



INTERNATIONAL CIVIL AVIATION ORGANIZATION

ASIA AND PACIFIC REGIONAL OFFICE



CATALOGUE OF ASIA AND PACIFIC FLIGHT INSPECTION AND FLIGHT VALIDATION SERVICE PROVIDERS

Twelfth Edition December 2024

FOREWORD

The Catalogue of Asia and Pacific Flight Inspection and Flight Validation Service Providers contains information on Service Providers that are currently operating in the Asia and Pacific region. The purpose of this catalogue is to disseminate information to States, which do not have their own Flight Inspection and Flight Validation Service Providers and are interested in making use of Service Providers that have capacity available to conduct flight tests of their radio navigation aids and Flight Validations for instrument flight procedures designed based on Performance Based Navigation (PBN) Concept.

DISCLAIMER

The designations employed and the presentation of material in this publication do not imply the expression of any opinion, recommendations or approval whatsoever on the part of ICAO concerning the service providers, legal status of any country, territory, city or area, or of its authorities, or concerning the delimitation of its frontiers or boundaries.

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INTRODUCTION

ICAO APAC office publishes the *Catalogue of Asia and Pacific Flight Inspection and Flight Validation (FIFV) Service Providers* more regularly to reflect the latest information that would benefit potential new customers seeking flight inspection/validation services within the APAC Region or beyond.

The Catalogue is published based on the FIFV Service Providers' information received from APAC ANSPs or CAA of different APAC States. Various Service Providers recognized by respective ANSPs or CAA of ICAO APAC Member States/Administrations are grouped under the name of a State to easily access information and information presentation. ICAO takes no responsibility for the approval/ accreditation of any Service Provider's legal status or adopted practices by respective States or any other entities.

We are happy to publish the 12th edition of the *Catalogue of Asia and Pacific Flight Inspection and Flight Validation Service Providers*. The document can be accessed by the link <https://www.icao.int/APAC/Pages/eDocs.aspx> under the CNS section.

The experiences gained in Flight Inspection and Procedure Validation (FIPV) practices, while recognizing different local geographical considerations, resulted in the development of a Regional Guidance material on the implementation of ICAO requirements and provisions for FIPV while keeping abreast of the latest developments of associated emerging technologies.

The first edition of Flight Inspection Guidance Material (FIGM) for the APAC Region to provide additional guidance on planning, execution, and delivery of flight inspection for the States/Administrations in the APAC Region was adopted by CNS SG/24 of APANPIRG/31 by *Conclusion CNS SG/24/10* on 04 December 2020. The document has been modified in a timely manner. The latest edition of the FIGM document is the fourth edition, which was adopted by CNS SG/28 Meeting by *Conclusion CNS SG/28/09*. The CNS SG/28 Meeting was held from 01-05 July 2024 in the ICAO APAC Office, Bangkok, Thailand. The State Letter Ref: T 8/1.2 – AP103/24 (CNS) dated 26 August 2024 Subject “*To note the various regional guidance materials available on the ICAO APAC website and take into consideration for their implementation*” was sent to States to inform about this document. The fourth edition of Asia Pacific Flight Inspection Guidance Material can be accessed at [this link](#).

States are encouraged to use the information provided in the catalogue and FIGM document. This catalogue and guidance material can hopefully facilitate and be beneficial to States/Administrations, especially for those without a national Flight Inspection Service Provider (FISP) and with difficulties conducting flight inspections.

ABBREVIATIONS AND ACRONYMS

AFIS	Automatic Flight Inspection System
ANSPs	Air Navigation Service Providers
CAA	Civil Aviation Authority
DF	Direction Finder / Direction Finding
DME	Distance Measuring Equipment
FMS	Flight Management System
GBAS	Ground-Based Augmentation System
GNSS	Global Navigation Satellite System
GPS	Global Positioning System
ILS	Instrument Landing System
LNAV/VNAV	Lateral Navigation / Vertical Navigation
LOC	Localizer
LPV	Localizer Performance with Vertical Guidance
MLS	Microwave Landing System
NDB	Non Directional Beacon
PAPI	Precision Approach Path Indicator
PAR	Precision Approach Radar
RF	Radio Frequency
RFI	Radio Frequency Interference
RNP APCH	Required Navigation Performance Approach
SAR	Surveillance Approach Radar
SBAS	Satellite-Based Augmentation System
SID	Standard Instrument Departure
SP	Service Providers
SRE	Surveillance Radar Element
STAR	Standard Instrument Arrival
VASIS	Visual Approach Slope Indicator System
VOR	VHF Omni Directional Radio Range

Capabilities of Flight Validation/Flight Inspection Service Provider

1. AUSTRALIA

1. Name, Country and Address of the service provider:

Flight Inspection

AeroPearl Pty

Ltd

Address: 3 Melaleuca St, Brisbane Airport, QLD, 4008

Tel: +61 7 3860 0600

Fax: +61 7 3860 0664

E-mail: admin@aeroparl.com.au

Flight Validation

Civil Aviation Safety Authority

E-mail: CNS.atm@casa.gov.au

2. Type(s) and number of flight testing aircraft available, associated charges and conditions:

Type of Aircraft & Aircraft Available		Flight Time Charges per hour (USD)		Other co-ordinations	Used for Validation/ Inspection (V/I)
		Positioning Flights	Check Flights		
<i>Beach B300</i>	<i>2</i>	<i>As negotiated.</i>	<i>As negotiated.</i>		<i>V & I</i>
<i>Learjet 35A</i>	<i>1</i>	<i>As negotiated.</i>	<i>As negotiated.</i>		<i>I (SSR/ADS-B only)</i>
<i>Charter</i>					

3. Flight testing capability and estimated flight time:

Radio Navigation Aids	Flight Check Capability (Y/N)	Estimated Flight Check Time		Type of Flight Check System
		Routine	Commissioning	
<i>VOR</i>	<i>Y</i>	<i>1 to 4</i>	<i>2 to 10</i>	<i>Automatic</i>
<i>DME</i>	<i>Y</i>	<i>1 to 4</i>	<i>4 to 8</i>	<i>Automatic</i>
<i>MLS</i>	<i>N</i>	<i>NA</i>	<i>NA</i>	
<i>ILS CAT I</i>	<i>Y</i>	<i>2 to 6</i>	<i>4 to 15</i>	<i>Automatic</i>
<i>ILS CAT II</i>	<i>Y</i>	<i>2 to 6</i>	<i>4 to 15</i>	<i>Automatic</i>
<i>ILS CAT III</i>	<i>Y</i>	<i>2 to 6</i>	<i>4 to 15</i>	<i>Automatic</i>
<i>PAR</i>	<i>Y</i>	<i>1 to 2, depending on requirements</i>	<i>1 to 4, depending on requirements</i>	<i>Automatic</i>

SRA	Y	1, depending on requirements	1 to 2, depending on requirements	Automatic
SRE	Y	1, depending on requirements	1 to 2, depending on requirements	Automatic
NDB/LOC	Y	0.5 to 2	2 to 8	Automatic
Marker Beacon	Y	0.5	0.5 to 2	Automatic
PAPI	Y	0.5	0.5 to 2	Automatic
VASIS	Y	0.5	0.5 to 2	Automatic
RF Interference	Y	varies, depending on requirements and location	varies, depending on requirements and location	Automatic
GNSS interference	Y	varies, depending on requirements and location	varies, depending on requirements and location	Manual (in relation to item 8.)
GBAS	Y	0.5	4 to 12	Automatic
SSR/ADSB	Y	0.5 to 15, depending on requirements	2 to 20, depending on requirements	Automatic
PSR	Y	1 to 2, depending on requirements	2 to 20, depending on requirements	Automatic
TACAN	Y	2 to 4	4 to 12	Automatic

4. Flight validation capability for instrument flight procedures including PBN Navigation Specification

Type of Procedures	Flight Validation Capability (Y/N)	Estimated Flight Validation Time		Type of Flight Validation System
		Initial	Periodic Review	
RNP APCH (LNAV)	Y	.5	.5	Aircraft
RNP APCH (LNAV/VNAV)	Y	.75	.5	Aircraft + Level D Simulator
RNP APCH (LPV)	NA	-	-	-
SBAS CAT I	NA	-	-	-
GBAS CAT I	Y	.5	.5	Aircraft
GBAS CAT II/III	NA	-	-	-
RNAV/RNP SID	Y	.75	.5	Aircraft+ Level D Simulator

<i>RNAV/RNP STAR</i>	<i>Y</i>	<i>.75</i>	<i>.5</i>	<i>Aircraft+ Level D Simulator</i>
<i>ILS/LOC</i>	<i>Y</i>	<i>.5</i>	<i>.5</i>	<i>Aircraft</i>
<i>VOR/NDB</i>	<i>Y</i>	<i>.5</i>	<i>.5</i>	<i>Aircraft</i>

5. Type of Flight Management System which is used for flight data coding:
 - *CASA comment for flight validation: GE FMC using Jeppesen custom database*
6. Location and Type of flight simulators which is used for flyability check, if available:
 - *CASA: Brisbane, B737 Level D Simulator but others on request*
7. Charges per hour (USD, tax excluded) for simulation, including flight crew:
 - *CASA and AeroPearl comments: On request*
8. GPS interference detection capability, if equipped:
 - *AeroPearl comment - GPS Receiver and Spectrum Analyser combined with downward-facing GPS antenna. Data from GPS receiver is monitored/analysed and Spectrum Analyser continuously scanning looking for interference.*
9. Languages possibly used by flight testing team:
 - *English*
10. Estimated annual flight time available to assist other Administrations for testing radio navigation aids:
 - *200-300 Hours Negotiable.*
11. Advance notice expected before delivery of the service:
 - *2 Months - Negotiable.*
12. State Regulation(s) commonly complied with when delivering flight inspection services:
 - *Airservices Australia Flight Inspection Requirements*
 - *ICAO Doc 8071*
 - *ICAO Annex 10*
13. State Regulation(s) commonly complied with when delivering flight validation services:
 - *Part 173 of the Civil Aviation Safety Regulations 1998*
 - *Manual of Standards Part 173—Standards Applicable to Instrument Flight Procedure Design*

14. Provide a link for further information, if any:

- www.aeroparl.com.au
- <https://www.legislation.gov.au/Details/F2017C00201>

15. Other information:

AeroPearl comment

- *Utilizes Aerodata Fully Automatic Flight Inspection System*
- *Able to provide Flight Validation Service on Request outside of Australia*
- *Able to provide Jeppesen database organization for Flight Validation procedures*

Capabilities of Flight Validation/Flight Inspection Service Provider

2. CHINA

1. Name, Country and Address of the service provider:

The name of flight validation/flight inspection service provider Flight Inspection Center of CAAC

Address: No 18 North Huoyun Road, Beijing Capital International Airport, Beijing, China. 100621

Tel: +86106454329

8

Fax: +8610645432

93

E-mail: cuij@chinacfi.net

2. Type(s) and number of flight testing aircraft available, associated charges and conditions:

Type of Aircraft & Aircraft Available		Flight Time Charges per hour (USD)		Other coordination	Used for Validation/ Inspection (V/I)
		Positioning Flights	Check Flights		
<i>Citation 560XLS</i>	<i>5</i>	<i>Negotiable</i>	<i>Negotiable</i>	<i>Negotiable</i>	<i>V/I</i>
<i>Citation 560XLS+</i>	<i>4</i>	<i>Negotiable</i>	<i>Negotiable</i>	<i>Negotiable</i>	<i>V/I</i>
<i>Citation 680</i>	<i>3</i>	<i>Negotiable</i>	<i>Negotiable</i>	<i>Negotiable</i>	<i>V/I</i>
<i>Gulfstream 450</i>	<i>1</i>	<i>Negotiable</i>	<i>Negotiable</i>	<i>Negotiable</i>	<i>V</i>

3. Flight testing capability and estimated flight time:

Radio Navigation Aids	Flight Check Capability (Y/N)	Estimated Flight Check Time		Type of Flight Check System
		Routine	Commissioning	
<i>VOR</i>	<i>Y</i>	<i>4-5hr</i>	<i>6-7hr</i>	<i>Automatic</i>
<i>DME</i>	<i>Y</i>	<i>In relation to VOR</i>	<i>In relation to VOR</i>	<i>Automatic</i>
<i>MLS</i>	<i>N</i>			<i>Automatic</i>
<i>ILS CAT I</i>	<i>Y</i>	<i>5hr</i>	<i>7hr</i>	<i>Automatic</i>
<i>ILS CAT II</i>	<i>Y</i>	<i>5hr</i>	<i>7hr</i>	<i>Automatic</i>
<i>ILS CAT III</i>	<i>Y</i>	<i>5hr</i>	<i>7hr</i>	<i>Automatic</i>
<i>PAR</i>	<i>Y</i>	<i>As required</i>	<i>3-4hr</i>	<i>Automatic</i>
<i>SAR</i>	<i>Y</i>	<i>As required</i>	<i>3-4hr</i>	<i>Automatic</i>
<i>SRE</i>	<i>N</i>			
<i>NDB/LOC</i>	<i>Y</i>	<i>3hr</i>	<i>4hr</i>	<i>Automatic</i>

<i>Marker Beacon</i>	<i>Y</i>	<i>In relation to ILS</i>	<i>In relation to ILS</i>	<i>Automatic</i>
<i>PAPI</i>	<i>Y</i>	<i>40min</i>	<i>1hr</i>	<i>Manual</i>
<i>VASIS</i>	<i>Y</i>			<i>Manual</i>
<i>RF Interference</i>	<i>Y</i>	<i>As required</i>	<i>As required</i>	<i>Automatic</i>
<i>GNSS interference</i>	<i>SNR for each satellite is available</i>	<i>As required</i>	<i>As required</i>	

4. Flight validation capability for instrument flight procedures including PBN Navigation Specification

Type of Procedures	Flight Validation Capability (Y/N)	Estimated Flight Validation Time		Type of Flight Validation System
		Initial	Periodic Review	
<i>RNP APCH (LNAV)</i>	<i>Y</i>	<i>10min</i>	<i>As required</i>	<i>Automatic</i>
<i>RNP APCH (LNAV/VNAV)</i>	<i>Y</i>	<i>10min</i>	<i>As required</i>	<i>Automatic</i>
<i>RNP APCH (LPV)</i>	<i>Y</i>	<i>10min</i>	<i>As required</i>	<i>Automatic</i>
<i>SBAS CAT I</i>	<i>N</i>			
<i>GBAS CAT I</i>	<i>Y</i>	<i>6-10hr</i>	<i>As required</i>	<i>Automatic</i>
<i>GBAS CAT II/III</i>	<i>Y</i>	<i>6-10hr</i>	<i>As required</i>	<i>Automatic</i>
<i>RNAV/RNP SID</i>	<i>Y</i>	<i>15-20min</i>	<i>As required</i>	<i>Automatic</i>
<i>RNAV/RNP STAR</i>	<i>Y</i>	<i>15-20min</i>	<i>As required</i>	<i>Automatic</i>

5. Type of Flight Management System which is used for flight data coding:
- Honeywell NZ 7.0(G450&CE680)*
 - Honeywell NZ6.0(CE560XLS)*
 - Collins FMC-3000V4.0(CE560XLS+)*
6. Location and Type of flight simulators which is used for flyability check, if available:
- Type D, Shanghai, China*
7. Charges per hour (USD, tax excluded) for simulation, including flight crew:
- 4700USD*
8. GPS interference detection capability, if equipped:
- Not available*

9. Languages possibly used by flight testing team:

- *Chinese English*

10. Estimated annual flight time available to assist other Administrations for testing radio navigation aids:

- *300hours (Negotiable)*

11. Advance notice expected before delivery of the service:

- *3 months*

12. State Regulation(s) commonly complied with when delivering flight inspection services:

- *ICAO Doc.8071 & Annex 10, CCAR85, CCAR86*

13. State Regulation(s) commonly complied with when delivering flight validation services:

- *ICAO Doc.9906*

14. Provide a link for further information, if any:

- *www.chinacfi.net*

15. Other information:

- *All flight inspection systems are certified by ISO/IEC 17025.*
- *For prior coordination, please contact Ms Jie Cui, with email:cuij@chinacfi.net.*

Capabilities of Flight Validation/Flight Inspection Service Provider

3. FRANCE

1. Name of the service provider:

DGAC/DSNA/DTI/CEV

*Address: 1, Avenue du Dr. Maurice Grynfolgel - CS 53584 F –
31 035 TOULOUSE CEDEX 1 - FRANCE*

Contact: Mr. Joel Faucon

Tel: +33 (0) 562 145 143

E-mail: joel.faucon@aviation-civile.gouv.fr

2. Type(s) and number of flight testing aircraft available, associated charges and conditions:

Type of Aircraft & Aircraft Available		Flight Time Charges per hour (USD)		Other co- ordinations	Used for Validation/ Inspection (V/I)
		Positioning Flights	Check Flights		
<i>PA31-350 located in French Polynesia (NTAA) – range: South Pacific islands</i>	<i>1</i>	<i>on demand- rates depend on location</i>	<i>On demand</i>	<i>Portable GNSS FIS for helicopter FV or GNSS RFI detection</i>	<i>V/I</i>

3. Flight testing capability and estimated flight time:

Radio Navigation Aids	Flight Check Capability (Y/N)	Estimated Flight Check Time (Hours)		Type of Flight Check System
		Routine	Commissioning	
<i>VOR</i>	<i>Y</i>	<i>1-2h</i>	<i>3-4h dependent upon number of routes</i>	<i>Automatic</i>
<i>DME</i>	<i>Y</i>	<i>0.5h-1h or along with VOR/ILS</i>	<i>1h or along with VOR/ILS</i>	<i>Automatic</i>
<i>MLS</i>	<i>N</i>			
<i>ILS CAT I</i>	<i>Y</i>	<i>3h</i>	<i>6-9h</i>	<i>Automatic – RTK DGPS</i>

<i>ILS CAT II</i>	<i>Y</i>	<i>4h</i>	<i>6-10h</i>	<i>Automatic – RTK DGPS</i>
<i>ILS CAT III</i>	<i>Y</i>	<i>4h</i>	<i>6-10h</i>	<i>Automatic – RTK DGPS</i>
<i>PAR</i>	<i>N</i>			
<i>SAR</i>	<i>N</i>			
<i>SRE</i>	<i>N</i>			
<i>NDB/LOC</i>	<i>N</i>			
<i>Marker Beacon</i>	<i>Y</i>	<i>0.2h or along with ILS</i>	<i>0.4h or along with ILS</i>	<i>Automatic – RTK DGPS</i>
<i>PAPI</i>	<i>Y</i>	<i>0.3h or along with ILS</i>	<i>0.5h</i>	<i>Automatic</i>
<i>VASIS</i>	<i>Y</i>	<i>0.3h or along with ILS</i>	<i>0.5h</i>	<i>Automatic</i>
<i>RF Interference</i>	<i>Y</i>	<i>Dependent upon RFI/ spectrum monitoring can be performed during navaid flight check</i>		<i>Automatic</i>
<i>GNSS interference</i>	<i>Y</i>	<i>Dependent upon RFI/ spectrum monitoring can be performed during PBN procedure flight validation</i>		<i>Automatic (See item 8.)</i>

4. Flight validation capability for instrument flight procedures including PBN Navigation Specification

Type of Procedures	Flight Validation Capability (Y/N)	Estimated Flight Validation Time (Hours)		Type of Flight Validation System
		Initial	Periodic Review	
<i>RNP APCH (LNAV)</i>	<i>Y</i>	<i>From 1h to 2h Dependent on nb of legs and on nb of minima on the chart</i>		<i>Automatic, procedure can be precoded in Garmin GTN (extra fees)</i>
<i>RNP APCH (LNAV/VNAV)</i>	<i>Y</i>			
<i>RNP APCH (LPV)</i>	<i>Y</i>			
<i>SBAS CAT I</i>	<i>Y</i>			
<i>GBAS CAT I</i>	<i>N</i>			
<i>GBAS CAT II/III</i>	<i>N</i>			
<i>RNAV/RNP SID</i>	<i>Y</i>	<i>Dependent on nb of legs</i>		<i>Automatic, procedure can be precoded in Garmin GTN (extra fees)</i>

<i>RNAV/RNP STAR</i>	<i>Y</i>	<i>Dependent on nb of legs</i>		<i>Automatic, procedure can be precoded in Garmin GTN (extra fees)</i>
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5. Type of Flight Management System which is used for flight data coding:
 - *Garmin GTN 750/650*
6. Location and Type of flight simulators which is used for flyability check, if available:
 - *None*
7. Charges per hour (USD, tax excluded) for simulation, including flight crew:
 - *N/A*
8. GPS interference detection capability, if equipped:
 - *Rohde &Schwarz EM100 or EB200 receiver connected to GPS +LNA antenna, driven by a specialized RFI detection software (CGX AiRFInDeR) and GPS measurements impact assessment*
9. Languages possibly used by flight testing team:
 - *French or English.*
10. Estimated annual flight time available to assist other Administrations for testing radio navigation aids:
 - *50h, could be increased.*
11. Advance notice expected before delivery of the service:
 - *3 months.*
12. State Regulation(s) commonly complied with when delivering flight inspection services:
 - *ICAO doc 8071 vol 1 and 2,*
 - *French regulation : Arrêté du 10 avril 2015 relatif à la mise en service et au suivi des aides radio à la navigation NOR: DEVA1507970A.*
13. State Regulation(s) commonly complied with when delivering flight validation services:
 - *ICAO doc 9906 vol5.*
 - *French regulation : Arrêté du 4 octobre 2017 relatif à l'établissement des procédures de vol aux instruments au bénéfice des aéronefs évoluant selon les règles applicables à la circulation aérienne générale NOR: TRAA1721722A*

14. Provide a link for further information, if any:

- <https://www.ecologique-solidaire.gouv.fr/en/performance-based-navigation-0>

15. Other information:

- *Type of Flight inspection System: SAFRAN Carnac30.*
- *DGAC/DSNA/DTI/CEV is the Flight Inspection Service Provider for France mainland and its oversea territories with 2 aircraft based in French Polynesia and French Caribbean. Holds also annual contracts since several years in Belgium, Tunisia, Lebanon. Performed more than 250 RNP APCH flight inspection and validation since 10 years in France among which more than 200 LPVs, and 2 RNP AR.*
- *DGAC/DSNA/DTI/CEV can provide support to APAC states to perform PBN procedure ground and flight validation including onboard interferences detection (with possible FIS portable system lease)*

Capabilities of Flight Inspection /Flight Validation Service Provider

4. INDIA

1. Name, Country and Address of the service provider: *INDIA, Airports Authority of India*

*Address: Executive Director,
Flight Inspection Unit
Airport Authority of India,
Safdarjung Airport, New Delhi 110003*

Tel: +91 (11) 24611077

Fax: +91 (11) 24697211

E-mail: edfiu@aai.aero

Or

*Address: General Manager,
Business Development
C-Block, Rajiv Gandhi Bhawan, New Delhi 110003*

Tel: +91 (11) 24629347

Fax: +91 (11) 24610841

E-mail: bd@aai.aero

2. Type(s) and number of flight-testing aircraft available, associated charges and conditions:

Type of Aircraft & Aircraft Available		Flight Time Charges per hour (USD)		Other co-ordinations	Used for Validation/ Inspection (V/I)
		Positioning Flights	Check Flights		
<i>Beach 360</i>	<i>2</i>	<i>Negotiable</i>	<i>Negotiable</i>		<i>V/I</i>
<i>Beach 350</i>	<i>1</i>	<i>Negotiable</i>	<i>Negotiable</i>		<i>V/I</i>
<i>Dornier DO-228</i>	<i>1</i>	<i>Negotiable</i>	<i>Negotiable</i>		<i>V/I</i>

3. Flight testing capability and estimated flight time:

Radio Navigation Aids	Flight Check Capability (Y/N)	Estimated Flight Check Time		Type of Flight Check System
		Routine	Commissioning	
<i>VOR</i>	<i>Y</i>	<i>2.5</i>	<i>5.0</i>	<i>Automatic,</i>
<i>DME</i>	<i>Y</i>	<i>Note 1</i>		
<i>TACAN</i>	<i>Y</i>	<i>2.5</i>		<i>Automatic</i>
<i>MLS</i>	<i>N</i>			
<i>ILS CAT I</i>	<i>Y</i>	<i>3.5</i>	<i>5.5</i>	<i>Automatic</i>
<i>ILS CAT II</i>	<i>Y</i>	<i>3.5</i>	<i>5.5</i>	<i>Automatic</i>
<i>ILS CAT III</i>	<i>Y</i>	<i>3.5</i>	<i>5.5</i>	<i>Automatic</i>

PAR	Y	Note 2		
SAR	Y			
SRE	Y			
NDB/LOC	Y	1.5	3.0	Automatic
Marker Beacon	Note 3			
PAPI	Y	0.5	1.5	Manual
VASIS	Y	0.5	1.5	Manual
RF Interference	Y			Manual
GNSS interference	Y			See item 8
Note 1: The estimated flight check time is included in the DVOR or other co-located facilities with DME support. Note 2: The estimate for flight check of PAR/SSR/SSE/SRE will depend on the user requirement. Note 3: The requirement of the flight check time of Marker Beacon is included in flight check time of ILS. Note 4: The flying hours requirement for each facility will depend on results being obtained to fulfil ICAO requirements for that facility.				

4. Flight validation capability for instrument flight procedures including PBN Navigation Specification

Type of Procedures	Flight Validation Capability (Y/N)	Estimated Flight Validation Time		Type of Flight Validation System
		Initial	Periodic Review	
RNP APCH (LNAV)	Y	Note		Automatic
RNP APCH (LNAV/VNAV)	Y			Automatic
RNP APCH (LPV)	Y			Automatic
SBAS CAT I	Y			Automatic
GBAS CAT I	Y	1.5	0.5	Automatic
GBAS CAT II/III	---	---	---	---
RNAV/RNP SID	Y	Note		Automatic
RNAV/RNP STAR	Y			Automatic
Note: Estimated flight validation tine depends upon the user Requirement				

5. Type of Flight Management System which is used for flight data coding:
- FMS DATA TYPE 7 DATABASE “ L7 EURASPAC” (Proline, Beach 350)
 - FMS DATA DATABASE “ J61 EURASPAC” (Proline- Fusion, Beach 360)
6. Location and Type of flight simulators which is used for flyability check, if available:

- *N/A*
7. Charges per hour (USD, tax excluded) for simulation, including flight crew:
- *N/A*
8. GPS interference detection capability, if equipped:
- *RD 460 (By Aerodata Germany)/Homing Method (Beach-350)*
9. Languages possibly used by flight testing team:
- *English.*
10. Estimated annual flight time available to assist other Administrations for testing radio navigation aids:
- *As Per Agreement*
11. Advance notice expected before delivery of the service:
- *As Per Agreement*
12. State Regulation(s) commonly complied with when delivering flight inspection services:
- *ICAO Documents.*
13. State Regulation(s) commonly complied with when delivering flight validation services:
- *ICAO Documents*
14. Provide a link for further information, if any:
- *www.aai.aero/en/services/consultancy-services-offered-aai*
15. Other information:
- *Point of Contact for prior co-ordination:
Executive Director,
Flight Inspection Unit,
Airports Authority of India,
Safdarjung Airport,
New Delhi-110003.
[Tel: +91\(11\) 24611077](tel:+911124611077)
[Fax: +91\(11\) 24697211](tel:+911124697211)
[E-mail: edfiu@aai.aero](mailto:edfiu@aai.aero)*
-

Capabilities of Flight Inspection /Flight Validation Service Provider

5. INDONESIA

1. Name of Service Provider:

Indonesian Flight Inspection Service Provider (BALAI BESAR KALIBRASI FASILITAS PENERBANGAN)

Address: Jln. Raya STPI – Curug, Legok, Tangerang, Banten,

Indonesia, 15820 Tel: +62-21 5473086, 5472943, 5472942

Fax : +62-21 5473086

*E-mail: info@flightcalibration.co.id
bbkfp-ubud@dephub.go.id*

2. Type(s) and number of flight testing aircraft available, associated charges and conditions:

Type of Aircraft & Aircraft Available		Flight Time Charges per hour (USD)		Other co- ordinations	Used for Validation / Inspection (V/I)
		Positionin g Flights	Check Flights		
<i>Kingair B350i</i>	<i>2</i>	<i>Negotiable</i>	<i>Negotiable</i>		<i>V/I</i>
<i>Kingair B200</i>	<i>4</i>	<i>Negotiable</i>	<i>Negotiable</i>		<i>V/I</i>
<i>Hawker 900XP</i>	<i>1</i>	<i>Negotiable</i>	<i>Negotiable</i>		<i>V</i>
<i>Bell 429</i>	<i>1</i>	<i>Negotiable</i>	<i>Negotiable</i>		<i>V/I</i>
<i>Cessna Citation Longitude C700</i>	<i>1</i>	<i>Negotiable</i>	<i>Negotiable</i>		<i>V</i>

3. Flight testing capability and estimated flight time:

Radio Navigation Aids	Flight Check Capability (Y/N)	Estimated Flight Check Time (Hours) *		Type of Flight Check System
		Routine	Commissionin g	
<i>VOR</i>	<i>Y</i>	<i>2.5</i>	<i>7 to 10</i>	<i>Automatic</i>
<i>DME</i>	<i>Y</i>	<i>2</i>	<i>2 to 4</i>	<i>Automatic</i>
<i>MLS</i>	<i>N</i>	<i>-</i>	<i>-</i>	
<i>ILS CAT I</i>	<i>Y</i>	<i>4 to 8</i>	<i>15 to 20</i>	<i>Automatic</i>
<i>ILS CAT II</i>	<i>Y</i>	<i>4 to 8</i>	<i>15 to 20</i>	<i>Automatic</i>
<i>ILS CAT III</i>	<i>Y</i>	<i>4 to 8</i>	<i>15 to 20</i>	<i>Automatic</i>
<i>PAR</i>	<i>N</i>	<i>-</i>	<i>-</i>	
<i>SAR</i>	<i>Y</i>	<i>-</i>	<i>15 to 25*</i>	<i>Automatic</i>

<i>SRE</i>	<i>N</i>	<i>-</i>	<i>-</i>	
<i>NDB/LOC</i>	<i>Y</i>	<i>1</i>	<i>2 to 4</i>	<i>Automatic</i>
<i>Marker Beacon</i>	<i>Y</i>	<i>0.5</i>	<i>0.5</i>	<i>Automatic</i>
<i>PAPI</i>	<i>Y</i>	<i>1</i>	<i>1 to 2</i>	<i>Automatic</i>
<i>VASIS</i>	<i>Y</i>	<i>1</i>	<i>1 to 2</i>	<i>Automatic</i>
<i>RF Interference</i>	<i>Y</i>	<i>0.5</i>	<i>-</i>	<i>Automatic</i>
<i>GNSS interference</i>				<i>(See item 8.)</i>

** Estimated time depends on requirements*

4. Flight validation capability for instrument flight procedures including PBN Navigation Specification

Type of procedures	Flight Validation Capability (Y/N)	Estimated Flight Validation Time (Hours)		Type of Flight Validation System
		Initial	Periodic Review	
<i>RNP APCH (LNAV)</i>	<i>Y</i>	<i>Depend on the design of Instrument Flight Procedure</i>		<i>Automatic</i>
<i>RNP APCH (LNAV/VNAV)</i>	<i>Y</i>			<i>Automatic</i>
<i>RNP APCH (LPV)</i>	<i>Y</i>			<i>Automatic</i>
<i>SBAS CAT I</i>	<i>N</i>			
<i>GBAS CAT I</i>	<i>Y</i>			<i>Automatic</i>
<i>GBAS CAT II/III</i>	<i>N</i>			
<i>RNAV/RNP SID</i>	<i>Y</i>			<i>Automatic</i>
<i>RNAV/RNP STAR</i>	<i>Y</i>			<i>Automatic</i>

5. Type of Flight Management System which is used for flight data coding:
- Rockwell Collins ProLine 21 (FMS-3000)*
6. Location and Type of flight simulators which is used for flyability check, if available:
- Full Flight Simulator King Air B200GT/350i for flyability check, location in base office*
7. Charges per hour (USD, tax excluded) for simulation, including flight crew:
- Negotiable*

8. GPS interference detection capability, if equipped:
- *Not equipped*
9. Languages possibly used by flight testing team:
- *Flight Validation/Inspection: Bahasa Indonesia, English*
 - *Report: English*
10. Estimated annual flight time available to assist other Administrations for testing radio navigation aids:
- *On Request/Negotiable*
11. Advance notice expected before delivery of the service:
- *Time for prior coordination required, 60 days*
12. State Regulation(s) commonly complied with when delivering flight inspection services:
- *ICAO Annex 10*
 - *ICAO Annex 14*
 - *ICAO Doc 8071*
 - *Advisory Circular CASR Part 171-5 from DGCA Indonesia applied to the flight inspection*
13. State Regulation(s) commonly complied with when delivering flight validation services:
- *ICAO Doc 9906*
 - *Advisory Circular CASR Part 171-5 from DGCA Indonesia applied to the flight validation*
14. Provide a link for further information, if any:
- bbkfp-ubud@dephub.go.id
15. Other information:
- *CASR 171 regarding Flight Inspection Service Provider*
-

Capabilities of Flight Validation/Flight Inspection Service Provider

6. JAPAN

1. Name of the Service Provider:

Ministry of Land, Infrastructure, Transport, and Tourism

Japan Civil Aviation Bureau

Address: 2-1-3 Kasumigaseki Chiyoda-ku, Japan, zip code 100-8918

Tel: +81(3)5253 8111

E-mail:

1. Type(s) and number of flight testing aircraft available, associated charges and conditions:

Type of Aircraft & Aircraft Available		Flight Time Charges per hour(USD)		Other co-ordinations	Used for Validation/ Inspection (V/I)
		Positioning Flights	Flights Check		
<i>CJ4</i>	<i>5</i>	<i>Negotiable</i>			<i>V/I</i>
<i>C700</i>	<i>1</i>				<i>V/I</i>

2. Flight testing capability and estimated flight time:

Radio Navigation Aids	Flight Check Capability (Y/N)	Estimated Flight Check Time (Hours)*		Type of Flight Check System
		Routine	Commissioning	
<i>VOR</i>	<i>Y</i>	<i>1.5</i>	<i>4.0+ Procedure radial</i>	<i>Automatic</i>
<i>DME</i>	<i>Y</i>	<i>1.0 or along with VOR/ILS</i>	<i>2.0 or along with VOR/ILS</i>	<i>Automatic</i>
<i>MLS</i>	<i>N</i>	<i>-</i>	<i>-</i>	<i>-</i>
<i>ILS CAT I</i>	<i>Y</i>	<i>2.0</i>	<i>depends on requirements of ground equipment</i>	<i>Automatic</i>
<i>ILS CAT II</i>	<i>Y</i>	<i>3.0</i>		<i>Automatic</i>
<i>ILS CAT III</i>	<i>Y</i>	<i>3.0</i>		<i>Automatic</i>
<i>PAR</i>	<i>Y</i>	<i>1.5</i>	<i>2.0</i>	<i>Automatic</i>
<i>SAR</i>	<i>Y</i>	<i>As required</i>		<i>Automatic</i>

<i>SRE</i>	<i>Y</i>	<i>As required</i>	<i>depends on requirements of ground equipment</i>	<i>Automatic</i>
<i>NDB</i>	<i>N</i>	<i>-</i>	<i>-</i>	<i>-</i>
<i>Marker Beacon</i>	<i>Y</i>	<i>0.5 or Along with ILS</i>	<i>0.5 or Along with ILS</i>	<i>Automatic</i>
<i>PAPI</i>	<i>Y</i>	<i>1.0</i>	<i>1.5</i>	<i>Automatic</i>
<i>VASIS</i>	<i>N</i>	<i>-</i>	<i>-</i>	<i>-</i>
<i>RF Interference</i>	<i>N</i>	<i>-</i>	<i>-</i>	<i>-</i>
<i>GNSS interference</i>	<i>N</i>	<i>-</i>	<i>-</i>	<i>-</i>
<i>TACAN</i>	<i>Y</i>	<i>1.5</i>	<i>4.0+ Procedure radial</i>	<i>Automatic</i>
<i>* The Flight Inspection time change by various elements. For example, used Regulations, a number of air-routes, air traffic density, and so on.</i>				

3. Flight validation capability for instrument flight procedures including PBN Navigation Specification:

Type of Procedures	Flight Validation Capability (Y/N)	Estimated Flight Validation Time (Hours)		Type of Flight Validation System
		Initial	Periodic Review	
<i>RNP APCH (LNAV)</i>	<i>Y</i>	<i>Depend on the design of Instrument Flight procedures</i>		<i>Automatic</i>
<i>RNP APCH (LNAV/VNAV)</i>	<i>Y</i>			<i>Automatic</i>
<i>RNP APCH (LPV)</i>	<i>Y</i>			<i>Automatic</i>
<i>SBAS CAT I</i>	<i>N</i>			<i>Automatic</i>
<i>GBAS CAT I</i>	<i>Y</i>			<i>Automatic</i>
<i>GBAS CAT II/III</i>	<i>N</i>			<i>-</i>

<i>RNAV/RNP SID</i>	<i>Y</i>	<i>Automatic</i>
<i>RNAV/RNP STAR</i>	<i>Y</i>	<i>Automatic</i>

4. Type of Flight Management System which is used for flight data coding:
CJ4: FMS-3000 (Rockwell Collins)
C700: G5000(Garmin)
5. Location and Type of flight simulators which is used for flyability check, if available:
Flight Training Device for B737NG 400XR (CAE)
Flight Inspection Center at CHUBU CENTRAIR International Airport
6. Charges per hour (USD, tax excluded) for simulation, including flight crew:
Negotiable
7. GPS interference detection capability, if equipped:
Not equipped
8. Languages possibly used by flight testing team:
Japanese
9. Estimated annual flight time available to assist other Administrations for testing radio navigation aids:
Negotiable.
10. Advance notice expected before delivery of the service:
4 months
11. State Regulation(s) commonly complied with when delivering flight inspection services:
Japan Civil Aviation Bureau Rule, ICAO DOC 8071, FAA Order 8200.1
12. State Regulation(s) commonly complied with when delivering flight validation services:
Japan Civil Aviation Bureau Rule, ICAO DOC 9906, FAA Order 8200.1
13. Provide a link for further information, if any:
No WEB site
14. Other information: _____

Capabilities of Flight Inspection /Flight Validation Service Provider

7. MALAYSIA

1. Name, Country and Address of the service provider:

MALAYSIA

Approved Flight Inspection Service Provider:

LAYANG LAYANG AEROSPACE SDN BHD

NO. 1, TERMINAL 2, OLD

AIRPORT ROAD TANJUNG ARU

88100, KOTA KINABALU,

SABAH MALAYSIA

Contact Person: Capt. Jamaluddin Bin Tambychik

Telephone: 6012-2139865

Email: jamal@layanglayanggroup.com

Website: http://layanglayanggroup.com/

2. Type(s) and number of flight testing aircraft available, associated charges and conditions:

Type of Aircraft & Aircraft Available		Flight Time Charges per hour (USD)		Other coordinatio ns	Used for Validation/ Inspection (V/I)
		Positionin g Flights	Chec k Flight s		
<i>Diamond DA 42NG</i>	<i>1</i>	<i>4,500.00</i>	<i>4,500.00</i>	<i>-</i>	<i>V/I</i>

3. Flight testing capability and estimated flight time:

Radio Navigatio n Aids	Flight Check Capability (Y/N)	Estimated Flight Check Time		Type of Flight Check System
		Routin e	Commissionin g	
<i>VOR</i>	<i>Y</i>	<i>2h</i>	<i>4h</i>	<i>Automatic</i>
<i>DME</i>	<i>Y</i>	<i>1h 30m</i>	<i>2h</i>	<i>Automatic</i>
<i>ILS CAT 1</i>	<i>Y</i>	<i>2h 45m</i>	<i>10h</i>	<i>Automatic</i>
<i>ILS CAT 2</i>	<i>Y</i>	<i>2h 45m</i>	<i>10h</i>	<i>Automatic</i>
<i>ILS CAT 3</i>	<i>N</i>			<i>Automatic</i>
<i>NDB/LOC</i>	<i>Y</i>	<i>1h</i>	<i>2h</i>	<i>Automatic</i>
<i>Marker Beacon</i>	<i>Y</i>	<i>1h</i>	<i>2h</i>	<i>Automatic</i>
<i>PAPI/VASI</i>	<i>Y</i>	<i>2h</i>	<i>4h</i>	<i>Automatic</i>
<i>TACAN</i>	<i>Y</i>	<i>2h</i>	<i>4h</i>	<i>Automatic</i>
<i>PSR/SSR/MLAT</i>	<i>Y</i>	<i>2h</i>	<i>3h</i>	<i>Automatic</i>
<i>PAR</i>	<i>Y</i>	<i>2h</i>	<i>6h</i>	<i>Automatic</i>
<i>AGL</i>	<i>Y</i>	<i>1h</i>	<i>2h</i>	<i>Automatic</i>

4. Flight validation capability for instrument flight procedures including PBN Navigation Specification

	Flight	Estimated Flight Validation Time	Type of
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Type of Procedures	Validation Capability (Y/N)	Initial	Periodic Review	Flight Validation System
<i>RNP APCH (LNAV)</i>	<i>N</i>	<i>-</i>	<i>-</i>	<i>-</i>
<i>RNP APCH (LNAV/VNAV)</i>	<i>N</i>	<i>-</i>	<i>-</i>	<i>-</i>
<i>RNP APCH (LPV)</i>	<i>N</i>	<i>-</i>	<i>-</i>	<i>-</i>
<i>SBAS CAT I</i>	<i>N</i>	<i>-</i>	<i>-</i>	<i>-</i>
<i>GBAS CAT I</i>	<i>N</i>	<i>-</i>	<i>-</i>	<i>-</i>
<i>GBAS CAT II/III</i>	<i>N</i>	<i>-</i>	<i>-</i>	<i>-</i>
<i>RNAV/RNP SID</i>	<i>N</i>	<i>-</i>	<i>-</i>	<i>-</i>
<i>RNAV/RNP STAR</i>	<i>N</i>	<i>-</i>	<i>-</i>	<i>-</i>

5. Type of Flight Management System which is used for flight data coding:
 - *Not available*
6. Location and Type of flight simulators which is used for flyability check, if available:
 - *Not available*
7. Charges per hour (USD, tax excluded) for simulation, including flight crew:
 - *Not applicable*
8. GPS interference detection capability, if equipped:
 - *Not applicable*
9. Languages possibly used by flight testing team:
 - *English / Bahasa Melayu (if applicable)*
10. Estimated annual flight time available to assist other Administrations for testing radio navigation aids:
 - *150 hours / Negotiable*
11. Advance notice expected before delivery of the service:
 - *3 months if Commissioning / 2 month if routine*
12. State Regulation(s) commonly complied with when delivering flight inspection services:
 - *Civil Aviation Regulations: Regulation 158, Annex 10, Annex 14 ICAO Doc 8071 Vol. I & III*
13. State Regulation(s) commonly complied with when delivering flight validation services:
 - *Civil Aviation Regulations: Regulation 158 and ICAO Doc 8071 Vol. II*
14. Provide a link for further information, if any:

<http://layanglayanggroup.com>
15. Other information:
 - *Layang Layang Aerospace Sdn. Bhd. received Flight Inspection Service Provider approval from Civil Aviation Authority of Malaysia in accordance to Civil Aviation Regulation, Regulation 158 1(b) since 15th March 2024. Certification Number: CAAM/CERT/FISP/01/2024*
 - *(AFIS)Automatic Flight Inspection System SAFRAN Carnac MS*
 - *Flight Inspector certify to operate SAFRAN Carnac MS (Certificate from CES Aviation)_*

Capabilities of Flight Inspection /Flight Validation Service Provider

8. MONGOLIA

1. Name, Country and Address of the service provider: *MONGOLIA*

Flight Inspection

Flight Inspection Services of National Civil Aviation Center of Mongolia

Address: Mongolia, Ulaanbaatar-34, Buyant-Ukhaa international airport, 17120

Tel: +976-7128-3285; +976-7004-9850

E-mail: fis@mcaa.gov.mn

Flight Validation

Flight Inspection Services of National Civil Aviation Center of Mongolia

Address: Mongolia, Ulaanbaatar-34, Buyant-Ukhaa international airport, 17120

Tel: +976-7128-3285; +976-7004-9850

E-mail: fis@mcaa.gov.mn

2. Type(s) and number of flight testing aircraft available, associated charges and conditions:

Type of Aircraft & Aircraft Available		Flight Time Charges per hour (USD)		Other co-ordinations	Used for Validation/ Inspection (V/I)
		Positioning Flights	Check Flights		
<i>C208B</i>	<i>2</i>	<i>Negotiable</i>	<i>Negotiable</i>	<i>Geosan LLC</i>	<i>V/I</i>
<i>F50</i>	<i>1</i>	<i>Negotiable</i>	<i>Negotiable</i>	<i>Mongolian Airways Cargo LLC</i>	<i>V/I</i>

3. Flight testing capability and estimated flight time:

Radio Navigation Aids	Flight Check Capability (Y/N)	Estimated Flight Check Time		Type of Flight Check System
		Routine	Commissioning	
<i>VOR</i>	<i>Y</i>	<i>3</i>	<i>6</i>	<i>Automatic</i>
<i>DME</i>	<i>Y</i>	<i>Combined with VOR or ILS</i>	<i>Automatic</i>	<i>Automatic</i>
<i>MLS</i>	<i>N</i>	<i>-</i>	<i>-</i>	<i>-</i>
<i>ILS CAT I</i>	<i>Y</i>	<i>6</i>	<i>12</i>	<i>Automatic</i>
<i>ILS CAT II</i>	<i>Y</i>	<i>6</i>	<i>12</i>	<i>Automatic</i>
<i>ILS CAT III</i>	<i>Y</i>	<i>8</i>	<i>14</i>	<i>Automatic</i>
<i>PAR</i>	<i>N</i>	<i>-</i>	<i>-</i>	<i>-</i>
<i>SAR</i>	<i>Y</i>	<i>Dependent upon nature and extent of checks required</i>		<i>Automatic</i>
<i>SRE</i>	<i>Y</i>			<i>Automatic</i>
<i>NDB/LOC</i>	<i>Y</i>	<i>3</i>	<i>4</i>	<i>Automatic</i>
<i>Marker Beacon</i>	<i>Y</i>	<i>Combined with ILS</i>		<i>Automatic</i>
<i>PAPI</i>	<i>Y</i>	<i>2</i>	<i>3</i>	<i>Automatic or photometric</i>

<i>VASIS</i>	<i>Y</i>	<i>3</i>	<i>4</i>	<i>Automatic</i>
<i>RF Interference</i>	<i>Y</i>	<i>Dependent upon nature and extent of checks required</i>		<i>Automatic</i>
<i>GNSS interference</i>	<i>Y</i>			<i>Automatic</i>

4. Flight validation capability for instrument flight procedures including PBN Navigation Specification

Type of Procedures	Flight Validation Capability (Y/N)	Estimated Flight Validation Time		Type of Flight Validation System
		Initial	Periodic Review	
<i>RNP APCH (LNAV)</i>	<i>Y</i>	<i>Dependent upon nature and extent of checks required</i>		<i>Automatic</i>
<i>RNP APCH (LNAV/VNAV)</i>	<i>Y</i>			<i>Automatic</i>
<i>RNP APCH (LPV)</i>	<i>Y</i>			<i>Automatic</i>
<i>SBAS CAT I</i>	<i>N</i>			-
<i>GBAS CAT I</i>	<i>N</i>			-
<i>GBAS CAT II/III</i>	<i>N</i>			-
<i>RNAV/RNP SID</i>	<i>Y</i>	<i>Dependent upon nature and extent of checks required</i>		<i>Automatic</i>
<i>RNAV/RNP STAR</i>	<i>Y</i>			<i>Automatic</i>

5. Type of Flight Management System which is used for flight data coding:

- *Airfield Technology Inc. AT-940 system.*

6. Location and Type of flight simulators which is used for flyability check, if available:

- *Customer's responsibility.*

7. Charges per hour (USD, tax excluded) for simulation, including flight crew:

- *Customer's responsibility.*

8. GPS interference detection capability, if equipped:

- *Comparison of GTN635 (dual) and Novatel 638 GPS receiver's data technique is applied.*
- *In Line-of-Sight condition, GNSS correction can also be used.*

9. Languages possibly used by flight testing team:

- *English, Russian, Mongolian.*

10. Estimated annual flight time available to assist other Administrations for testing radio navigation aids:

- *Negotiable.*

11. Advance notice expected before delivery of the service:

- *45 days for periodic flight inspection and 2 months for commissioning flight inspection and flight validation.*

12. State Regulation(s) commonly complied with when delivering flight inspection services:

- *Mongolian Civil Aviation Rule Part 171 and Requirements for Flight Inspection.*

13. State Regulation(s) commonly complied with when delivering flight validation services:

- *Mongolian Civil Aviation Rule Part 173 and Requirements for Flight Inspection.*

14. Provide a link for further information, if any:

- *Website: <https://ncac.mcaa.gov.mn/>*

15. Other information:

- *Type of flight inspection/validation system: Airfield Technology Inc. AT-940 dual system.*
- *We have experience in conducting flight inspection services at some airports in the Islamic Republic of Iran..*
- *For prior coordination, please contact with Mr. Gansukh Khurelsukh (e-mail: gansukh@mcaa.gov.mn; telephone number: +976-7128-3285 or +976-7004-9850).*
- *The flight procedure design service is available based on Customer demand.*
- *If the Customer has accepted it, the planes of local airlines may be usable for flight inspection and flight validation on the basis of the independent contract.*

Capabilities of Flight Validation/Flight Inspection Service Provider

9. MYANMAR

1. Name, Country and Address of the service provider:

Department of Civil Aviation, Myanmar
Mr. Yan Aung Oo
Acting Director (Flight Standards Division)
Department of Civil Aviation
DCA H/Q Building,
Yangon Int'l Airport Mingaladon 11021, Yangon, Myanmar
Tel: +95 (017) 533004
Fax: +95 (017) 533016
Email: dfgsd@dca.gov.mm

1. Type(s) and number of flight testing aircraft available, associated charges and conditions:

Type of Aircraft & Aircraft Available		Flight Time Charges per hour (USD)		Other co- ordinations	Used for Validation/ Inspection(V/I)
		Positioning Flights	Check Flights		
<i>Beechcraft 1900D</i>	<i>1</i>	<i>Negotiation</i>		<i>Myanmar National Airlines</i>	<i>Inspection</i>

2. Flight testing capability and estimated flight time:

Radio Navigation Aids	Flight Check Capability (Y/N)	Estimated Flight Check Time (Hours)		Type of Flight Check System
		Routine	Commissioning	
<i>VOR</i>	<i>Y</i>	<i>4</i>	<i>Depend on condition of facility under inspection</i>	<i>Automatic</i>
<i>DME</i>	<i>Y</i>	<i>Combined with VOR or ILS</i>		<i>Automatic</i>
<i>MLS</i>	<i>N</i>	<i>-</i>	<i>-</i>	<i>-</i>
<i>ILS CAT I</i>	<i>Y</i>	<i>5</i>	<i>Depend on condition of facility under inspection</i>	<i>Automatic</i>
<i>ILS CAT II</i>	<i>Y</i>	<i>5</i>		
<i>ILS CAT III</i>	<i>Y</i>	<i>5</i>		
<i>PAR</i>	<i>N</i>	<i>-</i>	<i>-</i>	<i>-</i>
<i>SAR</i>	<i>N</i>	<i>-</i>	<i>-</i>	<i>-</i>
<i>SRE</i>	<i>N</i>	<i>-</i>	<i>-</i>	<i>-</i>
<i>NDB/LOC</i>	<i>Y</i>	<i>3</i>	<i>Depend on condition</i>	

<i>Marker Beacon</i>	<i>Y</i>	<i>Combined with ILS</i>	<i>of facility under inspection</i>	<i>Automatic</i>
<i>PAPI</i>	<i>Y</i>	<i>2</i>		<i>Semi-automatic and Manual</i>
<i>VASIS</i>	<i>N</i>	<i>-</i>	<i>-</i>	<i>-</i>
<i>RF Interference</i>	<i>N</i>	<i>-</i>	<i>-</i>	<i>-</i>
<i>GNSS Interference</i>	<i>N</i>	<i>-</i>	<i>-</i>	<i>-</i>

3. Flight validation capability for instrument flight procedures including PBN Navigation Specification:

Type of Procedures	Flight Validation Capability (Y/N)	Estimated Flight Validation Time (Hours)		Type of Flight Validation System
		Initial	Periodic Review	
<i>RNP APCH (LNAV)</i>	<i>N</i>			
<i>RNP APCH (LNAV/VNAV)</i>	<i>N</i>			
<i>RNP APCH (LPV)</i>	<i>N</i>			
<i>SBAS CAT I</i>	<i>N</i>			
<i>GBAS CAT I</i>	<i>N</i>			
<i>GBAS CAT II/III</i>	<i>N</i>			
<i>RNA V/RNP SID</i>	<i>N</i>			
<i>RNA V/RNP STAR</i>	<i>N</i>			

4. Type of Flight Management System which is used for flight data coding:
- *None*
5. Location and Type of flight simulators which is used for flyability check, if available:
- *None*
6. Charges per hours (USD, tax excluded) for simulation, including flight crew:
- *N/A*
7. GPS interference detection capability, if equipped:
- *None*
8. Languages possibly used by flight testing team:

Myanmar and English

9. Estimated annual flight time available to assist other Administrations for testing radionavigation aids:

None.

10. Advance notice expected before delivery of the service:

N/A

11. State Regulation(s) commonly complied with when delivering flight inspection services:

MCAR Part-5 Section-9 Vol I.

12. State Regulation(s) commonly complied with when delivering flight validation services:

N/A

13. Provide a link for further information, if any:

<http://www.dca.gov.mm>

14. Other information:

Beechcraft 1900D is equipped with Norwegian Special Mission (NSM) Automatic Flight Inspection System (UNIFIS-3000).

Capabilities of Flight Inspection /Flight Validation Service Provider

10. NEW ZEALAND

1. Name, Country and Address of the service provider:

AIRWAYS CORPORATION OF NEW ZEALAND LTD

Address: Main Airport Hanger, 60 Toru Road, Paraparaumu, Wellington

Tel: +64 4 460 0703

Fax: +64 4 471 0395

E-mail: Philip.pinkney@airways.co.nz

2. Type(s) and number of flight testing aircraft available, associated charges and conditions:

Type of Aircraft & Aircraft Available		Flight Time Charges per hour (USD)		Other co- ordinations	Used for Validation/ Inspection (V/I)
		Positionin g Flights	Chec k Flight s		
<i>Piper Cheyenne IV</i>	<i>1</i>	<i>Negotiable</i>	<i>Negotiable</i>	<i>Nil</i>	<i>V and I</i>
<i>Piper Seneca</i>	<i>1</i>	<i>Negotiable</i>	<i>Negotiable</i>	<i>Third Party Operator</i>	<i>V and I</i>
<i>BK117 Helicopter</i>	<i>1</i>	<i>Negotiable</i>	<i>Negotiable</i>	<i>Third Party Operator</i>	<i>V and I</i>

3. Flight testing capability and estimated flight time:

Radio Navigation Aids	Flight Check Capabilit y (Y/N)	Estimated Flight Check Time		Type of Flight Check System
		Routine	Commissionin g	
<i>VOR</i>	<i>Y</i>	<i>*</i>	<i>**</i>	<i>Automatic</i>
<i>DME</i>	<i>Y</i>	<i>*</i>	<i>**</i>	<i>Automatic</i>
<i>MLS</i>	<i>N</i>	<i>*</i>	<i>**</i>	
<i>ILS CAT I</i>	<i>Y</i>	<i>*</i>	<i>**</i>	<i>Automatic</i>
<i>ILS CAT II</i>	<i>Y</i>	<i>*</i>	<i>**</i>	<i>Automatic</i>
<i>ILS CAT III</i>	<i>Y</i>	<i>*</i>	<i>**</i>	<i>Automatic</i>
<i>PAR</i>	<i>Y</i>	<i>*</i>	<i>**</i>	<i>Semi- Automatic</i>
<i>SAR</i>	<i>Y</i>	<i>*</i>	<i>**</i>	<i>Semi- Automatic</i>
<i>SRE</i>	<i>Y</i>	<i>*</i>	<i>**</i>	<i>Semi- Automatic</i>
<i>NDB/LOC</i>	<i>Y</i>	<i>*</i>	<i>**</i>	<i>Automatic</i>
<i>Marker Beacon</i>	<i>Y</i>	<i>*</i>	<i>**</i>	<i>Automatic</i>
<i>PAPI</i>	<i>Y</i>	<i>*</i>	<i>**</i>	<i>Semi-</i>

				<i>Automatic</i>
<i>VASIS</i>	<i>Y</i>	<i>*</i>	<i>**</i>	<i>Semi-Automatic</i>
<i>RF Interference</i>	<i>Y</i>	<i>*</i>	<i>**</i>	<i>Manual</i>
<i>GNSS interference</i>	<i>Y</i>	<i>*</i>	<i>**</i>	<i>Manual</i>

(*) Subject to certification requirements, contractual requirements, environment, aircraft performance and ATC holding. Call to discuss any requirements.

() Subject to items stated in (*) however may vary depending on the standard of facility installation. Call to discuss any requirements.**

4. Flight validation capability for instrument flight procedures including PBN Navigation Specification

Type of Procedures	Flight Validation Capability (Y/N)	Estimated Flight Validation Time		Type of Flight Validation System
		Initial	Periodic Review	
<i>RNP APCH (LNAV)</i>	<i>Y</i>	<i>*</i>	<i>*</i>	<i>Semi-Automatic</i>
<i>RNP APCH (LNAV/VNAV)</i>	<i>Y</i>	<i>*</i>	<i>*</i>	<i>Semi-Automatic</i>
<i>RNP APCH (LPV)</i>	<i>Y</i>	<i>*</i>	<i>*</i>	<i>Semi-Automatic</i>
<i>SBAS CAT I</i>	<i>Y</i>	<i>*</i>	<i>*</i>	<i>Semi - Automatic</i>
<i>GBAS CAT I</i>	<i>N</i>			
<i>GBAS CAT II/III</i>	<i>N</i>			
<i>RNAV/RNP SID</i>	<i>Y</i>	<i>*</i>	<i>*</i>	<i>Semi - Automatic</i>
<i>RNAV/RNP STAR</i>	<i>Y</i>	<i>*</i>	<i>*</i>	<i>Semi - Automatic</i>

(*) Subject to certification, contractual requirements, environment, aircraft performance and ATC restrictions. Airways typically only flight validates procedures vetted by Airways under our PART 173 procedure design authorization.

5. Type of Flight Management System which is used for flight data coding:

- *Garmin and AFIS system*

6. Location and Type of flight simulators which is used for flyability check, if available:

- *Typically provided by our National Carrier when required.*

7. Charges per hour (USD, tax excluded) for simulation, including flight crew:

- *N/A*
8. GPS interference detection capability, if equipped:
- *Spectrum analyzer, R&S PR100*
9. Languages possibly used by flight testing team:
- *English.*
10. Estimated annual flight time available to assist other Administrations for testing radio navigation aids:
- *Negotiable and depends on requirement. If we are required to use our dedicated flight check.*
11. Advance notice expected before delivery of the service:
- *Negotiable depending on Contract and location.*
12. State Regulation(s) commonly complied with when delivering flight inspection services:
- *Airways are currently certified under CAA rule Parts 171,172,173 and operate in accordance with most applicable part numbers such as 12,39,43,61,91,100.*
13. State Regulation(s) commonly complied with when delivering flight validation services:
- *Airways are currently certified under CAA rule Parts 171,172,173 and operate in accordance with most applicable part numbers such as 12,39,43,61,91,100.*
14. Provide a link for further information, if any:
- *www.airways.co.nz*
15. Other information:
- *Airways Corporation is a Government State Owned Enterprise tasked with providing Air Navigational Services to New Zealand.*
-

Capabilities of Flight Validation / Flight Inspection Service Provider

11. ISLAMIC REPUBLIC OF PAKISTAN

1. Name, Country & address of Service provider:

*Flight Inspection Unit of Pakistan PAA
Headquarters Pakistan Airports Authority
Jinnah Int'l Airport, Terminal-1, Karachi, Pakistan
Tele: +9221 99072239
Fax: +9921 99242695
E-mail: shahzad.fatah@caapakistan.com.pk*

2. Type(s) and number of flight testing aircraft available, associated charges and conditions:

Type of Aircraft & Aircraft Available		Flight Time Charges per hour (USD)		Other co-ordinations	Used for Validation/ Inspection (V/I)
		Positioning Flights	Check Flights		
<i>Beechcraft B 200</i>	<i>02</i>	<i>Flight Inspection Unit of Pakistan Airports Authority will provide a Financial Quote response to any request.</i>			<i>V & I</i>

3. Flight testing capability and estimated flight time:

Radio Navigation Aids	Flight Check Capability (Y/N)	Estimated Flight Check Time		Type of Flight Check System
		Routine	Commissioning	
<i>VOR</i>	<i>Y</i>	<i>2.0 hr.</i>	<i>6.0 hr.</i>	<i>Aero-Data Automatic Flight Inspection System (AFIS-120)</i>
<i>DME</i>	<i>Y</i>	<i>1.0 hr.</i>	<i>2.0 hr.</i>	
<i>ILS CAT 1</i>	<i>Y</i>	<i>3.5 hr.</i>	<i>10.0-12.0 hr.</i>	
<i>ILS CAT II</i>	<i>Y</i>	<i>4.5 hr.</i>	<i>12.0-15.0 hr.</i>	
<i>ILS CAT III</i>	<i>Y</i>	<i>4.5 hr.</i>	<i>12.0-15.0 hr.</i>	
<i>PAR</i>	<i>Y</i>	<i>3.0 hr.</i>	<i>6.0 hr.</i>	
<i>TACAN</i>	<i>Y</i>	<i>2.0 hr.</i>	<i>4.0 hr.</i>	
<i>VORTAC</i>	<i>Y</i>	<i>2.0 hr.</i>	<i>6.0 hr.</i>	
<i>MARKER BEACON</i>	<i>Y</i>	<i>1.5 hr.</i>	<i>2.0-3.0 hr.</i>	
<i>PAPI</i>	<i>Y</i>	<i>1.5 hr.</i>	<i>2.0-3.0 hr.</i>	
<i>VASI</i>	<i>Y</i>	<i>1.5 hr.</i>	<i>2.0-3.0 hr.</i>	

Note: Estimated Flight check time is subject to Scope and Requirements and excludes positioning flights.

4. Flight validation capability for instrument flight procedures including PBN Navigation Specification

Type of Procedures	Flight Validation Capability (Y/N)	Estimated Flight Validation Time		Type of Flight Validation System
		Initial	Periodic Review	
<i>RNP APCH (LNAV)</i>	<i>Y</i>	<i>Actual Flight Time will be charged as per Blocks Off to Blocks On</i>		<i>Aero-Data Automatic Flight Inspection System (AFIS-120)</i>
<i>RNP APCH (LNAV/VNAV)</i>	<i>Y</i>			
<i>RNAV/RNP SID</i>	<i>Y</i>			
<i>RNAV/RNP STAR</i>	<i>Y</i>			

5. Type of Flight Management System which is used for flight data coding:
Rockwell Collins FMS 3000.
6. Location and Type of flight simulators which is used for flyability check, if available:
None
7. Charges per hour (USD, tax excluded) for simulation, including flight crew:
Negotiable depending upon Scope and Requirement.
8. GPS interference detection capability, if equipped:
N/A
9. Languages possibly used by flight testing team:
English
10. Estimated annual flight time available to assist other Administrations for testing radio navigation aids: *150 Hours approx.*
11. Advance notice expected before delivery of the service: *03/04 Weeks.*
12. State Regulation(s) commonly complied with when delivering flight inspection services:
ANO-002-ARTS-5.0 & ICAO Doc 8071
13. State Regulation(s) commonly complied with when delivering flight validation services:
ICAO DOC 9906 (Vol.-5)
14. Provide a link for further information, if any:
www.paa.gov.pk
15. Other information:
- i) Flight Inspection Unit of Pakistan PAA has been providing flight Inspection & Validation services in the Asia Pacific & Middle East region to various countries such as Bangladesh, Sri Lanka, Nepal, Maldives, Vietnam, Cambodia, Iran, Bahrain, UAE, Kingdom of Saudi Arabia, Qatar, Oman, & Eretria.*
- ii) Long term Flight Inspection contracts are offered at Special rates, depending upon length of contract & quantum of work. All local taxes landing, housing, ground handling charges to be borne by the host State/ Authority.*

Capabilities of Flight Validation / Flight Inspection Service Provider

12. THE PHILIPPINES

1. Name of the Service Provider:

Flight Inspection & Calibration Group, Civil Aviation Authority of the Philippines

Address: FICG. CAAP Hangar, Andrews Avenue, Pasay City, Metro Manila

Tel: +632 8852 3013, +632 8246 4988 (Local 2023)

E-mail: ficg@caap.gov.ph;

2. Type(s) and number of flight testing aircraft available, associated charges and conditions:

Type of Aircraft & Aircraft Available		Flight Time Charges per hour (USD)		Other co-ordinations	Used for Validation/ Inspection (V/I)
		Positioning Flights	Check Flights		
<i>Learjet 31A</i>	<i>1</i>	<i>Negotiable</i>	<i>Negotiable</i>		<i>V/I</i>
<i>Pilatus PC12</i>	<i>1</i>	<i>Negotiable</i>	<i>Negotiable</i>		<i>V/I</i>

3. Flight testing capability and estimated flight time:

Radio Navigation Aids	Flight Check Capability (Y/N)	Estimated Flight Check Time (Hours)		Type of Flight Check System
		Routine	Commissioning	
<i>VOR</i>	<i>Y</i>	<i>2</i>	<i>6</i>	<i>Automatic</i>
<i>DME</i>	<i>Y</i>	<i>Along with VOR or ILS</i>	<i>Along with VOR or ILS</i>	<i>Automatic</i>
<i>MLS</i>	<i>N</i>			
<i>ILS CAT I</i>	<i>Y</i>	<i>4</i>	<i>12</i>	<i>Automatic</i>
<i>ILS CAT II</i>	<i>Y</i>	<i>4</i>	<i>12</i>	<i>Automatic</i>
<i>ILS CAT III</i>	<i>N</i>			
<i>PAR</i>	<i>N</i>			
<i>SAR</i>	<i>Y</i>	<i>4</i>	<i>12</i>	
<i>SRE</i>	<i>Y</i>	<i>4</i>	<i>12</i>	
<i>NDB/LOC</i>	<i>Y</i>	<i>1</i>	<i>5</i>	

<i>Marker Beacon</i>	<i>Y</i>	<i>Along with ILS</i>	<i>Along with ILS</i>	
<i>PAPI</i>	<i>Y</i>	<i>1</i>	<i>2</i>	
<i>VASIS</i>	<i>Y</i>	<i>1</i>	<i>2</i>	
<i>RF Interference</i>	<i>N</i>			
<i>GNSS interference</i>	<i>N</i>			

4. Flight validation capability for instrument flight procedures including PBN Navigation Specification

Type of Procedures	Flight Validation Capability (Y/N)	Estimated Flight Validation Time (Hours)		Type of Flight Validation System
		Initial	Periodic Review	
<i>RNP APCH (LNAV)</i>	<i>Y</i>	<i>2</i>	<i>1</i>	<i>Manual</i>
<i>RNP APCH (LNAV/VNAV)</i>	<i>Y</i>	<i>3</i>	<i>1</i>	<i>Manual</i>
<i>RNP APCH (LPV)</i>	<i>Y</i>	<i>3</i>	<i>1</i>	<i>Manual</i>
<i>SBAS CAT I</i>	<i>N</i>			
<i>GBAS CAT I</i>	<i>N</i>			
<i>GBAS CAT II/III</i>	<i>N</i>			
<i>RNAV/RNP SID</i>	<i>Y</i>	<i>2</i>	<i>1</i>	<i>Manual</i>
<i>RNAV/RNP STAR</i>	<i>Y</i>	<i>2</i>	<i>1</i>	<i>Manual</i>

5. Type of Flight Management System which is used for flight data coding:
- Apex Primus/ UNS – 1E*
6. Location and Type of flight simulators which is used for flyability check, if available:
- Not Available*
7. Charges per hour (USD, tax excluded) for simulation, including flight crew:
- Not Applicable*
8. GPS interference detection capability, if equipped:

- *Not Available*
9. Languages possibly used by flight testing team:
- *English.*
10. Estimated annual flight time available to assist other Administrations for testing radio navigation aids:
- *Negotiable*
11. Advance notice expected before delivery of the service:
- *3 months*
12. State Regulation(s) commonly complied with when delivering flight inspection services:
- *Philippine Civil Aviation Regulations for Air Navigation Services Part 6, 9, 10*
13. State Regulation(s) commonly complied with when delivering flight validation services:
- *Philippine Civil Aviation Regulations for Air Navigation Services Part 16*
14. Provide a link for further information, if any:
- *www.caap.gov.ph*
15. Other information:
- *ficg@caap.gov.ph*
-

Capabilities of Flight Validation / Flight Inspection Service Provider

13. PAPUA NEW GUINEA

1. Name, Country and Address of the service provider: *PAPUA NEW GUINEA*

Flight Inspection

RADIOLA LIMITED

Level 1, Unit 2, Bridgepoint Complex

15 Mariner View

Paremata, Porirua 5026

New Zealand

NIUSKY PACIFIC LIMITED

East of Jackson's Airport Terminals, adjacent to the Air Traffic Control Tower, 8 Mile

PO Box 273, Boroko, NCD. Papua New Guinea

NATIONAL AIRPORTS CORPORATION

Domestic Terminal, Jacksons, 1st Floor

Port Moresby, P.O. Box 684

Boroko, NCD, Papua New Guinea

Flight Validation

CIVIL AVIATION SAFETY AUTHORITY OF PNG (CASA PNG)

6 Mile, Morea-Tobo Rd, Port Moresby 111 National Capital District

P.O. Box 1941, Boroko, NCD, Papua New Guinea

NIUSKY PACIFIC LIMITED

East of Jackson's Airport Terminals, adjacent to the Air Traffic Control Tower, 8 Mile

PO Box 273, Boroko, NCD. Papua New Guinea

IDS AUSTRALASIA

Unit 1/39 Navigator Pl, Hendra QLD 4011, Australia

2. Type(s) and number of flight testing aircraft available, associated charges and conditions:

Type of Aircraft & Aircraft Available		Flight Time Charges per hour (USD)		Other co-ordinations	Used for Validation/ Inspection (V/I)
		Positioning Flights	Check Flights		
<i>Hawker Beechcraft King Air</i>	<i>1</i>	<i>Negotiable</i>	<i>Negotiable</i>	<i>Third-Party Operator</i>	<i>V&I</i>
<i>Mavic 3 Enterprise</i>	<i>1</i>	<i>Negotiable</i>	<i>Negotiable</i>	<i>Third-Party Operator</i>	<i>I</i>

3. Flight testing capability and estimated flight time:

Radio Navigation Aids	Flight Check Capability (Y/N)	Estimated Flight Check Time		Type of Flight Check System
		Routine	Commissioning	
<i>VOR**</i>	<i>Y</i>	<i>1 to 3</i>	<i>2 to 8</i>	<i>Automatic</i>
<i>DME**</i>	<i>Y</i>	<i>1 to 3</i>	<i>2 to 8</i>	<i>Automatic</i>
<i>ILS CAT I**</i>	<i>Y</i>	<i>2 to 5</i>	<i>3 to 12</i>	<i>Automatic</i>
<i>PAPI**</i>	<i>Y</i>	<i>0.5</i>	<i>0.5 to 3</i>	<i>Automatic</i>

(*) Subject to certification requirements, contractual requirements, environment, aircraft performance and ATC holding. Call to discuss any requirements.

(**) Subject to items stated in (*) however may vary depending on the standard of facility installation. Call to discuss any requirements

4. Flight validation capability for instrument flight procedures including PBN Navigation Specification

Type of Procedures	Flight Validation Capability (Y/N)	Estimated Flight Validation Time		Type of Flight Validation System
		Initial	Periodic Review	
<i>RNP APCH (LNAV) *</i>	<i>Y</i>	<i>0.5</i>	<i>0.5</i>	<i>Aircraft and/or Level D Simulator</i>
<i>RNP APCH (LNAV/VNAV)*</i>	<i>Y</i>	<i>0.75</i>	<i>0.5</i>	<i>Aircraft and/or Level D Simulator</i>
<i>RNAV/RNP SID*</i>	<i>Y</i>	<i>0.5</i>	<i>0.5</i>	<i>Aircraft and/or Level D Simulator</i>
<i>RNAV/RNP STAR*</i>	<i>Y</i>	<i>0.5</i>	<i>0.5</i>	<i>Aircraft and/or Level D Simulator</i>
<i>ILS/LOC*</i>	<i>Y</i>	<i>0.5</i>	<i>0.5</i>	<i>Aircraft and/or Level D Simulator</i>
<i>VOR/NDB*</i>	<i>Y</i>	<i>0.5</i>	<i>0.5</i>	<i>Aircraft and/or Level D Simulator</i>

(*) Subject to certification, contractual requirements, environment, aircraft performance and ATC restrictions. CASA PNG, NiuSky Pacific and IFPD Organization under Part 173.

5. Type of Flight Management System which is used for flight data coding:

- *CASA approved and comment for flight validation: GE FMC using Jeppesen custom database.*

6. Location and Type of flight simulators which is used for flyability check, if available:

- *CASA PNG Approved FSTD - B767-338ER FFR, QFTC, 5 Leonardo Drive, Brisbane Airport QLD, 4008*
7. Charges per hour (USD, tax excluded) for simulation, including flight crew:
- *CASA F&C, NSPL manpower hours*
8. GPS interference detection capability, if equipped:
- *NIL*
9. Languages possibly used by flight testing team:
- *English*
10. Estimated annual flight time available to assist other Administrations for testing radio navigation aids:
- *NA*
11. Advance notice expected before delivery of the service:
- *As per Schedule of Events and Negotiable depending on Contract and location.*
12. State Regulation(s) commonly complied with when delivering flight inspection services:
- *CARs 12, 61, 91, 100, 102, 139, 171*
13. State Regulation(s) commonly complied with when delivering flight validation services:
- *CARs 12, 61, 91, 100, 173*
14. Provide a link for further information, if any:
- <https://radiola.com/>
 - <https://www.niuskypacific.com.pg/>
 - <https://www.idscorporation.com/ids-subidiaries/ids-australasia/>
 - <https://www.nac.com.pg/>
 - <https://casapng.gov.pg/>
15. Other information:
- *Part 139 Holder –*
 - *National Airports Corporations Limited*
 - *Part 171 Holder –*
 - *NiuSky Pacific Limited*
 - *Radiola Limited*
 - *Part 173 Holder –*
 - *IDS Australasia Pty Ltd*
-

Capabilities of Flight Validation / Flight Inspection Service Provider

14. REPUBLIC OF KOREA

1. Name of the Service Provider:

*Flight Inspection Center, Ministry of Land, Infrastructure and Transport
Address: Gimpo International Airport, 84 Haneul-Gil, Gangseo-Gu, Seoul
07505, Republic of Korea
Tel: +82 (2) 2660 2162, 2167
Fax: +82(2) 2662 0881
E-mail: fic99@korea.kr or richard79@korea.kr*

2. Type(s) and number of flight testing aircraft available, associated charges and conditions:

Type of Aircraft & Aircraft Available		Flight Time Charges per hour (USD)		Other Co-ordinations	Used for Validation/ Inspection (V/I)
		Positioning Flights	Check Flights		
<i>Praetor 600</i>	<i>1</i>	<i>Negotiable</i>	<i>2,787</i>		<i>V/I</i>
<i>Hawker 750</i>	<i>1</i>	<i>Negotiable</i>	<i>2,787</i>		<i>V/I</i>

3. Flight testing capability and estimated flight time:

Radio Navigation Aids	Flight Check Capability (Y/N)	Estimated Flight Check Time (Hours)		Type of Flight Check System
		Routine	Commissioning	
<i>VOR</i>	<i>Y</i>	<i>2</i>	<i>4</i>	<i>Automatic</i>
<i>DME</i>	<i>Y</i>	<i>1</i>	<i>2</i>	<i>Automatic</i>
<i>MLS</i>	<i>N</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>
<i>ILS CAT I</i>	<i>Y</i>	<i>2</i>	<i>12</i>	<i>Automatic</i>
<i>ILS CAT II</i>	<i>Y</i>	<i>2</i>	<i>12</i>	<i>Automatic</i>
<i>ILS CAT III</i>	<i>Y</i>	<i>2</i>	<i>12</i>	<i>Automatic</i>
<i>PAR</i>	<i>Y</i>	<i>1</i>	<i>4</i>	<i>Automatic</i>
<i>SAR</i>	<i>Y</i>	<i>1</i>	<i>4</i>	<i>Automatic</i>
<i>SRE</i>	<i>Y</i>	<i>1</i>	<i>4</i>	<i>Automatic</i>
<i>NDB/LOC</i>	<i>Y</i>	<i>0.5</i>	<i>2</i>	<i>Automatic</i>
<i>Marker Beacon</i>	<i>Y</i>	<i>-</i>	<i>-</i>	<i>Automatic</i>
<i>PAPI</i>	<i>Y</i>	<i>0.5</i>	<i>4</i>	<i>Automatic</i>

VASIS	Y	0.5	4	Automatic
RF Interference	Y	-	-	Automatic
GNSS interference	Y	-	-	(See item 8.)
Radar (PSR/SSR ADSB/MLAT)	Y	1	6	Automatic
TACAN	Y	2	4 to 6	Automatic

4. Flight validation capability for instrument flight procedures including PBN Navigation Specification

Type of Procedures	Flight Validation Capability (Y/N)	Estimated Flight Validation Time (Hours)		Type of Flight Validation System
		Initial	Periodic Review	
RNP APCH (LNAV)	Y	2	0.5	Automatic
RNP APCH (LNAV/VNAV)	Y	2	0.5	Automatic
RNP APCH (LPV)	Y	2	1	Automatic
SBAS CAT I	Y	2	1	Automatic
GBAS CAT I	Y	10	1	Automatic
GBAS CAT II/III	Y	10	1	Automatic
RNAV/RNP SID	Y	2	0.5	Automatic
RNAV/RNP STAR	Y	2	0.5	Automatic
ILS/LOC	Y	2	0.5	Automatic
VOR/TACAN	Y	2	0.5	Automatic

5. Type of Flight Management System which is used for flight data coding:

- Praetor 600: Collins A429
- Hawker 750: FMS-6000

6. Location and Type of flight simulators which is used for flyability check, if available:

- N/A

7. Charges per hour (USD, tax excluded) for simulation, including flight crew:

- *N/A*
8. GPS interference detection capability, if equipped:
- *Rohde & Schwarz FSV7, Cubic 4400 with Aerodata package.*
9. Languages possibly used by flight testing team:
- *Korea, English.*
10. Estimated annual flight time available to assist other Administrations for testing radio navigation aids:
- *100 hours / Negotiable*
11. Advance notice expected before delivery of the service:
- *2-3 months*
12. State Regulation(s) commonly complied with when delivering flight inspection services:
- *Korea Act, ICAO DOC 8071, FAA Order 8200.1*
13. State Regulation(s) commonly complied with when delivering flight validation services:
- *ICAO and FAA related Documents.*
14. Provide a link for further information, if any:
- *Under construction*
15. Other information:

Capabilities of Flight Inspection /Flight Validation Service Provider

15. THAILAND

1. Name, Country and Address of the service provider:

Aeronautical Radio of Thailand Ltd.

Address: 102 Ngamduplee Rama IV Tung mahamek Bangkok 10120, Thailand

Tel: (662) 2878571, (668) 1734 9242

Fax: (662) 285-9565

E-mail: bs@aerorhai.co.th tirachai.su@aerorhai.co.th

2. Type(s) and number of flight testing aircraft available, associated charges and conditions:

Type of Aircraft & Aircraft Available		Flight Time Charges per hour (USD)		Other co-ordinations	Used for Validation/ Inspection (V/I)
		Positioning Flights	Check Flights		
<i>Beechcraft B300</i>	<i>2</i>	<i>Negotiable</i>	<i>Negotiable</i>	<i>-</i>	<i>V/I</i>
<i>Beechcraft B200</i>	<i>1</i>	<i>Negotiable</i>	<i>Negotiable</i>	<i>-</i>	<i>V/I</i>

3. Flight testing capability and estimated flight time:

Radio Navigation Aids	Flight Check Capability (Y/N)	Estimated Flight Check Time		Type of Flight Check System
		Routine	Commissioning	
<i>VOR</i>	<i>Y</i>	<i>2-4</i>	<i>12</i>	<i>Automatic</i>
<i>DME</i>	<i>Y</i>	<i>Combined with DVOR/ILS</i>	<i>Combined with DVOR/ILS</i>	<i>Automatic</i>
<i>MLS</i>	<i>N</i>			<i>Automatic</i>
<i>ILS CAT I</i>	<i>Y</i>	<i>6</i>	<i>12</i>	<i>Automatic</i>
<i>ILS CAT II</i>	<i>Y</i>	<i>6</i>	<i>14</i>	<i>Automatic</i>
<i>ILS CAT III</i>	<i>Y</i>	<i>6</i>	<i>14</i>	<i>Automatic</i>
<i>PAR</i>	<i>N</i>	<i>-</i>	<i>-</i>	<i>-</i>
<i>SAR</i>	<i>N</i>	<i>-</i>	<i>-</i>	<i>-</i>
<i>SRE</i>	<i>Y</i>	<i>4</i>	<i>8</i>	<i>Automatic</i>
<i>NDB/LOC</i>	<i>Y</i>	<i>2</i>	<i>4</i>	<i>Automatic</i>
<i>Marker Beacon</i>	<i>Y</i>	<i>Combined with ILS</i>	<i>Combined with ILS</i>	<i>Automatic</i>
<i>PAPI</i>	<i>Y</i>	<i>2</i>	<i>4</i>	<i>Automatic</i>
<i>VASIS</i>	<i>N</i>	<i>-</i>	<i>-</i>	<i>-</i>
<i>RF Interference</i>	<i>Y</i>	<i>Depend on the interference case</i>		
<i>GNSS interference</i>	<i>N</i>	<i>-</i>	<i>-</i>	<i>(in relation to item 8.)</i>

4. Flight validation capability for instrument flight procedures including PBN Navigation Specification

Type of Procedures	Flight Validation Capability (Y/N)	Estimated Flight Validation Time		Type of Flight Validation System
		Initial	Periodic Review	
<i>RNP APCH (LNAV)</i>	<i>Y</i>	<i>Depend on number of legs and waypoints</i>		<i>Automatic</i>
<i>RNP APCH (LNAV/VNAV)</i>	<i>Y</i>			
<i>RNP APCH (LPV)</i>	<i>N</i>			-
<i>SBAS CAT I</i>	<i>N</i>			-
<i>GBAS CAT I</i>	<i>Y</i>	<i>Depend on number of legs and waypoints</i>		<i>Automatic</i>
<i>GBAS CAT II/III</i>	<i>N</i>			
<i>RNAV/RNP SID</i>	<i>Y</i>	<i>Depend on number of legs and waypoints</i>		<i>Automatic</i>
<i>RNAV/RNP STAR</i>	<i>Y</i>			

5. Type of Flight Management System which is used for flight data coding:

- *Rockwell Collins FMS*

6. Location and Type of flight simulators which is used for flyability check, if available:

- *N/A*

7. Charges per hour (USD, tax excluded) for simulation, including flight crew:

- *N/A*

8. GPS interference detection capability, if equipped:

- *Spectrum Analyzer, ROHDE & SCHWARZ FSV30*

9. Languages possibly used by flight testing team:

- *English and Thai*

10. Estimated annual flight time available to assist other Administrations for testing radio navigation aids:

- *200 hours*

11. Advance notice expected before delivery of the service:

- *30 – 60 days*

12. State Regulation(s) commonly complied with when delivering flight inspection services:

- *Civil Aviation Authority of Thailand (CAAT) and/or ICAO standards and/or FAA standards.*

13. State Regulation(s) commonly complied with when delivering flight validation services:

- *Civil Aviation Authority of Thailand and/or ICAO standards and/or FAA standards.*

14. Provide a link for further information, if any:

- www.aerothai.co.th

15. Other information:

Capabilities of Flight Inspection /Flight Validation Service Provider

16. UNITED STATES OF AMERICA

1. Name, Country and Address of the service provider:

*Flight Validation / Flight Inspection
FAA National Headquarters
800 Independence Ave., SW
Orville Wright Bldg. (FOB10A)
Suite 1028
Washington, DC 20591*

*Phone: (202) 267-0523
E-Mail – David.P.Maturo@FAA.gov*

2. Type(s) and number of flight testing aircraft available, associated charges and conditions:

Type of Aircraft & Aircraft Available		Flight Time Charges per hour (USD)		Other co-ordinations	Used for Validation/ Inspection (V/I)
		Positioning Flights	Check Flights		
Challenger 605	6	\$5507.00	\$5507.00		V/I

3. Flight testing capability and estimated flight time:

Radio Navigation Aids	Flight Check Capability (Y/N)	Estimated Flight Check Time		Type of Flight Check System
		Routine	Commissioning	
VOR	Y	2 + 0.2/SIAP	8	Automatic
DME	Y	0.5	3	Automatic
MLS	N			
ILS CAT I	Y	1.5	7	Automatic
ILS CAT II	Y	1.5	13	Automatic
ILS CAT III	Y	1.5	13	Automatic
PAR	Y	1.5	5	Automatic
ASR	Y	1	6	Automatic
SRE	Y	-	11	Automatic
NDB	Y	0.7	2	Manual
Marker Beacon	Y	0.1	0.3	Automatic
PAPI	Y	0.5	1.5	Automatic
VASIS	Y	0.5	1.5	Automatic
RF Interference	N			
GNSS Interference	Y	-	-	Manual (See item 8.)

4. Flight validation capability for instrument flight procedures including PBN Navigation Specification

Type of Procedures	Flight Validation Capability (Y/N)	Estimated Flight Validation Time		Type of Flight Validation System
		Initial	Periodic Review	
RNP APCH (LNAV)	Y	1.5	0.5	Automatic/Manual
RNP APCH (LNAV/VNAV)	Y	1.5	0.5	Automatic/Manual
RNP APCH (LPV)	Y	1.5	0.5	Automatic
SBAS CAT I	Y	1.5	0.5	Automatic
GBAS CAT I	Y	7	2 + 0.2/SIAP	Automatic
GBAS CAT II/III	N			
RNAV/RNP SID	Y	1	-	Automatic/Manual
RNAV/RNP STAR	Y	1	-	Automatic/Manual

5. Type of Flight Management System which is used for flight data coding:
Collins FMS-6200
6. Location and Type of flight simulators which is used for flyability check, if available:
Oklahoma City, OK, Boeing 737-800 and Airbus A330
7. Charges per hour (USD, tax excluded) for simulation, including flight crew:
No additional cost if the FAA is inspecting the procedure. Otherwise not available
8. GPS interference detection capability, if equipped:
Not available outside of CONUS, Hawaii and Alaska. Cubic DF-4400 when King Air used
9. Languages possibly used by flight testing team:
English
10. Estimated annual flight time available to assist other Administrations for testing radio navigation aids:
Negotiable
11. Advance notice expected before delivery of the service:
Minimum of 90 days outside CONUS
12. State Regulation(s) commonly complied with when delivering flight inspection services:
FAA Order 8200.1, Current Edition
13. State Regulation(s) commonly complied with when delivering flight validation services
FAA Order 8200.1, Current Edition

14. Provide a link for further information, if any:

https://www.faa.gov/about/office_org/headquarters_offices/ato/service_units/flight_program_operations

15. Other information:

N/A

Capabilities of Flight Inspection /Flight Validation Service Provider

1. Name of the service provider: **Flight Tech Engineering, LLC**

Address: P.O. Box 3596

Englewood, CO 80155

Tel:(1) 720-465-6170

E-mail: IFP@flight-tech.aero

2. Type(s) and number of flight testing aircraft available, associated charges and conditions:

Type of Aircraft & Aircraft Available		Flight Time Charges per hour (USD)		Other co- ordination s	Used for Validation/ Inspection (V/I)
		Positionin g Flights	Check Flights		
<i>Cirrus SR20</i>	<i>1</i>	<i>Negotiable</i>	<i>Negotiable</i>		<i>V</i>

3. Flight testing capability and estimated flight time:

Radio Navigation Aids	Flight Check Capabilit y (Y/N)	Estimated Flight Check Time		Type of Flight Check System
		Routine	Commissioning	
<i>VOR</i>	<i>N</i>			
<i>DME</i>	<i>N</i>			
<i>MLS</i>	<i>N</i>			
<i>ILS CAT I</i>	<i>N</i>			
<i>ILS CAT II</i>	<i>N</i>			
<i>ILS CAT III</i>	<i>N</i>			
<i>PAR</i>	<i>N</i>			
<i>SAR</i>	<i>N</i>			
<i>SRE</i>	<i>N</i>			
<i>NDB/LOC</i>	<i>N</i>			
<i>Marker Beacon</i>	<i>N</i>			
<i>PAPI</i>	<i>N</i>			
<i>VASIS</i>	<i>N</i>			
<i>RF Interference</i>	<i>N</i>			
<i>GNSS interference</i>	<i>N</i>			<i>(in relation to item 8.)</i>

4. Flight validation capability for instrument flight procedures including PBN

Navigation Specification

Type of Procedures	Flight Validation Capability (Y/N)	Estimated Flight Validation Time		Type of Flight Validation System
		Initial	Periodic Review	
<i>RNP APCH (LNAV)</i>	<i>Y</i>			<i>Manual</i>
<i>RNP APC H (LNAV/VNAV)</i>	<i>Y</i>			<i>Manual</i>
<i>RNP APCH (LPV)</i>	<i>Y</i>			<i>Manual</i>
<i>SBAS CAT I</i>	<i>N</i>			
<i>GBAS CAT I</i>	<i>N</i>			
<i>GBAS CAT II/III</i>	<i>N</i>			
<i>RNAV/RNP SID</i>	<i>Y</i>			<i>Manual</i>
<i>RNAV/RNP STAR</i>	<i>Y</i>			<i>Manual</i>

5. Type of Flight Management System which is used for flight data coding:
 - *Garmin GNS 480, Garmin GTN 750, Garmin G1000*
6. Location and Type of flight simulators which is used for flyability check, if available:
 - *N/A*
7. Charges per hour (USD, tax excluded) for simulation, including flight crew:
 - *Negotiable*
8. GPS interference detection capability, if equipped:
 - *N/A*
9. Languages possibly used by flight testing team:
 - *English*
10. Estimated annual flight time available to assist other Administrations for testing radio navigation aids:
 - *N/A*

11. Advance notice expected before delivery of the service:

- *30 days*

12. State Regulation(s) commonly complied with when delivering flight inspection services:

- *FAA Order 8200.1 and ICAO Doc 8071*

13. State Regulation(s) commonly complied with when delivering flight validation services:

- *FAA Order 8200.1 and ICAO Doc 9906*

14. Provide a link for further information, if any:

- www.flight-tech.aero / www.performancenav.com

15. Other information:

- *Flight Tech Engineering (FTE) is an FAA approved IFP Service Provider specializing in Fixed Wing and Helicopter Instrument Procedure Design and Validation services. IFP Design capabilities include FAA and ICAO criteria standards. FTE can support both civilian and military operations and employs the same IFP design systems as the FAA and United States Air Force (USAF). On-Demand (time sensitive) ARINC/FMS coding, charting, and validation services available.*
- *FAA Approvals: Flight Validation, Simulator Validation, Airborne Obstacle Assessment, Ground Obstacle Validation.*
- *Points of Contact: Fixed Wing: Alec Seybold (aseybold@flight-tech.aero), Rotorcraft: Richard Scott (rscott@flight-tech.aero)*

Notes from FAA, USA: The FAA, USA does not make any sort of endorsement nor hires these providers. In the US, they are used solely for completely private services.

Capabilities of Flight Inspection /Flight Validation Service Provider

1. Name, Country and Address of the service provider: HUGHES Aerospace Corporation

1790 Hughes Landing Blvd, Suite 400, The Woodlands Texas 77380 USA

+1.281.655.3330

Fax: +1.281.360.1761

E-mail: info@hughesaerospace.com

2. Type(s) and number of flight testing aircraft available, associated charges and conditions:

Type of Aircraft & Aircraft Available		Flight Time Charges per hour (USD)		Other coordinations	Used for Validation/ Inspection (V/I)
		Positioning Flights	Check Flights		
<i>PA46T</i>	<i>1</i>	<i>Negotiable</i>	<i>Negotiable</i>		<i>V</i>
<i>R66</i>	<i>1</i>	<i>Negotiable</i>	<i>Negotiable</i>		<i>V</i>
<i>UAS</i>	<i>3</i>			<i>Obstacle</i>	<i>V</i>

3. Flight testing capability and estimated flight time:

Radio Navigation Aids	Flight Check Capability (Y/N)	Estimated Flight Check Time		Type of Flight Check System
		Routine	Commissioning	
<i>VOR</i>				
<i>DME</i>				
<i>MLS</i>				
<i>ILS CAT I</i>				
<i>ILS CAT II</i>				
<i>ILS CAT III</i>				
<i>PAR</i>				
<i>SAR</i>				
<i>SRE</i>				
<i>NDB/LOC</i>				
<i>Marker Beacon</i>				
<i>PAPI</i>	<i>Y</i>			
<i>VASIS</i>	<i>Y</i>			
<i>RF Interference</i>				
<i>GNSS interference</i>				<i>(in relation to item 8.)</i>

4. Flight validation capability for instrument flight procedures including PBN Navigation Specification

Type of Procedures	Flight Validation Capability (Y/N)	Estimated Flight Validation Time		Type of Flight Validation System
		Initial	Periodic Review	
<i>RNP APCH (LNAV)</i>	<i>Y</i>			<i>Automatic</i>
<i>RNP APC H (LNAV/VNAV)</i>	<i>Y</i>			<i>Automatic</i>
<i>RNP APCH (LPV)</i>	<i>Y</i>			<i>Automatic</i>
<i>SBAS CAT I</i>	<i>Y</i>			<i>Automatic</i>
<i>GBAS CAT I</i>				
<i>GBAS CAT II/III</i>				
<i>RNAV/RNP SID</i>	<i>Y</i>			<i>Automatic</i>
<i>RNAV/RNP STAR</i>	<i>Y</i>			<i>Automatic</i>
<i>COPTER RN P APCH</i>	<i>Y</i>			<i>Automatic</i>
<i>COPTER SBAS</i>	<i>Y</i>			<i>Automatic</i>

5. Type of Flight Management System which is used for flight data coding:
- Primarily GTN650 Hughes works directly with GARMIN or Honeywell to create Flight Inspection databases.*
6. Location and Type of flight simulators which is used for flyability check, if available:
- Hughes can source various simulators worldwide for Validation activities*
7. Charges per hour (USD, tax excluded) for simulation, including flight crew:
- TBD – Contact Hughes for a quote.*
8. GPS interference detection capability, if equipped:
- Provide the type of detection equipment and detection method.*
9. Languages possibly used by flight testing team:
- English*
10. Estimated annual flight time available to assist other Administrations for testing radio navigation aids:

- *TBD*
11. Advance notice expected before delivery of the service:
- *30 Days*
12. State Regulation(s) commonly complied with when delivering flight inspection services:
- *NA*
13. State Regulation(s) commonly complied with when delivering flight validation services:
- *FAA, ICAO, Host Regulator*
14. Provide a link for further information, if any:
- www.hughesaerospace.com *Hughes App – iOS, Android*
15. Other information:
- *Hughes is certificated ANSP by the FAA, ICAO and other member states. Hughes provides procedure design, charting, flight inspection and procedure maintenance for both airports & heliports. Hughes can also source aircraft & simulators locally for validation activities.*
 - *Contact Alyce Shingler at alyce.shingler@hughesaerospace.com +1.281.665.3330.*

Notes from FAA, USA: The FAA, USA does not make any sort of endorsement nor hires these providers. In the US, they are used solely for completely private services.