Swiss Confederation

Federal Office of Civil Aviation FOCA

FOCA GM/INFO

Guidance Material / INFORMATION

Area 100 Knowledge Skills and Attitude

Implementation Journal (IJ)



Scope	Implementation of ED Decision 2018/001/R and ED Decision 2019/017/R and related AMC / GM to Part ORA Issue 1 Amendment 5 and Part FCL Issue 1 Amendment 4 and 8 adressing the implementation of Area 100 KSA
Applies to	Approved Training Organisation (ATO) having obtained the privileges to conduct training courses for Commercial Pilot Licence (CPL), Airline Transport Pilot Licence (ATPL) and / or Multi Crew Pilot Licence (MPL) for Aeroplane and Helicopter (A/H).
Valid from	10.01.2022

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Space fo	r notes related	to organisational iss	ues, questions, (points to rer	nember, et	C.:		



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0 Introduction

The purpose of this Implementation Journal (IJ) is to assist an Approved Training Organisation (ATO) to revise/amend/compile their ATO documentation as required for a specific topic resulting from changes and/or implementations of relevant EU regulations. It is to be considered as a tool for the organisation in order to ease processes for obtaining required and defined approvals issued by the Federal Office of Civil Aviation (FOCA). Using the IJ will facilitate to establish compliance with defined requirements and will lead through the respective certification process.

The IJ shall be used as a working tool/paper and checklist for compliance verification and to identify/document the affected chapter(s) and/or subchapter(s).

Prior to submission to FOCA, the material shall be checked for the following qualities:

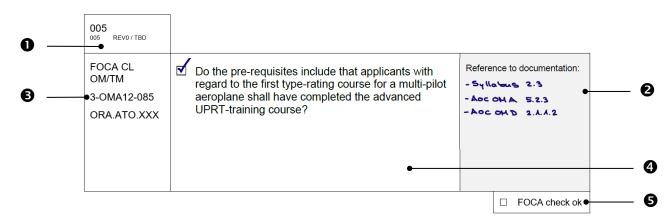
- Accuracy and completeness of the information;
- Readability and comprehensibility; and
- Conformity of the document with legal requirements.

The IJ consists of a standardised modular check box system. During compliance verification, the organisation shall include reference to the affected Part(s), Chapter(s), and/or Subchapters of the organisation's document systems or manual system, as required by the revision/amendment.

The IJ shall be sent to FOCA together with the revised / amended documents and relevant applications (PRA, Form 105).

0.1. Format of IJ

The IJ consists of a standardised modular check box system. The following presentation provides details of the defined format:



Sequence number of the check box.
 To be filled in by the organisation → reference to the Part(s), Chapter(s) and/or Subchapters of the organisation's document systems, as affected by the revision/amendment.
 Associated legal reference and/or reference to other relevant publications including FOCA guidance material.
 Questions for self-assessment and compliance verification.
 FOCA verification

1 Syllabus

CPL, ATPL and/or MPL Syllabus shall be amended with Area 100 KSA elements as follows.

1.1.	Affected	Syllabi
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005 005 REV0 / 27.04.2021				
FOCA CL OM/TM 5-TMAPP-450 5-TMAPP-451 5-TMAPP-460 5-TMAPP-461	Area 100 KSA is integrated in the training course: CPL modular CPL integrated CPL/IR integrated MPL ATPL modular ATPL integrated	Reference to documentation:		
			- TOOK ONE ON	
1.2. Student	data and attendance			
010 010 REV0 / 27.04.2021				
FOCA CL OM/TM 3-OMA12-085 4-TMP1-7-300	 □ Are student attendance records amended for: □ Formative assessment(s)? □ Summative assessments? □ Mental math test(s)? 	Referer	nce to documentation:	
			☐ FOCA check ok	
1.3. Overvie	w and summaries			
015 015 REV0 / 27.04.2021				
FOCA CL OM/TM	☐ Is the overview of training course subjects amended with the:	Referer	nce to documentation:	
4-TMP1-5-255	☐ formative assessment(s)? ☐ summative assessments? And			
	☐ mental math test(s)			

 $\ \square$ FOCA check ok

1.4. Theoretical knowledge instruction / practical training

020 020 REV0 / 27.04.2021		
FOCA CL OM/TM	☐ Does the detailed breakdown of the training course content includes comprehensive reference to the:	Reference to documentation:
4-TMP4-1-385	☐ applicable formative assessment?	
5-TMAPP-450	\square applicable summative assessment?	
5-TMAPP-451	☐ related assessment tool?	
5-TMAPP-455	☐ applicable mental math test?	
5-TMAPP-460	☐ Are the Mental Math Tests integrated into the learning	
5-TMAPP-461	subjects of:	
	 033 «Flight Performance and Planning - Flight Planning and Monitoring»; and 	
	☐ 061 «Navigation - General Navigation».	
		☐ FOCA check ok

2 Training Manual

The Training Manual (TM) shall be amended with Area 100 KSA elements as follows:

2.1. Instructional System Design (ISD)

025 025 REV0 / 27.04.2021			
FOCA CL OM/TM 4-TMP1-10-325	TM Part 1 Chapter x.10.x «Training effectiveness»:	Referen	ce to documentation:
	☐ For the development of an Instructional System Design (ISD) method, the chapter training effectiveness shall:		
	be amended with the procedure for the development of training course, including the following steps:		
	analysis of training need, requirements, learning objectives and required tests and assessments?		
	☐ course design and development of syllabus?		
	☐ preparation of lesson and session plans?		
	☐ training course implementation phase?		
	 evaluation and review phase – including a reference to the training standard evaluation process? 		
	☐ The training standard evaluation process shall be reviewed for completeness, by verifying the process to:		
	☐ include analysis of training course results?		
	☐ consider instructor and student feedback?		
	contain the training course content review, correction and/or enhancement?		
	ensure the continuous regulatory compliance including FOCA administrative requirements?		
			☐ FOCA check ok

2.2. Competency framework

030 030 REV0 / 27.04.2021			
FOCA CL OM/TM	TM Part 1, Chapter x.9.x «Assessments, tests and examinations»	Referen	nce to documentation:
4-TMP1-9-320 AMC1 FCL.310;	☐ Is there a statement, that the competency framework is either in:	work is	
FCL.515(b);	☐ a separate maintained document? or		
FCL.615(b); «Learning	☐ part of the assessment tool?		
Objectives (LOs)	☐ Is there a competency framework which include:		
(LOS)	☐ all Learning Objectives (LOs) of:		
	☐ 100 02 «Core competencies learning objectives»?		
	100 03 «Additional Threat and Error Management (TEM) related Learning Objectives»?		
	☐ a description of:		
	☐ each single competence? and		
	☐ associated indicators?		
			☐ FOCA check ok

2.3. Grading system

035 035 REV0 / 27.04.2021			
FOCA CL OM/TM	TM Part 1, Chapter x.9.x «Assessments, tests and examinations»	Referer	ce to documentation:
4-TMP1-9-320	\square Is there a statement, that the grading system is either in:		
	\square a separate maintained document? or		
	\square part of the assessment tool?		
	☐ Is there a grading system, which can be applied for assessing the student level of performance? Does the system include:		
	☐ defined level of performance?		
	☐ competency level description?		
	☐ a statement on how many performance indicators have to be satisfactorily completed to achieve 35%?		
			☐ FOCA check ok

2.4. Assessment Tool

040 040 REV0 / 27.04.2021			
FOCA CL OM/TM	TM Part 1, Chapter x.9.x «Assessments, tests and examinations»	Referen	ce to documentation:
4-TMP1-9-320	☐ Is a comprehensive reference to the applicable assessment tool provided?		
	☐ Is there an assessment tool that can be applied during formative and summative assessments? Does the tool include:		
	☐ the competency?		
	☐ competency description?		
	☐ Indicators?		
	☐ a possibility to record:		
	the number of performance indicators which were assessed for the relevant competency?		
	level of performance – how well the competency was demonstrated in the assessment? and		
	☐ and for summative assessment, the level of success?		
			☐ FOCA check ok

2.5. Conduct of Area 100 KSA assessments

045 045 REV0 / 27.04.2021			
FOCA CL OM/TM	TM Part 1, Chapter x.9.x «Assessments, tests and examinations»	Reference	e to documentation:
4-TMP1-9-320	☐ Is there a procedure for the conduct of Area 100 KSA formative and summative assessments? Does the procedure include the following steps:		
	☐ Opening of assessment?		
	☐ Monitoring of actions?		
	☐ Preparation of debriefing?		
	☐ Debriefing?		
	☐ Continuous improvement – including a reference to the training standard evaluation process?		
			☐ FOCA check ok

2.6. Formative Assessment

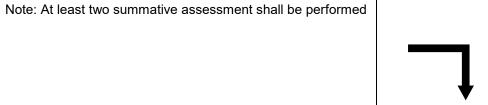
050 050 REV0 / 27.04.2021			
FOCA CL OM/TM	TM Part 1, Chapter x.9.x «Assessments, tests and examinations»	Reference	ce to documentation:
4-TMP1-9-320	☐ Concerning formative assessment, is there a statement that:		
	☐ at least one assessment is to be conducted during training?		
	☐ goals/targets and competencies are to be explained and described?		
	☐ student are to be supported to identify witnessed gap/weakness and to focus on area of improvements / corrective actions?		
	☐ students are to be engaged in self-reflection?		
	☐ assessments should be debriefed by the defined method?		
			☐ FOCA check ok

2.7. Summative Assessment

055 055 REV0 / 27.04.2021			
FOCA CL OM/TM	TM Part 1, Chapter x.9.x «Assessments, tests and examinations»	Referer	nce to documentation:
4-TMP1-9-320	☐ Concerning summative assessment, is there a statement that:		
	\square at least two assessments are to be performed?		
	☐ students performance are to be compared with the defined indicators?		
	☐ The individual level of competency is to be analysed?		
	35% of the performance indicators in the relevant competency are satisfactorily to be achieved?		
	assessments should be debriefed by the defined method?		
			☐ FOCA check ok

4-TMP1-9-320

060 REV0 / 27.04.2021					
FOCA CL OM/TM	TM Part 1, Chapter x.9.x «Assessments, tests and examinations»	Referen	ice to d	locumentatio	on:
4-TMP1-9-320	☐ Is there an Assessment Matrix for the Learning Objectives (LOs) of Area 100 KSA available:				
	☐ listing all single LOs and provides a comprehensive reference to the concerned Assessment?				
	considering the total of all referenced summative assessments, are all of the LOs covered in the matrix?				
	☐ included in:				
	☐ the Training Manual? or				
	☐ provided as an appendix?				
				FOCA che	ck ok
065 065 REV0 / 27.04.2021					
FOCA CL OM/TM	☐ Considering the total of all summative assessments, are all of the LOs covered?				



		Summative Assessment (SA)					
Learning Obj	earning Objectives		SA2	SA3	SA4	SA5	
100 02 01 00	Communication						
(01)	Show the ability to identify whether the recipient is ready and able to receive the information.						
(02)	Show the ability to appropriately select what, when, how and with whom to communicate.						
(03)	Show the ability to communicate clearly, accurately and concisely.						
(04)	Show the ability to confirm whether the recipient correctly understands important information.						
(05)	Show the ability to listen actively and show you understand the information you receive.						
(06)	Show the ability to ask relevant and effective questions.						
(07)	Show the ability to adhere to standard radio-telephony phraseology.						
(08)	Show the ability to accurately read, interpret, construct and respond to given documentation in English.						
(09)	Show the ability to correctly interpret non-verbal communication.						
(10)	Show the ability to use appropriate eye contact, body movement and gestures that are consistent with and support verbal messages.						
100 02 02 00	Leadership and teamwork						

Learning Objectives		Summative Assessment (SA)						
Learning Obje	ectives	SA1	SA2	SA3	SA4	SA5		
(01)	Show the ability to create an atmosphere of open communication that encourages participation.							
(02)	Show the initiative and the ability to give directions when required.							
(03)	Show the ability to admit mistakes and take responsibility.							
(04)	Show the ability to anticipate and respond appropriately to others' needs.							
(05)	Show the ability to carry out instructions when directed.							
(06)	Show the ability to communicate relevant concerns and intentions.							
(07)	Show the ability to give and receive feedback constructively.							
(80)	Show empathy, respect and tolerance for others.							
(09)	Show the ability to engage others in planning and to allocate activities fairly and appropriately according to others' abilities.							
(10)	Show the ability to address and resolve conflicts and disagreement in a constructive manner.							
(11)	Show the ability to project self-control.							
100 02 03 00	Problem-solving and decision-making							
(01)	Show the ability to seek accurate and adequate information from appropriate sources.							
(02)	Show the ability to identify and verify what and why things have gone wrong.							
(03)	Show the ability to employ proper problem-solving strategies.							
(04)	Show the ability to persevere in working through problems.							
(05)	Show the ability to use appropriate and timely decision-making processes.							
(06)	Show the ability to set priorities appropriately.							
(07)	Show the ability to identify and consider options effectively.							
(80)	Show the ability to monitor, review and adapt decisions as required.							
(09)	Show the ability to identify and manage risks.							
100 02 04 00	Situation awareness							
(01)	Demonstrate the ability to identify and assess accurately the general environment as it may affect the operation.							
(02)	Demonstrate the ability to identify threats, errors and undesirable aircraft states.							
(03)	Demonstrate the ability to manage threats, errors and undesirable aircraft states.							
100 02 05 00	Workload management					<u>, </u>		
(01)	Show the ability to maintain self-control.							
(02)	Show the ability to plan, prioritise and schedule tasks effectively.							
03)	Show the ability to manage time effectively when carrying out tasks.							
(04)	Show the ability to offer and accept assistance, delegate when necessary and ask for help early.							
(05)	Show the ability to manage interruptions, distractions, variations and failures effectively.							
100 03 01 00	Application of knowledge							
(01)	Demonstrate the ability to complete pre-flight planning in practical exercises.							
(02)	Demonstrate the KSA and TEM relating to phases of flight in the ground training environment.							
100 03 02 00	Upset prevention and recovery training (UPRT) and resilience				•			
(01)	Recognise potential upset 'threats' and suggest effective 'threat management' in scenario situations.							

	at	Summative Assessment (SA						
Learning Obje	ctives	SA1	SA2	SA3	SA4	SA		
(02)	Recognise potential upset 'errors' and suggest effective 'error management' in scenario situations.							
(03)	Explain the causes of and contributing factors to upsets.							
04)	Demonstrate resilience during scenario and/or other exercises.							
05)	Show the ability to identify the signs and discuss the effects of stress, fatigue and aviation lifestyle on situation awareness, and how to cope with them in order to maintain situation awareness.	ation lifestyle on situation awareness, and how to cope with them in order to						
				FOC	A Che	ck ok		
070								
070 REV0 / 27.0	4.2021							
FOCA CL	TM Part 4, Chapter x.7.x «Appendices»	Reference to documentation:		n:				
OM/TM 4-TMP4-7-4 ²	Does the organisation maintain a list to control applicable assessments (at least summative assessments)?							
7 IIVII 7 7 7	☐ Is the list:							
	☐ integrated in the Training Manual? or							
	☐ provided as an appendix?							
				FOC	A chec	k ok		
.8. Met	hod of debriefing							
075 075 REV0 / 27.0	4.2021							
FOCA CL OM/TM	TM Part 1, Chapter x.9.x «Assessments, tests and examinations»	Reference to documentation:			n:			
4-TMP1-9-32	20							
	☐ Is the debriefing included in the conduct of Area 100 assessment process?							
	☐ Does the course of debrief include:							
	☐ self assessment?							
	☐ feedback of the result of the assessment? and							

 $\hfill \square$ the facilitation of related discussions?

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☐ FOCA check ok

2.9. Mental math test

080 REV0 / 27.04.2021				
FOCA CL OM/TM	TM Part 1, Chapter x.9.x «Assessments, tests and examinations»	Referen	ice to d	documentation:
4-TMP1-9-320	☐ Does the description of the mental math test include a statement that:			
	☐ the test shall be scenario based and without using pencil and paper or a calculator or any other aid?			
	the mental math test is to be completed before the first attempt on last subject of theoretical knowledge examination?			
	☐ the minimum score is 75% or higher?			
	the student shall demonstrate the ability in a time- efficient manner to make correct mental calculation?			
	☐ Are mental math tests prepared and available?			
				FOCA check ok

2.10. Review Procedure

085 085 REV0 / 27.04.2021			
FOCA CL OM/TM 4-TMP4-6-410	TM Part 4, Chapter x.6.x «Review procedure» ☐ Is the applicability for the procedure to be applied, if a student does not achieve the required standard, amended, to include unsatisfactory performance in a summative assessment?	Referen	nce to documentation:
			□ FOCA check ok

3 Assessment Design

3.1. Scenario based assessments and exercises

090 090 REV0 / 27.04.2021		
FOCA CL OM/TM 4-TMP1-9-320	Does the defined Area 100 KSA formative assessment(s) and summative assessments include, as applicable to the individual assessment:	Reference to documentation:
4 TWII 1 0 020	\square a wide range of instructional methods/learning styles?	
	☐ practical exercises using training aids/devices?	
	☐ scenario based:	
	☐ case study exercises, written assignments/project work?	
	☐ oral board (instructor oral questioning/test, viva voce)?	
	☐ communications exercises?	
	conversation linked to a part of the course content?	
	performance review after group project/assignments?	
	written planning exercises combining multiple subjects?	
	exercises allowing the application Threat and Error Management (TEM)?	
	\square role play that depicts real life situation/scenario?	
	presentation exercises, preparation and delivery of group or individual presentations and discussions?	
	☐ Is there a comprehensive reference to the related assessment tool?	
	☐ Is there a reference to the students exercise handout, if applicable?	
		☐ FOCA check ok
095 095 REV0 / 27.04.2021		
FOCA CL	TM Part 4, Chapter x.7.x «Appendices»	Reference to documentation:
OM/TM 4-TMP4-7-412	☐ Does the organisation maintain a list to control applicable mental math tests (at least one mental math test)	
	☐ Is the list:	
	\square integrated in the Training Manual? or	
	☐ provided as an appendix?	
		☐ FOCA check ok

4 Operations Manual

The Operations Manual (OM) shall be amended with Area 100 KSA elements as follows:

4.1. Student File

100 100 REV0 / 27.04.2021			
FOCA CL OM/TM	OM Part A, Chapter x.7.x «Flight crew qualification records (licences and ratings)»	Referen	ce to documentation:
3-OMA12-085	☐ Is there a statement that the access to the information on Area 100 KSA, kept in the student's training records, should be restricted to the student and authorised organisation personnel only, and should not be disclosed outside the organisation?		
	☐ Is the list of the required content of the student file amended with the:		
	☐ outcome of the Summative assessments?		
	☐ result(s) of mental math test(s)?		
			☐ FOCA check ok

4.2. List of Instructors

105 105 REV0 / 27.04.2021			
FOCA CL OM/TM 3-OMA12-086	OM Part A, Appendix xy «List of instructors» ☐ Is the list of instructors amended with the Area 100 KSA competence?	Referen	ce to documentation:
			☐ FOCA check ok

4.3. Instructor initial training

110 110 REV0 / 27.04.2021			
FOCA CL OM/TM 3-OMD2-190	OM Part D, Chapter x.2.x «Initial training» □ For instructors that deliver KSA (Area 100) instruction, the initial training shall be amended with the appropriate training covering at least: □ learning styles, □ teaching methods, □ facilitation techniques, □ threat and error management (TEM), □ the applicable competencies, and □ the content of the subject(s) and exercises that they are to deliver. □ For instructors that are responsible KSA (Area 100) assessments, the initial training shall be amended with: □ appropriate training on: □ assessment(s) that they are to conduct; □ assessment tool. □ the standardisation on assessment evaluation, which includes at least: □ familiarisation with the performance indicators; □ grading and assessment system, including word pictures; □ methods of debriefing.	Reference	e to documentation:
			☐ FOCA check ok

4.4. Recurrent training and standardisation

115 115 REV0 / 27.04.2021			
FOCA CL OM/TM 3-OMD2-195	OM Part D, Chapter x.3.x «Refresher training» □ Is there a statement that the instructors involved in Area 100 KSA instruction and assessment are to receive annual recurrent training and standardisation? □ Is there a process specifying the development of the recurrent training and standardisation? □ Does the development of the recurrent training and standardisation consider: □ factual data gained from examinations, assessment results and feedback? □ subjects / topics / methods / assessments and exercises with need of standardisation?	Referen	ce to documentation:
			☐ FOCA check ok

4.5. Standardisation

120 120 REV1 / 10.01.2022			
FOCA CL OM/TM 3-OMD4-200	OM Part D, Chapter x.4.x «Standardisation training» Refresher training and standardisation for instructors involved in Area 100 KSA instruction and assessment are ideally combined. □ Is there a comprehensive reference to OM Part D Chapter x.3.x «Refresher training»?	Referer	nce to documentation:
			□ FOCA check ok

End of IJ