

C Series



AWO Courses / AL (All Weather Operations / Autoland)

Course Description

- There are three categories of ILS which support similarly named categories of operation:

Category I (CAT I)	A precision instrument approach and landing with a decision height not lower than 200 ft. (61 m) above touchdown zone elevation and with a runway visual range not less than 550 m.
Category II (CAT II)	A precision instrument approach and landing with a decision height lower than 200 ft. (61 m) above touchdown zone elevation but not lower than 100 ft. (30 m), and a runway visual range not less than 300m.
Category III (CAT III)	is subdivided into three sections:
Category III A	A precision instrument approach and landing with: a) A decision height lower than 100 ft. (30 m) above touchdown zone elevation, but not lower than the aircraft's certified alert height; and b) A runway visual range not less than 200 m.
Category III B	A precision instrument approach and landing with: a) A decision height lower than 50 ft. (15 m) above touchdown zone elevation, or no decision height; and b) A runway visual range less than 200 m but not less than 75 m.
Category III C	A precision instrument approach and landing with no decision height and no runway visual range limitation. This category is not yet in operation anywhere in the world, as it requires guidance to taxi in zero visibility as well. "Category III C" is not mentioned in Regulation Air Operations. Category III B is currently the best available system.

- With their IFR rating and their type rating, pilots are entitled to operate down to Category I weather minima.
- If approaches in lower weather conditions (CAT II or CAT III) are intended, additional training is required.
- AL (Autoland) can be part of this training module, AL has to be performed according AOC holder's training manual and SOP.

Aircraft Type

- C Series CS100 and CS300 (BD-500)

Course Goal

- The aim of the respective training is to fulfil the respective training requirements of EU OPS and – if applicable – the AOC holders AL training requirements.

Course Structure and Duration

- ■ ■ Self-study WBT/CBT 4.00 hours ■ One FFS-Session 4.00 hours

Theoretical Training and Checking

■ Self-study / WBT □ Classroom ■ Training on system trainer ■ Practical training on FFS T Theoretical test T Practical test

1. Aircraft Equipment & Procedures

- Checks of satisfactory functioning of equipment in flight
- Monitoring of automatic flight control systems and autoland status annunciators with emphasis on the action to be taken in the event of failures of such systems
- Actions to be taken in the event of failures such as engines, electrical systems, hydraulics, or flight control systems
- The effect of known unserviceabilities and use of minimum equipment lists
- Maximum deviation allowed from glidepath or localizer
- The importance and significance of alert height, if applicable, and the action in the event of any failure above and below the alert height
- The operational capabilities and limitations of the particular airborne system
- The effects for the aircraft and consequently for AWO operation of precipitation, ice accretion, low level windshear, and turbulence
- The importance of correct seating and eye position

2. Ground Equipment & Procedures

- Checks of satisfactory functioning of equipment on the ground
- Effect on minima caused by changes in the status of ground installations
- Recognition of and action to be taken in the event of failure of ground equipment
- Guidance on the visual cues required at decision height
- The use and limitations of RVR assessment systems
- The principles of obstacle clearance requirements
- The procedures and precautions to be followed with regard to surface movement during operations when the RVR is 400 m or less

3. Standard Operating Procedures (SOP)

- FMS flight phase-related procedures
- Task sharing during CAT 2, CAT 3 approaches
- Failures and associated actions above 1,000 ft.
- Failures and associated actions below 1,000 ft.
- CAT 3 approaches with and without decision height (DH)
- FMS irregularity and corresponding crew procedures to be followed
- Rejected take-off in low visibility

4. Autoland

- AL has to be performed according the AOC holder's training manual and procedures
- A customized AL training can be combined with this AWO training module.

Practical Training and Checking

Exercises cover all AWO minima, incl. the operator's lowest approved minimum. Example here shows a CAT 3B approved aircraft type:

Nr.	Type of AWO Approach / Exercise	GA	LDG	Visual Setting
1	CAT 3B All engines Ground equipment failure	X		day
2	CAT 3A 1 engine out		X	day
3	CAT 3B All engines Single AP failure	X		day
4	CAT 3A All engines No visual cues at DH	X		day
5	CAT 3B All engines On board equipment failure	X		day
6	CAT 2 All engines Minor on board		X	dusk
7	CAT 3B All engines Windshear / too much X-wind	X		night
8	CAT 3B All engines Dual AP failure		X	night
9	At instructor pilot's discretion	X		any
10	At instructor pilot's discretion		X	any

The typical lesson profile looks like this:

