



International
Civil Aviation
Organization

Organisation
de l'aviation civile
internationale

Organización
de Aviación Civil
Internacional

Международная
организация
гражданской
авиации

منظمة الطيران
المدني الدولي

国际民用
航空组织

LN 3/20.1-SA5145

Lima, 1 April 2013

To: Mr. Jean-Michel Boivin, Regional Director of Civil Aviation, West Indies and French Guiana
Mr. Zulficar Mohamed, Director General, Civil Aviation Authority, Guyana
Mr. Falisie Jozef Pinas, Minister of Transport, Communication and Tourism, Suriname

Subject: **RLA/03/901 REDDIG Management System and Administration of the Satellite Segment – Course on ATS Message Handling System (COM-AMHS) Lima, 24 to 28 June 2013**

Action required: Your reply by 13 May 2013

Sir,

I have the honour to refer to the agreements made at the Sixteenth Meeting of the Coordination Committee of project RLA/03/901 (RCC/16), held in Lima, Peru, from 18 to 20 March 2013, by which it was approved the implementation of the course COM-AMHS, as part of the activities of that project for this year.

In this regard, I inform you that the course will be held in this Regional Office from 24 to 28 June 2013 and it is designed for the technical and operational personnel in charge of the installation, operation and maintenance of AMHS systems, and will be conducted by a specialist with wide experience in AMHS, from EUROCONTROL's CNS/ATM INSTILUX Training Centre (Luxembourg). Its detailed content is attached as **Appendix A** to this letter.

The course objective is to present information on the technical design of an AMHS system (data networks, server topology, user configuration, routing tables, monitoring and supervision tools, interconnection with other AMHS systems, etc.), as well as on operational topics, such as the design of an addressing and correct routing policy, strategies of flow migration from AFTN to AMHS, and particular attention to the contents related to interconnection of AMHS systems and operating procedures of resolution and escalation of incidences.

It is expected that by the end of the course participants will have increased their knowledge of the AMHS system, acquiring the information necessary to facilitate the interoperability between AMHS systems installed in the region.

G:\LN03-RLA's\LN 3-20-RLA-03-901 NUEVO REDDIG\3-20-1 Cursos y Reuniones\2013 COM-AMHS\Convocatoria\1- 03901 5145 COM-AMHS Convening.docx

In accordance with the above, I am pleased to invite your Administration to nominate candidates if possible no later than **13 May 2013**, by sending the *Registration Form* included as **Appendix B** with the data of each participant and, if applicable, the *ICAO Fellowship Nomination Form* duly completed, (also attached as **Appendix C**), considering that the reservation of vacancies will be made on a first come first served basis to fill the places available.

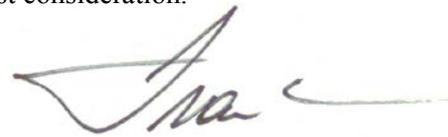
To participate in the course, your Administration might consider the following financing alternatives:

- a) Fellowships under an ICAO Project approved by your country;
- b) Availability of a fellowship under the Regional Project RLA/03/901 for each State participating in this project that does not have the previous option. The administration concerned must provide round trip tickets;
- c) Own resources of your Administration, if lacking any of the previous alternatives.

The documentation will be distributed during the course by electronic means, so it is recommended that participants carry a lap-top.

If further information is required, please contact Mr. Onofrio Smarrelli, CNS Regional Officer, at e-mail osmarrelli@icao.int.

Accept, Sir, the assurances of my highest consideration.



Franklin Hoyer
Regional Director
ICAO South American Office
Lima

Enclosures

As indicated

cc: Mr. Olivier Jouans, Regional Director of ATM services, West Indies and French Guiana
Mrs. Thelma Douglas Pinas, Permanent Secretary, Ministry of Transport, Communication and Tourism, Suriname
Mr. Robby Venlo, acting Director of Civil Aviation, Suriname
Mr. Brian De Souza, acting Director, CASAS, Suriname
C/FOS, C/PIU, ICAO Montreal

APPENDIX A

PRESENTATION ON ATS MESSAGE HANDLING SYSTEM (COM-AMHS) AND INTERCONNECTION ASPECTS

MODULE 01: THEORY FOR THE USER

1. INTRODUCTION
 - Module Objectives
 - The References for this course
2. DATA COMMUNICATIONS TECHNOLOGY
 - Seven Layers
 - Role of Communications in an ATM System
 - ICAO Data Applications
 - ATN Upper/Lower Layer Protocols
 - The move to IP
 - So, what is ATN?
3. MESSAGING AND E-MAIL
 - What is a Message?
 - The Postal Analogy
 - Point to Point Messaging
 - Store and Forward / Retrieve Messaging
4. ATC MESSAGING AND AFTN
 - The ATC Requirement for Messaging
 - Current Messaging Requirements
 - Messaging Application - an ATC Example
 - ICAO Protocols and Standards
 - Services provided by the AFTN
 - AFTN Procedures
 - AFTN Addressing
 - ICAO Regions
 - Message Formats
 - AFTN Inter-Centre Communication
 - AFTN Limitations
 - Why migrate to AMHS
 - Benefits of AMHS
 - The Way Forward
5. X.400: DEFINING THE TERMS
 - What is MHS?
 - Standards Development
 - What is a Message Handling System?
 - Message Structure
 - MHS Information Objects
 - MHS Services
 - The MHS Architecture
 - (A)MHS components: (ATS) Message Server
 - (A)MHS components: (ATS) User Agent
 - (A)MHS Components: The Message Store
 - (A)MHS Components: Access Units
 - The Journey of a Message
 - Management Domains
 - ADMDs and PRMDs
 - AMHS Management Domains
 - 'XX' Country Codes

- OR-Address Forms
- The Need for Directory Services
- Directory Overview
- Security Threats
- The MHS Security Functional Groups

- 6. X.400 - THE COMMUNICATIONS PROTOCOLS
 - Connecting MHS System Components
 - MHS Protocols
 - Underlying Networks: Physical vs. Logical Connections
 - AMHS Network over underlying network
 - Levels of connectivity in the AMHS architecture
 - Why not SMTP?

- 7. X.400 - MTS AND IPMS
 - MTS Functional Groups
 - Basic MTS Envelope
 - Delivery Reports
 - Non-Delivery Reports
 - The IPMS Elements of Service & IPM Heading
 - Receipt, Non-Receipt & Other Notifications

- 8. FROM MHS TO AMHS - ICAO ATN SARPS
 - AMHS SARPs Development
 - Basic and Extended Services
 - Selected Functions of the Extended Services
 - AMHS components: AFTN/AMHS Gateway
 - AMHS Message Formats
 - Message and Report Mappings
 - Message Field Mappings
 - Scenarii for an AFTN SS Message
 - AMHS address types
 - The A in AMHS

- 9. STRATEGY
 - PENS: Pan European Network Services over IP
 - The PENS - Status
 - PENS contract signed
 - COM05
 - COM05 progress report
 - Where are we today with AMHS?
 - HARE Programme
 - Single European Sky - Messaging
 - AMHS in SESAR
 - SWIM and SESAR
 - Future Communications Infrastructure

- 10. AMHS IN THE WORLD
 - AMHS in ASIAPAC
 - AMHS ASIAPAC Network
 - Transition - ASIAPAC
 - AMHS in CARSAM

- 11. CONCLUSION
 - Conclusion
 - Programme

MODULE 02: AMHS SYSTEM DESIGN AND TECHNICAL ISSUES

1. INTRODUCTION
Objectives
2. DRIVERS FOR AFTN MIGRATION
Reminder: Why migrate to AMHS
3. AMHS SYSTEM DESCRIPTION
AMHS System Description
General AMHS Overview
ATSMHS traffic flows
How does an X.400 system work?
AMHS information model
AMHS Objects
Flow of Information Objects in AMHS
AMHS activity over underlying networks
ATM applications over UNDERLYING NETWORKS
Topology of AMHS servers: centralised vs. distributed
Network characteristics determined by topology
European ATS Messaging Profile
AMHS QoS Requirements
4. AMHS SYSTEM DESIGN CRITERIA
Phases for AMHS Deployment
Transaction Examples
Technical Criteria
Modular Solution
Scalable and Portable Solution
5. AMHS USER TYPES
Evolution/Migration of Users
TYPE of ATM COMs SERVICES
Objectives for the User Migration Process
How does a User Agent Work?
What does the User do?
... and what tools does the user have?
UA: Free Text Format Message
UA: Auto-Formatting AIS Messages
UA: Auto-Formatting ATS Messages
UA: Auto-Formatting MET Messages
UA: Non Delivery Reports (NDR)
UA: Receipt Notifications (RN)
UA: Tracking Sent Messages
UA: Filtering Tool
UA: Message Backup
AU: Access Unit
Logical Connections for the ICARO/AMHS Solution
Access Unit: EAD Solution
EURONOTAM (I): COMMUNICATIONS FLOW
EURONOTAM (II): PHYSICAL TOPOLOGY
Exercises

6. AMHS SYSTEM MANAGEMENT TOOLS
 - Support Levels
 - Main AMHS Management Tools
 - High Level Administration Tool (HILA) (1)
 - HILA (2): Users and Adjacent MTAs
 - HILA (3): Local Users Administration
 - HILA (4): Adjacent MTAs Admin
 - HILA (5): Routing Table Administration
 - Local and Central Supervision
 - SNMP Alarms Supervision
 - End-to-End View Based on SNMP
 - Tracking Tool (1)
 - Tracking Tool (2): Web-based Administration Tool
 - Tracking Tool (3): Search Criteria
 - Tracking Tool (4): Results
 - Messaging Activity Monitor (1)
 - Messaging Activity Monitor (2): Users' View
 - Messaging Activity Monitor (3): Adjacent MTA's View
 - Messaging Activity Monitor (4): Alarms View
 - Messaging Activity Monitor (5): Global View
 - UA Archive: Control Position
 - AMHS Queue Monitoring
 - Historical Data Storage Manager
 - Statistics
 - Time Synchronisation: Network Time Protocol NTP
 - Remote Monitoring

7. AMHS COMMON FACILITIES
 - Common Facilities
 - Pan-European IP Network: PENS
 - Example: Madrid-Frankfurt IP Connection
 - PENS current situation
 - MAIN OBJECTIVES AND BENEFITS OF PENS
 - POTENTIAL PENS USERS
 - CONSIDERATIONS About SWIM, AMHS and PENS
 - Transition Plan IPv4/IPv6
 - Protocol Stacks for Transition-Phase AMHS Applications
 - Management Center (CMC)
 - EUR/NAT COM Chart
 - ATS Messaging Management Centre (AMC)
 - Directory Services
 - Name Resolution
 - Address Conversion
 - UA: Directory Query
 - Inter-Regional Gateways
 - An MTA with Dual Stacks
 - SITA TYPE B / AMHS Gateway (1) : Initial Situation
 - SITA TYPE B / AMHS Gateway (2): Message Migration
 - AMHS Security
 - Testing and Training Facilities
 - Examples of Testing Tools
 - Human resources analysis for IP/AMHS interoperability activities
 - Platform Standardization Test

MODULE 03: AMHS OPERATIONAL ISSUES

1. AMHS OPERATIONAL ISSUES
 - Main AMHS Operational Issues
 - AMHS Addressing: CAAS
 - AMHS Addressing: XF
 - AMHS Addressing: CAAS and XF
 - AMHS Addressing: CAAS vs. XF
 - How to define a national CAAS scheme
 - AMHS Addressing Registry
 - XF Address Conversion: Use of the ICAO registry
 - CAAS Addr. Conversion: Use of the ICAO registry
 - Global AMHS Address Registration
 - International Topology and Routing Strategy
 - Conversion between an AMHS IPM and an AFTN message
 - Mapping priorities
 - Conversion of AFTN Service Messages
 - Acknowledgement of SS-priority messages
 - Reception of an AMHS message with ATS-Message-header SS and RN not requested
 - Reception of an AMHS message with ATS-Message-header no SS and RN requested
 - Reception of RN with subject message not generated by the AFTN/AMHS GW
 - AMHS to AFTN Direction (reception of a Non-Receipt-Notification)
 - Message rejection due to the use of an unknown addressee indicator or recipient
 - Rejection of an AFTN-to-AMHS message: Transfer of NDR to the control position
 - Reception of NDR with subject message not generated by the AFTN/AMHS GW
 - AFTN to AMHS direction: Unsuccessful conversion of addressee indicator in incoming
 - AFTN to AMHS Direction (unsuccessful conversion of origin OGN indicator)
 - AMHS to AFTN Direction (unsuccessful conversion)
 - AMHS to AFTN Direction (non-delivery and out-of-line situations)
 - Legal AMHS Recording
 - Legacy Procedures
 - Management of MTA names and passwords
 - Associations between MTAs: Dialogue mode
 - Simultaneous P1 associations
 - Application and network timers optimization
 - AMHS operational issues

2. OPERATIONAL AFTN MIGRATION TO AMHS
 - AFTN to AMHS Migration
 - Decisions during AMHS Planning
 - Pre-requisite tasks
 - Tasks to be performed with every AMHS COM centre
 - Testing phases
 - Preoperational scenario
 - Details of the preoperational phase
 - AFTN Flows migration to AMHS: Objectives
 - AFTN Flows migration to AMHS: Initial situation
 - AFTN Flows migration to AMHS: Step 1
 - AFTN Flows migration to AMHS: Step 2
 - AFTN Flows migration to AMHS: Step 3
 - AFTN Flows migration to AMHS: Step 4a
 - AFTN Flows migration to AMHS: Step 4b
 - Operational AFTN migration to AMHS
 - Interconnection considerations

3. THE FIRST PROJECT ACTIVITIES
 - Current Status
 - FIRST
 - Outcomes of the FIRST Team
 - First Operational IP Link: MADRID-FRANKFURT
 - FIRST Team: Testing Structure
 - FIRST Team: Testing Development

4. CONCLUSION, DOCUMENTATION AND GLOSSARY
 - ICAO documentation
 - AMHS SARPs sub-volume 3
 - Need for Amendment to SARPs (PDRs)
 - Glossary
 - Conclusion



APÉNDICE B / APPENDIX B

ORGANIZACIÓN DE AVIACIÓN CIVIL INTERNACIONAL INTERNATIONAL CIVIL AVIATION ORGANIZATION

RLA/03/901 Regional Project / Proyecto Regional RLA/03/901

CURSO SOBRE EL SISTEMA DE MANEJO DE MENSAJES ATS (COM-AMHS) COURSE ON ATS MESSAGE HANDLING SYSTEM (COM-AMHS)

Lima, Perú, 16 al 20 de julio de 2012/ Lima, Peru, 16 to 20 July 2012

FORMULARIO DE REGISTRO / REGISTRATION FORM

1. Estado/*State*:
Organismo/*Organization*: _____

2. Nombre/*Name*: _____

3. Cargo/*Position*: _____

4. Dirección oficial /
Business address: _____

5. Tel.: _____ E-mail: _____

6. Hotel o dirección en
la ciudad/ *Hotel or
local address*: _____

7. Información de vuelo/ *Vuelo llegada/ fecha/ hora/
Arrival flight/ date/ hour*: _____
*Vuelo salida/ fecha/ hora/
Departure flight/ date/ hour*: _____

Firma/
Signature: _____ Fecha/
Date: _____

Enviar este formulario debidamente completado a: / *Send this form duly completed to: mail@lima.icao.int*



INTERNATIONAL CIVIL AVIATION ORGANIZATION
TECHNICAL COOPERATION BUREAU

GUIDE FOR THE COMPLETION OF ICAO FELLOWSHIP NOMINATION FORM

(This sheet should be detached by the originator prior to submitting the attached Fellowship Nomination Form to the local or regional UNDP Office for transmission to ICAO)

It is in the interests of Governments to ensure that the attached Nomination Form is fully completed for each nominee in *original and two copies*. All Nomination Forms should be submitted to the local UNDP Resident Representative who will then forward three copies to the appropriate ICAO Regional Representative. Nomination Forms should be received at the ICAO Regional Office at least *two months prior* to the starting date of the proposed courses.

PART I – NOMINATION BY GOVERNMENT

Please note the following:

Paragraph 1 should indicate the *main* field of training as specified in SECTION I – LIST OF TRAINING COURSES of the AVIATION TRAINING DIRECTORY OF ICAO.

Paragraph 2 should provide *specific* details as regards Host Countries, Training Institutes and Courses. For example: Air Traffic Control – Aerodrome and Approach Control, Procedural; Aircraft Maintenance – Boeing 737 Air Frame and Powerplant Systems should be shown instead of general phrases such as ATC, Aircraft Maintenance, etc.

Paragraph 4. The objectives of the Fellowship should be stated concisely and accurately.

PART II – NOMINEE'S PERSONAL HISTORY

The technical and/or specialized training data is indispensable in the formulation of the Fellow's programme to indicate what prerequisite/basic or advanced course may have to be added/eliminated to achieve the optimum result. The employment data is also an essential ingredient in the formulation of the programme, as it helps to define the type and level of the requested training.

PART III – LANGUAGE TEST

Unless a Fellow has had his/her academic education, especially High School and/or College, in the language of instruction to be used by the Host Countries proposed for the Fellowship, it is essential that a Language Test be administered at a certified Language School or at the local Embassy/Consulate of the Host Country to ascertain that the Fellow understands, reads, writes and speaks the instructional language sufficiently well to receive instruction in it.

Please see reverse side for additional information

PART IV-A and PART IV-B – MEDICAL REPORTS

It is essential that a nominee be healthy and free of any sickness which may require further examination and/or treatment during the tenure of the Fellowship. ICAO/UNDP will not pay any medical expenses incurred by a Fellow for sicknesses existing prior to the starting date of his/her Fellowship. Such expenses must be borne by the Fellow and/or his/her Government. A prospective Fellow must be examined by a medical doctor recommended by the local UNDP Office. Flight Crew Members and Air Traffic Controllers should take a thorough medical examination (Part IV-B) as specified in ICAO Annex 1, Chapter 6, paragraph 6.6, if they are pursuing a course leading to the award of a license. All others should take a general physical examination including a chest X-ray (Part IV-A).



INTERNATIONAL CIVIL AVIATION ORGANIZATION FELLOWSHIP NOMINATION FORM

NOTE: Each item must be completed in full and all entries should be typewritten or written in block letters. The completed form should be forwarded in triplicate to ICAO through the Office of the UNDP Resident Representative for the country concerned at least two months prior to the starting date of the proposed programme. The UNDP Resident Representative will in turn forward the completed Form in triplicate to the appropriate ICAO Regional Representative.

PART I – NOMINATION BY GOVERNMENT

The Government of _____ hereby:

1. Nominates: Mr./Mrs./Ms.* _____
(family name) (first name) (middle name)

for an ICAO fellowship in the field of _____
(Please identify main Field of Training in accordance with the Aviation Training Directory of ICAO, Section I – List of Training Courses)

2. Requests the following programmes of training under this fellowship:

(List in chronological sequence the various stages of training or study envisaged and identify the level as *ab initio*, advanced, refresher, further specialization, familiarization tour, on-the-job training (OJT), etc. If space is insufficient, please attach additional sheet using the same format.)

Host Country(ies)	Training Institute(s) (firms/organizations)	Specific Courses	Period		Duration (weeks)
			from	to	

Total duration

NOTE: The final fellowship study programme will be prepared by ICAO in consultation with the host countries and/or institutions, as the case may be. It may differ in detail, particularly regarding the duration of training and choice of host countries, from that requested. However, the objectives of the requested training programme will be respected by ICAO whenever possible.

*Delete that which is not applicable.

**INTERNATIONAL CIVIL AVIATION ORGANIZATION
FELLOWSHIP NOMINATION FORM**

PART I – cont'd

3. Requests that this fellowship be financed under the following technical co-operation programme:
(Check as appropriate and insert project number)

- | | | | | | |
|--------------------------|---------------------------------|--------------|-------|-----------|-------|
| <input type="checkbox"/> | UNDP Country Programme | Project No.: | _____ | Post No.: | _____ |
| <input type="checkbox"/> | UNDP Regional Programme | Project No.: | _____ | | |
| <input type="checkbox"/> | UNDP Interregional Programme | Project No.: | _____ | | |
| <input type="checkbox"/> | Trust Funds agreement with ICAO | Project No.: | _____ | | |

4. Declares that the objectives of this fellowship are:

5. With respect to the nominee's transportation to and from host country(ies), agrees that:

- Will assume costs
 Will not assume costs

6. Certifies that:

- a) The nominee is obligated to return to his/her country, on completion of the fellowship programme for duty assignment in civil aviation for a minimum period of ____ years.
- b) The absence of the candidate by the granting of the fellowship will not adversely affect the rank, rights, salary or seniority corresponding to his job.
- c) All sections of this Nomination Form have been duly completed and the nominee is suitable for the proposed Training Programme.
- d) Nominee is/will be in possession of a valid passport which does not expire before the termination date of the Fellowship.

Signature of Civil Aviation Authority

Date: _____

Name: _____
(type or print)

Title: _____
AFFIX OFFICIAL SEAL OR STAMP

OBSERVATIONS BY ICAO PROJECT MANAGER / MISSION CHIEF

I certify that all sections of this Nomination Form have been duly completed and the nominee is suitable for the proposed Training Programme.

Date: _____

Signature

**INTERNATIONAL CIVIL AVIATION ORGANIZATION
FELLOWSHIP NOMINATION FORM**

PART II – NOMINEE’S PERSONAL HISTORY

1. Name:	2. Marital Status:	3. Date of birth:
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4. Private address (for mailing purposes):

Telephone _____ E-mail _____

5. Name and address of person to be notified in case of emergency (other than the government authorities):

Telephone _____ E-mail _____

6. Language ability:

a) Mother tongue _____

b) Language/s used in Primary and Secondary school _____

c) Other language/s of which nominee has a working knowledge _____

d) Language/s to be used in proposed fellowship programme _____

7. School education record:

Name, Town, Country of School/s	Period		Grade completed and certificate acquired
	from	to	

8. College/university education record:

(If you have graduated with a diploma or degree indicate under “subject/s studied” only the major subject/s studies. Otherwise indicate all the subjects studied)

Name of college/university	Subject/s studied	Period		Degree /Diploma acquired
		from	to	

9. Technical and/or specialized training record:

(Proceed as with paragraph 8. Please list and specify all previous training received through ICAO fellowships for further education)

Name and place of Training Institute	Subject/s studied	Period		Duration (weeks)	Diploma/Certificate acquired
		from	to		

**INTERNATIONAL CIVIL AVIATION ORGANIZATION
 FELLOWSHIP NOMINATION FORM**

PART II – cont’d

10. Employment record:
 (Indicate last five years and/or two positions)

Employer (name of firm/organization)	Position last held	Period		Duties and responsibilities
		from	to	

11. Nominee’s statement:

- i) I understand that the ICAO fellowship will not become effective and no travel can be undertaken until I receive written notification and instructions of the award from ICAO.
- ii) Should I be awarded this fellowship I hereby undertake to:
 - a) Conduct myself, at all times, in a manner compatible with my status as holder of an ICAO fellowship;
 - b) Devote all my time during the fellowship programme to the successful pursuit of my studies as directed by ICAO and by the designated institution in the country of study;
 - c) Refrain from engaging in political, commercial, or any activities detrimental to the host country;
 - d) Submit reports, as required by ICAO and comply with all ICAO instructions; and
 - e) Return to my country, on termination of my fellowship programme, and to apply my newly acquired knowledge to further the development of civil aviation in my country.

I certify to the best of my knowledge that all the information given above is true in all respects.

Date: _____

 Nominee’s Signature

**INTERNATIONAL CIVIL AVIATION ORGANIZATION
FELLOWSHIP NOMINATION FORM**

PART III – LANGUAGE TEST

Note: This test is only required if the language to be used during the proposed fellowship programme is different from the mother tongue of the nominee or from the language used in the Primary and Secondary schools where he/she acquired his/her basic education (see PART II – Item 6). The test should be conducted by a school of language or university unless otherwise designated by ICAO to meet the requirements of the host country. The office of the UNDP Resident Representative or ICAO Technical Cooperation Mission should be consulted in this regard.

Name of institution conducting the examination: _____

Nominee's name: Mr./Mrs./Ms.*: _____

Language for which test was set: _____

RESULTS

(Check as appropriate)

1. Understanding:

- a) Understands without difficulty when addressed at normal speed.
- b) Understands nearly everything at normal speed although occasional repetition may be necessary.
- c) Understands almost everything if addressed slowly and carefully.
- d) Requires frequent repetition and/or translation of words and phrases.
- e) Does not understand even the simplest conversation.

2. Speaking:

- a) Speaks fluently, accurately and is easily intelligible.
- b) Occasionally makes errors which do not, however, obscure meaning.
- c) Makes frequent errors which occasionally obscure meaning.
- d) Speaks with so much difficulty that comprehension is difficult.
- e) Errors in speech so severe as to make comprehension virtually impossible.

3. Reading:

- a) Reads fluently with full comprehension.
- b) Reads slowly but understands almost everything he/she reads.
- c) Reads with difficulty; often consults the dictionary.
- d) Cannot understand what he/she reads.

4. Writing:

- a) Writes with ease and accuracy.
- b) Writes with few mistakes; can be understood.
- c) Writes with difficulty and makes frequent mistakes.
- d) Cannot write.

CONCLUDING REMARKS

Would this person be able to follow a technical course in this language? Yes No

Date: _____

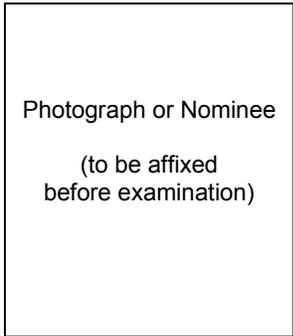
Signature of examiner

Name: _____

(type or print)

AFFIX OFFICIAL SEAL OR STAMP

*Delete that which is not applicable



**INTERNATIONAL CIVIL AVIATION ORGANIZATION
 FELLOWSHIP NOMINATION FORM**

PART IV - A – MEDICAL REPORT

Notes:

1. Flight Crew Members and Air Traffic Controllers who are to undergo training for the purpose of obtaining a license in accordance with ICAO Annex 1 shall use the form in Part IV-B.
2. Every nominee must undergo a complete medical examination conducted by a registered medical practitioner, including thorough clinical and laboratory examinations and X-ray of the chest. Medical papers (examination, laboratory, X-ray results, etc.) should not be forwarded unless requested.

The undersigned, Dr. _____ having completed the medical examination of nominee Mr./Mrs./Ms.* _____ whose photograph appears above, certifies the following:

(Check as appropriate)

The Nominee:

1. Is physically able to travel abroad? _____
2. Is mentally and physically able to carry out intensive studies? _____
3. Is free from infectious diseases? _____
4. Has good hearing? _____
5. Has good eyesight? _____
6. Is free from diseases that require treatment, or periodic medical examination during the proposed duration of the fellowship programme? _____

Yes	No

Additional comments by Medical Practitioner:

Date: _____

 Signature of Medical Practitioner

 *Delete that which is not applicable

AFFIX OFFICIAL SEAL OR STAMP
 (to be affixed across photograph also)

INTERNATIONAL CIVIL AVIATION ORGANIZATION FELLOWSHIP NOMINATION FORM

PART IV - B - cont'd

(Every nominee must undergo a complete medical examination, conducted by a designated medical examiner, including thorough clinical and laboratory examinations and X-ray of the chest. Medical papers (examination, laboratory, X-ray results, etc.) should not be forwarded unless requested. THIS PAGE TO BE COMPLETED BY MEDICAL EXAMINER.)

Height	Weight	Build - Slender <input type="checkbox"/>	Medium <input type="checkbox"/>	Heavy <input type="checkbox"/>	Obese <input type="checkbox"/>
		Normal	Abnormal		
Head, face, neck and scalp				Vascular system	Normal
Nose				Abdomen and viscera (including hernia)	
Sinuses				Anus and rectum (hemorrhoids, fistula, prostate)	
Mouth and throat				Endocrine system	
Ears, general (int. & ext. canals)				G-U system	
Drums (perforation)				Upper and lower extremities (strength, range of motion)	
Eyes, general				Spine, other musculoskeletal	
Ophthalmoscopic				Identifying body marks, scars, tattoos	
Pupils (equality and reaction)				Skin and lymphatics	
Ocular mobility (associated parallel movement, nystagmus)				Neurologic (tendon reflexes, equilibrium, sense, co-ordination, etc.)	
Lungs and chest (including breasts)				Psychiatric (specify any personality deviation)	
Heart (thrust, size, rhythm, sounds)				General systemic	

Blood pressure	Systolic	} sitting			Distant vision:		
	Diastolic				Right eye:	20/	Corrected to 20/
	Systolic	} recumbent			Left eye:	20/	Corrected to 20/
	Diastolic			Both eyes:	20/	Corrected to 20/	
Pulse: sitting					Near vision		N Chart value:
					Intermediate vision		N Chart value:

	Hearing		Audiometry				
	cv	wv	500 1000 2000 3000			Normal	Abnormal
Right ear	ft	ft	dB loss <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Left ear	ft	ft	dB loss <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

LABORATORY EXAMINATIONS

Urinalysis Microscopic:	Sugar	Albumin	Blood analysis:	Hb
			Sedimentation rate	
ECG	<input type="checkbox"/> Normal	<input type="checkbox"/> Abnormal	Chest X-ray	<input type="checkbox"/> Normal <input type="checkbox"/> Abnormal

Summary (Abnormal findings, remarks and recommendations)

Nominee is/is not* medically fit for flight crew/air traffic control* duties

MEDICAL EXAMINER'S DECLARATION

I hereby certify that I personally examined the applicant named on this medical examination report, and that this report with any attachment embodies my findings completely and correctly.

Date and place of examination	Aviation medical examiner's signature
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NOTE: The above test has been conducted in accordance with the provisions detailed in Chapter VI of ICAO Annex 1 – *Personnel Licensing*.

*Delete that which is not applicable