Civil Aviation Authority of Singapore

AIRCRAFT & INSTRUMENT RATING TEST (MULTI-CREW) / MPL TEST

Instructions

1. The AFE shall check the validity of the candidate's licence before commencing the test.
2. All items assessed in the FSTD shall be flown with 15 knots crosswind, unless otherwise specified.
3. For aircraft equipped with HUD,SVS,EVS etc, candidates are allowed to use these for all exercises, unless otherwise specified.
4. Any item in the test may only be repeated once. A maximum of 2 items in the test may be repeated. The candidate fails if more than 2 items are required to be repeated.
5. The test comprises of the skill-based items in this report and a real-time flight segment (i.e. Line Oriented Assessment (LOA)). Assessment of Key Competencies is based on the candidate's performance in the LOA and the skill-based items.
6. If more than 3 competencies are graded as 2, the candidate will have FAILED the test.
7. A gross exceedance of the flight test tolerances in any item renders the whole test as FAILED.
8. AFE may stop the test at any point if it is considered that the candidate's demonstration of flying skills requires a complete re-test.
9. In the event that the test has to be stopped prematurely, the current attempt will be disregarded, and the candidate shall undergo the full test.
10. The AFE shall endorse the AR and IR entries on separate lines in the Certificate of Test.
11. The completed test report must be uploaded in CAPELS within 48 hours from the date of the test.

Name of Candidate:		**Licence No./ PID No.:**
Purpose of Test: *(Tick all that applies)* Initial ☐ Renewal ☐ MPL ☐	**Aircraft Type:**	**Date of Test:** (dd/mm/yyyy)
FSTD Identification:	**Expiry of FSTD Qualification** (dd/mm/yyyy)	**Expiry of FSTD Approval to use** (dd/mm/yyyy)
AWI Number: AWI/SIM/ _____		

In the **Item** column, "**M**" indicates mandatory for both Initial and Renewal tests and "**I**" indicates applicable for Initial tests only.

Knowledge	**Item**	**Assessment**		**Remarks**
		Pass	**Fail**	
Cold Weather Operations	M			
List other topics that were quizzed: 1. 2.				

Skill-Based	**Item**	**Assessment**			**Remarks**
		Pass	**Fail**	**Repeat**	
SECTION 1 – Flight Preparation					
1.1 FMS set-up (if applicable)	M				
1.2 Use of checklists, before take-off procedures, radio and navigation equipment check, selection and setting of navigation and communication frequencies	M				
1.3 Taxying in compliance with air traffic control or instructions of instructor	I				
1.4 Before Take-off checks	M				
SECTION 2 – Take-offs					
2.1 Take-off with 30 knots crosswind (or max. crosswind limit)	I				

2.2 Instrument take-off; transition to instrument flight is required during rotation or immediately after becoming airborne	M				
2.3 Take-off with simulated engine failure between V1 and V2 (manual flight until flaps retracted)	M				
2.4 Rejected take-off before reaching V1 at minimum authorised RVR	M				
SECTION 3A – Abnormal and Emergency Procedures					
3.1 Above FL300, manually fly aircraft with power to exceed speed limit. Recover to altitude and stabilise	I				
3.2 Emergency descent starting above FL300, through at least 15,000ft with recovery not below MORA or 10,000ft AGL	I				
3.3 Engine fire drill	M				
3.4 TCAS RA	M				
SECTION 3B – Upset Prevention and Recovery Training (UPRT)					
3.5 Above FL300 and in clean configuration, reduce airspeed until onset of buffet or stall warning (or stick shaker) and recover	I				
3.6 During a turn, in approach configuration with the gear down, reduce airspeed until onset of buffet or stall warning and recover	I				
SECTION 4 – Instrument flight procedures					
4.1 Adherence to departure and arrival routes and ATC instructions	M				
4.2 Holding procedures (FMS)	M				
4.3 Manually, with one engine inoperative, ILS to DH/A of 200 feet or to higher minima if required by the approach procedure	M				
4.4 RNP/VOR/NDB approach to MDA and final alignment	M				
4.5 Instrument failure (Required for Gen 3 aircraft only)	M				
SECTION 5 – Missed approach Procedures					
5.1 Go-around on instruments with all engines on maximum power with autopilot off after reaching DH/DA (manual flight until flaps retracted)	I				
5.2 Manual Go-Around, with one engine inoperative, after an instrument approach on reaching DH/MDA	M				
SECTION 6 – Landings					
6.1 Visual approach to landing or Go-around	M				
6.2 Visual Circuit with one engine inoperative using manual thrust (Manual flight)	I				

6.3	With one engine failed (or two engines failed on same side for a four-engine aircraft), carry out an approach and landing (manually flown)	M				
6.4	No Trailing Edge Flaps approach and landing from 10 miles final (manual flight)	M				
6.5	Landing with 30 knots crosswind (or max. crosswind limit)	M				
6.6	*Aircraft with additional authorisations (e.g. HUD,SVS,EVS etc):* With one engine failed, approach using manual thrust, followed by a landing without HUD,SVS,EVS etc.	I				

Assessment of Key Competencies		**Assessment**					**Observable Behaviours**
		1	2	3	4	5	
KNO	Application of Knowledge						
PRO	Application of Procedures and Compliance with Regulations						
COM	Communications						
FPA	Flight Path Management Auto						
FPM	Flight Path Management Manual						
LTW	Leadership and Teamwork						
PSD	Problem Solving and Decision Making						
SAW	Situational Awareness and Management of Information						
WLM	Workload Management						

Overall Assessment MPL/Aircraft Rating/Instrument Rating Test	
☐ Pass	☐ Fail
Overall Comments	

Name of AFE	**Licence No.**	**Signature**

FLIGHT TEST TOLERANCES

The following limits given below are for general guidance.
The Authorised Flight Examiner shall provide the allowance for turbulent conditions and the handling qualities and performance of the aeroplane used.

	Normal Flight	**Flight with Simulated Asymmetric Flight Power**
Height		
(a) In level flight (other than at Decision Height)	± 100 ft	± 100 ft
(b) For starting go-around at Decision Height	+ 50 ft / 0 ft	+ 50 ft / 0 ft
(c) Minimum Descent Height/ MAP/altitude	+ 100 ft / 0 ft	+ 100 ft / 0 ft
Tracking on Radio Navigation Aids	± 5°	± 5°
Precision Approach	Half-scale deflection on Localiser and Glidepath	Half-scale deflection on Localiser and Glidepath
Heading	± 10°	± 10°
Speed	+10 / - 0 kts (Aeroplanes)	+10 / - 5 kts (Aeroplanes)

PILOT COMPETENCIES GRADING CARD

GRADING WORD PICTURES				
1	2	3	4	5
Ineffective performance, rarely demonstrating any of the behavioural indicators when needed, which resulted in an unacceptable reduction in safety margin.	Acceptable performance, occasionally demonstrating some of the behavioural indicators when needed, resulting in a safe operation.	Suitable performance, regularly demonstrating most of the behavioural indicators when needed, resulting in a safe operation.	Effective performance, regularly demonstrating the required behavioural indicators when needed, enhancing the safety margin.	Exemplary performance, always demonstrating the required behavioural indicators when needed, significantly enhancing safety and efficiency.

COMPETENCIES	OBSERVABLE BEHAVIOURS
Application of Knowledge (KNO)	OB 0.1 Demonstrates practical and applicable knowledge of limitations and systems and their interaction OB 0.2 Demonstrates required knowledge of published operating instructions OB 0.3 Demonstrates knowledge of the physical environment, the air traffic environment including routings, weather, airports and the operational infrastructure OB 0.4 Demonstrates appropriate knowledge of applicable legislation OB 0.5 Knows where to source required information OB 0.6 Demonstrates a positive interest in acquiring knowledge OB 0.7 Is able to apply knowledge effectively
Application of Procedures and Compliance with Regulations (PRO)	OB 1.1 Identifies where to find procedures and regulations OB 1.2 Applies relevant operating instructions, procedures and techniques in a timely manner OB 1.3 Follows SOPs unless a higher degree of safety dictates an appropriate deviation OB 1.4 Operates aeroplane systems and associated equipment correctly OB 1.5 Monitors aircraft systems status OB 1.6 Complies with applicable regulations OB 1.7 Applies relevant procedural knowledge
Communication (COM)	OB 2.1 Determines that the recipient is ready and able to receive information OB 2.2 Selects appropriately what, when, how and with whom to communicate OB 2.3 Conveys messages clearly, accurately and concisely OB 2.4 Confirms that the recipient demonstrates understanding of important information OB 2.5 Listens actively and demonstrates understanding when receiving information OB 2.6 Asks relevant and effective questions OB 2.7 Uses appropriate escalation in communication to resolve identified deviations OB 2.8 Uses and interprets non-verbal communication in a manner appropriate to the organizational and social culture OB 2.9 Adheres to standard radiotelephone phraseology and procedures OB 2.10 Accurately reads, interprets, constructs and responds to datalink messages in English
Flight Path Management – Automation (FPA)	OB 3.1 Uses appropriate flight management, guidance systems and automation, as installed and applicable to the conditions OB 3.2 Monitors and detects deviations from the intended flight path and takes appropriate action OB 3.3 Manages the flight path safely to achieve optimum operational performance

	OB 3.4 Maintains the intended flight path during flight using automation while managing other tasks and distractions OB 3.5 Selects appropriate level and mode of automation in a timely manner considering phase of flight and workload OB 3.6 Effectively monitors automation, including engagement and automatic mode transitions
Flight Path Management, manual control (FPM)	OB 4.1 Controls the aircraft manually with accuracy and smoothness as appropriate to the situation OB 4.2 Monitors and detects deviations from the intended flight path and takes appropriate action OB 4.3 Manually controls the aeroplane using the relationship between aeroplane attitude, speed and thrust, and navigation signals or visual information OB 4.4 Manages the flight path safely to achieve optimum operational performance OB 4.5 Maintains the intended flight path during manual flight while managing other tasks and distractions OB 4.6 Uses appropriate flight management and guidance systems, as installed and applicable to the conditions OB 4.7 Effectively monitors flight guidance systems including engagement and automatic mode transitions
Leadership and Teamwork (LTW)	OB 5.1 Encourages team participation and open communication OB 5.2 Demonstrates initiative and provides direction when required OB 5.3 Engages others in planning OB 5.4 Considers inputs from others OB 5.5 Gives and receives feedback constructively OB 5.6 Addresses and resolves conflicts and disagreements in a constructive manner OB 5.7 Exercises decisive leadership when required OB 5.8 Accepts responsibility for decisions and actions OB 5.9 Carries out instructions when directed OB 5.10 Applies effective intervention strategies to resolve identified deviations OB 5.11 Manages cultural and language challenges, as applicable
Problem Solving and Decision Making (PSD)	OB 6.1 Identifies, assesses and manages threats and errors in a timely manner OB 6.2 Seeks accurate and adequate information from appropriate sources OB 6.3 Identifies and verifies what and why things have gone wrong, if appropriate OB 6.4 Perseveres in working through problems while prioritizing safety OB 6.5 Identifies and considers appropriate options OB 6.6 Applies appropriate and timely decision making techniques OB 6.7 Monitors, reviews and adapts decisions as required OB 6.8 Adapts when faced with situations where no guidance or procedure exists OB 6.9 Demonstrates resilience when encountering an unexpected event
Situational Awareness and Management of Information (SAW)	OB 7.1 Monitors and assesses the state of the aeroplane and its systems OB 7.2 Monitors and assesses the aeroplane’s energy state, and its anticipated flight path OB 7.3 Monitors and assesses the general environment as it may affect the operation OB 7.4 Validates the accuracy of information and checks for gross errors OB 7.5 Maintains awareness of the people involved in or affected by the operation and their capacity to perform as expected OB 7.6 Develops effective contingency plans based upon potential risks associated with threats and errors OB 7.7 Responds to indications of reduced situational awareness
Workload Management (WLM)	OB 8.1 Exercises self-control in all situations OB 8.2 Plans, prioritizes and schedules appropriate tasks effectively OB 8.3 Manages time efficiently when carrying out tasks OB 8.4 Offers and gives assistance OB 8.5 Delegates tasks OB 8.6 Seeks and accepts assistance, when appropriate OB 8.7 Monitors, reviews and cross-checks actions conscientiously OB 8.8 Verifies that tasks are completed to the expected outcome OB 8.9 Manages and recovers from interruptions, distractions, variations and failures effectively while performing tasks