

Part I : Applicant's Information			
Name of Organisation:		ATO certificate no.: FTO-XXXX or ATCO-XXXX or MTO-XXXX	
Title of proposed Training Program: MCC(A) Training Course		Date of Submitted: DD - MMM - YY Proposed Course Start Date: DD - MMM - YY	Application No.: (For CAAT)
Prior Approval	Type of Submission <input type="checkbox"/> Initial <input type="checkbox"/> Amendment	Type of Program <input type="checkbox"/> MCC(A) <input type="checkbox"/> APS MCC	How the training is to be delivered <input type="checkbox"/> Classroom Delivery <input type="checkbox"/> Flight Training <input type="checkbox"/> Simulator Training <input type="checkbox"/> Other (specify).....
	No. of Attempt <input type="checkbox"/> 1 st attempt <input type="checkbox"/> 2 nd attempt <input type="checkbox"/> 3 rd attempt	<input type="checkbox"/> Other (specify).....	Training device will be used for this course (Type and number) <input type="checkbox"/> Simulator (FSTD/STD)..... <input type="checkbox"/> Actual aircraft.....
Coordinator Name/ contact: 1. Mr. XXX YYYY/ email 2. Mr. XXX YYYY/ email			
The following documents are submitted with this application by applicant: <input type="checkbox"/> 1. Intention letter on the applicant's company letterhead specifying the title of the training programme <input type="checkbox"/> 2. Checklist for Training Manual Approval (If applicable) <input type="checkbox"/> 3. Draft Manual <input type="checkbox"/> 4. Reference of training material/Other relevant documents or required by competent official.....			
Please ensure that <ul style="list-style-type: none"> • There is a list of effective pages. Every page is identified with a page number, a date and a revision number . • Training materials and Examination Tests, in any format, shall be made accessible for CAAT inspector • Reference in the applicable Training Program should be detail appropriate with training materials • Organisation declaration and signature in the first page must be signed 			
Declaration and Signature the information provided in this form is complete and correct and that the documents provided are genuine. Signature:Applicant's Name/: Date:			

Part II Competent Official Use Only			
Check Submitted document			
1 st checked <input type="checkbox"/> Complete date..... <input type="checkbox"/> Incomplete date..... Signature/Name:	2 nd checked <input type="checkbox"/> Complete date..... <input type="checkbox"/> Incomplete date..... Signature/Name:	3 rd checked <input type="checkbox"/> Complete date..... <input type="checkbox"/> Incomplete date..... Signature/Name:	Financial (If applicable) <input type="checkbox"/> Invoice No..... Date:..... <input type="checkbox"/> Receipt No..... Date:.....
Verification result: <input type="checkbox"/> Accept <input type="checkbox"/> Reject			
This compliance check form has been verified by:			
Signature:	Name:	Date:	
(If applicable) Under supervision of:			
Signature:	Name:	Date:	
Instructions:			
1) ATO is to conduct a self-assessment as part of its compliance check by providing manual references into the 'Compliance checked by ATO'. 2) Failure to complete this form may result in a delay in approval processing. After 3 rd rejected, applicant shall start the new process from the beginning with the new intention letter. 3) Each check list item shall be assessed and given a result either Satisfactory or Unsatisfactory (a) Satisfactory shall be given if the ATO is able to provide valid contents and details that comply with the requirements . (b) Unsatisfactory shall be given if the ATO is provide insufficient contents/details that comply with the requirement as well as impractical/non-realistic process or procedures that do not reflect an actual context and operations of the ATO. (c) Not applicable shall be filled out as N/A 4) Provide detail in each subtopic/content of every subjects. 5) Checklist does not address Training Manual requirements as per TCAR PEL Part ORA. Applicant should provide separate Training Manual checklist for review and approval along with this checklist. 6) The Theoretical Knowledge Checklist shall be submitted along with this checklist for both initial approvals and amendments affecting theoretical knowledge training 7) In case of amendment, Non-applicable items in the checklist may be greyed out by the applicant. 8) Once TCAR PEL Part ORA becomes effective, compliance with all items referenced in Part ORA will be mandatory .			

No.	Regulatory Requirement(s)			Compliance checked by ATO				CAAT Officials Use Only		
	Subject	Description	Reference	Yes	No	N/A	Reference	S	U	Remark
1	The aim of the course	A statement of what the student is expected to do as a result of the training.	TCAR PEL PART ORA AMC1 ORA.ATO.230(a)							
		The level of performance that must be obtained after the course.								
		The training constraints to be observed (i.e. time constraint).								
2	Pre-entry requirements	Minimum age.								
		Minimum educational (including language) and entrance requirements (if applicable). <i>Provide information on how the ATO will assess the candidate capabilities.</i>								
		Medical requirements. (If applicable) <i>The training manual shall clearly state that the candidate must have a valid relevant medical certificate to apply for the licence or the rating he will be trained for..</i>								
		Any additional requirements the ATO wants to apply.								
		Define the procedure to enrol in the course.								
3	Course Requirement	(a) The MCC training course shall comprise at least (1) 25 hours of theoretical knowledge instruction and exercises; and (2) 20 hours of practical MCC training, or 15 hours in the case of student pilots attending an ATP integrated course. An FNPT II MCC or an FFS shall be used. When the MCC training is combined with initial type rating training, the practical MCC training may be reduced to no less than 10 hours if the same FFS is used for both the MCC and type rating training	TCAR PEL Part FCL FCL.735.A							
		(b) The MCC training course shall be completed within 6 months at an ATO.								
		(c) Unless the MCC course has been combined with a type rating course, on completion of the MCC training course the applicant shall be given a certificate of completion.								
		(d) An applicant having completed MCC training for any other category of aircraft shall be exempted from the requirement in (a)(1).								
4	Competencies/training objectives	Competency is a combination of knowledge, skills and attitudes required to perform a task to the prescribed standard.								

No.	Regulatory Requirement(s)			Compliance checked by ATO				CAAT Officials Use Only			
	Subject	Description	Reference	Yes	No	N/A	Reference	S	U	Remark	
		The objectives of MCC training are to develop the technical and non-technical components of the knowledge, skills and attitudes required to operate a multicrew aircraft.	TCAR PEL Part FCL AMC1 FCL.735.A; FCL.735.H; FCL.735.As								
		Training should comprise both theoretical and practical elements and be designed to achieve the competencies/training objectives									
		Competencies/training objectives are follows table 1 as per AMC1 FCL.735.A; FCL.735.H; FCL.735.As									
5	Certificate of Completion Form	Certificate of completion includes the details as prescribed in AMC1 FCL.735.A; FCL.735.H; FCL.735.As									
ENHANCED MCC TRAINING TO AIRLINE PILOT STANDARDS (APS MCC) COURSE											
6	Course Elements	(a) The APS MCC training course should comprise both theoretical and practical elements and should be designed to achieve the training objectives, as set out in Table 1 as per Part FCL AMC2 FCL.735.A - Multi-crew cooperation (MCC)	TCAR PEL Part FCL AMC2 FCL.735.A - Multi-crew cooperation (MCC) Training course- aeroplanes								
7		(b) The APS MCC training course should include advanced swept-wing jet aeroplane training and airline operations scenario training to equip a pilot with the knowledge, skills, and attitudes required to commence initial type rating training to the standards generally required by a commercial air transport (CAT) operator certified pursuant to TCAR OPS.									
8		(c) The APS MCC course should consist of the following:									
		(1) the content of the MCC training course;									
		(2) advanced swept-wing jet aeroplane training;									
9	(3) advanced airline operations scenario training; and										
	(4) a final assessment.										
		(d) The flight simulation training device (FSTD) time per crew during practical training should be a minimum of 40 hours, or 35 for an integrated airline transport pilot licence (ATPL) holders, as set out in Table 2 as per Part FCL AMC2 FCL.735.A - Multi-crew cooperation (MCC) .									
		The training elements may be ordered, split and combined, as determined by the approved training organisation (ATO)'s course design.									

No.	Regulatory Requirement(s)			Compliance checked by ATO			CAAT Officials Use Only			
	Subject	Description	Reference	Yes	No	N/A	Reference	S	U	Remark
10		(e) The ATO should provide generic stand-alone or CAT-operator-specific APS MCC training, advanced swept-wing jet aeroplane training and advanced airline operations scenario training. In the case of generic stand-alone training, the ATO should establish appropriate documentation and manuals representative of a CAT operator, such as manuals for aeroplane original-equipment manufacturers (OEMs), standard operating procedures (SOPs), flight documentation, as well as reporting and documentation for management systems.								
11		(f) The practical training in the APS MCC training course should be based on a multi-pilot, multi-engine aeroplane type capable of carrying at least 50 passengers or equivalent mass. The FSTD used should be type-specific and equipped with a visual system that provides at least 180° horizontal and 40° vertical field of view. However, an FNPT II MCC that has a similar visual cueing system to the above or is approved for MCC pursuant to FCL.735.A may also be acceptable provided that the device is representative of the same class of multi-pilot, multi-engine aeroplane specified in this paragraph in terms of passenger load, mass and performance, and equipped with equivalent aeroplane systems and avionics functionality.								
12		(g) In the case of advanced swept-wing jet aeroplane practical training, an FSTD representing a swept-wing multi-engine jet aeroplane should be used.								
INSTRUCTOR QUALIFICATION										
13	MCC Course's Instructor qualification	(h) The minimum qualification level of an instructor to deliver the training course should be an MCCI(A). The ATO should ensure that:	TCAR PEL Part FCL AMC2 FCL.735.A - Multi-crew cooperation (MCC) Training course-aeroplanes							
14		(1) all the instructors, before delivering the training course content, have received training on the application of core competencies as well as competency-based training; and								
15		(2) before the MCCI(A) delivers the advanced swept-wing jet handling or airline operations scenario training elements, they have satisfactorily completed relevant specific handling, systems and technical instructor training under the supervision of an SFI or TRI with the privilege to instruct for multi-pilot aeroplanes.								

No.	Regulatory Requirement(s)			Compliance checked by ATO				CAAT Officials Use Only		
	Subject	Description	Reference	Yes	No	N/A	Reference	S	U	Remark
16		(i) The final assessment should be completed by an instructor nominated by the head of training (HT) for this purpose.								
COURSE DESIGN AND CORE COMPETENCIES										
17	Course Design	(j) The course should be designed using instructional systems design (ISD) methodology.	TCAR PEL Part FCL AMC2 FCL.735.A - Multi-crew cooperation (MCC) Training course-aeroplanes							
18		(k) Progress should be monitored throughout the course in accordance with the course design.								
19		(l) A final progress assessment should be conducted at the end of the practical training.								
PROGRESS ASSESSMENTS AND COURSE COMPLETION CERTIFICATE										
20	Assessment	(m) Practical training and progress assessments should be conducted to ensure that the student pilot has demonstrated the required level of competency (see Tables 1, 2, 3, 4 and 5 of this AMC).	TCAR PEL Part FCL AMC2 FCL.735.A - Multi-crew cooperation (MCC) Training course-aeroplanes							
21		(n) During progress assessments, the student's knowledge, skills and attitudes in both pilot flying and pilot monitoring roles should be assessed; those assessments should be integrated into the training sessions.								
22		(o) All assessments should be graded. An example of a grading system for the APS MCC is provided in GM3 FCL.735.A .								
23		(p) For the final assessment, the minimum standard for each competency should be at least 'satisfactory'. 'Satisfactory' is defined as demonstrating 75 % or greater of the relevant performance indicators/observable behaviors set out in the table of GM3 FCL.735.A .								
24		(q) A student pilot who has reached a satisfactory or higher standard at the final assessment of the practical training should be awarded the APS MCC course completion certificate pursuant to AMC2 FCL.735.A .								
25		(r) Alternatively, a student pilot who completes the APS MCC course but does not achieve the APS MCC standard should be awarded the MCC course completion certificate pursuant to AMC1 FCL.735.A ; FCL.735.H ; FCL.735.As .								
APS MCC TRAINING COURSE CONTENT AND PERFORMANCE INDICATORS										

No.	Regulatory Requirement(s)			Compliance checked by ATO				CAAT Officials Use Only		
	Subject	Description	Reference	Yes	No	N/A	Reference	S	U	Remark
26	APS MCC Training Course Content	(s) The elements of AMC1 FCL.735.A(c) should be enhanced as a result of the additional training in an airline context.	TCAR PEL Part FCL AMC2 FCL.735.A - Multi-crew cooperation (MCC) Training course- aeroplanes							
27		(t) CRM training should be provided to an APS MCC standard as per table 3, TCAR PEL Part FCL AMC2 FCL.735.A - Multi-crew cooperation (MCC) Training course- aeroplanes								
28		(1) The ATO should ensure that the student pilot understands how multi-crew coordination as well as the content and intent of CRM in ORO.FC.115 is applied in an airline context.								
29		(2) In order to impart maximum learning to the student pilot, the ATO should ensure the following:								
		(i) CRM is integrated into all practical exercises of the APS MCC; and								
		(ii) Threat-and-error management (TEM) is central to the course instruction; the concepts of threat anticipation, threat recognition, recovery to safe flight, error management, and consequent avoidance of undesired aeroplanes states is emphasized at all times.								
ENHANCED MCC TRAINING TO AIRLINE PILOT STANDARDS (APS MCC) COURSE (GM Level)										
30	Course Elements	(a) The ATO should be responsible for the initial course design based on the instructional systems design (ISD) methodology, as well as for the integral evaluation and further development of the course.	TCAR PEL Part FCL GM1 FCL.735.A - Multi-crew cooperation (MCC) training course— aeroplanes							
31		(b) Technical-knowledge instruction To maximize the benefit during the training in a flight simulation training device (FSTD), it is essential that the student pilot understands the aeroplane systems. Consequently, the approved training organisation (ATO) should provide sufficient systems training to ensure that student pilots are capable of effective situational awareness (SA) of the aeroplane systems when following normal and non-normal procedures and completing the related checklists. The standard of technical-knowledge training should be limited to this goal unless the course is part of a combined APS MCC/type rating course. ATOs providing APS MCC training in a combined APS MCC/type rating course may provide systems training up to type rating standard.								

No.	Regulatory Requirement(s)			Compliance checked by ATO				CAAT Officials Use Only		
	Subject	Description	Reference	Yes	No	N/A	Reference	S	U	Remark
		<p>Aeroplane systems training may be delivered by any means provided that the training ensures knowledge transfer to a standard within the scope of the ATO's APS MCC training course approval. This training may be delivered either through distance learning or instructor-led classroom instruction or a combination thereof. If distance learning is utilized as an element of the course, it should be supplemented by instructor-led training.</p> <p>Aeroplane systems knowledge at the required level should be confirmed by an assessment determined by the ATO's course design.</p>								
32		<p>(c) Advanced swept-wing jet flying training (see Table 4 of AMC2 FCL.735.A) The student pilot should develop a flight path management competency, including energy management, as pilot flying (PF), and associated active monitoring skills as pilot monitoring (PM). Aeroplane and airline procedures used during this training should develop the student pilot's understanding of the aeroplane flight envelope and inertia, as well as of the relationship between thrust and attitude. This phase should include an introduction to prevention and recovery of upsets, which builds confidence, skill, and resilience.</p>								
33		<p>(d) Advanced airline operations scenario training (see Table 4 of AMC2 FCL.735.A)</p>								
34		<p>(1) The student pilot should be trained to apply the core competencies to conduct a safe and efficient operation in realistic airline operations scenarios.</p>								
35		<p>(2) The airline-representative scenarios should include normal and non-normal situations.</p>								
36		<p>(3) Operations should be run in real time according to a typical schedule.</p>								
37		<p>(4) The scenarios should be constructed in an airline context in order to emphasize the following:</p> <ul style="list-style-type: none"> (i) threat-and-error management (TEM); (ii) crew resource management (CRM); (iii) flight path management, including energy management; and (iv) interaction with internal and external stakeholders in the resolution of scenarios. 								

No.	Regulatory Requirement(s)			Compliance checked by ATO				CAAT Officials Use Only		
	Subject	Description	Reference	Yes	No	N/A	Reference	S	U	Remark
38		(e) Airline-oriented training (see Table 5 of AMC2 FCL.735.A) The training should provide an understanding of the regulatory framework that an airline must operate in. The student pilot should understand the context and operational environment that applies to airline employees. Subjects should include but are not limited to the following:								
39		(1) regulation of operations and aircrew;								
40		(2) safety management systems (SMSs) with emphasis on the pilot's reporting obligations and 'just culture';								
41		(3) fatigue management and fatigue risk management system (FRMS) with emphasis on the airline's and pilot's obligations;								
42		(4) flight time limitations (FTLs), including crew scheduling and crew control functions;								
43		(5) flight operations planning and flight watch reporting systems;								
44		(6) airline maintenance department and interaction with flight operations;								
45		(7) ground operations and interaction with flight operations; and								
46		(8) in-flight department and interaction with flight operations.								
ENHANCED MCC TRAINING TO AIRLINE PILOT STANDARDS (APS MCC) COURSE (GM Level)										
47		The approved training organisation (ATO) should ensure that their course design develops the required core competencies through their training and assessment plan based on the competency framework provided in Table 1. An ATO may adapt this framework to include additional competencies and/or performance indicators/observable behaviors as per Table 1 — COMPETENCIES in TCAR PEL Part FCL GM2 FCL.735.A .	TCAR PEL Part FCL GM2 FCL.735.A - Multicrew cooperation (MCC) training course— aeroplanes							
48	Course Design	<i>Remark: EXAMPLE OF AN ENHANCED MCC TRAINING TO AIRLINE PILOT STANDARDS (APS MCC) GRADING SYSTEM as per TCAR PEL Part FCL GM3 FCL.735.A - Multi-crew cooperation (MCC) training course—aeroplanes</i>	TCAR PEL Part FCL GM3 FCL.735.A - Multi-crew cooperation (MCC) training course— aeroplanes							

No.	Regulatory Requirement(s)			Compliance checked by ATO			CAAT Officials Use Only			
	Subject	Description	Reference	Yes	No	N/A	Reference	S	U	Remark
ENHANCED MCC TRAINING TO AIRLINE PILOT STANDARDS (APS MCC) TRAINING — SPECIFIC ARRANGEMENT (GM Level)										
49	Specific Arrangement	The specific arrangement, pursuant to ORA.GEN.205, between an approved training organisation (ATO) and an operator for the APS MCC course should cover at least the following points:	TCAR PEL Part FCL GM4 FCL.735.A - Multi-crew cooperation (MCC) training course — aeroplanes							
50		(1) pre-entry requirements (including screening and selection);								
51		(2) provision of the relevant documentation (operations manuals (OMs) and training manuals);								
52		(3) design of the training programme;								
53		(4) content of the course, including criteria to ensure that the operator’s documentation, manuals, standard operating procedures (SOPs), reporting structures, and management system are represented throughout the training course;								
54		(5) training effectiveness;								
55		(6) performance data feedback from the ATO to the operator;								
56		(7) course evaluation and improvement;								
57		(8) alignment of the grading and assessment criteria; and								
58		(9) use of the operator’s crew resource management (CRM) content and utilisation of a flight crew CRM trainer, standardised by the operator.								
59		The ATO and the operator may use their OMs and training manuals to identify additional areas to be covered by the specific arrangement.								
RELEVANT REGULATION REGARDING CONTRACTED ACTIVITIES										
60	Contracted activities	(a) Contracted activities include all activities within the organisation’s scope of approval that are performed by another organisation either itself certified to carry out such activity or if not certified, working under the contracting organisation’s approval. The organisation shall ensure that when contracting or purchasing any part of its activity, the contracted or purchased service or product conforms to the applicable requirements.	TCAR PEL Part ORA ORA.GEN.205							
61		(b) When the certified organisation contracts any part of its activity to an organisation that is not itself certified in accordance with this Part to carry out such activity, the contracted organisation shall work under the approval of the contracting organisation. The contracting organisation shall ensure that the CAAT is given								

No.	Regulatory Requirement(s)			Compliance checked by ATO			CAAT Officials Use Only			
	Subject	Description	Reference	Yes	No	N/A	Reference	S	U	Remark
		access to the contracted organisation, to determine continued compliance with the applicable requirements.								
62	Responsibility When Contracting Activities	(a) The organisation may decide to contract certain activities to external organisations.	TCAR PEL Part ORA AMC1 ORA.GEN.205							
63		(b) A written agreement should exist between the organisation and the contracted organisation clearly defining the contracted activities and the applicable requirements.								
64		(c) The contracted safety related activities relevant to the agreement should be included in the organisation's safety management and compliance monitoring programmes.								
65		(d) The organization should ensure that the contracted organization has the necessary authorization or approval when required and commands the resources and competence to undertake the task.								
66	Contracted activities (GM)	(a) Regardless of the approval status of the contracted organization, the contracting organization is responsible to ensure that all contracted activities are subject to hazard identification and risk management as required by ORA.GEN.200 (a)(1) (iii) and to compliance monitoring as required by ORA.GEN.200 (a)(2).	TCAR PEL Part ORA GM1 ORA.GEN.205 Contracted activities							
67		(b) When the contracted organization is itself certified to carry out the contracted activities, the organization's compliance monitoring should at least check that the approval effectively covers the contracted activities and that it is still valid.								

Appendix (AMC-GM Table(s))

AMC1 FCL.735.A; FCL.735.H; FCL.735.As - Multi-crew cooperation (MCC) training course

Table 1 — Competencies/training objectives			
Competency/ objective	Performance indicators	Knowledge	Practical exercises
Communication	<ul style="list-style-type: none"> (a) Know what, how much and who to communicate to; (b) Ensure the recipient is ready and able to receive the information; (c) Pass messages and information clearly, accurately, timely and adequately; (d) Check if the other person has the correct understanding when passing important information; (e) Listen actively, patiently and demonstrate understanding when receiving information; (f) Ask relevant and effective questions, and offer suggestions; (g) Use appropriate body language, eye contact and tone; (h) Open and receptive to other's people view. 	<ul style="list-style-type: none"> (a) Human Factors, TEM and CRM; (b) Application of TEM and CRM principles to training. 	<p>In a commercial air transport environment, apply multi- crew procedures, including principles of TEM and CRM to the following:</p> <ul style="list-style-type: none"> (a) Pre-flight preparation: <ul style="list-style-type: none"> (1) FMS initialisation; (2) radio and navigation equipment preparation; (3) flight documentation; (4) computation of take- off performance data. (b) Take-off and climb: <ul style="list-style-type: none"> (1) before take-off checks; (2) normal take-offs; (3) rejected take-offs; (4) take-offs with abnormal and emergency situations included. (c) Cruise: emergency descent.
Leadership and team working	<ul style="list-style-type: none"> (a) Friendly, enthusiastic, motivating and considerate of others; (b) Use initiative, give direction and take responsibility when required; 		<ul style="list-style-type: none"> (d) Descent and approach: <ul style="list-style-type: none"> (1) instrument flight procedures; (2) holding; (3) 3D Operations using raw data;

	<ul style="list-style-type: none"> (c) Open and honest about thoughts, concerns and intentions; (d) Give and receive criticism and praise well, and admit mistakes; (e) Confidently do and say what is important to him or her; (f) Demonstrate respect and tolerance towards other people; (g) Involve others in planning and share activities fairly. 		<ul style="list-style-type: none"> (4) 3D Operations using flight director; (5) 3D Operations using autopilot; (6) one-engine- inoperative approach; (7) 2D Operations and circling; (8) computation of approach and landing data; (9) all engines go-around; (10) go-around with one engine inoperative; (11) wind shear during approach.
Situational awareness	<ul style="list-style-type: none"> (a) Be aware of what the aircraft and its systems are doing; (b) Be aware of where the aircraft is and its environment; (c) Keep track of time and fuel; (d) Be aware of the condition of people involved in the operation including passengers; (e) Recognise what is likely to happen, plan and stay ahead of the game; (f) Develop what-if scenarios and make pre-decisions; (g) Identify threats to the safety of the aircraft and of the people. 		<ul style="list-style-type: none"> (e) landing: transition from instrument to visual flight on reaching decision altitude or height or minimum descent altitude or height; (f) after landing and post flight procedures; (g) selected emergency and abnormal procedures.
Workload management	<ul style="list-style-type: none"> (a) Be calm, relaxed, careful and not impulsive; (b) Prepare, prioritise and schedule tasks effectively; (c) Use time efficiently when carrying 		

	<ul style="list-style-type: none"> out tasks; (d) Offer and accept assistance, delegate when necessary and ask for help early; (e) Review and monitor and cross-check actions conscientiously; (f) Follow procedures appropriately and consistently; (g) Concentrate on one thing at a time, ensure tasks are completed and does not become distracted; (h) Carry out instructions as directed. 		
<p>Problem- solving and decision- making</p>	<ul style="list-style-type: none"> (a) Identify and verify why things have gone wrong and do not jump to conclusions or make assumptions; (b) Seek accurate and adequate information from appropriate resources; (c) Persevere in working through a problem; (d) Use and agree an appropriate decision making process; (e) Agree essential and desirable criteria and prioritises; (f) Consider as many options as practicable; (g) Make decisions when they need to, reviews and changes if required; (h) Consider risks but do not take unnecessary risks. 		

Monitoring and cross-checking	(a) Monitor and cross-checks all actions; (b) Monitor aircraft trajectory in critical flight phases; (c) Take appropriate actions in response to deviations from the flight path.	(a) SOPs; (b) Aircraft systems; (c) Undesired aircraft states.	
Task sharing	(a) Apply SOPs in both PF and pilot monitoring (PM) roles; (b) Makes and responds to standard call-outs.	(a) PF and PM roles; (b) SOPs.	
Use of checklists	Utilise checklists appropriately according to SOPs.	(a) SOPs; (b) Checklist philosophy.	
Briefings	Prepare and deliver appropriate briefings.	(a) SOPs; (b) Interpretation of FMS data and in-flight documentation.	
Flight management	(a) Maintain a constant awareness of the aircraft automation state; (b) Manage automation to achieve optimum trajectory and minimum workload; (c) Take effective recovery actions from automation anomalies; (d) Manage aircraft navigation, terrain clearance; (e) Manage aircraft fuel state and take appropriate actions.	(a) Understanding of aircraft performance and configuration; (b) Systems; (c) SOPs; (d) Interpretation of FMS data and in-flight documentation; (e) Minimum terrain clearance; (f) Fuel management IFR and VFR regulation.	

FMS use	Programme, manage and monitor FMS in accordance with SOPs.	(a) Systems (FMS); (b) SOPs; (c) Automation.	
Systems normal operations	Perform and monitor normal systems operation in accordance with SOPs.	(a) Systems; (b) SOPs.	
Systems abnormal and emergency operations	(a) Perform and monitor abnormal systems operation in accordance with SOPs; (b) Utilise electronic and paper abnormal checklists in accordance with SOPs.	(a) Systems; (b) SOPs; (c) Emergency and abnormal procedures and checklists; (d) Recall items.	
Environment, weather and ATC	(a) Communicate effectively with ATC; (b) Avoid misunderstandings by requesting clarification; (c) Adhere to ATC instructions; (d) Construct a mental model of the local ATC and weather (e) environment.	(a) Systems; (b) SOPs; (c) ATC environment and phraseology; (d) Procedures for hazardous weather conditions.	

AMC2 FCL.735.A - Multi-crew cooperation (MCC) Training course- aeroplanes (Table 1)

Table 1 — Training objectives			
Training objectives	Performance indicators	Knowledge	Practical exercises
Monitoring and cross-checking	(a) Monitor and cross- check all actions; (b) Monitor aeroplane trajectory in critical flight phases; (c) Take appropriate actions in response to deviations from the flight path.	(a) SOPs; (b) Aeroplane systems; (c) Undesired aeroplane states.	<p>In a commercial air transport environment, apply multi-crew procedures, including principles of TEM and CRM to the following:</p> <p>(a) Pre-flight preparation:</p> <ol style="list-style-type: none"> (1) FMS initialisation; (2) radio and navigation equipment preparation; (3) flight documentation; (4) computation of take-off performance data. <p>(b) Take-off and climb:</p>
Task sharing	(a) Apply SOPs in both PF and PM roles; (b) Make and respond to standard call-outs.	(a) PF and PM roles; (b) SOPs.	
Use of checklists	Utilise checklists appropriately according to SOPs.	(a) SOPs; (b) Checklist philosophy.	
Briefings	Prepare and deliver appropriate briefings.	(a) SOPs; (b) Interpretation of FMS data and in-flight documentation.	
Flight management	(a) Maintain a constant awareness of the aeroplane automation state; (b) Manage automation to achieve optimum trajectory and minimum workload; (c) Take effective recovery actions from automation anomalies; (d) Manage aeroplane navigation, terrain clearance; (e) Manage aeroplane fuel state and	(a) Understanding of aeroplane performance and configuration; (b) Systems; (c) SOPs; (d) Interpretation of FMS data and in- flight documentation; (e) Minimum terrain clearance; (f) Fuel management IFR and (g) VFR regulation.	

Table 1 — Training objectives

Training objectives	Performance indicators	Knowledge	Practical exercises
	take appropriate actions.		(4) 3D Operations using flight director; (5) 3D Operations using autopilot; (6) one-engine- inoperative approach; (7) 2D Operations and circling; (8) computation of approach and landing data; (9) all engines go- around; (10) go-around with one engine inoperative; (11) wind shear during approach. (e) landing: transition from instrument to visual flight on reaching decision altitude or height or minimum descent altitude or height; (f) after landing and post flight procedures; (g) selected emergency and abnormal procedures.
FMS use	Programme, manage and monitor FMS in accordance with SOPs.	(a) Systems (FMS); (b) SOPs; (c) Automation.	
Systems normal operations	Perform and monitor normal systems operation in accordance with SOPs.	(a) Systems; (b) SOPs.	
Systems abnormal and emergency operations	(a) Perform and monitor abnormal systems operation in accordance with SOPs; (b) Utilise electronic and paper abnormal checklists in accordance with SOPs.	(a) Systems; (b) SOPs; (c) Emergency and abnormal procedures and checklists; (d) Recall.	
Environment, weather and air traffic control (ATC)	(a) Communicate effectively with ATC; (b) Avoid misunderstandings by requesting clarification; (c) Adhere to ATC instructions; (d) Construct a mental model of the local ATC and weather environment.	(a) Systems; (b) SOPs; (c) ATC environment and phraseology; (d) Procedures for hazardous weather conditions.	

AMC2 FCL.735.A - Multi-crew cooperation (MCC) Training course- aeroplanes (Table 2)

Table 2 — Minimum hours

Training element	Minimum FSTD time per crew
MCC TRAINING	20 hours/15 hours
ADVANCED SWEPT-WING JET AEROPLANE TRAINING	12 hours
ADVANCED AIRLINE OPERATIONS SCENARIO TRAINING	6 hours
FINAL ASSESSMENT	2 hours

AMC2 FCL.735.A - Multi-crew cooperation (MCC) Training course- aeroplanes (Table 3)

Table 3 — APS MCC CRM TRAINING CONTENT AND PERFORMANCE INDICATORS			
Training	Performance indicators	Knowledge	Practical exercises
CRM training	(a) Display competency in the relevant CRM-related behaviours. (b) Successfully complete the final progress check.	Understand the CRM concepts set out in ORO.FC.115 of TCAR OPS Part ORO.	Integrate CRM into all practical exercises of the APS MCC.

AMC2 FCL.735.A - Multi-crew cooperation (MCC) Training course- aeroplanes (Table 4)

Table 4 — ADVANCED APS MCC FLYING TRAINING COURSE CONTENT AND PERFORMANCE INDICATORS			
Training	Performance indicators	Knowledge	Practical exercises
Advanced swept-wing flying training	<ul style="list-style-type: none"> (a) Understand and apply combinations of thrust and attitude that ensure a stable, safe flight in various aeroplane configurations and altitudes. (b) Manage the (much) wider range of speed and thrust at both low level and high level. (c) Demonstrate good judgement and correct use of lift and drag devices during various phases of the flight. (d) Use displays along with all available aids to stay mentally ahead when piloting all profiles. (e) Understand and recognise the precursors of high-energy approaches. (f) Know angle-of-attack (AoA) versus attitude indications at low level as well as at high level. (g) Practice upset prevention as a priority, and clearly recognise when and how recovery is necessary, by using the required pilot skills to mitigate loss of control in-flight (LOC-I) events. 	<p>Elements and components of jet orientation:</p> <ul style="list-style-type: none"> (a) glass cockpit displays; (b) propulsion; (c) aerodynamics; (d) flight controls; (e) performance; (f) jet flight planning; (g) weight and balance; (h) basic jet flying; (i) pilot techniques for jet flying, advanced-handling-skills development; (j) flight path management; (k) auto flight; (l) high-altitude operations; (m) introduction into prevention and recovery of upsets. 	<ul style="list-style-type: none"> (a) Take-off, approach, landing, go-around. (b) Flight deck management practices. (c) Complex problem-solving techniques. (d) Advanced handling. (e) Manual handling skills (no autopilot, no auto thrust, and where possible, no flight director). (f) Flight at different speeds, including slow flight and altitudes within the normal flight envelope. (g) Steep turns. (h) Aeroplane stability and stall awareness. (i) Upset prevention techniques and approach-to-stall recovery events (appropriate to FSTD limitations and capabilities). (j) High-energy approach prevention. (k) Go-around management of approach and landing configurations.

<p>Advanced airline operations scenario training</p>	<ul style="list-style-type: none"> (a) Execute pre-flight preparation in accordance with airline or OEM SOPs. (b) Conduct an effective crew briefing, including cabin crew managers (CCMs). (c) Display good airmanship and TEM skills in assessing aeroplane serviceability, weather planning, fuel planning, and destination facilities. (d) Conduct cockpit preparation and briefings in an effective and accurate manner. (e) Manage and execute engine start, taxi-out and pre-take-off checks safely and in accordance with airline or OEM SOPs. (f) Manage and execute runway line-up, take-off, climb, cruising, descent, approach, landing and taxi-in safely and in accordance with airline or OEM SOPs. (g) During non-normal operations, display good system knowledge, and apply non-normal procedures, communications, TEM, situational awareness (SA), decision-making and aeroplane handling. 	<ul style="list-style-type: none"> (a) Knowledge of systems as set out in this AMC. (b) SOPs. (c) Normal-and non-normal operations' checklists and procedures. 	<ul style="list-style-type: none"> (a) CHECK-IN PROCEDURES. (b) PRE-FLIGHT PREPARATION: <ul style="list-style-type: none"> (1) weather analysis; (2) flight planning; (3) fuel planning; (4) configuration deviation list (CDL), dispatch deviation procedures guide (DDPG), and minimum equipment list (MEL) analysis; and (5) cabin crew briefing. (c) NORMAL PROCEDURES: <p>cockpit preparation, pushback, engine starting, taxiing, take-off, climb, cruising, descent, landing, shutdown, and disembarkation procedures.</p> (d) ON TIME PERFORMANCE: <ul style="list-style-type: none"> (1) weather analysis; (2) flight planning; and (3) fuel planning. (e) NON-NORMAL PROCEDURES: <ul style="list-style-type: none"> (1) as per (c) above, in case of a technical or operational non-normal event; (2) TEM; (3) diversion decision-making; (4) communication; (5) diversion; (6) fuel SA; and (7) passenger and crew care.
--	--	---	---

AMC2 FCL.735.A - Multi-crew cooperation (MCC) Training course- aeroplanes (Table 5)

Table 5 — ADVANCED APS MCC AIRLINE TRAINING CONTENT AND PERFORMANCE INDICATORS			
Training	Performance Indicators	Knowledge	Practical Exercises
Airline-oriented training	(a) Understand the roles of airline departments. (b) Understand the challenges faced by airline departments. (c) Understand the relationships between airline departments. (d) Understand airline responsibilities. (e) Understand a pilot's responsibilities as a crew member.	Appropriate elements of the applicable Regulation (TCAR PEL Part FCL and TCAR OPS Air OPS Regulation).	The exercise should provide the student pilot with a practical understanding of airline operations. This may be achieved through a visit to an airline or alternative means.

GM2 FCL.735.A - Multicrew cooperation (MCC) training course—aeroplanes

Table 1 — COMPETENCIES		
Competency	Description	Performance indicators/observable behaviours
Application of knowledge	Relates and applies relevant knowledge in the operational environment and in scenario settings.	<ul style="list-style-type: none"> – Demonstrates the acquisition and retention of required aviation knowledge; – Relates knowledge between subject areas; – Applies knowledge to the operational environment; – Correctly identifies threats and errors in a timely manner; – Uses knowledge to create valid options of managing threats, errors and undesirable aeroplane states; – Mentally resolves basic mathematics problems relating to operational situations, both under normal circumstances and under pressure; – Shares knowledge with others openly and constructively, as and when appropriate.

Table 1 — COMPETENCIES		
Competency	Description	Performance indicators/observable behaviours
Application of regulations and procedures	Identifies and applies appropriate procedures in accordance with published operating instructions and pursuant to applicable regulations.	<ul style="list-style-type: none"> – Identifies where to find the information; – Follows standard operating procedures (SOPs) unless a higher degree of safety dictates an appropriate deviation therefrom; – Follows all operating instructions in a timely manner; – Correctly operates aeroplane systems and associated equipment; – Monitors the status of aeroplane systems; – Complies with applicable regulations; – Applies relevant procedural knowledge.
Communication	Communicates through appropriate means in normal and non-normal situations.	<ul style="list-style-type: none"> – Ensures that the recipient is ready and able to receive the information; – Shares appropriate information; – Selects appropriately what, when, how, and with whom to communicate; – Conveys messages clearly, accurately, and concisely; – Confirms that the recipient correctly understands important information; – Listens actively and demonstrates understanding when receiving information; – Asks relevant and effective questions; – Communicates in order to resolve deviations identified through monitoring; – Adheres to standard radiotelephony phraseology and procedures; – Accurately reads, interprets, drafts, and responds to data link messages in English; – Correctly uses and interprets non-verbal communication.
Aeroplane flight path management — automation	Controls the aeroplane flight path through automation.	<ul style="list-style-type: none"> – Uses appropriate flight management and guidance systems as well as automation, as installed and as appropriate to the conditions; – Monitors and detects deviations from the desired aeroplane trajectory and takes appropriate action; – Manages the flight path to optimise the operational performance;

Table 1 — COMPETENCIES		
Competency	Description	Performance indicators/observable behaviours
		<ul style="list-style-type: none"> – Maintains the desired flight path during flight using automation, whilst managing other tasks and distractions; – Effectively monitors automation, including engagement and automatic-mode transitions.
Aeroplane flight path management — manual control	Controls the aeroplane flight path through manual flight.	<ul style="list-style-type: none"> – Uses appropriate flight management and guidance systems and automation, as installed and appropriate to the conditions; – Manually controls the aeroplane using only the relationship between aeroplane attitude, speed and thrust, as well as navigation signals or visual information; – Monitors and detects deviations from the desired aeroplane trajectory and takes appropriate action; – Manages the flight path to optimise the operational performance; – Maintains the desired flight path during manual flight, whilst managing other tasks and distractions; – Effectively monitors flight guidance systems, including engagement and automatic-mode transitions.
Leadership and teamwork	Influences others so that they contribute to a shared purpose. Collaborates to accomplish the goals of the team.	<ul style="list-style-type: none"> – Creates an atmosphere of open communication and encourages team participation; – Displays initiative and gives directions when required; – Admits mistakes and takes responsibility; – Carries out instructions when directed; – Gives and receives feedback constructively; – Applies effective intervention strategies to resolve deviations identified whilst monitoring; – Takes into account cultural differences; – Engages others in planning; – Addresses and resolves conflicts and disagreements in a constructive

Table 1 — COMPETENCIES		
Competency	Description	Performance indicators/observable behaviours
		manner; – Exercises decisive leadership.
Problem-solving and decision- making	Identifies problem precursors and resolves actual problems, using decision-making techniques, in a timely manner.	– Seeks accurate and appropriate information from appropriate sources; – Identifies and verifies what and why has failed; – Perseveres with resolving problems whilst prioritising safety; – Uses appropriate and timely decision-making techniques; – Sets priorities appropriately; – Identifies and considers options, as appropriate; – Monitors, reviews, and adapts decisions, as required; – Identifies, assesses, and manages risks effectively; – Adapts when faced with situations where no guidance or procedure exists.
Situational awareness (SA) and information management	Perceives, comprehends, and manages information, as well as anticipates its effect on the operation.	– Monitors, identifies, and assesses accurately the aeroplane’s state and systems; – Monitors, identifies, and assesses accurately the aeroplane’s energy state and anticipated flight path; – Monitors, identifies, and assesses accurately the general environment as it may affect the operation; – Validates the accuracy of information and checks for gross errors; – Maintains the awareness of the people involved in or affected by the operation as well as their capacity to perform as expected; – Anticipates what could happen, plans, and stays ahead of the situation; – Develops effective contingency plans based upon potential threats; – Recognises and effectively responds to indications of reduced SA.

Table 1 — COMPETENCIES		
Competency	Description	Performance indicators/observable behaviours
Workload management	Maintains available workload capacity through prioritisation and distribution of tasks, using resources.	<ul style="list-style-type: none"> – Exercises self-control in all situations; – Plans, prioritises, and schedules tasks effectively; – Manages time efficiently when carrying out tasks; – Offers and gives assistance, delegates when necessary; – Seeks and accepts assistance, when necessary; – Monitors, reviews, and cross-checks taken action conscientiously; – Verifies that tasks are completed as expected; – Manages and recovers from interruptions, distractions, variations, and failures effectively, while performing tasks.

GM3 FCL.735.A - Multi-crew cooperation (MCC) training course—airplanes

EXAMPLE OF AN APS MCC GRADING SYSTEM					
Competency	Unsatisfactory	Satisfactory	Good	Very Good	Exemplary
General description of each competency level.	The pilot's performance in this competency was unsatisfactory with a negative effect on safety. The pilot did not demonstrate the majority of the relevant performance indicators.	The pilot's performance in this competency was satisfactory with a slightly positive effect on safety. The pilot demonstrated most of the relevant performance indicators in this competency to at least a satisfactory standard.	The pilot's performance in this competency was effective with a significant contribution to safety. The pilot consistently demonstrated most of the relevant performance indicators in this competency to a good standard.	The pilot's performance in this competency was very effective, which significantly enhanced safety. The pilot regularly demonstrated all of the relevant performance indicators in this competency to a very good standard.	The pilot's performance in this competency was exemplary with an outstanding effect on safety. The pilot always demonstrated all of the relevant performance indicators in this competency to an exemplary standard.
Notes			<ul style="list-style-type: none"> – Most: 75 % or greater. – Relevant performance indicator: a performance indicator/observable behaviour that is expected to be demonstrated during the assessment. 		

CERTIFICATE OF COMPLETION FORM (AMC1 FCL.735.A; FCL.735.H; FCL.735.As - MULTI-CREW COOPERATION (MCC) TRAINING COURSE)

CERTIFICATE OF COMPLETION OF MCC - TRAINING			
Applicant's last name(s):		First name(s):	
Type of license:		Number:	State:
ME/IR training completed		OR	ME/IR validity date: ME/IR skill test date:
Issued on:		passed on:	
	Signature of applicant:		

The satisfactory completion of MCC-Training according to requirements is certified below:

TRAINING			
Multi-crew co-operation training received during period:			
from:	to:	at:	ATO / operator*
Location and date:		Signature of head of ATO or authorized instructor*:	
Type and number of license and state of issue:		Name(s) in capital letters of authorised instructor:	

** Delete as appropriate*

CERTIFICATE OF COMPLETION FORM (AMC2 FCL.735.A; FCL.735.H; FCL.735.As - ENHANCED MCC TRAINING TO AIRLINE PILOT STANDARDS (APS MCC) COURSE)

CERTIFICATE OF COMPLETION OF APS MCC-TRAINING			
Applicant's last name(s):		First name(s):	
Type of license:		Number:	State:
ME/IR: Training completed		OR	ME/IR validity date ME/IR skill test: date
Issued on:		passed on:	
	Signature of applicant:		

The satisfactory completion of APS MCC training according to requirements is certified below:

TRAINING			
Multi-crew cooperation training to airline pilot standards received during period:			
from:	to:	at:	ATO/operator*
Location and date:		Signature of head of ATO or authorized instructor*:	
Type and number of license and state of issue:		Name(s) in capital letters of authorized instructor:	

** Delete as appropriate*