	FFS 4
Loss of autopilot;	FFS 5





# training documentation & delivery

- Limitations
- Before Start Checklist
- Before Taxi Checklist
- Before Takeoff Checklist
- After Takeoff Checklist
- Electronic Flight Instrument System (EFIS)
  - Controls and Indications
  - CTP
  - Flight Mode Annunciator (FMA)
  - Declutter
- **FMS Graphical Frequency Tuning**
- **FMS Graphical Flight Planning**
- Hydraulic System
  - Components
  - Hydraulic Pumps
  - Hydraulic Quantities
  - Hydraulic System Overheat Procedure
  - Normals/Abnormals/Emergencies
  - Limitations
- **FMS Programming**
- 2 • **FMS limitations**
- Descent and Approach Checklist
- Before Landing Checklist
- After Landing Checklist
- Shutdown Checklist
- Power Off Checklist



# training documentation & delivery

- Fan blade icing and removal
- Before takeoff checklist
- Instrument Takeoff
- Crosswind Takeoff
- Contaminated surface takeoff
- Rejected takeoff on contaminated runway
- SID/Noise Abatement Procedures Departure
- After takeoff checklist
- Inadvertent encounters with moderate or severe in flight icing conditions
- Aerodynamic effects of airborne icing
- Descent and Approach checklists
- 1** • **LPV Approach**
- SBAS/GNSS malfunction
- 2** • **Two-engine bailed landing from idle thrust**
- Before Landing checklist
- After Landing checklist
- Autothrottle failure
- 3** • **TCAS**
- Shutdown checklist
- Power-off checklist
- Temperature Compensation
- 4** • **HUD usage (if installed)**
- CRM



# training documentation & delivery

## 4.2.3.6. SIT 4

Day 4

3:00

- 
- Briefing Items
    - System Review
  - TASE
    - Operations in low visibility
      - Surface Movement Guidance Control System (SMGCS or "SMIGS")
      - Taxi
      - Takeoff
      - Approach and landing
  - Task
    - Before Taxi Checklist
    - FMS Setup
    - Low Vis Taxi
    - Instrument Takeoff
    - SID
    - Failed Pitot Heat
    - High Alt Stall
    - PFD Fail
    - AHS & ADC Fail
    - Explosive Decompression
    - Divert to nearest airport
    - VNAV Descent
    - ILS Approach/Glide Slope Failure (Localizer), failed AP
    - Missed Approach
    - Dual Gen Failure
    - Full stop Landing





# training documentation & delivery

## 4.3.4.1. Objectives

- Familiarization with performance calculations, Windshear procedures and FMS operations. Understand pressurization, hydraulics, landing gear and brakes. Review after landing procedures.

## 4.3.4.2. TASE

1

- Actions in response to EGPWS windshear and terrain warnings;
- Approaches/Landings with reduced flap settings;

## 4.3.4.3. Task

- Crew Co-operation
- Crew Leadership and Management Skills
- Crew Situational awareness
- Crew Decision Making

## 4.3.4.4. Briefing items

- Density Altitude
- Windshear
- Convective Weather, Heavy Precipitation
- Radar Test/Use

## 4.3.4.5. Learning Assessment

The pilot will be proficient to perform takeoff and landing. The pilot will gain experience in Windshear memory procedures executed with the appropriate configuration, and maximum performance performed. The pilot will be able to operate onboard weather radar and learn weather avoidance techniques.



# training documentation & delivery

FCL	No	A
1.3/3.3	1.	Pre-Flight inspection (cockpit only)
1.1	2.	Performing Calculations
1.5	3.	Taxiing
1.6	4.	Pre-takeoff Checks
2.1	5.	Normal Takeoff
1	6.	<b>Windshear on Takeoff</b>
3.4.10	7.	Convective Weather Avoidance
3.4.5	8.	Hydraulic Pump Failure
3.9.4	9.	Non-precision approach w/ Own Navigation
2	10.	<b>Windshear on Landing</b>
3.9.4	11.	Non-Precision approach w/ Procedure Turn
4.1	12.	Miss Approach with Diversion
3.4.0/3.6.3	13.	Engine Shutdown due to L Oil Press
3.4.12	14.	Manual Gear Extension
3	15.	<b>No Flap Landing</b>
3.9.4	16.	Non-precision Approach
5.1	17.	Normal Landing from non-precision approach
	18.	After Landing Procedures



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# Questions?

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**Thank- you**

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