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Disclaimer
No quality control has been performed on this document.
Summary of the outcome of the consultation

This document comprises individual responses to all comments received for NPA 2020-14.

For an overview of essential comments received and subsequent changes to the draft regulatory material, please refer to the Opinion, Chapter 2.4.1.
Individual comments (and responses)

In responding to the comments, the following terminology is applied to attest EASA’s position:

(a) **Accepted** — EASA agrees with the comment and any proposed change is incorporated into the text.

(b) **Partially accepted** — EASA either partially agrees with the comment or agrees with it but the proposed change is partially incorporated into the text.

(c) **Noted** — EASA acknowledges the comment, but no change to the text is considered necessary.

(d) **Not accepted** — EASA does not agree with the comment or proposed change.

(General Comments)

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<thead>
<tr>
<th>comment</th>
<th>3</th>
<th>comment by: Boeing</th>
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<tr>
<td>GENERAL COMMENT</td>
<td>Boeing Commercial Airplanes and its pilot staff find this NPA to be a well-researched and well-written document, and that the proposals made are sound.</td>
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<tr>
<td>response</td>
<td>Noted - thank you for your comment. Thank you for your positive feedback.</td>
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<th>comment</th>
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<th>comment by: Luftfahrt-Bundesamt</th>
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<td>The LBA has no comments on NPA 2014-25.</td>
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<td>response</td>
<td>Noted - thank you for your comment. Thank you for your feedback.</td>
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- The Commission Regulation (EC) No 965/2012;
- The Decision No 2011/016/R;
- The Decision No 2011/017/R;

The comments hereafter shall be considered as an identification of some of the major issues the FNAM asks EASA to discuss with third-parties before any publication of the proposed regulation.

In consequence, the comments hereafter shall not be considered:
- As a recognition of the third-parties consultation process carried out by the European Parliament and of the Council;
- As an acceptance or an acknowledgement of the proposed regulation, as a whole or of any part of it;
- As exhaustive: the fact that some articles (or any part of them) are not commented does not mean FNAM has (or may have) no comments about them, neither FNAM accepts or acknowledges them. All the following comments are thus limited to our understanding of the effectively published proposed regulation, notwithstanding their consistency with any other pieces of regulation.

FNAM General Comments

Generally speaking, FNAM supports the initiative to improve safety for relief pilots.
FNAM notes nevertheless few dedicated crew relief pilot/copilot are operating for French carriers. Most of the time, CRP/CRCP are fully qualified pilots/ copilots in France.

response
Noted - thank you for your comment.
Thank you for your feedback.

2. Explanatory Note — 2.3. Summary of the Regulatory Impact Assessment (RIA)

comment by: ACM CT

For small Air atxi operators such as Business Jet Operators a 90 day interval for simulator checking is neither practical nor realistic to comply with.
Business Jet Operators operating under an AOC schedule simulator training every 6 month with an external ATO provider (i.e. CAE or Flight Safety International). These ATO's offer so called Recurrent packages which are basically 2 to 4 day Recurrent trainings in a FFS.
There is no schedule provided from these ATO's to cover a 90 day interval and no Business Jet Operator has own simulators to schedule such trainings like most airlines do. EASA has to understand that there is another world besides airline flying and since airlines dont change their aircraft types every year Business Jet Operators do so and therefore own FFS is not an option. We have to rely on external training providers with various kind of FFS for the type of Business Jet operated. Recurrents are mostly overbooked and hard to schedule having in mind the low number of Business Jet. i.e. there is one FFS for a Falcon 7X in Europe, the next is in Dubai or USA. Furthermore I dont see any gain in safety by forcing operators to check and train their relief Pilots every 90 days. There is just no ATO capacity present to cope such an interval. Please be realistic and practical about this NPA and leave the interval at where it was.
2. Individual comments (and responses)

**Response**

Accepted – Thank you for your comment.

The proposal for the amendment to paragraph (b)(3) of point FCL.060 was revised to set out more options in relation to the maintenance of recent experience for cruise relief co-pilots (CRCP), to provide more flexibility for the pilots concerned.

**Comment**

10

**Comment by:** Peter Pöyliö

**Point 3:**

2.3. Summary of the Regulatory Impact Assessment (RIA)

The only difference between Options 1 and 2 is the CRCP recency requirement. The Agency and the group believe that Option 2 should be selected. The reason for this is that Option 2 improves safety by requiring a CRCP to undergo refresher flying training in an FFS every 90 days in the context of recency (instead of every 6 months currently).

This additional training is estimated to cost EUR 1 000 per FFS session, excluding travel cost, i.e. at a total cost of a maximum EUR 924 000 per year (462 CRCP x EUR 1 000 per FFS x 2 per year). The total cost will depend on the way the training is integrated into the operator training programme. The additional training should ensure that a CRCP maintains their manual flying skills.

Nordic Global Airlines agrees that the simulator training done every 90 days is very beneficial. However, we suggest that instead of 90 days the requirement should be three (3) months so that the validity period ends on the last day of the month.

Completing the simulator training during the last month of validity extends the recency three months beginning from the original end date of validity.

Finally, a framework for CRCP - Co-Pilot –upgrade training program should be developed. For example, this could contain a set of takeoffs and landings.

**Response**

Not accepted.

The intention is indeed to have training intervals that do not exceed 90 days, also to align with the current regulatory texts addressing similar matters.

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**Comment**

4

**Comment by:** Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)

**FCL.060(b)(3) Ref page 12**

“has carried out recency and refresher flying skill training in an FFS”

**Proposed action:**

We suggest that there should be some guidance published to what the “refresher flying skill training in FFS” should contain as a minimum.

**Rationale:**

The way the proposal is written it is not clear what the refresher flying skill training in FFS should contain and how long this training should be.

**Response**

Accepted – thank you for your comment.

The proposal for the amendment to paragraph (b)(3) of point FCL.060 was revised to set out more options in relation to the maintenance of recent experience for cruise relief co-pilots (CRCP), to provide more flexibility for the pilots concerned.
comment

5  comment by: Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)

FCL.720.A(e) Ref page 13

“To remove the restriction, the applicants shall comply with FCL.740(b) and complete the required flight training on the aeroplane in accordance with Appendix 9 to this part”.

Proposed action:
The proposed text should have a full stop after “FCL.740 (b)”. The wording would then be as follows:

“To remove the restriction, the applicants shall comply with FCL.740(b).”

Rationale:
The second part of the sentence is unnecessary. As the proposed text is referring to FCL.740(b) it is clear that you shall:
1) take refresher training at an ATO, when necessary to reach the level of proficiency necessary to safely operate the relevant class or type of aircraft; and
2) pass a proficiency check in accordance with Appendix 9 to this Part.

response

Noted - thank you for your comment.

After further review and in the interest of clarity, it was decided to revise the draft amendment (now point FCL.720.A(c)) by outlining in more detail the necessary steps for lifting the restriction. A simple reference to point FCL.740 (on the renewal process) was finally identified not to be appropriate.

comment

9  comment by: Peter Pöyliö

Point 2:

FCL.510.A ATPL(A) — Prerequisites, experience and crediting
(c) Crediting […]

(3) Holders of a restricted type rating issued in accordance with FCL.720.A (e) shall be credited up to a maximum credit of 250 hours. These 250 hours may be credited against the 1500 hours requirement of paragraph (b), and the 500 hours’ requirement of paragraph (b)(1), provided that the total credit given against any of these paragraphs does not exceed 250 hours

Nordic Global Airlines’ view is that this limitation concerning crediting of flight hours is not justifiable. Our experience tells that all flight experience is valuable and should be credited in full. Especially companies operating only one type of aeroplane should not be prevented from upgrading the CRCP to a Co-Pilot when the required hours for ZFTT have been acquired. Completing the base training with a large transport aircraft is too costly for a small operator. ZFTT has been developed for saving these costs and as such it is a perfectly valid solution. It is therefore unnecessary and unfounded to limit the crediting of flight hours to 250h.

response

Not accepted - thank you for your comment.

Based on comments received and a subsequent discussion in the RMT.0190 Review group, it was decided to limit the crediting of flight time flown as CRCP to 250 hours towards the crediting of flight time prescribed in point FCL.510.A (ATPL(A)). This was supported by the detail that CRCPs have not gained sufficient exposure to all aspects of flying critical phases of the flight such as take-offs and landings. In addition, the set limit was not further reduced, for consistency with paragraph (c)(2) of point FCL.510.A.
Draft Regulation (Draft EASA Opinion)  
FCL.060 Recent experience

TEXT PROPOSED BY EASA:

(...)

(3) as cruise relief co-pilot unless he/she; has carried out recency and refresher flying skill training in an FFS at intervals not exceeding 90 days. This refresher training may be combined with the operator’s refresher training prescribed in the relevant requirements of Part-ORO or the checking requirements prescribed by Appendix 9 to this Part.

ECA SUGGESTION FOR THE TEXT

[...]

out recency and refresher flying skill training including training of approach, landing and Go Aroun[ds] and a suitable amount of manual flying skill training at high and low altitude operation in an FFS at intervals not exceeding 90 days. This refresher training may be combined with the operator’s refresher training prescribed in the relevant requirements of Part-ORO or the checking

REASONING:

Take Off, Approach, Landing and Go Around manual flying skills are only trained and assessed once during the type rating training, in the skill test. Afterwards, a certain decay of these manual flying skills is therefore to be counteracted with a suitable amount of training. Manual flying skills at low and high altitude operation will decay due to the lack of possibility to fly the A/C manually above FL200 during normal operation. Therefore, without a regular training of these manual flying skills the ability to cope with demanding flying situations will disappear. Either seat qualified pilots or instructors are assessed on manual flying skills on the copilot’s seat during the bi-annual simulator check and should therefore be approved as CRCP.

At the same time, we need to be cautious on the manual flight requirement at high altitude. The FFS might not always be accurate for this, and there is a potential for negative training, especially considering the kind of events leading to flying manually at high altitude. Nevertheless, it would give the opportunity to train basic skills where the aircraft aerodynamics limitations impose a precise flying skills and a good scanning, since maximum and minimum speeds can be very close.

A need to train manual flying skills in general, including approach and landing - is crucial.

response

Not accepted - thank you for your comment.
Manual flight skills are addressed in the revised paragraph ORO.FC.A.201 (b) (2) (iii) and the subsequent GM, where it is stated that CRCP must complete the same training programme as the co-pilot in accordance with ORO.FC.230, including take-off and landing exercises in both the PF and PM roles. In addition, it should be noted that initial training also includes manual flying exercises.
comment 12  

**Appendix 9**

Training, skill test and proficiency check for MPL, ATPL, type and class ratings, and proficiency check for IRs

A. General; Para 18

**EASA TEXT:**

18. In case of a restricted type rating issued in accordance with FCL.720.A(e), the applicants shall fulfil the same requirements as other applicants for the type rating except for; (a) the take-off and landing exercises during the flight training on the aeroplane or in the case of ZFTT in an FFS as applicable. (b) the take-off manoeuvres during the proficiency check for the revalidation or renewal of the type rating.

**ECA COMMENTS:**

The CRCP will, in most airlines, seat on the cockpit jump seat during T/O and landing and should be able to enhance the situational awareness with a proper flight monitoring and timely interventions when necessary.

Recurrent subsequent training is provided, so there is no need (and it would be unfair) to include a check on a skill which is not supposed to be used later on.

At the same time, it is important, that the CRCP is initially assessed on his flying skills at the end of his type rating, including on take off and landing, even if he will not use these skills (theoretically) later on.

response

Noted - thank you for your comment..

EASA determined during the discussions within the review group that a GM was necessary to ensure an adequate understanding of the new implementation rule in ORO.FC.A.201 point (b)(2), which gives a detailed description of the training of manual flying skills, including take-off and landing exercises to be conducted during the recurrent training.

comment 13  

**FCL.720.A Experience requirements and prerequisites for the issue of class or type ratings — aeroplanes**

**TEXT PROPOSED BY EASA:**

[...]

(e) Notwithstanding paragraph (d), a Member State may issue a type rating with restricted privileges for multipilot aeroplane that allows the holder of such rating to act as a cruise relief co-pilot above Flight Level 200, provided that two other members of the crew have a type rating in accordance with paragraph (d). To remove the restriction, the applicant shall comply with FCL.740(b) and with the practical take-off and landing training.

**ECA COMMENT:**

This provision is a key element to make sure that proficiency is acquired when upgrading to "normal pilot". As take-off and landing have not been checked, but only
trained, there is a need to "restart from zero" (in the sense that a complete type rating training and final check is necessary to review the competency level of the trainee, in order to remove the restriction).

There can be some credit based on experience and kind of training received when flying as a CRCP, but manual handling of the aircraft at low altitude, in normal and abnormal situations, need to be reviewed completely in order to deliver the unrestricted FCL Type Rating.

Response

Partially accepted - thank you for your comment.

Based on comments received, the RMT.0190 Review group further redrafted the text to clarify how the CRCP restriction on a type rating can be removed: It will be necessary to complete a dedicated training and assessment at an ATO, followed by practical take-off and landing exercises in the relevant aeroplane type. The skills shall be assessed in accordance with the provisions of Appendix 9 to Part-FCL. Applicants with at least 750 hours of experience shall be deemed eligible for ZFTT training in accordance with point FCL.730.A.

Comment 14

Comment by: CAA-NL

In the NPA a proposal was made if a applicant would like to remove the restriction. In our opinion this is not necessary. It is obvious when a candidate with a restricted licence will apply for a ‘full licence’ he shall meet the requirements of Part-FCL.

Response

Not accepted - thank you for your comment.

The complete type rating training is not considered necessary as the applicant already holds a rating, only with the CPRP restriction. To lift it, the type rating bridge course at an ATO is considered an appropriate transition measure to the unrestricted type rating.

Comment 15

Comment by: CAA-NL

FCL appendix 9, A (18) a proposal was made that in case of a restricted type rating the applicant shall fullfil the same requirements as other applicants for the type rating except for: the take of and landing exercises during the flight training and for take-off manoeuvres during the proficiency check. Why is landing not included in the requirement.

Response

Noted - thank you for your comment.

See reply to comment No 11 & 22.

Comment 19

Comment by: Taylor Wessing

Attachment #1

see attachment

Response

Accepted - thank you for your comment.

Based on comments received, and after extensive discussions within the RMT.0190 Review group, it was decided to allow the ZFTT training route also for CRCPs, as the mandatory recurrent training and checking by operators in FFS creates a significant safety margin and may even include the performance of take-off, landing and go-around manoeuvres.

Comment 21

Comment by: DGAC FRANCE
Chapter 3.1.1 (2) Amend FCL.510.A ATPL(A) (c) (3)

Subject: Prerequisites, experience and crediting

Comment:

France considers that crediting up to 250 hours as CRCP against the 500 hours requirement of paragraph (b)(1) is of little significance of a suitable multipilot experience. This amount should consequently be lowered.

Proposal:

[...]

(c) Crediting

[...]

(3) Holders of a restricted type rating issued in accordance with FCL.720.A (e) shall be credited up to a maximum credit of:
- 250 hours against the 1 500 hours requirement of paragraph (b) and
- 100 hours against the 500 hours requirement of paragraph B (1).

response

Not accepted - thank you for your comment.
See reply to comment No 9.

comment 22 comment by: DGAC FRANCE

Chapter 3.1.1 (5) Amend Appendix 9 A.General

Subject: Training, skill test and proficiency check for MPL, ATPL, type and class ratings, and proficiency check for IRs

Comment:

The formulation used in “A. General” §18 is inconsistent with the “B. Specific requirements for airplane category” §6.
According to A § 18, take off manoeuvres shall not be checked during proficiency check for revalidation or renewal and there is no specification for the skill test.
According to B§6, in case of restricted type rating, no specifications are defined neither for the skill tests nor for proficiency checks. Does it mean that on multipilot and single pilot high performance complex aeroplane, take off manoeuvres shall be checked even when for those restricted type ratings?

Proposal:

A.General

[...]

response

Not accepted - thank you for your comment.
See reply to comment No 9.
18. In case of a restricted type rating issued in accordance with FCL.720.A(e), the applicants shall fulfil the same requirements as other applicants for the type rating except for:

(a) the take-off and landing exercises during the flight training on the aeroplane or in the case of ZFTT in an FFS as applicable.
(b) the take-off manoeuvres during the skill test and the proficiency check for the revalidation or renewal of the type rating.

response

Partially accepted - thank you for your comment.

The revised version of the rule text of Appendix 9 clarifies the following principles:

1) The relief co-pilot does not need to perform any checking for the Take-off manoeuvres. The rational for this requirement is there will be no reason for the relief co-pilot to perform such duty, because before take-off the crew will return to the gate to resolve any possible crew issues.

2) The relief co-pilot is required to be checked in the landing manoeuvre at least in the pilot monitoring role. The rational this for requirement is to mitigate a possible incapacitation in flight where the relief co-pilot may be required to be seating at the controls of the aircraft during landing.

During the initial training, pilots are required to train take-offs and landings. The reason for such provision is to ensure that when eventually the CRCP moves to unrestricted Co-pilot role, and as it is not required to complete a new type rating course, the initial training conducted by the CRCP must be equivalent to the unrestricted Co-pilot training.

comment

28 comment by: UK CAA

Page No: 12/13

Paragraph No: Amendment to FCL.510.A ATPL(A)(c)(3)

Comment: The proposed amendment is intended to restrict the amount of hours flown as a Cruise Relief Pilot that can be credited for the ATPL(A) to 250 hours.

1) - The Agency should consider whether it is necessary also to amend FCL.035 Crediting of flight time and theoretical knowledge. Under FCL.035(a) Crediting of flight time, FCL.035(a)(3) states:

“(3) Flight time as co-pilot or PICUS. Unless otherwise determined in this Part, the holder of a pilot licence, when acting as co-pilot or PICUS, is entitled to be credited with all of the co-pilot time towards the total flight time required for a higher grade of pilot licence.”

The word ‘all’ in FCL.035(a)(3) appears to conflict with FCL.510.A (ATPL(A)(c)(3).

2) - The UK CAA recommends that the Agency considers whether it is appropriate to amend AMC1 FCL.050 Recording of Flight Time. Now that a limit is placed on the amount of CRCP time that can be counted towards the experience requirements for the ATPL(A), there is presumably a need for CRCP time to be distinguished from
‘normal’ co pilot time in pilots’ logbooks (as well as other flight records, e.g. the operator’s records).

3) - There are a large number of provisions in Annexes I, II and III where one of the prerequisites for a licence, rating or certificate is that a pilot must have a minimum amount of experience ‘... as pilot of aeroplanes ...’. The UK CAA recommends that the Agency reviews all such provisions to determine whether there should be limits placed on the amount of cruise relief co pilot time that can be accepted towards meeting these prerequisites.

Provisions identified (but may not be limited to) are:

In Annex I Part-FCL:

FCL.510.H(b)(5) and (c) experience required for ATPL(H);
FCL.720.H(a)(2)(i) MPA time in lieu of MCC for 1st MP type rating;
FCL.720.PL(a)(3) and (c)(3) prerequisites for PL type rating;
FCL.820(d)(2) experience for Flight Test Rating;
FCL.905.Fl(d) experience for FI to instruct for CPL;
FCL.905.Fl(g)(1) experience for FI to instruct for IR;
FCL.905.Fl(j)(1) and (2) experience for FI to instruct for MPL;
FCL.915.TRI(b)(1) and (c)(2)(i) experience for TRI(MPA) and TRI(SPA);
FCL.915.TRI(e)(1) experience for TRI(PL);
FCL.915.CRI(a)(1) and (b)(1) experience for CRI(A);
FCL.915.IRI(a)(1) experience for IRI(A);
FCL.915.IRI(b)(1) experience for IRI(H);
FCL.915.IRI(c) experience for IRI(As);
FCL.915.SFI(c)(1) experience for SFI(A);
FCL.915.MCCI(b)(1) and (b)(2) experience for MCCI;
FCL.1005.FE(a)(1) to (a)(5) experience for FE(A);
FCL.1010.TRE(a)(1) experience for TRE(A);
FCL.1010.CRE(c) experience for CRE(A);
FCL.1010.IRE(a) experience for IRE(A);
FCL.1010.SFE(a)(2) experience for SFE(A);
FCL.1010.FIE(a)(2) experience for FIE(A).

In Annex II Conditions for conversion of Existing national licences for aeroplanes and helicopters:

Section 1 Pilot licences, the table at paragraph d, rows (b), (c) and (e); and the table at Section 3, SFI Certificate.

In Annex III Conditions for the acceptance of licences issued by or on behalf of third countries:

Section A Validation of licences, the table at paragraph 3(e), rows (b) and (e); and in Section C Acceptance of class and type ratings, paragraph 1.d(ii).

Justification:
The proposed change affects other parts of the Aircrew Regulation and guidance material that are not addressed in the NPA.
Proposed Text:

In relation to comment 2) that references AMC1 FCL.050, Recording of Flight Time, the following changes are suggested:

Amend General (a)(4) or (5) as follows:

“(4) details on pilot function, namely PIC, including solo, SPIC and PICUS time, co-pilot, cruise relief co pilot; dual, FI or FE;”

“(5) Operational conditions, namely if the operation takes place at night, or is conducted under instrument flight rules or the pilot is a cruise relief co-pilot.”

Amend Instructions for Use (i)(10) as follows:

“(10) column 12: the ‘remarks’ column may be used to record details of the flight at the holder’s discretion. The following entries, however, should always be made:
(i) instrument flight time undertaken as part of the training for a licence or rating;
(ii) details of all skill tests and proficiency checks;
(iii) signature of PIC if the pilot is recording flight time as SPIC or PICUS;
(iv) signature of instructor if flight is part of an SEP or TMG class rating revalidation;
(v). that the pilot acted as cruise relief co pilot”

In addition the UK CAA recommends the inclusion of an example of what an entry for a flight as cruise relief co pilot should look like in the sample logbook.

response
Noted - thank you for your comment.
See reply to comment No 5 & 9.
Your comments related to AMC1 FCL.050 will be considered for the next update of AMC & GM to Part-FCL.

comment 29
comment by: UK CAA

Page No: 14

Paragraph No: Amendment to Appendix 9, paragraph 18

Comment: The proposed text for paragraph 18 is:

“18. In case of a restricted type rating issued in accordance with FCL.720.A(e), the applicants shall fulfil the same requirements as other applicants for the type rating except for;
(a) the take-off and landing exercises during the flight training on the aeroplane or in the case of ZFTT in an FFS as applicable.
(b) the take-off manoeuvres during the proficiency check for the revalidation or renewal of the type rating.”

Section 2 Explanatory Note, paragraph 2.4.2. Proposed CRCP mitigating measures lists the mitigating measures. Item (e) (p.11) is as follows:
“(e) An amendment to the licensing rules requiring the applicant for a restricted type rating to be fully trained and checked during the initial type rating, including all take-offs and landing exercises in the FFS. However, the group further clarified that an applicant for a restricted type rating should not need to conduct the practical take-off and landing exercises during the flight training on the aeroplane, or in the case of ZFTT, in an FFS. Furthermore, during subsequent revalidation or renewal of the rating, the group proposed that holders of a restricted type rating should not be checked during take-off exercises, but that only their landing abilities should be assessed”.

The UK CAA believes that the text for the ZFTT case is confusing. It could be taken to mean that a Cruise Relief pilot who obtains the restricted rating via a ZFTT course does not have to complete any take-off and landing training at all - yet 18(b) says that the pilot will have to complete a landing during proficiency checks. It cannot be assumed that a pilot obtaining the restricted rating through ZFTT will complete take-offs and landings in the FFS with the operator in accordance with Part ORO, ORO.FC.220. It is doubtful that the operator would do this training if the rating is only valid for the cruise phase. Also, if the operator is a 3rd country operator then it cannot be required to comply with Part ORO

Furthermore, it cannot be assumed that there will be a simulator available for use during the type rating course for a new pilot. For some older aircraft types we have the position where a small number of aeroplanes remain in service and the simulators are de-commissioned or are not approved under the Aircrew Regulation. In such cases the type rating course has to be completed in the aeroplane.

**Justification:**
Appendix 9, paragraph 18(a) should make clear that the training in the simulator must include take-off and landing in all cases, including those obtaining the rating through ZFTT. It must also make clear that the take-off and landing training must be completed in the aeroplane when an FFS is not available.

**Proposed Text:**

“18. In case of a restricted type rating issued in accordance with FCL.720.A(e), the applicants shall fulfil the same requirements as other applicants for the type rating except for;
(a) the take-off and landing exercises during any required flight training on the aeroplane, *provided that these exercises are completed in the FFS*.
(b) the take-off manoeuvres during the proficiency check for the revalidation or renewal of the type rating.”

**response**
Not accepted - thank you for your comment.
See reply to comment No 13 & 22.

**comment**
31  
This NPA increases training requirements (CRM) for Cruise Relief Pilots and for Cruise Relief Co-Pilots who will be required to have a FFS session every 90 days (instead of the common rules’ 6-months interval). Though this could be combined with other recurrent training/checking, such an additional measure implies extra costs.

Response

Noted - thank you for your comment.
See reply to comment No 7.

Comment 32

comment by: FNAM (French Aviation Industry Federation)

Appendix 9 – A. General – 18

Those requirements state that:
“In case of a restricted type rating issued in accordance with FCL.720.A(e), the applicants shall fulfil the same requirements as other applicants for the type rating except for;
(a) the take-off and landing exercises during the flight training on the aeroplane or in the case of ZFTT in an FFS as applicable.
(b) the take-off manoeuvres during the proficiency check for the revalidation or renewal of the type rating.”

On the other hand, in ORO.FC.A.201 In-flight relief of flight crew members, those requirements state:
“(b) The co-pilot may be relieved by:
[...]
(2) for operations only above FL 200, a cruise relief co-pilot that complies with the following minimum qualifications:
[...]
(iii) recurrent training in accordance with ORO.FC.230.
(iv) recurrent checking in accordance with ORO.FC.230 except for the take-off manoeuvres.”

FNAM wonders why the requirement are not the same between those 2 paragraphs. FNAM suggest that further to the adoption of this revision of FCL, a rulemaking task may be opened to eventually harmonize Air-Ops.

Response

Noted - thank you for your comment.
The revised version of the rule text clarifies the following principles:

1) The relief co-pilot does not need to perform any checking for the Take-off manoeuvres. The rational for this requirement is there will be no reason for the relief co-pilot to perform such duty, because before take-off the crew will return to the gate to resolve any possible crew issues.

2) The relief co-pilot is required to be checked in the landing manoeuvre at least in the pilot monitoring role. The rational this for requirement is to mitigate a possible incapacitation in flight where the relief co-pilot may be required to be seating at the controls of the aircraft during landing.
During the initial training, pilots are required to train take-offs and landings. The reason for such provision is to ensure that when eventually the CRCP moves to unrestricted Co-pilot role, and as it is not required to complete a new type rating course, the initial training conducted by the CRCP must be equivalent to the unrestricted Co-pilot training.

**Comment 33**

**Comment by:** Finnish Transport Safety Agency

**FCL.510.A ATPL(A) – Prerequisites, experience and crediting**

**Comment:**

Trafi suggests a clarification to be added for recording of flight time as a cruise relief co-pilot in AMC1 FCL.050 (b). At the moment the definition "Cruise relief co-pilot" means a pilot who relieves the co-pilot of his/her duties at the controls during the cruise phase of a flight in multi-pilot operations above Fl 200 (FCL.010). However, according to AMC1 FCL.050 (b)(3) a cruise relief co-pilot may log all flight time as co-pilot when occupying a pilot’s seat. As the cruise relief co-pilot quite often has also tasks when not occupying a pilot’s seat, it is unclear how this flight time should be recorded. In addition it is unclear which of these flight times, copilot time when occupying a pilot’s seat or the flight time when acting as a crew member but not occupying a pilot’s seat should be counted for crediting.

In Trafi’s opinion all flight time when acting as a crew member and having duties should be counted for crediting. This is based on the fact that also the flight engineer time is credited towards the ATPL licence.

**Response**

Noted - thank you for your comment.

Your comment related to AMC1 FCL.050 will be considered for the next update of AMC & GM to Part-FCL.

**Comment 34**

**Comment by:** Finnish Transport Safety Agency

**FCL.720.A Experience requirements and prerequisites for the issue of class or type ratings — aeroplanes**

**Comment:**

Trafi suggests that in order to remove the cruise relief co-pilot restriction, the required flight training could be completed also in an FFS if the pilot has at least 500 hours of flight time as a cruise relief co-pilot on the same type. As a mitigating measure new line training and checking is required after the removal of the restriction. Trafi suggests that the provisions of additional CRM training for pilots whose cruise relief co-pilot restriction has been removed will be added also under ORO.FC.220 points (d) and (e).

Suggested text:

(e) ..

To remove the restriction, the applicants shall comply with FCL.740(b) and complete the required flight training on the aeroplane in accordance with Appendix 9 to this Part. If the pilot has at least 500 hours of flight time as a cruise relief co-pilot on the same type, the required flight training can be completed also in an FFS. After the
**removal of restriction the flight training and checking and LIFUS shall be completed according to Part-ORO.**

**Response**

Not accepted - thank you for your comment.

The revised point FCL.720.A (c) specifies the need for an assessment conducted at the ATO based on which the amount of further training to remove the CRCP restriction is determined. In accordance with Appendix 9 to Part-FCL Section A paragraph 1, such training shall be completed in FSTD. Upon successful completion of the skill test, the pilot shall complete the training referred to in Appendix III (Part-ORO) ORO.FC.220(e) or complete flight training in the aircraft that includes take-off, landing and go-around manoeuvres.

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**Comment**

**35**

**Comment by:** Finnish Transport Safety Agency

**FCL.730.A Specific requirements for pilots undertaking a zero flight time type rating (ZFTT) course — aeroplanes**

**Comment:**

In Trafi’s opinion same credit as in FCL.510.A point (c)(3) should be added to FCL.730.A.

**Suggested text:**

(c) Hours of flight time or route sectors gained whilst exercising the privileges of a restricted type rating issued in accordance with FCL.720.A(e) shall not be credited up to a maximum credit of 250 hours towards (a)(1) and (2) above.

As already commented in FCL.510.A, the recording of flight time as a cruise relief copilot should be clarified. In Trafi’s opinion all flight time when acting as a crew member and having duties should be counted for crediting.

**Response**

Not accepted - thank you for your comment. See reply to comment No 9 & 13.

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**Comment**

**38**

**Comment by:** Finnish Pilots’ Association Safety and Security Committee

**GM1 ORO.GEN.110(f)**

-Add: (6) the means and occurrence severity/threshold when the relieving crew member shall be alerted back to the flight deck, especially if the crew on relief is the commander

**Response**

Not accepted - thank you for your comment. The suggested information is already contained in paragraph (4) ‘contingency scenarios’ of the GM1 ORO.GEN.110 (f).

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**Comment**

**39**

**Comment by:** Finnish Pilots’ Association Safety and Security Committee

**FCL. 060 (b) (3)**
- Add in some wording the need to practice high altitude manual flying in normal and reduced instrumentation and adequate practice to for the risks involved.

Justification: Recent years have shown many loss of control cases in mid-flight. Current requirements don’t adequately reflect the need for this training even for full-licenced pilots, and these lads are very inexperienced most of the time.

response

Noted - thank you for your comment.

The topic referred to in your comment is addressed by the revised point FCL.060 (3) (iii) and point ORO.FC.201. Such training is part of operator recurrent training programme, subject to the SMS established by the operator.

comment

40  
comment by: Finnish Pilots’ Association Safety and Security Committee

Add: requirement to maintain Either Pilots’ Seat training and qualification for all crew members in an augmented crew, when using a CRCP.

Justification: The CRCP is most often very inexperienced, and the other pilot should feel at home with the controls and instruments whether he is sitting on the left or right seat. This will bring more safety to an unexpected landing when the commander is incapacitated. Also monitoring of the other pilots' task is enhanced by this requirement.

response

Noted - thank you for your comment.

See reply to comment No 39.

comment

41  
comment by: Air Atlanta Icelandic

Comment on: FCL.730.A Specific requirements for pilots undertaking a zero flight time type rating (ZFTT) course — aeroplanes

Air Atlanta Icelandic has set up a cruise relief pilot programme in conjunction with one ATO where the pilot is trained and operates for the Air Atlanta Icelandic from the start of CRCP training and until he has competed the full type rating (unrestricted). Once the pilot reaches the minimum 500 hours as a CRCP (in the seat) and following a thorough evaluation he will be scheduled for further simulator training in order to complete the full type rating.

It is the opinion of Air Atlanta Icelandic that the changes to FCL.730.A for the requirement to ZFTT should be reconsidered if the CRCP undergoes the training and flying under the control of the same operator and same ATO, where in that case the CRCP hours could be counted towards the ZFTT requirement. After the full type rating the pilot could be restricted to operate on the same type and for the same operator until he gains the experience to undergo ZFTT training for another aircraft type.

In the Air Atlanta Icelandic programme the CRCP undergoes substantial training in take-off and landing in the simulator and is required to undergo OPC (Operators Proficiency check) and recurrent simulator training every 6 months to build up his capability to handle the aircraft and his progress is always reviewed before being allowed to undergo the full type rating in accordance to ZFTT. Before he will
undertake the ZFTT, he is given a Jet Orientation familiarisation, and substantial training in take-offs and landings in a Level D flight simulator.

Air Atlanta Icelandic only operates wide bodied aircraft and the suggested changes will be a considerable financial burden as the cost for conducting the landings are high and Air Atlanta Icelandic does not believe that the take-off and landing exercise will be added value for the CRCP in the Air Atlanta Icelandic CRCP to F/O programme.

Air Atlanta Icelandic has 15 pilots that have completed this program and are operating as a fully qualified pilots today.

response
Noted - thank you for your comment.
The updated rule text outlines the training requirements and prerequisites that pilots must fulfil to qualify for ZFTT. During discussions within the expert group, it was determined that a minimum of 750 hours of flying time would be required for this training.


comment 16
comment by: CAA-NL

In ORO.FC.201 (b) (2) (iii) and (iv) a proposal was made that a co-pilot may be relieved by:........(2)......that complies with the following minimum qualifications: recurrent training in accordance with ORO.FC.230 and recurrent checking in accordance with ORO.FC.230 except for the take-off manoeuvres. In our opinion it is not consistent to have a take-off and landing requirement for recurrent training and a take-off requirement only for recurrent checking.

response
Not accepted - thank you for your comment.
The take-off manoeuvre required for training is included, amongst other reasons, for the purpose of allowing the pilot to develop take-off skills already at this stage of his/her career. However, it is excluded from Checking as the relief co-pilot will not execute a take-off while he/she may need to execute a landing in case of emergency (e.g. F/O incapacitation). In addition, the new provision does not prevent the operator from performing further checks on the take-off manoeuvre.

comment 25
comment by: DGAC FRANCE

Amend ORO.FC.A.201 (a) as follows :

Comment :
The ORO.FC.A.201 (a) (2) should specify that the pilot relieving the commander above flight level 200 (RCP) has to be specifically trained for the task.

Proposal :

ORO.FC.A.201 In-flight relief of flight crew members

(a) The commander may delegate the conduct of the flight to :
(1) another qualified commander; or
(2) for operations only above flight level (FL) 200, a pilot specifically trained for the task and who complies with the following minimum qualifications:
   (i) ATPL;
   (ii) conversion training and checking, including type rating training, in accordance with ORO.FC.220;
   (iii) all recurrent training and checking in accordance with ORO.FC.230 and ORO.FC.240;
   (iv) route/area and aerodrome competence in accordance with ORO.FC.105.

response
Noted - thank you for your comment.
Point ORO.GEN.200(a)(4) “maintaining personnel trained and competent to perform their tasks” already includes such qualification requirements.


comment 6 comment by: Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)
GM1 ORO.FC.A.201(a)(2)(ii) and (iii) Ref page 16
The first sentence: “To enhance the leadership and decision making skills of the pilot relieving the commander”
Proposed action:
Amend the proposal: “To enhance the leadership and decision making skills of the pilot relieving the flight crew member”
Rationale:
The way the proposal is written it is not coherent.

response
Not accepted – thank you for your comment.
The proposed naming convention “flight crew member” is too generic as the flight crew member includes Co-pilot, Commander, CRCP etc. The aim was to specify the required level of leadership and decision-making skills to be reached by the pilot which needs to be equivalent to the commander.

comment 17 comment by: CAA-NL
It is not clear for us if CRM training should include all requirements stated in AMC1 ORO FC.115 or is it just limited to subjects mentioned in the NPA. In our opinion important subjects as resilience development and surprise/startle effect are missing.

response
Partially accepted – thank you for your comment.
Clarifications will be made in the amendment to AMC & GM to Part-ORO Subpart FC, n to ensure that the required CRM training provisions are clear.

comment 23 comment by: DGAC FRANCE
Chapter 3.2.1 (2) New GM1 ORO.GEN.110(f)
Subject: Operator responsibilities

BRIEFING BETWEEN RELIEVING FLIGHT CREW MEMBERS

Comment:

DGAC FOI considers the proposed briefing elements as a minimum. Consequently, the list of briefing items that follows the sentence “the briefing may include, for example” should be reinforced as follow.

Proposal:

The Briefing should include at least:

1. (1) Technical status of aeroplane including remaining fuel,
2. (2) En route and destination weather,
3. (3) Alternate airports,
4. (4) Contingency scenarios, and
5. (5) Cabin status.

response

Not accepted - thank you for your comment.
The operator can add, to the proposed bullet points, additional elements as the regulatory text is a Guidance material.

comment 24

comment by: DGAC FRANCE

Chapter 3.2.1 (4) New GM1 ORO.FC.A.201(a)(2)(ii) and (iii)

Subject: In-flight relief of flight crew members

LEADERSHIP AND DECISION MAKING SKILLS OF THE RELIEF PILOT

Comment:

DGAC FOI considers that the training program required for relief pilots should include the case of “total loss of electrical power supply”

Proposal:

To enhance the leadership and decision making skills of the pilot relieving the commander, an operator should include in its training program exercises related to issues identified by the operator’s safety risk management. In addition, an operator should consider including exercises such as initiation of emergency descent, engine failure in the cruise, smoke control and/or removal, unreliable airspeed indication, total loss of electrical power supply or upset prevention and recovery training.
| response | Not accepted – thank you for your comment. The proposed abnormal and emergency procedures suggested in this particular comment are too prescriptive as the difficulty of those manoeuvres depend on the aircraft type. For example, in the A350 aircraft the initiation of the emergency descent can be done by the autopilot. |
| comment | 26 | comment by: **DGAC FRANCE**
Chapter 3.2.1 (1) NEW AMC2 ORO.GEN.110(f)

Subject: Operator responsibilities
PROCEDURES FOR THE RELIEF OF FLIGHT CREW MEMBERS IN CAT OPERATIONS

Comment:

The proposed AMC2 ORO.GEN.110(f) states that “task sharing” should be included in the briefing associated to the handover (also not listed in new GM1 ORO.GEN.110(f)).

Along with the assignment of flight crew members stations or seats to relieving crew members (RH or LH seat), the operator procedures should also address the function of the relieving crew members, i.e. who will act as the Pilot Flying (PF) and Pilot Monitoring (PM).

Note: it is not intended to mandate through the AMC a particular task sharing between the pilot relieving the commander and the second first officer. The preferred option needs to be assessed by the operator.

Proposal:

[...]
— the assignment of flight crew member stations or seats and the task sharing to relieving crew members, accounting for different phases of flight, including any possible emergency scenarios and controlled rest periods.
[...]

response | Not accepted – thank you for your comment. There is no provision to discuss task sharing at crew level. The task sharing is decided by the operator and described in the OPS manual. Adding such wording in this provision would create questions about why other provisions did not include it, although task sharing also occurs. |
| comment | 27 | comment by: **DGAC FRANCE**
Chapter 3.2.1 (3) NEW AMC1 ORO.FC.A.201(a)(2)(ii)
### Subject: In-flight relief of flight crew members

**Comment:**

Operator procedures for the relief of the flight crew member should specify in the operations manual the minimum level of experience on the aircraft type of a first officer before he/she can act as a pilot relieving the commander.

It has to be considered that the minimum experience as defined in AMC1 ORO.FC.200(a) Composition of flight crew - CREWING OF INEXPERIENCED FLIGHT CREW MEMBERS may not be sufficient for a first officer newly qualified on the aircraft type to act as relief of the commander.

This would be in line with BEA recommendation: « *It is recommended to define additional criteria for access to the role of relief captain* ».

**Proposal:**

AMC1 ORO.FC.A.201(a)(2)(ii) In-flight relief of flight crew members

MINIMUM EXPERIENCE
The operator should define and specify in the operations manual the minimum level of experience for a first officer to be designated to act as pilot relieving the commander.

CRM TRAINING FOR THE RELIEF PILOT
The training should include [...] *(unchanged)*

**response**

Accepted – thank you for your comment.
The draft text is updated in line with your proposal.

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**comment 36**

**comment by:** Finnish Transport Safety Agency

AMC1 ORO.FC.A.201(a)(2)(ii) In-flight relief of flight crew members

**Comment**

In Trafi’s opinion the CRM training requirements should be transferred under AMC1 ORO.FC.115 & 215 where the other CRM requirements are stated.

**response**

Accepted. – thank you for your comment.
The draft text is updated in line with your proposal.

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**comment 37**

**comment by:** Finnish Transport Safety Agency

GM1 ORO.FC.A.201(a)(2)(ii) and (iii)

**Comment**

In Trafi’s opinion these training requirements should be transferred under AMC material for ORO.FC.230 where the other recurrent requirements are stated.

**response**

Not accepted - thank you for your comment.
Point ORO.FC.230 focusses on recurrent training for all operators. The GM is specific to the relieved flight crew and should be maintained in GM to point ORO.FC.A.201.


comment 8 comment by: Peter Pöyliö

NGA is an operator of 4 MD-11F aircraft. Currently we have approximately 50 pilots, 10 of which are Cruise Relief Co-Pilots. The CRCP’s have gone through full MD-11 type rating course including skill test, but due to the nature of work and the FL200 altitude restriction, Zero Flight Time Training has not been completed. The training has been given under the ATO’s of Finnair Flight Academy and Lufthansa Flight Training.

The CRCP’s follow the normal training scheduling, meaning that they fly the same programs as the other pilots. Training consisting of the following elements is being given every six (6) months:
- Web based training on mandatory subjects (MD-11 systems, CRM, DGR, SEC, etc.)
- Simulator training consisting of two days: on day one a four-hour school flight including training on the left seat. On day two a four-hour check flight with the CRCP flying from right seat and doing the Co-Pilot’s duties. The program changes on every training round.

In addition the NGA CRCP’s visit the simulator every 90 days and fly a manually flown program with a minimum of three takeoffs and landings.

Comments on the NPA are below.

Point 1:

4.5.4. Proportionality impact

There are no known small operators that make use of a CRP or CRCP. As only the large long-haul operators are using CRP or CRCPs, no proportionality impacts need to be considered.

According to information stated above the committee has not known about Nordic Global Airlines, which employs 10 Cruise Relief Co-Pilots. We are a small airline but we operate long haul traffic.

response Noted - thank you for your comment.


comment 1 comment by: Tim SINDALL

These comments relate to the role of the Cruise Relief Co-Pilot (CRCP):

Pages 38, 41 and 43. Threat String 5 states that risks attaching to pilot incapacitation should be mitigated by Normal Flight Crew Training, Part FCL. However, nothing in PART FCL reflects the text published in Annex 6 Part I paragraph 9.4.2.1 b) that, "The approach and landing procedure practice may be performed as the pilot who is not flying the aeroplane."
I was the UK Member of the ICAO Operations Panel when we first introduced this item with the role of the CRCP in mind, and articulated clearly the importance that CRCPs should experience when undertaking their 90-day refresher training both a selection of cruise-related emergencies (as are adequately addressed in the draft GM1.ORO.FC.A.201(a)(2)(ii) and (iii) on Page 16) and pilot-monitoring/pilot non-handling duties associated with an approach and landing. Any pilot of a heavy multi-engined aeroplane operating for the purposes of commercial air transport will understand that PM/PNH can be extremely busy during an approach and landing at a major aerodrome, and especially when that aerodrome is associated with an unplanned diversion. Unless a CRCP is given an opportunity to practise his/her skills as PM/PNH at this stage of flight in the course of a 90-day refresher he/she may find himself/herself unable to perform usefully following the incapacitation of one of the other pilot crew members.

A change is suggested to Recommendation 5, to reflect the ICAO Annex Part I provision, "The approach and landing procedure practice may be performed as the pilot who is not flying the aeroplane."

response
Noted - thank you for your comment.

The final draft rule text requires type rating training for CRCPs to include the entire type rating training syllabus (including take-off and landing manoeuvres), while skill tests and proficiency checks will only need to include landing manoeuvres in the role of the pilot monitoring.

comment 2
comment by: Tim SINDALL

The text of Recommendation 5 regarding ORO.FC.A.201 fails to reflect fully the provisions published in ICAO Annex 6 Part I Chapter 9, paragraph 9.4.2.1. I suggest that in order to correct this oversight, a sentence should be inserted following the revision in sub-paragraph (iv) to read, "Approach and landing checking should include performance as the pilot who is not flying the aeroplane."

response
Noted - thank you for your comment.

See the reply to comment No 1.

comment 18
comment by: CAA-NL

In our opinion the risk classification for physical seat change must be 'LOW' in stead of 'MED'. Based on the classification of risk scheme in chapter 6.1.9 the outcome of the combination Remote and minor is low and not medium.

response
Noted - thank you for your comment.
Appendix A - Attachments

Statement to EASA.pdf

Attachment #1 to comment #19