INTERNATIONAL FEDERATION OF AIR TRAFFIC CONTROLLERS' ASSOCIATIONS

63rd ANNUAL CONFERENCE
15 – 19 April 2024, Singapore

REVIEW OF THE IFATCA TRAINING (TRNG) POLICY

Presented by PLC

SUMMARY

The IFATCA section on training (TRNG) in the TPM was last updated in 2007, and has had various amendments on specific subjects within the section since 2007. PLC was tasked to review the complete TRNG section in the TPM and assess whether any policies required updating.

1. INTRODUCTION

1.1. The International Federation of Air Traffic Controllers' Association (IFATCA) section on training (TRNG) in the Technical and Professional Manual (TPM) was last updated during the 46th Annual Conference in Istanbul, Turkey 2007, and has had various amendments on specific subjects within the section since 2007.

1.2. The Professional and Legal Committee (PLC) was tasked to review the TRNG section of the IFATCA TPM.

1.3. The policy change will be presented in the following manner, this is to highlight the proposed change to IFATCA Member Associations.

1.4. IFATCA Policy and proposed change:

IFATCA TPM (20XX), TRNG X.X.X – Title of the policy

Proposal:

~~Struck out text, present in the original policy but proposed for deletion~~ New text inserted (so this is what's added in the proposal) original text, that was there originally and proposed to keep.

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2. DISCUSSION

2.1. **TRNG 9.1.1 AGE**

2.1.1. The age of an applicant, as far as the online archive goes, has been mentioned for the first time in WP 11 - Montréal 1970. A few statements were made in this working paper, one of which mentioned the minimum age of 18, quote:

> *"The candidate controller should be at least 18 years old, owing to the fact that a certain degree of maturity is required because of the responsible task he is called upon with reference to the safety of human life and prove him fitness [sic] to exercise a function of command."*

2.1.2.   It also mentioned the upper age limit, quote:

> *"The upper age limit should be not older than 30, so as to enable the applicant to mentally assimilate new techniques and to learn new concepts during the instructional course, keeping in mind that it is intended to keep up the instructional phase to the highest rating within air traffic control."*

2.1.3.   The working paper also states the subject of age may need some considerations taking local necessities and the degree of development of the aviation industry into account, and that the upper limit could be higher depending on previous aviation experience of the candidate.

2.1.4.   No policy recommendation can be found in this working paper, and thus it is not possible to say if and what exact policy was created. However, in WP 11 - Dublin 1972, a paper was accepted and amended, resulting in the current IFATCA policy "Applicants without previous aviation experience should be between 18 and 25 years."

2.1.5.   This policy was mentioned again in WP 49 - Brussels 1979, and reviewed in WP 164 - Istanbul 2007 and WP 157 - Costa Rica 2019, where the policy had been examined and no update was necessary at the time.

2.1.6.   Apart from the IFATCA policy, the International Civil Aviation Organisation (ICAO) Annex 1, 4.4.1.1 requires that an applicant for an air traffic control licence shall not be less than 21 years of age.

2.1.7.   The European Aviation Safety Agency (EASA) Commission Regulation (EU) 2015/340 of 20 February 2015, ATCO.B.005, does not explicitly require a minimum age for an ATCO licence, however, it is necessary to hold a student controller licence and complete unit training in order to be issued an ATCO licence. The minimum age for a student controller licence is 18 years of age. In practice, this results in a minimum age of 18 years old plus the duration of the unit training.

2.1.8.   In the IFATCA Information Handbook (IHB), recruitment requirements can be found for many Member Associations (MAs). A wide variation of different age limits can be found in this section, which emphasises the fact that it is hard to determine general age limits for applicants.

2.1.9.   General consensus can be found regarding the minimum age limit of at least 18 to 21 years old, necessary to be mature enough and prepared for the responsible task of being an air traffic controller.

2.1.10.   The upper limit for an applicant does not exist as a requirement by ICAO, the EASA, and different age limits can be seen throughout the IHB. The IFATCA policy states that an applicant without previous aviation experience should be 25 years of age or younger. However, aviation experience is a quite subjective term as aviation is a broad industry.

2.1.11.   Age limits can also be seen as a discriminatory requirement and the policy is not sustained by any (scientific) evidence. The age limit of 18 to 25 years old together with 'aviation experience' as mentioned above are subjective requirements. Based on this,

with the fact that ICAO and EASA already provide a minimum age limit for a licence, PLC finds that the IFATCA policy is unnecessary and proposes removing it from the TPM.

2.1.12.   IFATCA Policy and proposed change:

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IFATCA TPM (2023), TRNG 9.1.1 – AGE

Proposal:

~~Applicants without previous aviation experience should be between 18 and 25 years.~~
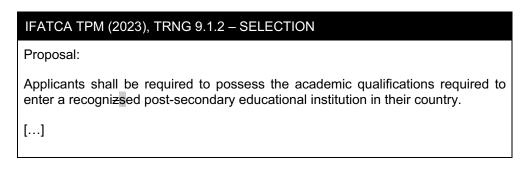
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2.2.   TRNG 9.1.2 SELECTION

2.2.1.   The definition of a post-secondary institution, derived from https://tophat.com/glossary/p/postsecondary-education/, is:

> *'Post-secondary education, also known as tertiary education, is the education level that follows after successfully completing secondary education, which is often called high school. Post-secondary education includes universities and colleges and similar institutions and degrees.'*

2.2.2.   The current IFATCA policy provides a minimum level of education (at least the qualifications to enter post-secondary education) to start as an Air Traffic Control (ATC) applicant.

2.2.3.   This policy ensures that these standards always need to be met to start as an applicant, and it provides some freedom to the ANSP or an Approved Training Organisation (ATO) to require a higher entry-level of education for an applicant. However, it doesn't provide the freedom to lower the entry education level for an applicant.

2.2.4.   The policy does recognise the significance of the air traffic control profession, and according to the IFATCA Information Handbook (IHB) and websites of ANSPs, the entry-level of many ANSPs are broadly similar to this policy.

2.2.5.   However, as ANSPs are dealing with staffing shortages these days, one can argue that it might be necessary to lower the required education level to apply as an applicant to broaden the group of people that can apply for the selection process of air traffic controllers. On the other side of the spectrum, it could also be seen as lowering the standards especially if it is done because of staff shortages reasons. If the entry level is lower the course standard could also be lowered to accommodate passing of the course. This practice could snowball into a less competent controller in the field.

2.2.6.   After extensive discussion, PLC concluded that this topic needs more research to decide whether the policy is still valid, as PLC did not find any (scientific) research related to this topic.

2.2.7.   PLC is of the opinion that the policy should not be deleted as long as there hasn't been more research on this topic and therefore should be investigated further in a separate working paper, and therefore proposes to add it to the working programme for next year. PLC however proposes a small editorial change and proposes that the definition of post-secondary institution should be incorporated into the TPM.

2.2.8.   IFATCA Policy and proposed change:

IFATCA TPM (2023), TRNG 9.1.2 – SELECTION
Proposal: Applicants shall be required to possess the academic qualifications required to enter a recognized post-secondary educational institution in their country. […]

2.2.9.   The following policy has been examined and does not need an update at this time.

IFATCA TPM (2023), TRNG 9.1.2 – SELECTION
Proposal: […] Applicants shall pass the selection standards. […]

2.2.10.   According to ICAO Annex 1 section 4.3.2 Medical Fitness, medical requirements apply to student controllers, quote:

> *"A Contracting State shall not permit a student air traffic controller to receive instruction in an operational environment unless that student air traffic controller holds a current Class 3 Medical Assessment."*

2.2.11.   According to ICAO Annex 1 section 4.4.1.4 Medical Fitness, apply as well for issuing an ATCO licence, quote:

> *"The applicant shall hold a current Class 3 Medical Assessment."*

2.2.12.   These requirements ensure that students and licensed ATCOs shall comply with the ICAO class 3 medical requirement, especially when working in an operational environment. Based on this, it makes sense that the medical examinations take place during the selection process and shall apply to all selection candidates.

2.2.13.   PLC is of the opinion that this policy needs some rewording and proposes to amend the policy as indicated.

2.2.14.   IFATCA Policy and proposed change:

IFATCA TPM (2023), TRNG 9.1.2 – SELECTION
Proposal: […]

> The ICAO medical requirements and other tests ~~shall apply to all candidates for selection and other tests~~ considered appropriate by national authorities, ~~should~~ shall apply to all selection candidates. ~~be employed. The final selection of prospective controllers should be made by licenced ATCOs together with professional assessors.~~
>
> and:
>
> The final selection of student controllers shall be made by licensed air traffic controllers together with the selection board.
>
> […]

2.2.15. PLC is of the opinion that IFATCA should have a much stronger stance when it comes to discrimination and therefore proposes that the policy should be amended as indicated.

2.2.16. IFATCA Policy and proposed change:

> ### IFATCA TPM (2023), TRNG 9.1.2 – SELECTION
>
> Proposal:
>
> […]
>
> There ~~should~~ shall be no discrimination in the selection of air traffic controllers.
>
> […]

2.2.17. It is important that MAs are involved in the process of the selection of air traffic controllers and cooperate with their ANSPs responsible staff for this process. Therefore, it is necessary that IFATCA has a policy on this matter.

2.2.18. The policy could use some minor new formatting and wording and PLC proposes to amend the policy as indicated.

2.2.19. IFATCA Policy and proposed change:

> ### IFATCA TPM (2023), TRNG 9.1.2 – SELECTION
>
> Proposal:
>
> […]
>
> Member Associations should cooperate with those responsible for the selection of air traffic controllers in their country, and obtain agreement on:
>
> 1. The composition of the selection board, including representation by the Member Association where appropriate;

> 2. A definite list of performance criteria that would be sought by the selection board;
> 3. The procedures of the selection process.
>
> […]

2.2.20.   The following policy has been examined and does not need an update at this time.

> **IFATCA TPM (2023), TRNG 9.1.2 – SELECTION**
>
> Proposal:
>
> […]
>
> Aptitude tests specifically designed for air traffic controllers shall be included in the selection process for air traffic controllers.
>
> […]

2.2.21.   While determining which candidates are suitable to start their ATC training after the selection process, the board that makes these decisions shall include persons with knowledge of different aspects of ATC and selection methods and procedures. This will enable the selection board, together with licensed air traffic controllers, to make informed decisions regarding the selection process.

2.2.22.   Therefore, the selection board shall include at least a psychologist familiar with all aspects of ATC, a controller trained in selection methods and procedures, and a professional assessor, such as an air traffic controller trained or specialised in being an assessor.

2.2.23.   To complement the current IFATCA policy, PLC proposes to amend the policy as indicated.

2.2.24.   IFATCA Policy and proposed change:

> **IFATCA TPM (2023), TRNG 9.1.2 – SELECTION**
>
> Proposal:
>
> […]
>
> The selection board shall include at least:
>
> 1. A psychologist trained in, or and familiar with, all aspects of ATC;
> 2. And an air traffic controller trained in selection methods, and procedures;
> 3. A professional assessor.
>
> […]

2.2.25.   The following policy has been examined and does not need an update at this time.

IFATCA TPM (2023), TRNG 9.1.2 – SELECTION
Proposal: […] Member Associations, in consultation with their ANSPs, shall encourage the development of suitable static and dynamic aptitude tests for the selection of air traffic controllers. […]

2.2.26.   The concept of Team Resource Management (TRM) is mentioned in this part of the TPM as stated below.

2.2.27.   PLC concluded that the idea behind this policy is that it is useful to consider the competencies relevant to TRM, such as teamwork, problem-solving, decision making and self-management, during the recruitment and selection process of air traffic controllers. Therefore, the scope of this policy is relevant but it needs some clarification.

2.2.28.   There is a separate part in the TPM, TRNG 9.1.3 TEAM RESOURCE MANAGEMENT, in which is described what the definition of TRM is, the importance of TRM is recognised and that it shall be implemented universally, continuously throughout the course of an air traffic controllers' career.

2.2.29.   PLC proposes to remove the policy on TRM from TRNG 9.1.2 SELECTION of the TPM and add a new paragraph regarding the competencies relevant to TRM in the TRM (TRNG 9.1.3 TRM) section of the TPM. Therefore, PLC proposes to remove the policy from the TPM.

2.2.30.   IFATCA Policy and proposed change:

IFATCA TPM (2023), TRNG 9.1.2 – SELECTION
Proposal: […] ~~Team Resource Management as a concept should be considered in the selection of ATCOs.~~ […]

2.3.   TRNG 9.1.3 TEAM RESOURCE MANAGEMENT (TRM)

2.3.1.   In the current IFATCA policy about Team Resource Management (TRM), the specific location of the ICAO definition and the definition itself are provided in the policy. This is unnecessary as many ICAO definitions in the TPM are not provided with the exact

ICAO source in the IFATCA policy itself, and it is not future-proof as such a specific reference to a location can get outdated.

2.3.2.   The ICAO definition of TRM, according to ICAO Doc 9683, 1st edition (1998), is "To make optimal use of all available resources - people, equipment, and information - to enhance the safety and efficiency of Air Traffic Services."

2.3.3.   IFATCA recognises the importance of TRM and PLC finds it necessary to keep emphasising this in a policy, and proposes to rewrite and amend the current IFATCA policy.

2.3.4.   As already said in the policy, TRM shall be implemented throughout the course of an ATCO's career. Because of the importance of TRM for an air traffic controller, it is useful to consider the competencies relevant to TRM, such as teamwork, problem-solving, decision-making, and self-management during the recruitment process and training of air traffic controllers.

2.3.5.   Therefore, PLC proposes to add and amend the policy as indicated.

2.3.6.   IFATCA Policy and proposed change:

IFATCA TPM (2023), TRNG 9.1.3 – TEAM RESOURCE MANAGEMENT (TRM)

Proposal:

~~For the purposes of defining the concept of TRM, IFATCA accepts the ICAO definition of TRM in ICAO Doc 9683, 1st Ed. (1998), Human Factors Considerations in CNS/ATM Systems, Appendix to Chapter 5 §14: "To make optimal use of all available resources – people, equipment, and information – to enhance the safety and efficiency of Air Traffic Services.~~

IFATCA ~~recognizes~~recognises the importance of TRM as defined by ICAO. TRM shall be universally implemented, continuously throughout ~~the course of~~ an ATCO's career.

Competencies relevant to TRM such as teamwork, problem-solving, decision-making, and self-management should be considered in the recruitment process and training of ATCOs.

2.4.   TRNG 9.2.1 GENERAL SCHEDULE FOR A 3 TO 5 YEAR TRAINING

2.4.1.   The current IFATCA policy, 9.2.1 GENERAL SCHEDULE FOR A 3 TO 5 YEARS TRAINING, was created in WP 164 - 2007 Turkey, after reviewing an already existing curriculum for training.

2.4.2.   This curriculum was amended because it was divided into three separate years of training, which was found too restrictive and detailed according to PLC at that time, ending up with a new, more general schedule for training, now policy.

2.4.3.   The current policy provides a good blueprint of what a general schedule for ATC training should look like, summing up important things that should be included in the training programme.

2.4.4. Although the content of the schedule is useful, some wording can be different and some wording is a bit too detailed.

2.4.5. For example, the title of the schedule could be "general curriculum for ATC training", omitting the part "3 to 5 years", as this is different for every training and the time bracket is large.

2.4.6. The same rule can be applied to the parts mentioning "tower and/or approach and/or area control". This is too detailed as well because training and practical validations shall always be to licensing standards, regardless of the rating. This is also emphasised in TPM TRNG 9.2.3. LINK BETWEEN ATC SCHOOL & OPERATIONAL UNITS, in which policies state that all controllers shall be trained in accordance with ICAO requirements and shall be licensed and hold ATC ratings appropriate to the duties they are undertaking.

2.4.7. To remove the unnecessary parts of the policy, add some relevant new words and rewording, it is proposed to amend the policy as indicated.

2.4.8. IFATCA Policy and proposed change:

IFATCA TPM (2023), TRNG 9.2.1 – GENERAL CURRICULUM~~SCHEDULE~~ FOR ~~A 3 TO 5 YEAR~~ATC TRAINING

Proposal:

ATC training should consist of at least the following:

~~A general schedule for 3 to 5 year training should consist of the following~~:
1. A programme of classroom and practical instruction which should include:
   a) Sufficient knowledge of the duties of an air traffic controller as well as pertinent information concerning related aviation fields.
   b) All relevant material and simulation exercises required ~~for tower control and/or approach control and/or area control~~ to licensing standards.
   c) ~~Providing~~ Administrative background, such as ~~for~~ reporting procedures, rostering, management forms~~, etc.~~;
2. Threat and Error Management;
3. Team Resource Management;
4. A programme of familiarisation flights and flight training ~~assignment for short periods of time~~, visits to ~~commercial~~ dispatch offices, aircraft maintenance ~~shops~~, joining a cockpit during a commercial flight and flight simulator exposure; ~~and aviation flying.~~
5. ~~A programme of flight training including training exercises in multi-engine aircraft simulators.~~
5.~~6.~~ ~~Providing the employer the opportunity~~ Opportunities for instructors to assess the suitability and capability of the students for air traffic control duties;
6.~~7.~~ ~~A practical check-out in tower, approach or area control~~ Theoretical and practical assessments ~~exams~~ to licensing standards.

2.5. **TRNG 9.2.2 GRADUATION**

2.5.1.   As previously discussed in TRNG 9.1.2 SELECTION, the definition of a post-secondary institution is:

> *'Post-secondary education, also known as tertiary education, is the education level that follows after successfully completing secondary education, which is often called high school. Post-secondary education includes universities and colleges and similar institutions and degrees.'*

2.5.2.   Currently, policy in TRNG 9.1.2 SELECTION of the TPM also writes about education, quote:

> *"Applicants shall be required to possess the academic qualifications required to enter a recognized post-secondary educational institution in their country."*

2.5.3.   In other words, to start as an ATC student, you shall be at least educated similar to what is necessary to start as a student at a university or college, and when finished with your ATC training you should be recognized similarly to having graduated from such an institution.

2.5.4.   The policy TRNG 9.2.2 GRADUATION provides recognition that the level of education of ATC training is similar to graduating from a post-secondary educational institution.

2.5.5.   PLC is of the opinion that the scope of this policy does not need any changes, however, the wording could be slightly different. It is proposed to amend the current policy as indicated.

2.5.6.   IFATCA Policy and proposed change:

IFATCA TPM (2023), TRNG 9.2.2 – GRADUATION

Proposal:

Air traffic control students who successfully ~~completing the~~ complete the training should be considered ~~period would be expected~~ to have fulfilled the requirements for graduating ~~graduated~~ from ~~the~~ a post-secondary educational institution.

2.6.   **TRNG 9.2.3 LINK BETWEEN ATC SCHOOL & OPERATIONAL UNITS**

2.6.1.   Close cooperation between Approved Training Organisations (ATOs) and ATC units is very useful and beneficial for both parties. Sharing information and experience as air traffic controllers to the ATO and the trainees is valuable training material, and information provided by the ATO can be used to improve the training.

2.6.2.   PLC finds that the scope of this policy is still relevant. However, the policy needs rewording, and PLC therefore proposes to amend the policy as indicated.

2.6.3.   Currently, there is already an abbreviation, not relevant to this topic, of ATO - Actual Time Over, in the TPM. PLC proposes that the abbreviation ATO - Approved Training Organisation should also be incorporated into the TPM, as this is the term used by ICAO and should be used as a replacement for the term 'ATC school' in the following paragraphs.

2.6.4.   PLC proposes to change the current heading of the policy, 'Link between ATC school & operational units', to 'Link between ATO and operational units'.

2.6.5.   IFATCA Policy and proposed change:

> **IFATCA TPM (2023), TRNG 9.2.3 – LINK BETWEEN ATO ~~ATC SCHOOL &~~ AND OPERATIONAL UNITS**
>
> Proposal:
>
> ~~It should be brought to the attention of ANSPs that there is a requirement for close co-operation between ATC training schools and ATC units for which training is performed.~~
>
> There should be close cooperation between Approved Training Organisations (ATOs) and ATC units for which training is performed.
>
> […}

2.6.6.   OJTIs could not only be useful while assisting in simulation training but could also, for example, be useful during theory training, teaching knowledge about past incidents, providing real-world examples, providing information on ATC systems, etc.

2.6.7.   Therefore, to broaden the policy, it is proposed to amend the current IFATCA policy as indicated.

2.6.8.   Currently, there is only an acronym of OJT - On the Job Training in the TPM, PLC proposes that the acronym OJTI - On The Job Training Instructor should be incorporated into the TPM.

2.6.9.   IFATCA Policy and proposed change:

> **IFATCA TPM (2023), TRNG 9.2.3 – LINK BETWEEN ATO ~~ATC SCHOOL &~~ AND OPERATIONAL UNITS**
>
> Proposal:
>
> […]
>
> ~~ATC on-the-job training instructors (ATC OJTIs) should assist in simulation training at the ATC School whenever possible.~~
>
> Current validated OJTIs should assist at an ATO whenever possible during simulation and theoretical training.
>
> […}

2.6.10.   The following policy currently states that ATC OJTIs working at ATOs should be able to update their knowledge at operational units. However, to be and stay current as an OJTI, your knowledge should always be up to date as you will provide training, and be an active air traffic controller, at an operational unit, which makes the policy redundant.

2.6.11.   The policy could, however, be interpreted in other ways as well:

2.6.12.   OJTIs working at ATOs should be given the opportunity to update their knowledge, not only from the unit they are licensed at, but also on different ATC units. For example, a tower controller should be provided the opportunity to gain knowledge from approach or area control as well.

or,

2.6.13.   At ATOs, there might be instructors or teachers who are not licensed air traffic controllers, such as a meteorologist teaching about the weather. They should also be provided opportunities to update their knowledge at operational units.

or,

2.6.14.   There might be a possibility that instructors at ATOs are, for example, retired controllers or due to other circumstances do not have an active validation or rating. Since these instructors do not work at an operational unit, they should be provided opportunities to update their knowledge at an operational unit.

2.6.15.   It is possible to interpret the policy in different ways and it is not correctly written. So, to broaden the policy slightly and correct the wording, it is proposed to amend the current policy as indicated.

2.6.16.   IFATCA Policy and proposed change:

IFATCA TPM (2023), TRNG 9.2.3 – LINK BETWEEN ATO ~~ATC SCHOOL &~~ AND OPERATIONAL UNITS
Proposal:
[…]
Instructors ~~ATC OJTIs~~ working ~~in ATC schools should be given the opportunity~~ at an ATO shall be able to update their knowledge regularly in operational units.
[…}

2.6.17.   To align the following policy with the policies mentioned above in regards to changing the term ATC School to ATO, PLC proposes to amend this policy to:

2.6.18.   IFATCA Policy and proposed change:

IFATCA TPM (2023), TRNG 9.2.3 – LINK BETWEEN ATO ~~ATC SCHOOL &~~ AND OPERATIONAL UNITS
Proposal:
[…]
An exchange of information on the performance of students should be maintained between ~~ATC School~~ the ATO and the ATC unit.
[…}

2.6.19.　The following two policies have been examined and do not need any updates at this time.

2.6.20.　IFATCA Policy and proposed change:

<table>
<tr><td>IFATCA TPM (2023), TRNG 9.2.3 – LINK BETWEEN ATO <s>ATC SCHOOL &</s> AND OPERATIONAL UNITS</td></tr>
<tr><td>

Proposal:

[…]

All controllers shall be trained in accordance with ICAO requirements.

All controllers shall be licensed and shall hold ATC ratings appropriate to the duties they are undertaking.

[…}
</td></tr>
</table>

2.7.　TRNG 9.2.4 REASONS FOR FAILURE IN ATC TRAINING

2.7.1.　The following policy has been examined and does not need an update at this time.

<table>
<tr><td>IFATCA TPM (2023), TRNG 9.2.4 – REASONS FOR FAILURE IN ATC TRAINING</td></tr>
<tr><td>

Proposal:

Training organisations should be encouraged to research the reasons for failure.
</td></tr>
</table>

2.8.　TRNG 9.2.5 AUTOMATION CONTROLLER TRAINING

2.8.1.　This policy will be examined by Agenda Item B.5.10/C.6.11 Review of Automation Policies.

2.9.　TRNG 9.2.6 AIRBORNE COLLISION AVOIDANCE SYSTEM (ACAS) TRAINING

2.9.1.　This policy has been reviewed in WP 164 - Istanbul 2007, in which the policy was rewritten to make it less complicated.

2.9.2.　Since Airborne Collision Avoidance Systems (ACAS) are an important safety net, it is important that training about ACAS is provided to all air traffic controllers, during initial training as well as during refresher courses.

2.9.3.　Therefore, this policy content does not need an update at this time. However, to standardise the formatting of all the TNRG policies, it is proposed to amend the current numbering in the policy and do some editorial editing:

2.9.4.　IFATCA Policy and proposed change:

<table>
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IFATCA TPM (2023), TRNG 9.2.6 – AIRBORNE COLLISION AVOIDANCE SYSTEM (ACAS) TRAINING

</td></tr>
<tr><td>

Proposal:

Comprehensive initial and refresher ACAS training should be provided and should consist of:

1. Definition of ACAS ~~(TCAS)~~;
2. Technical description and cockpit displays;
3. Pilot reactions to Traffic Advisories and Resolution Advisories;
4. Controller reactions and legal responsibilities;
5. Phraseologies;
6. Experience simulated ACAS ~~(TCAS)~~ events in an aircraft simulator or on video.

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</table>

2.10. **TRNG 9.2.7 BASIC DOCUMENTATION FOR USE BY TRAINING OFFICERS / INSTRUCTORS**

2.10.1. IFATCA TRNG policy 9.2.7 provides some guidance for basic documentation to be used by training officers and instructors to develop training and assessment programmes. Below is briefly explained what the mentioned documents include and if they are still relevant to the existing policy.

2.10.2. ICAO Annex 1 Chapter 4, 4.4 and 4.5 provides requirements for air traffic controller ratings, including knowledge of subjects appropriate to privileges granted and as far as they affect the area of responsibility of the rating a controller is trained for. Therefore, this documentation is still relevant for this IFATCA policy.

2.10.3. ICAO PANS-TRG, Doc 9868, part IV, contains the quote:

"This part contains four chapters with procedures for the development and implementation of a competency-based training and assessment programme for air traffic controllers (ATCOs), ATC on-the-job training instructors (OJTIs) and air traffic safety electronics personnel (ATSEP)"

2.10.4. Therefore, this documentation is still relevant to this IFATCA policy.

2.10.5. ICAO Doc 10056 (Manual on Air Traffic Controller Competency-based Training and Assessment) was divided into two separate parts in 2021. Prior to 2021, all material was contained in one single document. Explaining what is included in the two volumes is written in the foreword of volume I, quote:

"... Volume I, which provides guidance to support the implementation of competency-based training and assessment for air traffic control officers (ATCOs) and expands on the procedures included in the Procedures for Air Navigation Services — Training (PANS-TRG, Doc 9868). Volume II of Doc 10056 focuses on the OJTIs, and provides guidance on how to identify the competencies necessary for their environment and how to design the training and assessment needed for their development."

2.10.6. Therefore, this documentation is still relevant for this IFATCA policy.

2.10.7.	The documentation mentioned in the IFATCA policy is still relevant, and the policy also mentions that other guidance material should be used, keeping local conditions in mind as well. Therefore, the following policy does not need an update at this time.

> **IFATCA TPM (2023), TRNG 9.2.7 – BASIC DOCUMENTATION USED BY TRAINING OFFICERS / INSTRUCTORS**
>
> Proposal:
>
> ATC OJTIs and course developers should use ICAO Annex 1, PANS-TRG, Doc 10056 and other guidance material as appropriate to assist them in developing their training and assessment programmes. Variations dictated by local conditions should be borne in mind.

## 2.11.	TRNG 9.2.8 EMERGENCY TRAINING

2.11.1.	PLC has examined the policy and finds it to be still current. PLC however does recognise the importance of providing Essential Traffic Information to aircraft during a safety event (reduction of required separation) and proposes to add this and do some formatting to the existing policy.

2.11.2.	IFATCA Policy and proposed change:

> **IFATCA TPM (2023), TRNG 9.2.8 – EMERGENCY TRAINING**
>
> Proposal:
>
> Air Traffic Controllers shall be regularly trained in emergency and degraded system situations, in initial as well as refresher training. This training should at least include:
>
> 1.	In-Flight Emergency Response (IFER) and coordination training;
> 2.	Handling of unlawful interference situations;
> 3.	Hypoxia awareness;
> 4.	Contingency procedures;
> 5.	Essential Traffic Information.

## 2.12.	TRNG 9.2.9 E-LEARNING

2.12.1.	ICAO has a manual called "*Guidelines for the Development of Online Courses"* that provides the TRAINAIR PLUS Programme (TPP) Members with guidance on the standards and best practices for the development of online courses, this guide is complementary to the TRAINAIR PLUS Training Development Guide (TDG) *"Competency-based Training Methodology"*. This indicates that ICAO is supporting e-learning.

2.12.2.	IFATCA at the Annual Conference in Jamaica established a Training Task Force (TTF), the task force is in the process of developing various training and e-learning courses to the benefit of IFATCA MA's.

2.12.3.	Online e-learning has experienced rapid growth for several reasons:

2.12.4.   **Flexibility and Convenience:** Online e-learning allows learners to access educational content from anywhere and at any time, as long as they have an internet connection. This flexibility is especially appealing to individuals who have busy schedules, work commitments, or other responsibilities.

2.12.5.   **Diverse Learning Options:** E-learning platforms offer a wide range of courses on various subjects, from academic subjects to practical skills, professional development, and personal interests. This diversity caters to a broader audience with different learning needs and goals.

2.12.6.   **Cost Effectiveness:** Online courses often cost less than traditional in-person education. There are no commuting expenses, and the infrastructure costs for institutions are reduced. This makes education more accessible to people who might not have been able to afford it otherwise.

2.12.7.   **Lifelong Learning and Skill Upgrade:** The rapid pace of technological advancements and changes in industries has made continuous learning essential for career growth. Online e-learning allows individuals to update their skills and knowledge without needing to leave their jobs or relocate.

2.12.8.   **Global Reach:** E-learning breaks down geographical barriers. Students from around the world can enrol in courses offered by institutions and experts in different countries. This global reach enhances cultural diversity and the exchange of ideas.

2.12.9.   **Self-Paced Learning:** Online courses often offer self-paced learning, allowing learners to progress at their own speed. This accommodates different learning styles and helps individuals grasp concepts thoroughly before moving on.

2.12.10.   **Interactive Multimedia:** E-learning often employs multimedia elements such as videos, animations, quizzes, and interactive simulations. These engaging materials can enhance understanding and retention of complex concepts.

2.12.11.   **Adaptive Learning:** Some e-learning platforms use adaptive learning algorithms that tailor the content and pace of learning to individual students' needs and performance. This personalised approach can lead to more effective learning outcomes.

2.12.12.   **Networking Opportunities:** Online courses can provide opportunities for students to interact with peers from diverse backgrounds, fostering a sense of community and allowing for collaborative learning and networking.

2.12.13.   **Covid-19 Pandemic:** The global COVID-19 pandemic accelerated the growth of online e-learning. Lockdowns and social distancing measures forced educational institutions to pivot quickly to online platforms to continue providing education. This shift highlighted the viability and importance of online learning options.

2.12.14.   **Technological Advancements:** Advancements in technology, such as high-speed internet, mobile devices, and learning management systems, have made online learning more accessible and user-friendly.

2.12.15.   **Credentialing and Certification:** Many online courses offer certificates, diplomas, or even degrees upon completion. These credentials can carry weight in the job market and professional development.

2.12.16.　These factors, among others, have contributed to the rapid growth of online e-learning. As technology continues to advance and societies evolve, e-learning is likely to remain a significant and dynamic aspect of education.

2.12.17.　PLC has examined the policy and finds it to be still current; however, we do propose to do some formatting to the numbering of the existing policy to standardise it with other policies in the TRNG chapter.

2.12.18.　IFATCA Policy and proposed change:

IFATCA TPM (2023), TRNG 9.2.9 – E-LEARNING
Proposal: E-learning should be supported as a learning tool provided that: 1.　The quality and scope of the training shall not be diminished by introducing E-learning; 2.　E-learning serves the interest and the need of the ATCO or the student ATCO; 3.　the right method is chosen with regard to the learning goal; 4.　the organisation provides sufficient duty time to meet the learning goal; 5.　the operational expertise of an active controller is used from the start; 6.　human interaction is incorporated; 7.　the feedback loop is kept short; 8.　E-learning is considered part of the blend of training methods that are used to deliver training. *[EDITORIAL NOTE: REMOVE THE BULLET POINTS]*

2.13.　TRNG 9.3.1 ON-THE-JOB-TRAINING (OJT)

2.13.1.　ICAO Doc 9868, chapter 3, para 3.2, describes two paragraphs that apply to this policy regarding the instructor's qualifications. Quote:

"Instructors shall hold or have held a licence and be authorized to carry out instruction on the basis of their expertise and/or qualifications and/or ratings."

and, quote:

"Prior to an organization authorizing the provision of instruction, instructors should undergo a selection process designed to ensure the individual's motivation and disposition are suitable for the instructor's role."

2.13.2.　ICAO Doc 10056, volume II, Manual on Air Traffic Controller Competency-based Training and Assessment, paragraph 5.2.1 also provides guidelines for the selection of OJTIs, quote:

"ANSPs select candidates from their pool of ATCOs to develop as OJTIs. The methods used to make this selection are varied but should at least recognize that:

a) high performing ATCOs do not automatically make for competent OJTIs, as the OJTIs must also have the ability to build up solid learning relationships, coach and mentor trainees and be able to self-reflect on their respective performances as OJTIs, even in challenging circumstances;

b) the candidate should be a competent ATCO who is respected and accepted in the operational environment;

c) a strong desire to enable others to succeed is a powerful motivator for a potential OJTI;

d) the ATCO has already demonstrated commitment to continuous improvement;

e) the ATCO embodies the values of the organization; and

f) some key OJTI competencies are already evident (e.g. collaboration, self-assessment)."

2.13.3.   Summarising, the ICAO statements above recognise the fact that experience alone is not sufficient but emphasise the fact that the motivation, disposition and instructional aptitude of an instructor are also important to be ATC OJTI. Since ICAO documentation already provides extensive explanation on the selection of OJTIs regarding motivation and instructional aptitude, as described above, PLC finds that it is not necessary to keep the IFATCA policy and proposes to remove the policy.

2.13.4.   IFATCA Policy and proposed change:

IFATCA TPM (2023), TRNG 9.3.1 – ON-THE-JOB-TRAINING (OJT)
Proposal:
~~The selection of ATC OJTIs should not only be made on the basis of experience but also on motivation and instructional aptitude.~~
[…]

2.13.5.   The following policy has been examined and PLC proposes different wording for 'check-out'.

2.13.6.   IFATCA Policy and proposed change:

IFATCA TPM (2023), TRNG 9.3.1 – ON-THE-JOB-TRAINING (OJT)
Proposal:
[…]
A period of consolidation should follow a ~~check-out~~ validation. The previous experience of the student shall be taken into account.
[…]

2.13.7.   ICAO Annex 1, Chapter 4, 4.4.1.3.2. provides a requirement for an OJTI, quote:

"An air traffic controller acting as an air traffic control on-the-job training instructor shall hold an appropriate rating and be qualified as an air traffic control on-the-job training instructor."

2.13.8.   This provides the requirement that the controller acting as an OJT instructor has to be validated on the sector they are providing on-the-job training and that they also have to be qualified as an instructor.

2.13.9.   ICAO does not provide a requirement for a minimum time of experience of an air traffic controller to become an instructor. However, it does point out that there might be (local) regulatory requirements:

2.13.10.   ICAO Doc 10056, volume II, Manual on Air Traffic Controller Competency-based Training and Assessment, paragraph 5.2.2, quote:

"Regulatory requirements may oblige ANSPs to select candidates who have gained a minimum number of years' experience as an operational ATCO prior to becoming an OJTI."

2.13.11.   EASA does, however, provide requirements related to experience for the application of an OJTI endorsement in Commission Regulation (EU) 2015/340, ATC.C.015, quote:

"Applicants for the issue of an OJTI endorsement shall:

(a) hold an air traffic controller licence with a valid unit endorsement;

(b) have exercised the privileges of an air traffic controller licence for a period of at least two years immediately preceding the application. This period can be shortened to not less than one year by the competent authority when requested by the training organisation; and …"

2.13.12.   EASA also states in Commission Regulation (EU) 2015/340, ATC.C.010 that holders of an OJTI endorsement shall only exercise the privileges of the endorsement if they have, quote:

"(1) exercised for at least two years the privilege of the rating they will instruct in;

(2) exercised for an immediately preceding period of at least six months the privilege of the valid unit endorsement, in which instruction will be given;

(3) practised instructional skills in those procedures in which it is intended to provide instruction."

2.13.13.   Concluding, the IFATCA policy is similar to the experience EASA requires to be an OJTI, except for the fact that EASA provides an exception that it is possible that the minimum experience can be reduced to not less than one year if approved by the competent authority.

2.13.14.   The IFATCA policy thus provides a good starting point for the minimum required experience to become an instructor which can not be found in the mentioned ICAO document, and therefore PLC finds the following policy is still current.

IFATCA TPM (2023), TRNG 9.3.1 – ON-THE-JOB-TRAINING (OJT)
Proposal:
[…]

> Apart from being validated on the sector concerned, controllers should not be engaged in training student controllers unless they have at least two years operational experience and have been validated on that sector for at least six months.
>
> […]

2.13.15. The following policy has been examined in WP 157 - Jamaica 2023 and does not need an update at this time, however, to align the formatting of the numbering in the policy with the other policies in this paper, PLC proposes to amend the numbering of the policy as indicated.

2.13.16. IFATCA Policy and proposed change:

IFATCA TPM (2023), TRNG 9.3.1 – ON-THE-JOB-TRAINING (OJT)

Proposal:

[…]

When conducting ATC OJT on adjacent positions, the following items shall be considered to reduce the likelihood and consequences of communication errors:

1. System quality and functionalities;
2. Communication methods;
3. Operational briefing and OJTI training;
4. Trainees' schedule;
5. Trainee level of experience; and
6. Airspace complexity.

[…]

[EDITORIAL NOTE: REMOVE BULLET POINTS]

2.13.17. PLC has examined the following policy and concluded that this policy requires more extensive research for a thorough review than is possible within the scope of this paper. PLC therefore advises to put it on the PLC working programme for the upcoming year.

IFATCA TPM (2023), TRNG 9.3.1 – ON-THE-JOB-TRAINING (OJT)

Proposal:

[…]

No operational duty should be carried out after simulator duty during the same shift.

[…]

2.13.18. The following policy has been examined and does not need an update at this time.

<table>
<tr><td>**IFATCA TPM (2023), TRNG 9.3.1 – ON-THE-JOB-TRAINING (OJT)**</td></tr>
<tr><td>Proposal:

[…]

To ensure ATC OJTIs have sufficient time working on their own and are able to retain competence on each sector for which they hold validations, ATC OJTI time should be limited to no more than 50% of duty time. This can be organised on a daily, weekly, monthly or shift pattern basis, but shall limit the time gap between solo operations and take into account leave and other periods when the controller is not at work.

[…]</td></tr>
</table>

2.13.19. The following policies originate from WP 157 - Sofia 2015, a paper about the role and the responsibilities of the OJTI.

2.13.20. Some foundation on this policy can also be found in ICAO Doc 10056 volume II, 2.4.3, which mentions maintaining a safe environment, quote:

"*The responsibility to maintain operational safety rests with the OJTIs.*"

2.13.21. The ICAO document also mentions that an OJTI must ensure that training is provided in such a way that it enables the trainee to continue to manage the traffic safely, by, for example, choosing a sector that is suitable for the trainee's competence level, splitting working positions or manage the flow of traffic.

2.13.22. Since research has already been done on the working paper from 2015 in which both the responsibility of an OJTI and the importance of Just Culture had been highlighted, PLC finds this policy still current.

<table>
<tr><td>**IFATCA TPM (2023), TRNG 9.3.1 – ON-THE-JOB-TRAINING (OJT)**</td></tr>
<tr><td>Proposal:

[…]

It shall be made clear that the ATC OJTI is responsible for maintaining the safety of air traffic on the position where OJT is provided."

In case of investigation following an incident/accident involving an ATC OJTI and a trainee the principles of Just Culture shall be applied.</td></tr>
</table>

2.14. **TRNG 9.4.1 A SYSTEM COMBINING ASSESSMENTS WITH EXAMINATIONS**

2.14.1. PLC has examined the policies in TRNG 9.4.1 and finds the scope of the policies still current. However, some of the policies need some rewording or should be written in a slightly different way, which can be seen in the following proposed amendments below.

2.14.2. IFATCA Policy and proposed change:

> **IFATCA TPM (2023), TRNG 9.4.1 – A SYSTEM COMBINING ASSESSMENTS WITH EXAMINATIONS**
>
> Proposal:
>
> During ~~school~~ training at an Approved Training Organisation (ATO), ~~regular progress tests~~ assessments ~~should be given~~ on all theoretical subjects should be carried out. Results should be analysed and discussed with the trainees.
>
> […]

2.14.3.   IFATCA Policy and proposed change:

> **IFATCA TPM (2023), TRNG 9.4.1 – A SYSTEM COMBINING ASSESSMENTS WITH EXAMINATIONS**
>
> Proposal:
>
> […]
>
> ~~The students should be regularly assessed and debriefed throughout the period of simulation training.~~ Multiple assessments and debriefings should take place consistently throughout the period of simulation training. A written report should be made by the instructor on a regular basis and should reflect the level of achievement of the appropriate performance criteria. Both theoretical assessment(s) combined with multiple practical assessments should contribute to ~~the total marks.~~ the final assessment.
>
> […]

2.14.4.   IFATCA Policy and proposed change:

> **IFATCA TPM (2023), TRNG 9.4.1 – A SYSTEM COMBINING ASSESSMENTS WITH EXAMINATIONS**
>
> Proposal:
>
> […]
>
> Examination on local regulations and procedures~~, local area, letters of agreements etc.~~ should be made.
>
> […]

2.14.5.   IFATCA Policy and proposed change:

> **IFATCA TPM (2023), TRNG 9.4.1 – A SYSTEM COMBINING ASSESSMENTS WITH EXAMINATIONS**

> Proposal:
>
> […]
>
> ~~During OJT regular assessments by ATC OJTIs should be provided by OJTIs during OJT.~~ Multiple assessments should be carried out during OJT. Reports on the student's progress should be forwarded to ~~training section~~ the ATO. ~~At all times the student should~~ Trainees shall be kept informed and permitted to see the reports at all times.
>
> […]

2.14.6.   IFATCA Policy and proposed change:

> **IFATCA TPM (2023), TRNG 9.4.1 – A SYSTEM COMBINING ASSESSMENTS WITH EXAMINATIONS**
>
> Proposal:
>
> […]
>
> A student that has failed an assessment ~~examination~~ should, provided some ~~signs~~ evidence of ~~success are~~ progress is demonstrated and it can be determined that the individual can meet the required performance standards, ~~has controller potential,~~ after a suitable period of further training, be permitted a ~~re-examination~~ re-assessment.
>
> […]

2.14.7.   IFATCA Policy and proposed change:

> **IFATCA TPM (2023), TRNG 9.4.1 – A SYSTEM COMBINING ASSESSMENTS WITH EXAMINATIONS**
>
> Proposal:
>
> […]
>
> The duration of training shall not be dictated or constrained by a ~~strict~~ predetermined ~~period of~~ time, but rather by the achievement of performance standards at determined milestones, taking into account the progression demonstrated by the trainee.

2.15.   **TRNG 9.4.2 USE OF UNQUALIFIED PERSONNEL**

2.15.1.   The following policy has been examined by PLC and concluded that the policy does not need any changes, except for editorial changes.

2.15.2.   IFATCA Policy and proposed change:

> **IFATCA TPM (2023), TRNG 9.4.2 – THE USE OF UNQUALIFIED PERSONNEL**
>
> Proposal:
>
> ~~For the purpose of guaranteeing~~To guarantee safety, controllers shall not be replaced by personnel who do not hold ATC licences in accordance with ICAO Annex 1, with the ratings, recency and competency appropriate to the duties that they are expected to undertake for the position and unit at which those duties are to be performed.
>
> State Regulators shall ~~recognize~~ recognise the advantages of implementing an ATCO licensing system to provide assurance to domestic and international stakeholders.
>
> ANSPs shall recognise the advantages of an ATCO licensing system as an effective tool not only to harmonise ATCO standards, but to give an effective, transparent means of providing assurance that ATCO standards are being met and maintained.
>
> The functions which are contained within ICAO Annex 1, as being ATC functions shall not be added to the work responsibilities for unlicensed personnel.
>
> In the event of an incident, caused totally or in part by the use of unqualified personnel, responsibility shall lie with the person or authority responsible for allocating the unqualified staff to the task undertaken and any other person or authority who has materially supported or assisted to use unqualified personnel.

2.16.   **TRNG 9.4.3 AIR TRAFFIC FLOW MANAGEMENT (ATFM)**

2.16.1.   The following policy has been examined and does not need an update at this time except for some editorial changes.

> **IFATCA TPM (2023), TRNG 9.4.3 – AIR TRAFFIC FLOW MANAGEMENT (ATFM)**
>
> Proposal:
>
> ATFM staff not performing clerical or administrative functions, so-called ATFM controllers, shall be qualified controllers with recent experience ~~on~~in control duties on entry to ATFM services.
>
> The responsibility for aircraft in flight remains solely with ATC and any subsequent ATFM involvement shall be at the request of ATC only.
>
> An ATFM controller shall hold an ATFM rating. Such a rating shall require the ATFM controller to demonstrate a comprehensive knowledge, skill and experience of all relevant ATC procedures and ATFM duties.
>
> ATFM controllers should be obliged to familiarise themselves with major changes in ATC procedures and maintain their acquaintance with problem areas ~~with~~in relation to ATFM within their region.

2.17.   **TRNG 9.4.4 COMPETENCE ASSESSMENT**

2.17.1.   TRNG 9.4.4 COMPETENCE ASSESSMENT was reviewed in detail by PLC for the Annual Conference in Accra, Ghana 2018.

2.17.2.   PLC has examined the policy and finds it to be still current. PLC do however propose to do some formatting to the existing policy to standardise it with other policies in the TRNG chapter, and proposes some minor rewording as indicated.

2.17.3.   IFATCA Policy and proposed change:

IFATCA TPM (2023), TRNG 9.4.4 – COMPETENCE ASSESSMENT

Proposal:

The results of competence assessments shall be treated confidentially. Member Associations should, together with their management, draw up a "code of conduct" which to the greatest possible extent will guarantee the objectivity and confidentiality of competence assessments.

Before a competence assessment system is implemented, the following, as a minimum, shall be taken into account:

1.   a suitable period of evaluation of the system should take place;
2.   adequate facilities to enable remedial training.

IFATCA supports competence assessment for all personnel engaged in operational duties, for every endorsement or validation. Theoretical knowledge and practical competence shall be assessed at least once a year, for every rating that a controller holds. The standards to be achieved and the ~~check list~~ checklist of items to be evaluated should be made available to all those concerned.

When assessments are conducted, controllers shall be able to view their results and ~~to~~ discuss them with the ~~assessing officer~~ assessor. Additionally, controllers shall be able to record their comments, regarding the results and the manner in which the assessment was carried out.

All ATCOs selected to act as assessors should undergo appropriate training that will provide guidance on achieving a fair, objective, and valid assessment.

Additionally, a controller considered for the assessor role should have the following as a minimum:

1.   4 years operational experience;
2.   1 year experience on the position where the assessment takes place;
3.   2 years OJTI experience;
4.   having a high standard of credibility and communication skills in the OJTI/coaching role; and
5.   currency on the position where the assessment takes place.

Controllers having an assessor qualification shall be subject to the same competence assessments as other controllers.

The assessor's qualification should be the subject of periodic refresher training, at periods not exceeding 3 years, to ensure that skills are maintained and new techniques and procedures are incorporated.

IFATCA endorses the use of multiple observations to augment existing dedicated competency-based assessment.

2.18. **TRNG 9.4.5 AUTOMATIC DEPENDANT SURVEILLANCE (ADS) CONTROL RATING**

2.18.1. The policy was examined by PLC in 2007 in WP 164 - Istanbul, in which it was concluded that there was no need for an update at the time, and originates from WP 150 - Toulouse 1998.

2.18.2. PLC has reviewed this policy again and concluded that the reason that this policy exists most probably is that, summarised, ADS and CPDLC systems were relatively new at the time the policy was written and that there was a need to create a policy that ensures that sufficient training was in place. However, nowadays, ADS and CPDLC are very often used.

2.18.3. Besides that, IFATCA TPM section AAS 1.2 (AUTOMATIC DEPENDENT SURVEILLANCE (ADS)) already covers the technical part of using ADS, and IFATCA TPM section TRNG 9.2.5 (AUTOMATION CONTROLLER TRAINING) covers the training part of ADS and other automation systems, summarised saying that air traffic controllers using automated systems should be instructed properly to use the system and formal training should be established on both the theoretical and practical part of a system.

2.18.4. The current IFATCA policy describes subjects that are necessary to know before one is able to work on such a system and therefore should be a part of the formal training anyway, as mentioned already in TRNG 9.2.5. In addition to that, ADS and CPDLC are different systems and there is no reason to combine them in such a policy.

2.18.5. Concluding, PLC finds this policy redundant and proposes to delete the policy as indicated.

2.18.6. IFATCA Policy and proposed change:

> ~~IFATCA TPM (2023), TRNG 9.4.5 – AUTOMATIC DEPENDANT DEPENDENT SURVEILLANCE (ADS) CONTROL RATING~~
>
> Proposal:
>
> ~~Control of aircraft via ADS and Controllers Pilot Data Link Communication (CPDLC) is sufficiently different to other forms of ATC rating to warrant comprehensive training and a separate rating.~~
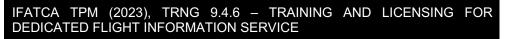>
> ~~The training syllabus should include instruction in:~~
>
> ~~1.   Aircraft situational displays and degraded operational modes;~~
> ~~2.   CPDLC equipment and protocols including failure modes and procedures;~~
> ~~3.   ADS separation standards and, where applicable, ADS, surveillance, flight data and processor track separation standards;~~
> ~~4.   aircraft emergency protocols and procedures."~~

2.19. **TRNG 9.4.6 TRAINING AND LICENSING FOR DEDICATED FLIGHT INFORMATION SERVICE**

2.19.1. The following policy has been examined by PLC and concluded that it does not need any changes, except for an editorial mistake. PLC proposes to amend the policy as indicated.

2.19.2.   IFATCA Policy and proposed change:

> **IFATCA TPM (2023), TRNG 9.4.6 – TRAINING AND LICENSING FOR DEDICATED FLIGHT INFORMATION SERVICE**
>
> Proposal:
>
> Where States have established or intend to establish dedicated FIS positions, persons working these positions shall be appropriately trained and ~~licenced~~ licensed.
>
> Guidance material at the global level should be made available by regulators on requirements, procedures, training and licensing for dedicated Flight Information Service.

2.20.   **TRNG 9.5.1 REFRESHER COURSES**

2.20.1.   This policy has been examined by PLC and concluded that it does not need any changes to the scope of the policy. However, the policies could use some rewording. PLC also concluded that the paragraph mentioning Team Resource Management is already covered by the policy in TRNG 9.1.3 TEAM RESOURCE MANAGEMENT (TRM), mentioning that the concept of TRM should be implemented throughout the career of an air traffic controller, and therefore also should be considered in refresher training of controllers.

2.20.2.   PLC proposes to remove the policy part referring to TRM and to reword and amend the other paragraphs in the policy.

2.20.3.   IFATCA Policy and proposed change:

> **IFATCA TPM (2023), TRNG 9.5.1 – REFRESHER COURSES**
>
> Proposal:
>
> ~~As a means of maintaining a world wide air traffic control service of the highest standards, controllers should participate in a refresher course, which should not have a bearing on the test of the proficiency of the controller, (training and simulation designed to ensure a maintenance of knowledge and abilities with respect to all standards, procedures, equipment and technique currently in use) every year while actively engaged in control duties.~~
>
> ATCOs should participate in a refresher course at least every year. This course should not have a bearing on the validation of the controller. The training and simulation provided during the refresher course should be designed to ensure the maintenance of knowledge and abilities with respect to all standards, procedures, equipment and techniques currently in use.
>
> ~~Team Resource Management as a concept should be considered in the continuation training of ATCOs.~~
>
> ~~As well as programmed refresher courses, adequate courses of instruction should be provided prior to the introduction into the ATC system of new or modified~~

In addition to a yearly refresher course, adequate training should be provided before the introduction of new or modified equipment and changes to standards or procedures.

Member Associations are encouraged to submit proposals to their ANSP regarding the implementation of refresher training courses.

2.21. TRNG 9.5.2 ENGLISH LANGUAGE TRAINING

2.21.1. The importance of the English language in Air Traffic Control (ATC) cannot be overstated, as it plays a critical role in ensuring safe and efficient communication between pilots and air traffic controllers. Here are some key reasons why English is the standard language in ATC:

2.21.2. **Universal Communication:** English serves as the international language of aviation. Pilots and air traffic controllers from different countries, who might not share a common native language, can communicate effectively in English. This is especially important in situations involving international flights, where multiple parties with different linguistic backgrounds need to coordinate.

2.21.3. **Clarity and Precision:** Aviation communication requires precise and unambiguous communication. English provides a standardised set of terms, phrases, and procedures that are universally understood by aviation professionals. Misunderstandings and miscommunications can have serious consequences in aviation, so using a common language reduces the chances of errors due to language barriers.

2.21.4. **Safety:** Safety is the top priority in aviation, and clear communication is essential for maintaining safe operations. Air traffic controllers need to convey instructions, clearances, and information to pilots accurately and quickly. Similarly, pilots need to report their intentions, positions, and status clearly to controllers. Any breakdown in communication due to language barriers could lead to accidents or loss of separation.

2.21.5. **Emergency Situation:** In emergency situations, time is of the essence. Using a common language like English allows pilots and controllers to quickly and effectively communicate critical information, helping them make rapid decisions and take appropriate actions to ensure the safety of passengers, crew, and aircraft.

2.21.6. **Efficiency:** Air traffic control involves managing the flow of air traffic to minimise delays and maximise efficiency. Clear and efficient communication is crucial for coordinating takeoffs, landings, route changes, and other procedures. Using a common language streamlines the process and reduces the likelihood of misunderstandings that could lead to disruptions in traffic flow.

2.21.7. **International Regulations:** ICAO mandates the use of English as the standard language for aviation communication. This ensures consistency and interoperability among aviation professionals worldwide.

2.21.8. **Training and Certification:** Pilots and air traffic controllers undergo rigorous training and certification processes that include proficiency in English communication. This ensures that all professionals in the aviation industry have a sufficient level of English language skills to perform their duties effectively.

2.21.9. **Record Keeping:** Accurate communication is crucial for maintaining records and documentation related to flight operations. English provides a standardised way of recording communications, instructions, clearances, and other important information.

2.21.10. In summary, the importance of the English language in air traffic control lies in its ability to facilitate effective, clear, and standardised communication among aviation professionals from diverse backgrounds. This communication is essential for ensuring safe and efficient air travel operations around the world.

2.21.11. IFATCA has two policies on English Language, TRNG 9.5.2 ENGLISH LANGUAGE TRAINING and TRNG 9.5.2.1 WRITTEN ENGLISH LANGUAGE PROFICIENCY.

2.21.12. Although ICAO has set International Regulations on English Language Proficiency, it has become clear to IFATCA that there is still a significant deficiency when it comes to controllers' and pilots' English Language proficiency.

2.21.13. IFATCA has started a Speak English Programme (SEP) that has been very successful and popular in the aviation world. This programme has grown tremendously over the last 2-3 years and it is achieving great results, improving the language abilities of controllers and pilots around the world.

2.21.14. Learning from this programme and seeing the first-hand results of the ability to speak non-aviation related English, IFATCA believes that it would benefit non-English speaking controllers to attend non-aviation related English courses in English-speaking countries to enhance the controller's ability to communicate more effectively in non-aviation related English.

2.21.15. Therefore, PLC is of the opinion that this should be incorporated into the TPM as indicated.

2.21.16. IFATCA Policy and proposed change:

> **IFATCA TPM (2023), TRNG 9.5.2 – ENGLISH LANGUAGE TRAINING**
>
> Proposal:
>
> Sufficient training shall be available for current ATCOs of all English language abilities so as to be able to meet the required ICAO level and subsequently ~~to~~ retain (or improve) that competency.
>
> IFATCA strongly supports initiatives where controllers from non-English speaking Member Associations attend courses in English-speaking countries that would improve their ability to communicate non-aviation related English more effectively.
>
> ATCOs ~~Staff~~ who are unable to achieve and maintain the English language requirements shall have their positions protected and given opportunities to reach the required ICAO level.

2.22. **TRNG 9.5.2.1 WRITTEN ENGLISH LANGUAGE PROFICIENCY**

2.22.1.   The policy in TRNG 9.5.2.1, as seen below, provides some guidelines for written language, specifically about cases in which datalink is used as a way of communication instead of voice communication.

2.22.2.   ICAO describes a lot of information about data link communication in ICAO Doc 10037, Global Operational Data Link (GOLD) Manual (1st edition, 2017), a document providing guidance on ATS data link services.

2.22.3.   For example, in the above-mentioned ICAO Doc, paragraph 3.1.2.4. ICAO writes, quote:

2.22.4.   *"While the CPDLC message set, [...], generally provides message elements for common ATC communications, the controller may determine voice to be a more appropriate means depending on the circumstances (e.g., some types of non-routine communications)."*

2.22.5.   and, in paragraph 3.3.1.3. including the note, quote:

2.22.6.   *"The controller should only use standard message elements when composing clearances or instructions. However, circumstances may exist where the controller may use free text message elements to supplement the standard message elements (see 3.3.2)."*

2.22.7.   *"The use of standard message elements is intended to minimize the risk of input errors and misunderstandings, and facilitate use by a non-native English speaking controllers and flight crews. The use of standard message elements allows the aircraft and ground systems to automatically process the information in the messages that are exchanged, which allows the flight crew to respond more quickly to a standard clearance."*

2.22.8.   PLC believes that the quoted ICAO document covers all of the current IFATCA policy, and the title of this policy is referring to language proficiency, but the policy itself only describes how datalink messaging should be used, not necessarily talking about English proficiency. Therefore, PLC is of the opinion that the IFATCA policy is redundant.

2.22.9.   IFATCA therefore proposes to delete the IFATCA policy as indicated.

2.22.10.   IFATCA Policy and proposed change:

> **IFATCA TPM (2023), TRNG 9.5.2.1 WRITTEN ENGLISH LANGUAGE PROFICIENCY**
>
> ~~Voice communication is fundamental for the transmission of non-routine messages. Where Datalink datalink is available as a means of communication:~~
>
> - ~~A set of pre-formatted messages is necessary to minimise the need for ATCOs to compose free text messages;~~
> - ~~ATCOs should revert to voice communication to transmit non-routine messages;~~
> - ~~Whenever possible, standard phraseology should be used in composing free-text messages.~~

2.23. **TRNG 9.5.3 SUPERVISORY AND MANAGEMENT COURSES**

2.23.1. This policy has been examined by PLC and concluded that the paragraph mentioning Team Resource Management is already covered by the policy in TRNG 9.1.3 TEAM RESOURCE MANAGEMENT (TRM), mentioning that the concept of TRM should be implemented throughout the career of an air traffic controller, and therefore also should be considered in training of ATCOs.

2.23.2. Therefore, PLC proposes to remove the TRM paragraph from the policy.

2.23.3. PLC also concluded that the scope of the two policies mentioning the courses before supervisor and management positions are the same, and therefore can be combined into one policy.

2.23.4. IFATCA Policy and proposed change:

IFATCA TPM (2023), TRNG 9.5.3 – SUPERVISORY AND MANAGEMENT COURSES

Proposal:

~~Prior to appointment to a supervisory or management position, controllers should be provided with suitable supervisory and management courses which meet the requirements of the new position.~~

~~Team Resource Management as a concept should be considered in the training of controllers prior to an appointment as supervisor or management position.~~

~~Controllers should be provided the opportunity to take courses which will prepare them for employment on other duties, including management positions.~~

ATCOs should be provided with suitable courses which will prepare them for employment in other duties, including management and supervisory positions. The courses should meet the requirements of the new position.

2.24. **TRNG 9.5.4 FLIGHT EXPERIENCE FOR AIR TRAFFIC CONTROLLERS**

2.24.1. PLC recognises the fact that flying experience and/or familiarisation related to flying is beneficial to the knowledge of the air traffic controller and therefore should be encouraged during the training of air traffic controllers and their career.

2.24.2. Visits to adjacent and distant air traffic control units can also be useful, encouraging the exchange of information about air traffic control. Sharing experiences can be used as an opportunity for educational purposes for both trainees and experienced air traffic controllers.

2.24.3. To provide the opportunity to gain such knowledge, it is recommended to ANSPs that they provide the possibilities for familiarisation flights, flight (simulator) experience, visits to different air traffic control units and gaining and/or maintaining flying experience.

2.24.4.   PLC therefore believes that the scope of the current IFATCA policies does not need any change. However, the policies can use some rewording and formatting. PLC proposes to amend the current policy as indicated.

2.24.5.   IFATCA Policy and proposed change:

IFATCA TPM (2023), TRNG 9.5.4 – FLIGHT EXPERIENCE FOR AIR TRAFFIC CONTROLLERS

Proposal:

~~The Federation shall recommend to all ANSPs:~~

~~a)   To provide for familiarization flights in the cockpits of aircraft for air traffic controllers, with combined facilities to visit adjacent and distant air traffic control units.~~
~~b)   Licensed and trainee controllers should participate in familiarization flights~~
~~c)~~
~~i.   To encourage air traffic controllers with flying experience to maintain their proficiency by offering special facilities, and~~
~~ii.   To encourage air traffic controllers without flying experience to gain such experience by providing facilities for pilot-training to the level of the Private Pilot Licence,~~
~~d)   To exploit the use of flight simulators for the familiarization of air traffic controllers with specific in-flight problems~~

It is recommended that ANSPs:

1.   Provide the opportunity for familiarisation flights in the cockpit of aircraft;
2.   Provide the possibility to visit adjacent and distant air traffic control units;
3.   Provide the possibility to use flight simulators for the familiarisation of air traffic controllers with specific in-flight problems;
4.   Encourage air traffic controllers to gain and/or maintain flying experience.

2.25.   **TRNG 9.6.1 RECOGNITION OF PRIOR LEARNING FOR MILITARY AIR TRAFFIC CONTROLLERS**

2.25.1.   This policy has been added to the TPM during the 62nd annual conference (2023) at Jamaica - WP 155 and therefore does not need an update at this time.

IFATCA TPM (2023), TRNG 9.6.1 – RECOGNITION OF PRIOR LEARNING FOR MILITARY AIR TRAFFIC CONTROLLERS

Proposal:

Previous training, qualifications and experience attained by military air traffic controllers, should be assessed by the appropriate licensing authority and, if relevant, be credited towards the training required to meet at least ICAO Annex 1 requirements for attaining a civilian air traffic control licence.

> If the military air traffic controller's previous training, qualifications and experience meet at least ICAO Annex 1 requirements, then the appropriate licensing authority should facilitate the conversion to a civilian air traffic controller licence.

3. CONCLUSION

3.1. PLC was tasked to review the TRNG section of the TPM. In this review, PLC did not only look into the content of the policies but also reviewed the section to correct editorial mistakes, propose some rewording of sentences and align the formatting of all the policies in the TRNG section.

3.2. PLC also used the opportunity of this review to improve the efficiency of the section by proposing to combine some policies and to remove some policies that, in the opinion of PLC, were present in duplicate, without losing the content, scope and foundation of the TRNG section.

3.3. PLC also concluded that two policies in the TRNG section need a more extensive review, if deemed necessary, in a separate working paper to review the content of those policies.

3.4. PLC concludes that the title of the whole TPM section "ATC TRAINING" should be broadened and changed into "TRAINING AND LICENSING".

4. DRAFT RECOMMENDATIONS

4.1. It is recommended that the above-mentioned sections of the Technical and Professional Manual (TPM) be amended accordingly, as described in Section 2 of this working paper.

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