



# RNLAF Credit report PC7

## CPL(A)/IR, FI(A) restricted and Aerobatics + AUPRT, LPE and RT

### **Appendix**

- A Theoretical training compliance list
- B Training course compliance sheet
- C Academics to be trained during ATPL bridge course for ATPL(A)

*Please quote date, our reference and subject when replying.*

## 1 Introduction

Due to new regulations introduced for civilian flight crew licensing, the AIC-B 16/04 policy between Defence and the civilian aviation authority for crediting a civilian license became invalid. To obtain the credits again for a civilian license, the military service checked the obtained knowledge, experience and skills gained in military services against the new civilian regulation. Credit for pilot licences obtained during military service is regulated by the civilian regulation in article 10 of the European;

COMMISSION REGULATION No 1178/2011  
of 3 November 2011.  
Up to  
COMMISSION REGULATION 2016/539

The knowledge, experience and skill gained in military service shall be given credit for the purposes of the relevant FCL requirements in accordance with the elements of a credit report established by the Member State in consultation with the Agency. This report describes the Credit report for PC-7 pilots of the Royal Netherlands Air force to obtain the civilian CPL(A)/ IR with the addition of FI(A), FI(A) aerobatics. The credit report is set up according article 10 of the EC no 1178/2011 which covers the following items:

- Military requirement for issuing a FI(A)
- The scope of the privileges of the Military Pilot License holder;
- Credits to be given;
- Limitations to be included on the Part-FCL licences;
- Additional licenses/certificates;
- Additional requirements to request ATPL(A);
- Copies of all documents to be sent in for military to civilian conversion.

The validity of the credit report in relation to the EASA and military regulation is set **till December 2025**. IL&T will extend the validity each time with three years when the theoretical and practical training still meets the EASA requirement.

To maintain compliant with the EASA regulations, every change in EASA and military regulation on training need to be checked if it affects this credit report. For EASA changes, the MLA and the ATO who is giving the theoretical course inform the Defence organisation on the change, and the Defence organisation will inform MLA and the ATO when changes in military requirements are foreseen. If necessary the credit report will be amended to maintain in compliance with EASA.

This credit report is based on the Part-FCL AMC/GM amendment 4, and the referenced documents from the RNLAf.

***An application for the conversion Military to Civilian license can only be done once.*** All civilian licenses requested by military **aircrew with at least 3 years of experience on type (after type rating)**, which are currently still within the defence organisation are required to comply with this credit report.

When converted to civilian all other certificates or licenses are according EASA regulations, except when the civilian license is necessary for additional training within the defence organisation. Only in this case a special arrangement is created between the RNLAf and IL&T.

**Amendment February 2023.** In February 2023 this credit report was amended with the EASA rules change since the last update (27-9-2018). Upset Recovery Prevention Training (UPRT) was added and credited according EASA requirements. Initial F-35 type rating (b-course) was added and F-16 type rating was deleted. The validity of this credit report update ends in December 2025.

All changes (Feb 2023) will be added in red in this report.

## 2 Military requirements for issuing a MPL(A) & FI(A)

### 2.1 Total overview military pilot training course

To obtain a FI(A), the military student needs to pass successfully multiple flight training courses after he/she was granted a MPL(A/H) license. This report can only be used in addition to the credit reports-, jet, heli & transport. **Military Pilot Licences (MPL) are regulated and enforced by the NLD MAR-FCL who can be found at <https://english.defensie.nl/topics/military-aviation-authority/military-aviation-regulations>.**

### 2.2 Conversion helicopter pilots to fixed wing

The helicopter pilots who will transition to fixed wing in a later stage of their carrier also taken into account for fixed wing credits. The helicopter pilot training starts with the Military Pilot License Theoretical Knowledge followed by the initial training fixed wing, advanced training fixed wing, initial training helicopters, type rating training and (initial) mission training for helicopter pilots. When an operational helicopter pilot for at least 3 years the credits are for theoretical ATPL(H), and depending on helicopter type and flown hours CPL(H) or ATPL(H) with IR. See for details RNLAf credit report CPL(H) IR or ATPL(H) IR. This report describes the compliance of the helicopter pilot transitioned to fixed wing.

The table below gives an overview of the courses required for all military pilot to get the FI(A) certificate.

Course	location
Instruction technique for instructors	NL
Fixed wing conversion PC-7	NL
Flight Instruction aeroplane course	NL
Instruction conversion PC-7	NL

In the next paragraphs the military training program is described for all pilots (fixed wing and helicopter).

### 2.3 Instruction technique for instructors

The objective is to train military pilots the instruction techniques for flight instruction. **Training is in accordance to the Netherlands Military Aviation Regulations Flight Crew License (NLD MAR-FCL). The NLD MAR-FCL is based on the civilian Part FCL with additional military requirements.**

Entry Prerequisites- Pilots must have a valid military pilot license

Status Upon Completion — Eligible for flight instructor course

The training consists of theoretical training:

Course length : 3 days  
Academic flight training : 24 hrs

For more information see Reference 1: TM instruction technique for instructors

#### 2.4 Fixed wing conversion PC-7

The objective is to qualify military pilots to the PC-7 type rating with IR.

Entry Prerequisites- Pilots must have a valid military pilot license

Status Upon Completion — Pilot in command, VFR, IFR and formation flying.

The training consists of theoretical and practical training. Training is in accordance to the Netherlands Military Aviation Regulations Flight Crew License (NLD MAR-FCL). The NLD MAR-FCL is based on the civilian Part FCL with additional military requirements. After completion of the PC-7 Type rating, the pilot has obtained the following knowledge in pilot training:

Course length	: 7 weeks
Academic flight training	: 18 hrs
Flight training	: 50,4 hrs

For more information see Reference 2: TM type conversion PC7

#### 2.5 Flight Instruction aeroplane course

The objective is to qualify military pilots to become flight instructors.

Entry Prerequisites- Pilots must have a valid military pilot license and type rated on the PC7.

Status Upon Completion — Military Flight instructor.

The training consists of theoretical and practical training. After completion of the flight instructor course, the pilot has obtained the following knowledge in pilot training:

Course length	: 12 weeks
Academic flight training	: 155 hrs
Flight training	: 50,5 hrs

For more information see Reference 3: TM Flight Instructor (Aeroplane) Course

#### 2.6 Instruction conversion PC-7

The objective is to qualify military pilots to become flight instructors on the PC7.

Entry Prerequisites- Pilots must have a valid military pilot license, Flight instructor and type rated on the PC7.

Status Upon Completion — Flight instructor on the PC7.

The training consists of theoretical and practical training. After completion of the flight instructor conversion course, the pilot has obtained the following knowledge in pilot training:

Course length : 3 weeks  
 Academic flight training : 16 hrs  
 Flight training : 21,2 hrs

For more information see Reference 4: TM instruction qualification on the PC7

Advanced Upset Prevention Recovery Training (AUPRT) as part of the EMVO syllabus versus EASA requirement: EASA requirement according: FCL.745.A Advanced UPRT course — aeroplanes

During the EMVO:

AUPRT practical flight training: 7,2 hours (all performed as dual flight instruction) AUPRT Theoretical knowledge training: 10,65 hours Pre- and postflight briefings are executed on all UPRT related sorties

The FI(A) training is compliant with EASA FCL.915 General prerequisites and requirements for instructors.

For a total overview in flight hours and academics for the helicopter to fixed wing pilot see below (fixed wing related);

		PC-7 inst.
ITT	Theoretical	24
PC-7 type rating	Theoretical	18
	practical	50,4
FI course	Theoretical	155
	practical	50,5
FI conv PC-7	Theoretical	16
	practical	21,2
<b>TOTAL</b>	<b>Theoretical</b>	<b>213</b>
	<b>practical</b>	<b>122,1</b>

### 3 The scope of the privileges of the Military Pilot License holder

After successfully completing the Flight Instructor Course, the FI rating is added to the MPL (A). The first privilege is to act as FI restricted. When the instructor has 200 hrs on type, 100 hrs as FI (restr.) with 5 solo releases and 100 hrs instrument time (for IR instruction), the restriction is removed.

## 4 Credits to be given

The knowledge, experience and skill gained during flight training is compared to the civilian standards regulation 1178/2011. This report can only be used in addition to the credit reports jet, heli & transport.

Credits to be given, depending actual flight hours:

### **CPL(A)/IR, FI(A)restricted, FI(A) aerobatics (including PBN) + AUPRT, LPE and RT**

The following Part- FCL regulations are used to compare the military training versus civilian requirement and training for the credits to be given for:

FCL.930.FI FI-training course

FCL.800 Aerobatic rating

Appendix 3, Subpart E CPL modular course -Aeroplanes

#### 4.1 FI(A) experience requirements and crediting

FCL.930.FI states:

(a) Applicants for the FI certificate shall have passed a specific pre-entry flight test with an FI qualified in accordance with FCL.905.FI(i) within the 6 months preceding the start of the course, to assess their ability to undertake the course. This pre-entry flight test shall be based on the proficiency check for class and type ratings as set out in Appendix 9 to this Part.

(b) The FI training course shall include:

(1) 25 hours of teaching and learning;

(2)

(i) in the case of an FI(A), (H) and (As), at least 100 hours of theoretical knowledge instruction, including progress tests;

(ii) in the case of an FI(B) or FI(S), at least 30 hours of theoretical knowledge instruction, including progress tests;

(3)

(i) in the case of an FI(A) and (H), at least 30 hours of flight instruction, of which 25 hours shall be dual flight instruction, of which 5 hours may be conducted in an FFS, an FNPT I or II or an FTD 2/3;

(ii) in the case of an FI(As), at least 20 hours of flight instruction, of which 15 hours shall be dual flight instruction;

(iii) in the case of an FI(S), at least 6 hours or 20 take-offs of flight instruction;

(iv) in the case of an FI(S) providing training on TMGs, at least 6 hours of dual flight instruction on TMGs;

(v) in the case of an FI(B), at least 3 hours of flight instruction, including 3 take-offs.

The military FI, is assessed before becoming a Flight instructor, and will have 179 hrs of theoretical training and 67,5 hours of flight instruction training on the PC-7. The military training is compliant to the EASA regulations.

4.2 IR(A) experience requirements and crediting for helicopter pilots

Part FCL appendix 6 IR(A) modular flying training course states:

- (a) Basic instrument Flight module. This comprises 10 hours of instrument time under instruction, of which up to 5 hours can be instrument ground time in a BITD, FNPT I or II, or an FFS. Upon completion of the Basic Instrument Flight Module, the candidate shall be issued a Course Completion Certificate.
- (b) Procedural instrument Flight module: This comprises the remainder of the training syllabus for the IR(A), 40 hours single-engine or 45hours multi-engine instrument time under instruction, and the theoretical knowledge course for the IR(A)

The Helicopter pilot when finished the Flight instructor course on PC-7 will have totally 161 Hrs theoretical training, 20 hrs IFR ground simulation and 36,2 hrs Actual IFR training from the following courses:

<b>Course</b>	<b>Theoretical</b>	<b>Simulator</b>	<b>Practical</b>
MPTKL	56	--	--
EMVO	36	4	6,2
VVO	69	9,5	9,5
IERW			10
TC-PC7		6	9,1
FI(A) PC7		5	2,6
<b>Totalling</b>	<b>161</b>	<b>24,5</b>	<b>37,4</b>

**Table 1 IFR training helicopters**



	Compliant	Remark
<b>A. IR(A) – Modular flying training course</b>		
<b>GENERAL</b>		
1. The aim of the IR(A) modular flying training course is to train pilots to the level of proficiency necessary to operate aeroplanes under IFR and in IMC. The course consists of two modules, which may be taken separately or combined:		
(a) Basic Instrument Flight Module This comprises 10 hours of instrument time under instruction, of which up to 5 hours can be instrument ground time in a BITD, FNPT I or II, or an FFS. Upon completion of the Basic Instrument Flight Module, the candidate shall be issued a Course Completion Certificate.	x	EMVO  4 hrs ground simulator, 6.2 hrs practical training
(b) Procedural Instrument Flight Module This comprises the remainder of the training syllabus for the IR(A), 40 hours single-engine or 45 hours multi-engine instrument time under instruction, and the theoretical knowledge course for the IR(A)	x	VVO/IERW/TC PC7/FI(A) PC7 20,5 sim and 31,2 actual  See table IFR training helicopters
<b>THEORETICAL KNOWLEDGE</b>		
6. An approved modular IR(A) course shall comprise at least 150 hours of theoretical knowledge instruction.	x	MPTKL,EMVO,VVO (56,36,69) totalling 161 hrs
<b>FLYING TRAINING</b>		
7. A single-engine IR(A) course shall comprise at least 50 hours instrument time under instruction of which up to 20 hours may be instrument ground time in an FNPT I, or up to 35 hours in an FFS or FNPT I.	x	VVO/IERW/TC PC7/FI(A) PC7 20,5 sim and 31,2 actual
10.2 The holder of an IR(H) may have the total amount of training required in paragraphs 7 or 8 above reduced to 10 hours.	x	IERW/ Type rating
10.3 The total instrument flight instruction in aeroplane shall comply with paragraph 7 or 8, as appropriate.	x	20 hrs simulator and 37,4 flight instruction (totalling 57,4 hrs)

**Table 2 Appendix 7 of Part-FCL**

#### 4.3 Aerobatic experience requirements and crediting

FCL.800 states:

- (a) Holders of a pilot licence for aeroplanes, TMG or sailplanes shall only undertake aerobatic flights when they hold the appropriate rating.
- (b) Applicants for an aerobatic rating shall have completed:
  - (1) at least 40 hours of flight time or, in the case of sailplanes, 120 launches as PIC in the appropriate aircraft category, completed after the issue of the licence;
  - (2) a training course at an ATO, including:
    - (i) theoretical knowledge instruction appropriate for the rating;
    - (ii) at least 5 hours or 20 flights of aerobatic instruction in the appropriate aircraft category.
- (c) The privileges of the aerobatic rating shall be limited to the aircraft category in which the flight instruction was completed. The privileges will be extended to another category of aircraft if the pilot holds a licence for that aircraft category and has successfully completed at least 3 dual training flights covering the full aerobatic training syllabus in that category of aircraft.

And when the FI is checked for (Voortgezette Vlieger Opleiding) VVO instruction:

FCL.905.FI FI — Privileges and conditions states:

- (f) a towing, **aerobatic** or, in the case of an FI(S), a cloud flying rating, provided that such privileges are held and the FI has demonstrated the ability to instruct for that rating to an FI qualified in accordance with point (i);

The PC-7 FI(A) has demonstrated his ability to train aerobatic to a qualified FI(A) with aerobatic rating, before training VVO students are allowed.

Within the training syllabus EMVO & VVO Aerobatics are included and the FI's are instructed during the EMVO and VVO. See compliance list appendix A. In addition to the aerobatic rating, the flight instructor is giving instruction in aerobatics. The military flight instructor pilot is compliant to the EASA aerobatic regulations, with the addition of giving lessons in aerobatic.

#### 4.4 CPL(A) for RNLAf pilots

Appendix 3, subpart E CPL modular training course states:

1. The aim of the CPL(A) modular course is to train PPL(A) holders to the level of proficiency necessary for the issue of a CPL(A).
2. Before commencing a CPL(A) modular course an applicant shall be the holder of a PPL(A) issued in accordance with Annex 1 to the Chicago Convention.
3. Before commencing the flight training the applicant shall:
  - (a) have completed 150 hours flight time;
  - (b) have complied with the prerequisites for the issue of a class or type rating for multi-engine aeroplanes in accordance with Subpart H, if a multi-engine aeroplane is to be used on the skill test.
4. An applicant wishing to undertake a modular CPL(A) course shall complete all the flight instructional stages in one continuous course of training as arranged by an ATO. The theoretical knowledge instruction may be given at an ATO conducting theoretical knowledge instruction only.
5. The course shall comprise:
  - (a) theoretical knowledge instruction to CPL(A) knowledge level; and
  - (b) visual and instrument flying training.

#### FLYING TRAINING

8. Applicants without an IR shall be given at least 25 hours dual flight instruction, including 10 hours of instrument instruction of which up to 5 hours may be instrument ground time in a BITD, an FNPT I or II, an FTD 2 or an FFS.
9. Applicants holding a valid IR(A) shall be fully credited towards the dual

instrument instruction time. Applicants holding a valid IR(H) shall be credited up to 5 hours of the dual instrument instruction time, in which case at least 5 hours dual instrument instruction time shall be given in an aeroplane. An applicant holding a Course Completion Certificate for the Basic Instrument Flight Module shall be credited with up to 10 hours towards the required instrument instruction time.

10. (a) Applicants with a valid IR shall be given at least 15 hours dual visual flight instruction.

(b) Applicants without a night rating aeroplane shall be given additionally at least 5 hours night flight instruction, comprising 3 hours of dual instruction, which shall include at least 1 hour of crosscountry navigation and 5 solo take-offs and 5 solo full stop landings.

11. At least 5 hours of the flight instruction shall be carried out in an aeroplane certificated for the carriage of at least 4 persons and have a variable pitch propeller and retractable landing gear.

#### EXPERIENCE

12. The applicant for a CPL(A) shall have completed at least 200 hours flight time, including at least:

(a) 100 hours as PIC, of which 20 hours of cross-country flight as PIC, which shall include a VFR crosscountry flight of at least 540 km (300 NM), in the course of which full stop landings at two aerodromes different from the aerodrome of departure shall be made;

(b) 5 hours of flight time shall be completed at night, comprising 3 hours of dual instruction, which shall include at least 1 hour of cross-country navigation and 5 solo take-offs and 5 solo full stop landings; and

(c) 10 hours of instrument flight instruction, of which up to 5 hours may be instrument ground time in an FNPT I, or FNPT II or FFS. An applicant holding a course completion certificate for the Basic Instrument Flight Module shall be credited with up to 10 hours towards the required instrument instruction time. Hours done in a BITD shall not be credited;

(d) 6 hours of flight time shall be completed in a multi-engine aeroplane, if a multi-engine aeroplane is used for the skill test.

(e) Hours as PIC of other categories of aircraft may count towards the 200 hours flight time, in the following cases:

- (i) 30 hours in helicopter, if the applicant holds a PPL(H); or
- (ii) 100 hours in helicopters, if the applicant holds a CPL(H); or
- (iii) 30 hours in TMGs or sailplanes; or
- (iv) 30 hours in airships, if the applicant holds a PPL(As); or
- (v) 60 hours in airships, if the applicant holds a CPL(As).

The experience gained related to the EXPERIENCE mentioned above:

(a) More than 100 hrs as PIC, and crosscountry requirements (helicopter credits included)

(b) More than 5 hrs flight time at night, with minimum 3 hrs flight instruction (fixed wing) and solo flight at night.

(c) More than 10 hrs instrument flight instruction

(d) Is not applicable

(e) For helicopter pilots crediting of 100 hrs.

#### 4.5 PBN compliance

For civilian Instrument ratings as of Aug 2018 a Performance based Navigational (PBN) training is required. The RNLAf operates according the PBN principles. The requirement for PBN and the RNLAf compliance to this training is presented in appendix B PBN compliance sheet.

#### 4.6 Conclusion

The requirement for CPL(A) and Flight instruction course (restricted) for military pilots fulfils the civilian requirements of Appendix 3, subpart E CPL(A) module, the FCL.930.FI and FCL.800. Were a RNLAf pilot will have at least 400 hrs practical and for flight instructor a training in academic hours of 213 hrs, and additional 122,1 hours of flight training.

The full FI training course is credited, however the Assessment of Competence must be assessed by an FIE assigned by the Dutch authority.

On top of the normal credit reports (Transport, Jet and Helicopter) the following credits can be requested:

An overview of credits are presented in the table below.

Transport/Jet training pre-training courses	FI (A) res aerobatics	FI(A) res
ITT	x	x
FI-Course	x	x
FI-conv PC-7	x	x
FI VVO	x	
Military bridge course FW	x	x

Heli training pre-training courses	FI (A) res aerobatics	CPL(A) /IR	FI(A) res
ITT	x	x	x
FI-Course	x	x	x
FI-conv PC-7	x	x	x
FI VVO	x		
Military bridge course FW	x	x	x

## 5 Additional licenses/certificates

See credit reports Jet, heli and transport

## 6 Limitations to be included on the Part-FCL licences

See credit reports jet, heli and transport

## 7 Additional requirements to request ATPL

See credit reports Jet, heli and transport

## 8 Copies of all documents

To obtain the civilian license, the following documents need to be send to KIWA;

Request form CPL(A)/IR

(valid) Passport copy

Flight Logbook

Current civilian flight medical

Copy of Military Pilot License

Copy list of functions which indicates the date when placed on an operational squadron.

FI Assessment of competence form.

Checklist for sending in application EASA FCL

<b>Document</b>	<b>Remark</b>
KIWA request form PPL(A)/CPL(A)/ATPL(A)	Download application on: <a href="https://diensten.kiwa.nl/vergunningen/luchtvaart">https://diensten.kiwa.nl/vergunningen/luchtvaart</a>
Passport copy	Valid passport
Flight logbook	PDF of flight logbook (OMIS) To check flight experience and IR prof check
Copy Flight medical	Civilian (from CML)
Copy military Pilot license	
Copy of functions	PDF of personal file (peoplesoft) To check training curriculum
Military bridge course certificate FW	Check for successful completion of the bridge course.
FI competence check	Assessment of Competence must be performed by a FIE assigned by the Dutch authority



- Reference 1: Training manual Instruction Technique Instructors  
Cursusnummer 036286 version 1.1
- Reference 2: TM Type conversion PC7 pubnr: 066707 6 april 2013
- Reference 3: TM Flight Instructor (Aeroplane) Course pubnr:066693 31-8-2012
- Reference 4:TM Instruction Conversion PC7 pubnr:066742 1 oct 2012



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22-3-2023

**Our reference**  
Credit report 2023

## RNLAF Credit report PC7

CPL(A)/IR, FI(A) restricted and Aerobatics + AUPRT, LPE  
and RT

### **Appendix**

- A Theoretical training compliance list
- B Training course compliance sheet
- C Academics to be trained during ATPL bridge course for ATPL(A)

*Please quote date, our reference and subject when replying.*

Appendix: A Aerobatic training compliance list

Appendix: B PBN compliance sheet

## Appendix A Aerobatic compliance list

THEORETICAL KNOWLEDGE AND FLYING TRAINING	FIXED WING	HELO
(a) The aim of the aerobatic training is to qualify licence holders to perform aerobatic manoeuvres.	AETC P-V4A-N-3(T-38C) Apr 17 Ch 1	VVO
(b) The ATO should issue a certificate of satisfactory completion of the instruction to licence endorsement.		-
(c) Theoretical knowledge The theoretical knowledge syllabus should cover the revision or explanation of:	EMVO/AETC P-V4A-N-3(T-38C)	EMVO/VVO
(1) human factors and body limitation:	X	X
(i) spatial disorientation;	X	X
(ii) airsickness;	X	X
(iii) body stress and G-forces, positive and negative;	X	X
(iv) effects of grey- and blackouts.	X	X
(2) technical subjects:		
(i) legislation affecting aerobatic flying to include environmental and noise subjects;	X	X
(ii) principles of aerodynamics to include slow flight, stalls and spins, flat and inverted;	X	X
(iii) general airframe and engine limitations (if applicable).	X	X
(3) limitations applicable to the specific aircraft category (and type):	X	X
(i) air speed limitations (aeroplane, helicopter, TMG and sailplane, as applicable);	X	X

(ii) symmetric load factors (type-related, as applicable);	X	X
(iii) rolling Gs (type-related, as applicable).	X	X
(4) aerobatic manoeuvres and recovery:	X	X
(i) entry parameters;	X	X
(ii) planning systems and sequencing of manoeuvres;	X	X
(iii) rolling manoeuvres;	X	X
(iv) looping manoeuvres;	X	X
(v) combination manoeuvres;	X	X
(vi) entry and recovery from developed spins, flat, accelerated and inverted.	X	X
(5) emergency procedures:	X	X
(i) recovery from unusual attitudes;	X	X
(ii) drills to include the use of parachutes (if worn) and aircraft abandonment.	X	X
<b>(d) Flying training</b>		<b>VVO</b>
The exercises of the aerobatic flying training syllabus should be repeated as necessary until the applicant achieves a safe and competent standard. Having completed the flight training, the student pilot should be able to perform a solo flight containing a sequence of aerobatic manoeuvres. The dual training and the supervised solo training flights should be tailored to the category of aircraft and limited to the permitted manoeuvres of that type of aircraft. The exercises should comprise at least the following practical training items:		
(1) confidence manoeuvres and recoveries:		
(i) slow flights and stalls;	x	x
(ii) steep turns;	x	x
(iii) side slips;	x	x

(iv) engine restart in-flight (if applicable);	simulator	simulator
(v) spins and recovery;	x	x
(vi) recovery from spiral dives;	x	x
(vii) recovery from unusual attitudes.	x	x
(2) aerobatic manoeuvres:	x	x
(i) Chandelle;	x	x
(ii) Lazy Eight;	x	x
(iii) rolls;	x	x
(iv) loops;	x	x
(v) inverted flight;	x	x
(vi) Hammerhead turn;	x	x
(vii) Immelmann.	x	x

## Appendix C PBN compliance sheet

	ALL	Jet	Transport	Heli Germany	Heli USA
062 07 00 00 PBN	EMVO				
062 07 01 00 PBN concept (as described in ICAO Doc 9613)	EMVO				
062 07 01 01 PBN principles	EMVO				
062 07 01 02 PBN components	EMVO				
062 07 01 03 PBN scope	EMVO				
062 07 02 00 Navigation specifications	EMVO				
062 07 02 01 RNAV and RNP	EMVO				
062 07 03 00 Use of PBN	EMVO				
062 07 03 01 Airspace planning	EMVO				
062 07 03 02 Approval	EMVO				
062 07 03 03 Specific RNAV and RNP system functions	EMVO				
062 07 03 04 Data processes	EMVO				
062 07 04 00 PBN operations	EMVO				
062 07 04 01 PBN principles	EMVO				
062 07 04 02 On-board performance monitoring and alerting		AETC P4A	T-44C ADVANCED MULTI- ENGINE MPTS	Heeresfliegerwaffenschule	IERW FSXXI

062 07 04 03 Abnormal situations		AETC P4A	T-44C ADVANCED MULTI- ENGINE MPTS	Heeresfliegerwaffenschule	IERW FSXXI
062 07 04 04 Database management		AETC P4A	T-44C ADVANCED MULTI- ENGINE MPTS	Heeresfliegerwaffenschule	IERW FSXXI
062 07 05 00 Requirements of specific RNAV and RNP specifications		AETC P4A	T-44C ADVANCED MULTI- ENGINE MPTS	Heeresfliegerwaffenschule	IERW FSXXI
062 07 05 01 RNAV10		AETC P4A	T-44C ADVANCED MULTI- ENGINE MPTS	Heeresfliegerwaffenschule	IERW FSXXI
062 07 05 02 RNAV5		AETC P4A	T-44C ADVANCED MULTI- ENGINE MPTS	Heeresfliegerwaffenschule	IERW FSXXI
062 07 05 03 RNAV/RNP1/2		AETC P4A	T-44C ADVANCED MULTI- ENGINE MPTS	Heeresfliegerwaffenschule	IERW FSXXI

062 07 05 04 RNP4		AETC P4A	T-44C ADVANCED MULTI- ENGINE MPTS	Heeresfliegerwaffenschule	IERW FSXXI
062 07 05 05 RNP APCH		AETC P4A	T-44C ADVANCED MULTI- ENGINE MPTS	Heeresfliegerwaffenschule	IERW FSXXI
062 07 05 06 RNP AR APCH		AETC P4A	T-44C ADVANCED MULTI- ENGINE MPTS	Heeresfliegerwaffenschule	IERW FSXXI
062 07 05 07 A-RNP		AETC P4A	T-44C ADVANCED MULTI- ENGINE MPTS	Heeresfliegerwaffenschule	IERW FSXXI
062 07 05 08 PBN Point in Space (PinS) departure		AETC P4A	T-44C ADVANCED MULTI- ENGINE MPTS	Heeresfliegerwaffenschule	IERW FSXXI
062 07 05 09 PBN Point in Space (PinS) approach		AETC P4A	T-44C ADVANCED MULTI- ENGINE MPTS	Heeresfliegerwaffenschule	IERW FSXXI



062 05 04 00 FMS and general terms		AETC P4A	T-44C ADVANCED MULTI- ENGINE MPTS	Heeresfliegerwaffenschule	IERW FSXXI
062 05 04 03 Navigation data base		AETC P4A	T-44C ADVANCED MULTI- ENGINE MPTS	Heeresfliegerwaffenschule	IERW FSXXI
062 05 04 06 Determination of the FMS- position of the aircraft		AETC P4A	T-44C ADVANCED MULTI- ENGINE MPTS	Heeresfliegerwaffenschule	IERW FSXXI
062 06 00 00 GLOBAL NAVIGATION SATELLITE SYSTEMS	EMVO	AETC P4A	T-44C ADVANCED MULTI- ENGINE MPTS	Heeresfliegerwaffenschule	
062 06 01 00 GPS/GLONASS/GALILEO	EMVO	AETC P4A	T-44C ADVANCED MULTI- ENGINE MPTS	Heeresfliegerwaffenschule	
062 06 01 01 Principles	EMVO	AETC P4A	T-44C ADVANCED MULTI- ENGINE MPTS	Heeresfliegerwaffenschule	IERW FSXXI

062 06 01 02 Operation		AETC P4A	T-44C ADVANCED MULTI- ENGINE MPTS	Heeresfliegerwaffenschule	IERW FSXXI
062 06 01 03 Errors and Factors affecting accuracy	EMVO				
062 06 02 00 Ground, Satellite and Airborne based augmentation systems	EMVO				
Practical	ALL	Jet	Transport	Heli Germany	Heli USA
Practical skill test IR(A) PBN	Appendix 3 to MAR-FCL 2.320 Contents of the skill test for the issue and renewal of an IR(A)				