

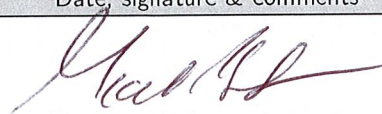
Manual Test		
Pitch Trim Indicator vs. Surface Position Calibration on Ground		
Test Id: 2.a.vi	Flight Model: AL42	Certification: FNPT-II
Test Objective	Expected Results	
The objective of this test is to demonstrate that device pitch trim visual cockpit indicators are satisfactorily calibrated related to the class of aeroplanes pitch trimmer.	Expected results given in the following table	
Reference	Tolerances	
QTG Volume I - Validation Data - Handling Qualities- 2.a.vi - See 2.a.vi Volume I	+/- 1 equivalent to +/- 8% of Computed Trim Angle (see Demonstration procedure)	
Demonstration Procedure		
The pilot manually set the trim to the desired position using the trim indicator. On the FNPT Check, position is recorded in %. The procedures is repeated for the different required positions.		

Trimmer angle	Trim Indicator %	Measured value %
Full Nose Up	100	100
Mid Nose Up	50	51.1
Neutral	0	0.9
Mid Nose Down	-50	-51.8
Full Nose Down	-100	-99.6



NOTE

Tolerance conversion: Computed trim value is in % on the IOS. The elevator deflection representative of our Diamond DA42-VI is considered as 25. If we do the approximation that the trim position is equivalent to the elevator position, we can say that from -100% to +100% of trim, the elevator deflection is 25. So the conversion is: +/- 1 Computer Trim (Elevator) equals to 8%. Clearly, change of 8% of trim computed value is equivalent to 1 of trim surface position.

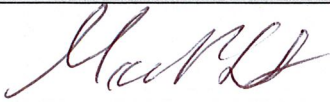
Authority's approval	Operator's approval
Date, signature & comments	Date, signature & comments
	 14-6-2023

Manual Test		
Alignment of Power Lever Angle vs. Selected Engine Parameter on Ground		
Test Id: 2.a.viii.1	Flight Model: AL42	Certification: FNPT-II
Test Objective	Expected Results	
The objective of the test is to demonstrate that alignment of the power lever with reference to the key engine parameters conforms to the class of the aeroplanes.	Expected results given in the following table	
Reference	Tolerances	
QTG Volume I - Validation Data - Handling Qualities- 2.a.viii.1 - See 2.a.viii.1 Volume I	No more than 19% of computed value	
Demonstration Procedure		
On ground, with the FNPT in stop mode, the power settings is set with the power levers from Min to Max. The power levers positions are read in percentage from the instructor station ( ALSIM menu/then FNPT check/flight control window). Computed throttle levers values are in % on the IOS from 0% to 100%. The throttle lever longitude for the full deflection on the simulator is 10.5 cm i.e 1 cm corresponds to 9.5% on the IOS. A tolerance of 2 cm is applied as per CS FSTD A is equivalent to a 19% tolerance on the IOS.		

Left Load %	Left Power Lever %	Left Load Measured value %
2	0	0.0
16	30	29.5
40	50	49.8
70	70	69.7
100	100	99.9

Right Load %	Right Power Lever %	Right Load Measured value %
2	0	0.0
16	30	29.6
40	50	49.2
70	70	70.4
100	100	99.6

Authority's approval	Operator's approval
Date, signature & comments	Date, signature & comments
	 22-8-23



# Manual Test

## Visual Ground Segment

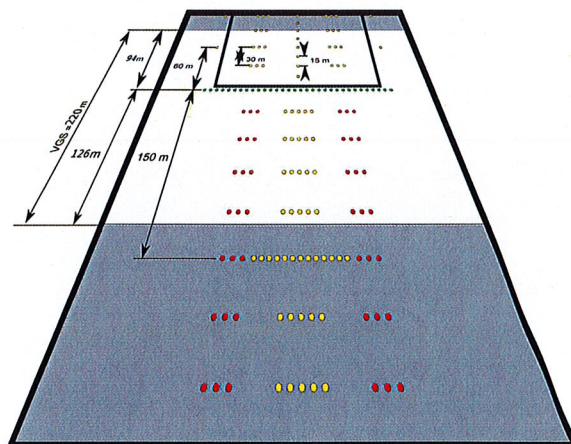
Test Id: 4.c.i


Flight Model: AL42

Certification: FNPT-II

Test Objective	Expected Results
The objective of the test is to demonstrate that the visual system ground segment visible to the pilot when conducting a landing manoeuvre in low visibility conforms to the class of aeroplanes.	220 m
Reference	Tolerances
QTG Volume I - Validation Data - Visual System - VGS Calculation- 4.c.i - See 4.c.i Volumes I	Near end: The lights computed to be visible should be visible Far end: +/-20% of computed VGS
Demonstration Procedure	
Weather conditions are 15C and 1013hPa. The aircraft (at maximum weight) is set in Landing configuration at LFRS RWY 03 (ILS 109.9) with a 350m Runway Visual Range (RVR) (set RVR and fog from the weather page of the Instructor Station) and the descent stopped at 30m (100ft) above threshold elevation which corresponds to 173ft QNH. The Visual System should show a maximum visibility of 350m (1200ft) and a certain amount of RWY edge lights and Approach lights which total distance equals the Visual Ground Segment. IAS should be 90 kts and VS -450ft/min. Engine parameters are 2020 RPM and 45% Load. (Please refer to the QTG volume I for more details.)	

Operation	Computed	Measured	Tolerance
VGS (m)	214	220	[ 170 ; 255 ]

PASS ☒FAIL ☐

Authority's approval	Operator's approval
Date, signature & comments	Date, signature & comments
	 4.2-24

## 3 Functions and Subjective Tests

### Contents

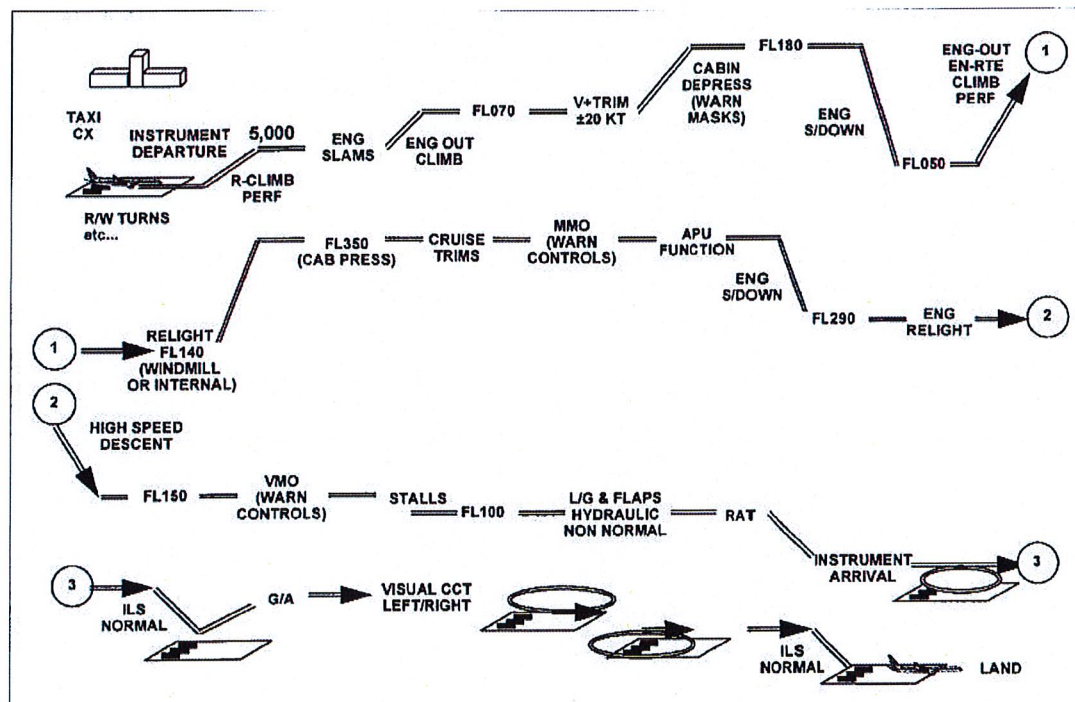
3-1	Introduction . . . . .	3-2
3-2	Typical subjective flight . . . . .	3-3
3-3	Subjective Tests . . . . .	3-4



## 3-1 Introduction

The following tables show the functions and subjective tests that are to be performed by the operator before initial evaluation. After performing these tests, the operator should sign and date all the tests in the subjective tests list as a proof that the tests have been performed.

## 3-2 Typical subjective flight



## 3-3 Subjective Tests



### Subjective tests fly-outs

This section provides material for the performance of subjective tests.

All subjective tests listed in CS-FSTD (A) shall be covered by the operator with regards to AMC1.CS.FSTD(A).300.(9).(ii) before the initial evaluation and for recurrent evaluations to ensure the qualification of the device and its continuation.

Results of fly-outs shall be presented to Authorities during initial and recurrent evaluations.

**Summary table:** The table summarizes the fly-outs in which the tests shall be performed. One test can be found in one or more fly-outs. If a test is not applicable to a fly-out, the box is colored in grey. Some tests are to be performed during any flight phase (for example, sound system tests). After the execution of all 4 fly-outs, the operator will be able to tick the last box of the following table to attest that the test is satisfactory during all the fly-outs.

### SUMMARY TABLE

Test	Fly-outs				Test satisfactory on flight model:
	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	MPG10
a.1.a: Preflight	x	x	x	x	<input type="checkbox"/>
b.1.a: Engine(s) normal start	x	x	x	x	<input type="checkbox"/>
b.3.a: Taxi - Thrust response	x				<input type="checkbox"/>

During fly-outs, Operator shall test all the 5 declared airports. A table figures at the end of the summary table to follow the progress of tests.

Declared airports:	Tested during fly-out n°:	Test satisfactory
		<input type="checkbox"/>
		<input type="checkbox"/>
		<input type="checkbox"/>
		<input type="checkbox"/>
		<input type="checkbox"/>

**Fly-outs:** 4 fly-outs are provided to cover all the scope of tests.

Before each fly-out, a table summarizes flight conditions and aircraft set-up. Aircraft and meteorological parameters are monitored through IOS. Operator is recommended to test various weight and center of gravity position. Also, flight conditions shall differ from one fly-out to another. In addition, please note that some data are imposed; for example QNH in order to cover various meteorological conditions or arrival facilities to perform selected approaches.

The operator is free to choose departure airports. The arrival airports must be chosen with regards to their approach facilities, in order to perform approaches imposed by Subjective Tests. Please note that all the 5 approved airports shall be covered. Refer to the table mentioned previously.

Tests shall be performed during different day times: Dawn, day, night and twilight... Time box should be filled.

Several meteorological conditions shall be tested with various temperature, QNH and MTO (to be fill in T°, QNH and MTO). Icing, rain, snow, hail... shall be tested.

## SUBJECTIVE TESTS

### SUMMARY TABLE

Test	Fly-outs				Test satisfactory on flight model:
	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	A42M2
a.1.a: Preflight	x	x	x	x	<input checked="" type="checkbox"/>
b.1.a: Engine(s) normal start	x	x	x	x	<input checked="" type="checkbox"/>
b.3.a: Taxi - Thrust response	x				<input checked="" type="checkbox"/>
b.3.b: Taxi - Power lever friction	x				<input checked="" type="checkbox"/>
b.3.c: Taxi - Ground handling	x				<input checked="" type="checkbox"/>
b.3.e: Taxi - Brake operation	x				<input checked="" type="checkbox"/>
c.1.a: Takeoff - Aeroplane/engine parameter relationships	x				<input checked="" type="checkbox"/>
c.1.c: Takeoff - Acceleration characteristics	x			x	<input checked="" type="checkbox"/>
c.1.d: Takeoff - Nose wheel and rudder steering	x				<input checked="" type="checkbox"/>
c.1.e: Takeoff - Crosswind		x			<input checked="" type="checkbox"/> 10 kts xwind
c.1.g: Takeoff - Low visibility take-off			x		<input checked="" type="checkbox"/>
c.1.h: Takeoff - Landing gear, wing	x	x	x	x	<input checked="" type="checkbox"/>
d.1: Climb - Normal	x	x	x	x	<input checked="" type="checkbox"/>
d.2: Climb - One or more engines inoperative		x		x	<input checked="" type="checkbox"/>
e.1: Cruise - Performance characteristics	x			x	<input checked="" type="checkbox"/>
e.2: Cruise - High altitude handling			x		<input checked="" type="checkbox"/>
e.3: Cruise - High Mach number handling			x		<input checked="" type="checkbox"/> n/a
e.5: Cruise - High IAS handling		x			<input checked="" type="checkbox"/>



Test	Fly-outs				Test satisfactory on flight model:
	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	A42M2
f.1: Manoeuvres - Stall configuration			x		<input checked="" type="checkbox"/>
f.3: Manoeuvres - Turns with/without speed brake/spoilers deployed	x				<input checked="" type="checkbox"/>
f.8: Manoeuvres - Manoeuvring with one or more engines inoperative				x	<input checked="" type="checkbox"/>
g.1: Descent - Normal	x	x		x	<input checked="" type="checkbox"/>
g.2: Descent - Maximum rate			x		<input checked="" type="checkbox"/>
h.1.a: Instrument Approaches and Landing - PAR	x				<input checked="" type="checkbox"/>
h.1.b.A: Instrument Approaches and Landing - Manual approach with/without director including landing	x				<input checked="" type="checkbox"/>
h.1.b.C: Instrument Approaches and Landing - Manual approach to DH and G/A all engines	x				<input checked="" type="checkbox"/>
h.1.b.D: Instrument Approaches and Landing - Manual one engine inoperative approach to DH and G/A		x			For too fast SE 50% <input checked="" type="checkbox"/>
h.2.a: Non precision approach - NDB	x				<input checked="" type="checkbox"/>
h.2.b: Non precision approach - VOR, VOR/DME, VOR/TAC				x	<input checked="" type="checkbox"/>
h.2.d: Non precision approach - ILS LLZ (LOC), LLZ (LOC)/BC				x	<input checked="" type="checkbox"/>
i.1: Visual Approaches and landing - Manoeuvring, normal approach and landing all engines operating with and without visual approach aid guidance		x			<input checked="" type="checkbox"/>



Test	Fly-outs				Test satisfactory on flight model:
	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	A42M2
i.2: Visual Approaches (segment) and landing - Approach and landing with one or more engines inoperative		x			<input checked="" type="checkbox"/>
i.4: Visual Approaches and landing - Approach and landing with crosswind		x			<input checked="" type="checkbox"/>
j.1: Missed approach - All engines				x	<input checked="" type="checkbox"/>
j.2: Missed approach - One or more engine(s) out		x			<input checked="" type="checkbox"/>
k.1.f: Landing roll and taxi - Brake operation, to include autobraking system when applicable	x	x	x	x	<input checked="" type="checkbox"/>
l.1.b: Aeroplane operation - De-icing/anti-icing			x		<input checked="" type="checkbox"/>
l.1.d: Aeroplane operation - Communications	x	x	x	x	<input checked="" type="checkbox"/>
l.1.e: Aeroplane operation - Electrical	x	x	x	x	<input checked="" type="checkbox"/>
l.1.h: Aeroplane operation - Fuel and oil, hydraulic and pneumatic	x	x	x	x	<input type="checkbox"/>
l.1.i: Aeroplane operation - Landing gear	x	x	x	x	<input checked="" type="checkbox"/>
l.1.k: Aeroplane operation - Powerplant	x	x	x	x	<input checked="" type="checkbox"/>
l.1.s: Aeroplane operation - Navigation systems	x	x	x	x	<input type="checkbox"/>
l.1.t: Aeroplane operation - Stall warning / avoidance			x		<input checked="" type="checkbox"/>
l.2.a: Airborne procedures - Holding	x				<input checked="" type="checkbox"/>
l.3.a: Engine shutdown and parking - Engine and systems operation	x	x	x	x	<input checked="" type="checkbox"/>
l.3.b: Engine shutdown and parking - Parking brake operation	x	x	x	x	<input checked="" type="checkbox"/>
l.4: Other as appropriate including effects of wind		x			<input checked="" type="checkbox"/>

Test	Fly-outs				Test satisfactory on flight model:
	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	A42M2
m.2.a: Representative airport runways and taxiways				x	<input checked="" type="checkbox"/>
m.2.b: Runway definition (3km)			x		<input checked="" type="checkbox"/>
m.2.c: Runway surface and markings (3km)			x		<input checked="" type="checkbox"/>
m.2.d: Lighting for the runway in use			x		<input checked="" type="checkbox"/>
m.4.a: Visual feature recognition - runway (8km)				x	<input checked="" type="checkbox"/>
m.4.c: Visual feature recognition - runway (5km)		x			<input checked="" type="checkbox"/>
m.4.d: Visual feature recognition - taxiway (5km)		x			<input checked="" type="checkbox"/>
m.4.e: Visual feature recognition - runway (3km)			x		<input checked="" type="checkbox"/>
m.4.f: Visual feature recognition	x	x	x	x	<input checked="" type="checkbox"/>
m.6.a: Correlation with aeroplane and associated equipment	x	x	x	x	<input checked="" type="checkbox"/>
m.6.b: Visual system – take-off and landing	x				<input checked="" type="checkbox"/>
m.6.c: Visual system – environment	x	x	x	x	<input checked="" type="checkbox"/>
m.9.a: IOS – Environmental effects	x	x	x	x	<input checked="" type="checkbox"/>
m.9.b: IOS – Airport/aerodrome selection	x	x	x	x	<input checked="" type="checkbox"/>
m.9.c: IOS – Airport/aerodrome lighting	x	x	x	x	<input checked="" type="checkbox"/>
o.1.c: Sound Systems – Aeroplane noises	x	x	x	x	<i>Speakers w/s sometimes</i> <input type="checkbox"/>
o.1.f: Sound Systems – Engine/propeller	x	x	x	x	<input type="checkbox"/>



Tests regarding the 5 declared airports:

Declared airports:	Tested during fly-out n°:	Test satisfactory
EINN	Q1 Q3	<input checked="" type="checkbox"/>
EGHH		<input checked="" type="checkbox"/>
EIDW	Q3 Q2	<input checked="" type="checkbox"/>
EGAA EICK	Q4	<input checked="" type="checkbox"/>
EIKY	Q1 Q4	<input checked="" type="checkbox"/>
EINF	Q2	

CAA recommendation - 19-07-2023

High level summary of Function & Subjective fly outs:-

The subjective flight test had been completed on quarterly basis.

It was recommended by the FI that a greater variation in the environmental conditions QNH be adopted in the flyouts (e.g., QNH 990 to 1030 mb, OAT low and high temperature range)

The following Flyouts should have a varied range of environmental conditions to test various aspects of the simulator.



**- 1<sup>ST</sup> FLY-OUT -**

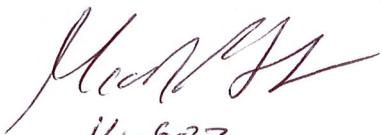
Aircraft Configuration:					
Gross weight:		1805		CoG position:	
Flight Test Conditions:					
Departure:		Cruise:		Arrival:	
From:	E100	Altitude:	5000ft	To:	E100
Time:	1745	Time:	1800	Time:	1815
T°:	+10	T°:	+0	T°:	+10
QNH:	1010	QNH:	1010	QNH:	1009
MTO:		MTO:		MTO:	
Facilities:	NDB ILS	Others:	ILS	Facilities:	ILS and NDB equipped

Item:	Flight Test Procedures:	Associated Tests:	✓
Preflight	Set the A/C on its parking position and perform a functions check of all switches, indicators, systems...	a.1.a	<input checked="" type="checkbox"/>
Pre Take-Off	Start the engine(s) according to AFM.	b.1.a	<input checked="" type="checkbox"/>
	During taxiing to the runway threshold, perform the following checks:		
	- Increase and decrease power to check reactions of thrust response and power lever friction,	b.3.a b.3.b	<input checked="" type="checkbox"/>
	- Turn right and left to check reactions of ground handling,	b.3.c	<input checked="" type="checkbox"/>
Take-Off	- Apply symmetrical and asymmetrical braking action.	b.3.e	<input checked="" type="checkbox"/>
	At threshold, with parking brakes on, apply take-off power and check engine parameters.	c.1.a	<input checked="" type="checkbox"/>
	Proceed to a take-off by releasing parking brakes and applying take-off power.	c.1.c	<input checked="" type="checkbox"/>
	During take-off ground roll, apply left and right rudder to check its action.	c.1.d	<input checked="" type="checkbox"/>
Normal climb	After lift off, retracts flaps and landing gear.	c.1.h	<input checked="" type="checkbox"/>
	Perform a normal climb according to AFM.	d.1	<input checked="" type="checkbox"/>
Cruise	Set the A/C in cruise configuration in a specified cruise power setting and check performance characteristics.	e.1	<input checked="" type="checkbox"/>
	Cruise to an ILS equipped airport.		
Holding pattern	With/without speed brake/spoilers deployed, roll the A/C from right to left.	f.3	<input checked="" type="checkbox"/>
	Climb up to approx. 4000 ft and perform a holding pattern with the prescribed power setting.	l.2.a	<input checked="" type="checkbox"/>
Descent	Perform a normal 5% slope descent.	g.1	<input checked="" type="checkbox"/>

Approach	Perform an ILS approach (with the flight director if fitted and without) down to the Decision Altitude and then Go Around.	h.1.a h.1.b.A h.1.b.C	<input checked="" type="checkbox"/>
Cruise	Cruise to a NDB equipped airport.	-	-
Approach	Perform a NDB approach. During approach, set the power to idle.	h.2.a m.6.b	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
Touch down	Following the touch down, apply brakes.	k.1.f	<input checked="" type="checkbox"/>
Engine shut down on stand	On stand, shut down the engines according to AFM and monitor engines parameters. Set the parking brake on.	l.3.a l.3.b	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>

The following additional tests shall be performed at any flight phase:

Item:	Additional Tests Procedures:	Associated Tests:	✓
Visual system	Move the A/C along the tree axis and check that the visual motion is coherent with the flight controls operation and that view offered by the visual system corresponds to the operation of the controls.	m.6.a m.6.c	<input checked="" type="checkbox"/>
Functions	During the flight path execution, check the functioning of: - Communications and interphone if fitted, - The electrical system, - Fuel, oil, hydraulics and pneumatics systems, - Landing gear, - Engine parameters, - The functionality of navigation system operation (identification of morse codes, indications, GPS...).	l.1.d l.1.e l.1.h l.1.i l.1.k l.1.s	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
Instructor station	During the flight path execution, check that the IOS enable the instructor to control the simulation. - Set the A/C to any place in the database, - Set the cloud base to an altitude close to that of the A/C (the altimeter must be able to confirm the cloud base altitude), - During night conditions, set the A/C at runway threshold with landing lights on and check the signage and runway markings, - The airport lightings are of the type of those of the airport, and that their intensity is dimmable.	m.9.b m.9.a m.4.f m.9.c	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
Sound system	Check that the sound system simulates the aerodynamic, gear, flaps, etc sounds in a realistic manner. Check that the sound system simulates the engine and propeller sounds in a realistic manner.	o.1.c o.1.f	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>

<b>Authority's Approval</b> (Date, Signature & Comments)	<b>Operator's Approval</b> (Date, Signature & Comments)
	 14-6-23



- 2<sup>nd</sup> FLIP-ULM

**AIRCRAFT CONFIGURATION:**

Gross weight:	1900	CoG position:	
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**FLIGHT TEST CONDITIONS:**

Departure:		Cruise:		Arrival:	
From:	ELDW	Altitude:	Medium <sup>1</sup>	To:	FINF
Time:	1950	Time:	2040	Time:	Night
T <sup>1</sup> :	+ 08	T <sup>1</sup> :	MOZ	T <sup>1</sup> :	+ 08
QNH:	1016	QNH:	1016	QNH:	1016
MTO:	Crosswind	MTO:	ICING	MTO:	Crosswind
Facilities:	VOL RNP ILS	Others:		Facilities:	ILS equipped

Item:	Flight Test Procedures:	Associated Tests:	✓
Preflight	Set the A/C at runway threshold and perform a functions check of all switches, indicators, systems...	a.1.a	<input checked="" type="checkbox"/>
Pre Take-Off	Start the engine(s) according to AFM.	b.1.a	<input checked="" type="checkbox"/>
Take-Off	From the IOS, set crosswind.		
	Proceed to a take-off with one notch of flaps and check for the wind effect at lift off. After lift off, retracts flaps and landing gear.	c.1.e c.1.h	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
Normal climb	Start a normal climb according to AFM.	d.1	<input checked="" type="checkbox"/>
One engine inoperative climb	Continue to climb with one engine inoperative. Perform the procedure according to AFM.	d.2	<input checked="" type="checkbox"/>
Medium altitude handling	Set the A/C in cruise at medium altitude and maximum continuous power and check handling qualities.	e.5	<input checked="" type="checkbox"/>
Descent	Perform a normal 5% slope descent.	g.1	<input checked="" type="checkbox"/>
One engine inoperative approach	Perform a one engine inoperative ILS approach (with the flight director if fitted and without) down to the Decision Altitude and then Go Around	h.1.b.D	<input checked="" type="checkbox"/>
One engine inoperative climb	Climb with one engine inoperative to perform a traffic pattern. Perform the procedure according to AFM.	d.2	<input checked="" type="checkbox"/>
One engine inoperative landing	Perform a manual one engine inoperative approach.	i.2	<input checked="" type="checkbox"/>
Missed approach one engine inoperative	Perform a standard go around with one engine inoperative.	j.2	<input checked="" type="checkbox"/>
Visual system (5km)	Perform a traffic pattern all engine operative. At 5km from runway threshold, set the A/C in approach	m.4.c m.4.d	<input checked="" type="checkbox"/>

<sup>1</sup> A medium altitude is an altitude high enough to perform safe manoeuvres.

	configuration and: - Check runway definition, strobe lights, runway edge white lights and visual approach and guidance lights, - Check runway centerline lights.		
Approach	Initially set a crosswind component from the instructor station and perform a visual normal approach and landing (with or without visual approach aid guidance).	i.4 i.1 l.4	<input checked="" type="checkbox"/>

The following additional tests shall be performed at any flight phase:

Item:	Additional Tests Procedures:	Associated Tests:	✓
Visual system	Move the A/C along the tree axis and check that the visual motion is coherent with the flight controls operation and that view offered by the visual system corresponds to the operation of the controls.	m.6.a m.6.c	<input checked="" type="checkbox"/>
Functions	During the flight path execution, check the functioning of: - Communications and interphone if fitted, - The electrical system, - Fuel, oil, hydraulics and pneumatics systems, - Landing gear, - Engine parameters, - The functionality of navigation system operation (identification of morse codes, indications, GPS...).	l.1.d l.1.e l.1.h l.1.i l.1.k l.1.s	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
Instructor station	During the flight path execution, check that the IOS enable the instructor to control the simulation. - Set the A/C to any place in the database, - Set the cloud base to an altitude close to that of the A/C (the altimeter must be able to confirm the cloud base altitude), - During night conditions, set the A/C at runway threshold with landing lights on and check the signage and runway markings, - The airport lightings are of the type of those of the airport, and that their intensity is dimmable.	m.9.b m.9.a m.4.f m.9.c	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
Sound system	Check that the sound system simulates the aerodynamic, gear, flaps, etc sounds in a realistic manner. Check that the sound system simulates the engine and propeller sounds in a realistic manner.	o.1.c o.1.f	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>



alsim

A42M2 DA42-VI QTG

Subjective Fly-outs

AUTHORITY'S APPROVAL (DATE, SIGNATURE & COMMENTS)	OPERATOR'S APPROVAL (DATE, SIGNATURE & COMMENTS)
	<p><i>Dan</i> 22/8/23.</p> <p><i>Alan</i> 22-8-23</p>



- 3<sup>rd</sup> FLY-OUT

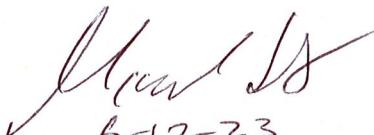
AIRCRAFT CONFIGURATION:					
Gross weight:	1900	CoG position:			
FLIGHT TEST CONDITIONS:					
Departure:		Cruise:		Arrival:	
From:	EIAA	Altitude:	5000 ft below service ceiling	To:	EIDW
Time:	1800	Time:	1818	Time:	Night
T°:	-5	T°:	-20	T°:	-3
QNH:	1012	QNH:	STD BARO	QNH:	1011
MTO:	200 m RVR	MTO:	Icing conditions	MTO:	
Facilities:	ILS RNP	Others:		Facilities:	RNAV equipped

Item:	Flight Test Procedures:	Associated Tests:	✓
Preflight	Set the A/C at runway threshold and perform a functions check of all switches, indicators, systems...	a.1.a	<input checked="" type="checkbox"/>
Pre Take-Off	Start the engine(s) according to AFM.	b.1.a	<input checked="" type="checkbox"/>
Take-Off	From the IOS, set 200m RVR. Proceed to a low visibility take-off.	c.1.g	<input checked="" type="checkbox"/>
	After lift off, retracts flaps and landing gear.	c.1.h	<input checked="" type="checkbox"/>
Normal climb	Perform a normal climb according to AFM.	d.1	<input checked="" type="checkbox"/>
High altitude cruise	Climb to up 5000ft below service ceiling and set the A/C in cruise configuration. Cruise to a RNAV approach equipped airport.		
	Check high altitude handling and experience the overspeed warning.	e.2	<input checked="" type="checkbox"/>
	Set the A/C at Maximum Continuous Power and high altitude and check its handling qualities.	e.3	<input checked="" type="checkbox"/>
	Conduct training in stall configuration (with/without flaps, landing gear...). Meanwhile, ensure the functionality of stall warning at least 5kts before actual stall.	f.1 l.1.t	<input checked="" type="checkbox"/>
Emergency descent	Afterwards, check the functioning of anti-ice/de-ice system.	l.1.b	<input checked="" type="checkbox"/>
	Perform an emergency descent at maximum rate with power reduce and maximum allowed drag.	g.2	<input checked="" type="checkbox"/>
Visual system (3km)	At 3km from runway threshold, with the A/C in approach configuration, :		
	- Check runway definition,	m.2.b	<input checked="" type="checkbox"/>
	- Check runway surface and markings,	m.2.c	<input checked="" type="checkbox"/>
	- Check lighting for runway in use, including runway edge	m.2.d	<input checked="" type="checkbox"/>

	and centerline lighting, visual approach aids and approach lighting of appropriate colors, - Check threshold lights and touchdown zone lights.	m.4.e	<input checked="" type="checkbox"/>
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The following additional tests shall be performed at any flight phase:

Item:	Additional Tests Procedures:	Associated Tests:	✓
Visual system	Move the A/C along the tree axis and check that the visual motion is coherent with the flight controls operation and that view offered by the visual system corresponds to the operation of the controls.	m.6.a m.6.c	<input checked="" type="checkbox"/>
Functions	During the flight path execution, check the functioning of: - Communications and interphone if fitted, - The electrical system, - Fuel, oil, hydraulics and pneumatics systems, - Landing gear, - Engine parameters, - The functionality of navigation system operation (identification of morse codes, indications, GPS...).	l.1.d l.1.e l.1.h l.1.i l.1.k l.1.s	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
Instructor station	During the flight path execution, check that the IOS enable the instructor to control the simulation: - Set the A/C to any place in the database, - Set the cloud base to an altitude close to that of the A/C (the altimeter must be able to confirm the cloud base altitude), - During night conditions, set the A/C at runway threshold with landing lights on and check the signage and runway markings, - The airport lightings are of the type of those of the airport, and that their intensity is dimmable.	m.9.b m.9.a m.4.f m.9.c	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
Sound system	Check that the sound system simulates the aerodynamic, gear, flaps, etc sounds in a realistic manner. Check that the sound system simulates the engine and propeller sounds in a realistic manner.	o.1.c o.1.f	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>

AUTHORITY'S APPROVAL (DATE, SIGNATURE & COMMENTS)	OPERATOR'S APPROVAL (DATE, SIGNATURE & COMMENTS)
	 6-12-23



4<sup>TH</sup> FLY-OUT

AIRCRAFT CONFIGURATION:					
Gross weight:		1900		CoG position:	
FLIGHT TEST CONDITIONS:					
Departure:		Cruise:		Arrival:	
From:	ELKY	Altitude:	5000 ft	To:	ECK.
Time:	2030	Time:	2110	Time:	Night
T°:	+04	T°:	M02	T°:	+03
QNH:	0996	QNH:	0995	QNH:	0995
MTO:		MTO:	Turb / ice	MTO:	
Facilities:	NDB ILS	Others:		Facilities:	VOR and Localizer (DME) equipped

Item:	Flight Test Procedures:	Associated Tests:	✓
Preflight	Set the A/C at runway threshold and perform a functions check of all switches, indicators, systems...	a.1.a	<input checked="" type="checkbox"/>
Pre Take-Off	Start the engine(s) according to AFM.	b.1.a	<input checked="" type="checkbox"/>
Take-Off	Proceed to a take-off by releasing parking brakes and applying take-off power.	c.1.c	<input checked="" type="checkbox"/>
	After lift off, retracts flaps and landing gear.	c.1.h	<input checked="" type="checkbox"/>
Normal climb	Perform a normal climb according to AFM.	d.1	<input checked="" type="checkbox"/>
Cruise	Set the A/C in cruise configuration in a specified cruise power setting and check performance characteristics. Cruise to a VOR equipped airport.	e.1	<input checked="" type="checkbox"/>
Descent	Perform a normal 5% slope descent.	g.1	<input checked="" type="checkbox"/>
Approach	Perform a VOR approach.	h.2.b	<input checked="" type="checkbox"/>
Missed approach	Perform a standard go around all engines operative.	j.1	<input checked="" type="checkbox"/>
One engine inoperative climb	Climb with one engine inoperative up to the overhead of the airfield. Perform the procedure according to AFM.	d.2	<input checked="" type="checkbox"/>
One engine inoperative manoeuvres	In cruise configuration, with one engine inoperative, roll the A/C from right to left, perform steady slideslip, climb and descent.	f.8	<input checked="" type="checkbox"/>
Traffic pattern and Visual system	Set the A/C above the airport scene at a distance that allow to check the correct representation of the runways and taxiways.	m.2.a	<input checked="" type="checkbox"/>
Cruise	Cruise to a Localizer or a Localizer DME approach equipped airport.	-	-
Approach	Perform either a Localizer or a Localizer DME approach.	h.2.d	<input checked="" type="checkbox"/>
Visual system (8km)	At 8km from runway threshold, with the A/C in approach configuration, check runway definition, strobe lights,	m.4.a	<input type="checkbox"/>

Visual  
Alignment  
REQ'D.

runway edge white lights and visual approach and guidance lights.		
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The following additional tests shall be performed at any flight phase:

Item:	Additional Tests Procedures:	Associated Tests:	✓
Visual system	Move the A/C along the tree axis and check that the visual motion is coherent with the flight controls operation and that view offered by the visual system corresponds to the operation of the controls.	m.6.a m.6.c	<input checked="" type="checkbox"/>
Functions	During the flight path execution, check the functioning of: - Communications and interphone if fitted, - The electrical system, - Fuel, oil, hydraulics and pneumatics systems, - Landing gear, - Engine parameters, - The functionality of navigation system operation (identification of morse codes, indications, GPS...).	l.1.d l.1.e l.1.h l.1.i l.1.k l.1.s	<input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
Instructor station	During the flight path execution, check that the IOS enable the instructor to control the simulation. - Set the A/C to any place in the database, - Set the cloud base to an altitude close to that of the A/C (the altimeter must be able to confirm the cloud base altitude), - During night conditions, set the A/C at runway threshold with landing lights on and check the signage and runway markings, - The airport lightings are of the type of those of the airport, and that their intensity is dimmable.	m.9.b m.9.a m.4.f m.9.c	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
Sound system	Check that the sound system simulates the aerodynamic, gear, flaps, etc sounds in a realistic manner. Check that the sound system simulates the engine and propeller sounds in a realistic manner.	o.1.c o.1.f	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>

SATIS  
CHECK  
SUMMER.

SPEAKER  
FOR LH  
ENGINE  
u/s.

AUTHORITY'S APPROVAL (DATE, SIGNATURE & COMMENTS)	OPERATOR'S APPROVAL (DATE, SIGNATURE & COMMENTS)
	<p><i>[Signature]</i> 24/02/24.</p> <p><i>[Signature]</i> 4-224</p>