

Kontrollantmöte SP

2023-04-18



*What do you bring
from the morning?*

- *Henrik Wallén*
- *Vänster med vind R21 ESGG*
- *CPL 2001*
- *SPU & BSAA*
- *FI(A) – SE/ME/IR/Instructor*
- *TRI/TRE Beech200/250*
- *SEN Examiner + FIE*
- *TS from 15/5 ☺*
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The afternoon is introduced at

www.menti.com

”rfarenhet är

”



BASA

Annex 3



BASA- Bilateral Aviation Safety Agreement

Information till dig som önskar konvertera ett
FAA certifikat för flygplan till ett Del-FCL
certifikat

Den 18 maj 2021 trädde ett avtal i kraft, Annex 3 till det s.k. BASA avtalet, som möjliggör konverteringar av privatflygarcertifikat för flygplan (inkl SEP, MEP, Mörker och Instrument) för FAA certifikatinnehavare.

[Mer information om konvertering av FAA-certifikat enligt BASA](#)

BASA- Bilateral Aviation Safety Agreement

- Bulletpoints:
 - Not for everyone (place of stay and date for skilltest affect)
 - Only for valid ratings/license
 - Can only give you PPL+ applicable rating
 - Current flight experience training and testing
 - NOTE! No theoretical knowledge examination before skilltest
 - Testresult (incl oral theory) shall be noted in your logbook
 - Read and follow the form – its all there!
 - Ask us if you have any questions

Basic Instrument Rating - BIR



BIR – Basic Instrument Rating

- To increase utility and safety mainly for PPL-pilots and non-commercial aviation
- Privileges and the competency based requirements are adapted to the needs of private pilots.
- "Replaces" EIR – what can I do with my EIR?
<https://www.transportstyrelsen.se/sv/luftfart/Certifikat-och-utbildning/information-gallande-overgang-fran-eir-till-bir/>

BIR – What's new?



FCL.835 Basic instrument rating (BIR)

Regulation (EU) 2020/359

(a) Privileges and conditions

- (3) BIR privileges may be exercised at night only if the pilot holds a night rating in accordance with point [FCL.810](#).

BIR – What's new?

- (5) The exercise of BIR privileges shall be subject to all of the following conditions:
- (i) the decision height (DH) or minimum descent height (MDH) used in aerodrome operating minima shall be at least 200 ft greater than what would otherwise be calculated according to point 'NCO.OP.110 Aerodrome operating minima – aeroplanes and helicopters' and point 'NCO.OP.111 Aerodrome operating minima – NPA, APV, CAT I operations' to Annex VII of [Regulation \(EU\) No 965/2012](#); and
 - (ii) the visibility used in aerodrome operating minima shall not be less than 1 500 m;
 - (iii) the pilot-in-command shall not commence a flight under IFR or undertake a VFR-to-IFR transition, unless:
 - (A) at the aerodrome of departure, the visibility is at least 1 500 m and the cloud ceiling is at least 600 ft, or the published circling minimum applicable to the aeroplane category, whichever is the greater; and
 - (B) at the destination aerodrome and at any required alternate aerodrome the available current meteorological information indicates, for the period from 1 hour before until 1 hour after the estimated time of arrival, or from the actual time of departure to 1 hour after the estimated time of arrival, whichever period is shorter, a visibility of at least 1 500 m and a cloud ceiling of at least 600 ft, or the published circling minimum applicable to the aeroplane category, or the DH/MDH incremented by 200 ft in accordance with (i), whichever is the greater.

BIR – What's new?

Min 1500m vis
+ (highest of)
600ft ceiling
or
circling minima



Min 1500m vis
+ (highest of)
600ft ceiling
or
circling minima
or
+200ft DH/MDH



BIR – What's new?

- Competency based training – no minimum hour requirement



Module	Theory	Flight training	Order	ATO?
1	1 exam per mod. (80 hrs min..) 7 subjects FCL.615 a) +Appendix 6	Core flying (IR)	First!	End at ATO
2		Dep, hold, 2D/3D	Optional	End at ATO
3		En-route		Not req
4 (ME only)		Multi engine		End at ATO

BIR – Skilltest

- (e) Skill test. After the completion of the training course specified in paragraph (c), the applicants shall pass a skill test in an aeroplane in accordance with Appendix 7 to this Annex. For a multi-engine BIR, the skill test shall be taken in a multi-engine aeroplane. For a single-engine BIR, the skill test shall be taken in a single-engine aeroplane. A multi-engine centreline thrust aeroplane shall be considered to be a single-engine aeroplane for the purposes of this paragraph.

- Same pass standards as IR
– appendix 7
- Remember "school-check"
(skilltests only)

The form is titled 'Instrument Rating (IR) and Basic Instrument Rating (BIR) Aeroplane' and includes sections for the examiner, applicant, flight time, and training organization.

A. To be completed by the examiner:
 IR Single Engine (SE) BIR Single Engine (SE) IR Multi Engine (ME) BIR Multi Engine (ME)

B. To be completed by the applicant:
First name: ... Last name: ...
First name: ... Last name: ...
First name: ... Last name: ...
Address: ... City: ... Post code: ... E-mail address: ...
Phone: ...
Flight time:
Pilot-in-command: ... Other crew: ... Instructor: ... Instrument rating time: ...
 Applicant verification of compliance according to ARA GEN 315 and AMC1 ARA GEN 315 (I)
 ARA GEN 315
C. To be completed by Training organisation (continued on page 2):
Name of training organization: ...
Name of training officer responsible for the course:
Course intended:
 ATP Integrated CPL/R Integrated IR Modules
 Flight time practical (with minimum of 8 hours) MCC completed
 MCC integrated CBR Modules BIR
 Pre-only assessment Yes No Planned MCC time
Swedish Transport Agency
SE-401 72 Norrköping, Sweden
Göta kyrkogata 16, Norrköping
Telephone: +46 771 503 802
Telefax: +46 11 160 249

BIR - Validity, revalidation & renewal

(g) Validity, revalidation and renewal

- (1) A BIR shall be valid for 1 year.
- (2) Applicants for the revalidation of a BIR shall:
 - (i) within a period of three months immediately preceding the expiry date of the rating, pass a proficiency check in accordance with [Appendix 9](#) to this Part; or
 - (ii) within the validity period, complete 6 hours as PIC under IFR including three instrument approach procedures and complete a training flight of at least one hour with an instructor who holds privileges to provide training for the BIR.
- (3) For each alternate subsequent revalidation, the holder of the BIR shall pass a proficiency check in accordance with paragraph (2)(i) in an aeroplane.



BIR – Discussion

What is competency based training to you?

Have you instructed any competency based courses?

Training element	
Title of assessed item taken from training module	
This cell describes the applicant's proficiency to be assessed by the training organisation or instructor.	
Module 2: 3D approach procedures (must be performed by sole reference to instruments)	
Altitude, speed, heading control (stabilised approach)	
OBJECTIVE	<p>(A) Establish a stabilised approach, in trim for the aeroplane configuration and speed, using the correct techniques for attitude, heading and power control.</p> <p>(B) Correct assessment of track and vertical path.</p>
SKILL	<p>(A) Establish the final approach and maintain the approach path in horizontal and vertical profile to minima.</p> <p>(B) Control the aircraft as necessary to achieve a stable approach path.</p> <p>(C) Arrive at the minima on a stabilised approach in order to make a correct decision to perform a landing, go-around or circling approach safely.</p> <p>(D) Prepare backup radio aids for continued approach in the event of radio aid or display equipment failure.</p> <p>(E) Use correct RTF procedures and terminology and comply with all ATC instructions and clearances.</p>
KNOWLEDGE	<p>(A) Horizontal and vertical tolerances.</p> <p>(B) Actions to be taken in the event of radio aid or display equipment failure.</p> <p>(C) Procedure in the event of loss of communication with ATC.</p> <p>(D) Procedure in the event of loss of integrity.</p>
ATTITUDE	<p>(A) Situation awareness: Confirm that approach is stabilised.</p> <p>(B) Effective communication: Advise ATC if appropriate.</p> <p>(C) Leadership and teamwork: (1) Demonstrate correct coordination with ATC (where applicable); (2) Procedures for loss of approach capability.</p> <p>(D) Effective workload management: Monitor to ensure that the flight profile remains safe.</p> <p>(E) Effective problem-solving and decision-making: Make appropriate decision to abandon approach if required.</p>

BIR - Summering

- Bulletpoints:
 - Increased minima for take off and landing
 - For private pilots only
 - Training is competency based but the skilltest is "normal"
 - No FCL requirement for the training BUT check if the ATO has one in their Training manual
 - Check that all competencies are trained and checked by the ATO before skilltest

Air Operations

Regulation changes



Part NCO updates – sum up

- NCO.OP.101 Altimeter check
- NCO.OP.110 Aerodrome operating minima IFR
- NCO.OP.111 3D & 2D operations
- NCO.OP.112 Circling minima
- NCO.OP.125 + AMC1/2/3 Fuel/energy & oil supply
- NCO.OP.140 Destination alternate
- NCO.OP.142 Destination alternate – instrument approach
- NCO.OP.143 Destination alternate – planning minima
- NCO.OP.185 In-flight fuel management
- NCO.OP.210 Commence and continue approach

Part NCO updates

<https://www.transportstyrelsen.se/sv/luftfart/Certifikat-och-utbildning/kontrollanter/Moten-och-utbildningar/>

Certifikat och utbildning »

AFIS-personal »

Bli pilot »

Certifikat och behörigheter för piloter »

Flygledare »

Flygmedicin »

Flygtekniker »

Flygteknisk utbildning »

Frågor och svar »

FSTD (utbildningshjälpmedel för flygsimulering) »

För provvakter för teoriprov inom flygutbildning »

För utbildningsorganisationer inom flygutbildning »

Instruktörer inom flygutbildning »

Kabinpersonal »

Kontakta oss »

Kontrollanter »

Anmälan till flygprov och Kompetensbedömnings »

Bli kontrollant »

Inloggning R/T-prov »

Kontrollantinformation »

Mötens och utbildningar

Grundutbildning till språkkontrollant »

Standardiseringssutbildning för språkkontrollanter »

Notices to examiners (NOTEX) »

Mötens och utbildningar för kontrollanter

Här finns att anmäla sig till 2023 års PC och Skill test kontrollantmöten, Seniormöten och FIE kontrollantmöten samt utbildningar. Anmälan är endast giltig via hemsidan och anmälningsformulären.

Kontrollantutbildningar 2023

Då vi följer Folkhälsomyndighetens rekommendationer har vi nu valt att hålla fysiska möten och kurser. Skulle det bli en förändring kommer denna information att uppdateras.

Utbildningar 2023

Märk att anmälningarna inte automatiskt ger en plats på utbildningarna. Transportstyrelsen kommer att granska anmälningarna och där efter ta ett beslut. Ni kommer att bli informerade i tid.

För att bli kontrollant för olika typer av prov inom flygutbildning krävs att man går en utbildning som finns att läsa mer om här: [Bli kontrollant](#)

- ST utbildning fullständig kontrollant 9-10 maj Kista (fulltecknad)
- Senior utbildning (krav är att man är erfaren flygprovskontrollant) 23 maj Kista [Anmälan Senior utbildning](#)
- Kontrollantutbildning 9-11 oktober (9 oktober via TEAMS) Kista [Anmälan PC utbildning](#)

Kostnader enligt Transportstyrelsens föreskrifter om avgifter [TSFS 2016:105](#)

PC kontrollantutbildning (inkl. teoretisk utbildning och utfärdande)

Luftfartyg certifierade för en pilot: 11000 kr

Luftfartyg certifierade för mer än en pilot: 25000 kr

Höjd mätare (NCO.OP.101)

- Ny Regel
- Ska kontrolleras innan avgång
- Ska ha en lämplig inställning under flygning



Operativa minima (NCO.OP.110)

- Operativa minima ska fastställas för avgångs-, alternativ och destinationsflygplats.
- De ska ta hänsyn till:



Luftfartygets:

- Typ, prestanda och flygegenskaper
- Utrustning för navigation, inhämtande av visuella referenser och/eller kontroll av flygbanan under start, inflygning, landning och avbruten inflygning
- Begränsningar och villkor som står i AFM

Operativa minima



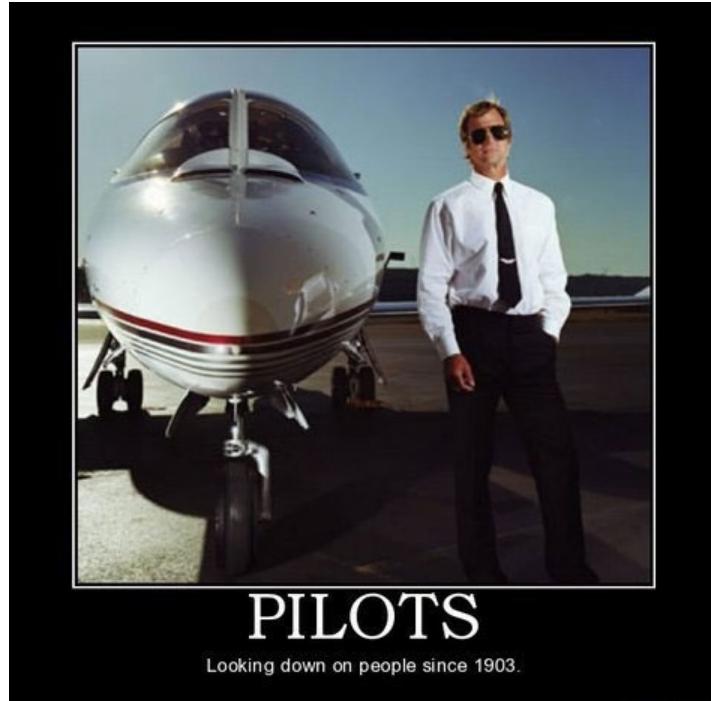
- Storlek och utformning av de banor/start- och landningsområden som kan komma i användning
- Användbarhet och prestanda för tillgängliga visuella och icke-visuella hjälpmedel och infrastruktur
- OCA/H för instrumentinflygningarna
- Hinder i utflygningsriktningen



- ▶ Instrumentinflygningsproceduren
- ▶ Flygplatsens egenskaper och typen av ANS som är tillgängliga
- ▶ Minima som fastställts av staten
- ▶ Villkor för godkännande av LVO

Operativa minima

- Befälhavarens kompetens och relevanta operativa erfarenhet



Detta flyttas till NCO.OP.205/6

- (c) The minima for a specific type of approach and landing procedure shall only be used if:
- (1) the ground equipment required for the intended procedure is operative;
 - (2) the aircraft systems required for the type of approach are operative;
 - (3) the required aircraft performance criteria are met; and
 - (4) the pilot is qualified appropriately.

Operativa minima (NCO.OP.111)

2D och 3D inflygningar

- DH för en 3D eller en CDFA 2D inflygning ska inte vara lägre än det högsta av:
 - OCH för luftfartygets kategori
 - Publicerade DH eller MDH
 - Systemminima
 - Den DH som anges i AFM eller ~~meddelande~~
the minimum height to which the approach aid can be used without the required visual reference;
- MDH för en icke-CDFA 2D inflygning ska inre vara lägre än det högsta av:
 - OCH för luftfartygets kategori
 - Publicerad MDH **(NY)**
 - Systemminima
 - Lägsta MDH som anges i AFM

Tas bort

Vad är ILS minima (Cat B flygplan)?

Från AIP:

Cat of ACFT		A	B	C	D
Straight-in Approach	CAT I	166 (134)	174 (142)	197 (165)	205 (173)
	LOC	470 (438)			
Circling S RWY		560 (520)	620 (580)	860 (820)	880 (840)

Från Jeppesen:

Standard	ILS	STRAIGHT-IN
	DA(H) 230' (198')	

Från NCO.OP.111:

Facility	Lowest DH/MDH (ft)
ILS/MLS/ GLS	200
GNSS/SBAS (LPV)	200
Precision approach radar (PAR)	200

Operativa minima (NCO.OP.112)

Circling

- MDH för circling ska inte vara lägre än det högsta av
 - OCH för luftfartygets kategori
 - DH/MDH för inflygningen
 - Lägsta circlinghöjd enligt tabellen nedan

Table 1
MDH and minimum visibility for circling per aeroplane category aeroplane category

	Aeroplane category			
	A	B	C	D
MDH (ft)	400	500	600	700
Minimum VIS (m)	1 500	1 500	2 400	3 600

- 100 m

- Finns GM1 NCO.OP.112 som är relativt omfattande

Bränsle/energimängd (och olja)

NCO.OP.125

- PIC ska säkerställa att det finns tillräckligt med bränsle/energi och olja med beaktande av:
 - Väder
 - Alla faktorer som påverkar luftfartygets prestanda
 - Förseningar som förväntas
 - Eventuella oförutsedda händelser
- Reserv?

Bränsle/energimängd (och olja)

NCO.OP.125

- (b) The pilot-in-command shall plan a quantity of fuel/energy to be protected as final reserve fuel/energy to ensure a safe landing. The pilot-in-command shall take into account all of the following, and in the following order of priority, to determine the quantity of the final reserve fuel/energy:
 - (1) the severity of the hazard to persons or property that may result from an emergency landing after fuel/energy starvation; and
 - (2) the likelihood of unexpected circumstances that the final reserve fuel/energy may no longer be protected.
- (c) The pilot-in-command shall commence a flight only if the aircraft carries sufficient fuel/energy and oil:
 - (1) when no destination alternate is required, to fly to the aerodrome or operating site of intended landing, plus the final reserve fuel/energy; or
 - (2) when a destination alternate is required, to fly to the aerodrome or operating site of intended landing, and thereafter, to an alternate aerodrome, plus the final reserve fuel/energy.

Tidigare (regel)

(1) for visual flight rules (VFR) flights:

- (i) by day, taking-off and landing at the same aerodrome/landing site and always remaining in sight of that aerodrome/landing site, to fly the intended route and thereafter for at least 10 minutes at normal cruising altitude;
- (ii) by day, to fly to the aerodrome of intended landing and thereafter to fly for at least 30 minutes at normal cruising altitude; or



Max Cont. cruise power at 1500 ft istf. normal cruising altitude

The pilot-in-command shall only commence a flight if the helicopter carries sufficient fuel and oil for the following:

- (1) for VFR flights, to fly to the aerodrome/operating site of intended landing and thereafter to fly for at least 20 minutes at best-range-speed; and



Ny 10 min möjlighet, till samma flygplats inom 25 Nm,
mörker VFR fortfarande samma

Nuvarande (AMC/GM)

for aeroplanes:

- (1) for 10 minutes at maximum continuous cruise power at 1 500 ft (450 m) above the destination under VFR by day, taking off and landing at the same aerodrome/landing site, and always remaining within sight of that aerodrome/landing site;
- (2) for 30 minutes at holding speed at 1 500 ft (450 m) above the destination under VFR by day; and

for helicopters:

- (1) for 10 minutes at best-range speed under VFR by day, taking off and landing at the same aerodrome/landing site, and always remaining within 25 NM of that aerodrome/landing site, when needed for the purpose of specialised operations;
- (2) for 20 minutes at best-range speed for other VFR flights; and

Tidigare (regel)

(1) for visual flight rules (VFR) flights:

- (i) by day, taking-off and landing at the same aerodrome/landing site and always remaining in sight of that aerodrome/landing site, to fly the intended route and thereafter for at least 10 minutes at normal cruising altitude;

Nuvarande (AMC/GM)

for aeroplanes:

- (1) for 10 minutes at maximum continuous cruise power at 1 500 ft (450 m) above the destination under VFR by day, taking off and landing at the same aerodrome/landing site, and always remaining within sight of that aerodrome/landing site;



Max Cont. cruise power at 1500 ft istf. normal cruising altitude

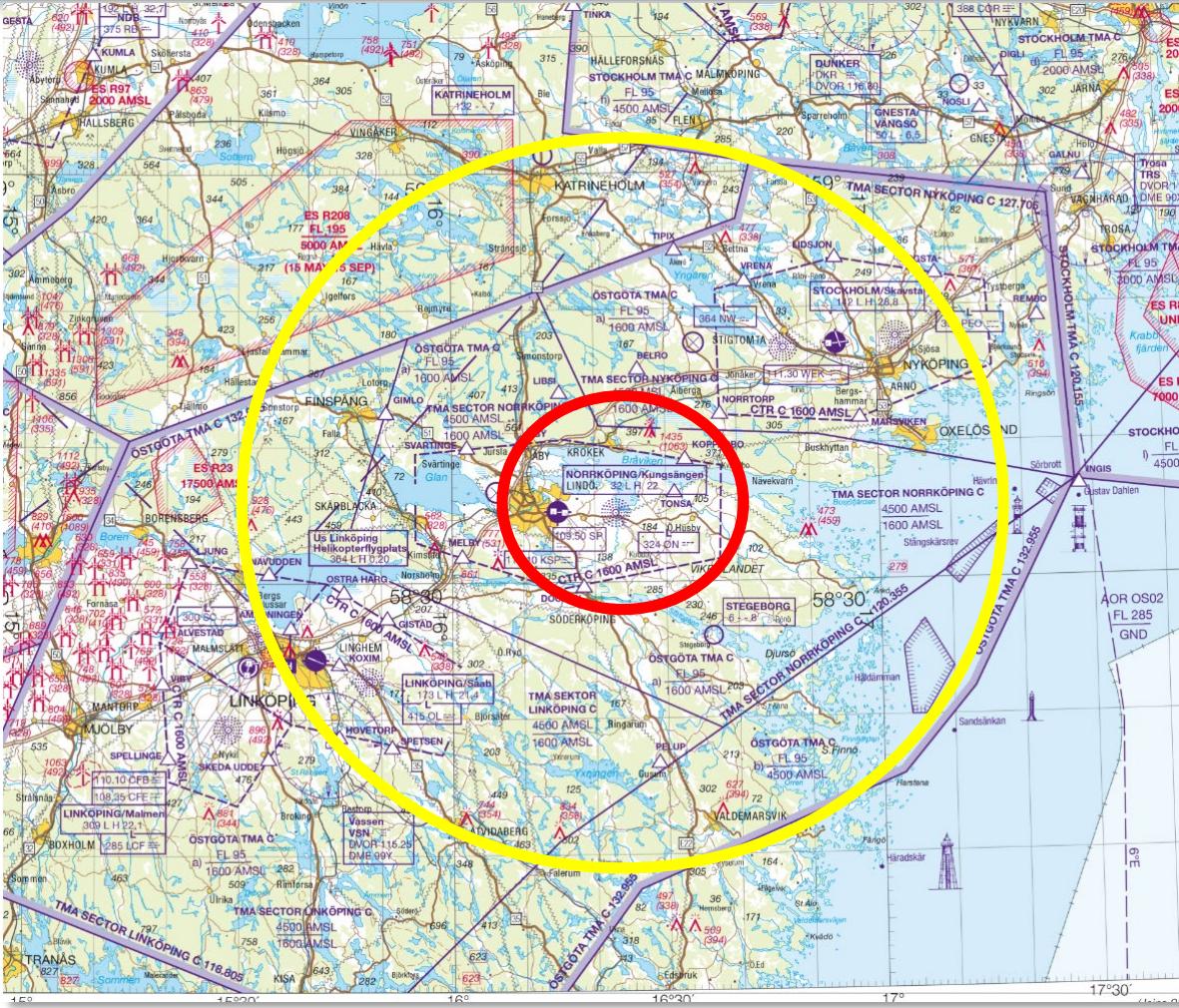
The pilot-in-command shall only commence a flight if the helicopter carries sufficient fuel and oil for the following:

- (1) for VFR flights, to fly to the aerodrome/operating site of intended landing and thereafter to fly for at least 20 minutes at best-range-speed; and



Ny 10 min möjlighet, till samma flygplats inom 25 Nm

Vad innebär det i praktiken för dager VFR?



- = Flygplan, inom synhåll
- = Helikopter, inom 25 Nm

Tidigare (regel)

- (iii) by night, to fly to the aerodrome of intended landing and thereafter to fly for at least 45 minutes at normal cruising altitude;
- (2) for IFR flights:
 - (i) when no destination alternate is required, to fly to the aerodrome of intended landing and thereafter to fly for at least 45 minutes at normal cruising altitude; or
 - (ii) when a destination alternate is required, to fly to the aerodrome of intended landing, to an alternate aerodrome and thereafter to fly for at least 45 minutes at normal cruising altitude.



Holding speed at 1500 ft istf. normal cruising altitude

- (2) for IFR flights:
 - (i) when no alternate is required or no weather-permissible alternate aerodrome is available, to fly to the aerodrome/operating site of intended landing, and thereafter to fly for 30 minutes at holding speed at 450 m (1 500 ft) above the destination aerodrome/operating site under standard temperature conditions and approach and land; or
 - (ii) when an alternate is required, to fly to and execute an approach and a missed approach at the aerodrome/operating site of intended landing, and thereafter:
 - (A) to fly to the specified alternate; and
 - (B) to fly for 30 minutes at holding speed at 450 m (1 500 ft) above the alternate aerodrome/operating site under standard temperature conditions and approach and land.



Inte längre ISA-conditions

Nuvarande (AMC/GM)

- (3) for 45 minutes at holding speed at 1 500 ft (450 m) above the destination or destination alternate aerodrome under VFR flights by night and IFR; and

- (3)

for 30 minutes at holding speed at 1 500 ft (450 m) above the destination or destination alternate aerodrome under IFR.

Alternativ krävs, om inte... NCO.OP.140

- (a) the available current meteorological information indicates that, for the period from 1 hour before until 1 hour after the estimated time of arrival, or from the actual time of departure to 1 hour after the estimated time of arrival, whichever is the shorter period, the approach and landing may be made under visual meteorological conditions (VMC); or
- (b) the place of intended landing is isolated and:
 - (1) an instrument approach procedure is prescribed for the aerodrome of intended landing and
 - (2) available current meteorological information indicates that the following meteorological conditions will exist from 2 hours before to 2 hours after the estimated time of arrival:
 - (i) a cloud base of at least 300 m (1 000 ft) above the minimum associated with the instrument approach procedure; and
 - (ii) visibility of at least 5,5 km or of 4 km more than the minimum associated with the procedure.



Ändrade vid en flygplats samt
ingen test om isolerad
flygplats

For IFR flights, the pilot-in-command shall specify at least one destination alternate aerodrome in the flight plan, unless the available current meteorological information for the destination indicates, for the period from 1 hour before until 1 hour after the estimated time of arrival, or from the actual time of departure to 1 hour after the estimated time of arrival, whichever is the shorter period, a ceiling of at least 1 000ft above the DH/MDH for an available instrument approach procedure (IAP) and a visibility of at least 5 000m.

Exempel på när alternativ krävs

- **ESNQ281430Z 2815/2819 21015KT 9999 OVC011 TEMPO 2815/2819 SCT008 OVC012=**
- **ESNN281430Z 2815/2824 31003KT 4000 -RA OVC015 TEMPO 2815/2824 1200 BR -DZ OVC004=**

ESNQ

		OCA (H)			
Cat of ACFT		A	B	C	D
Straight-in	CAT I	1593(161)	1601(169)	1612(180)	1622(190)
Approach	LOC		1750(318)		
Circling		2210(701)	2410(901)	3350(1841)	3350(1841)
Circling SE RWY		2210(701)	2340(831)	2430(921)	2440(931)

ESNN

		OCA (H)			
Cat of ACFT		A	B	C	D
Straight-in	Cat I	177(164)	187(174)	199(186)	212(199)
Approach	LOC		380(360)		
Circling		800(790)	1110(1100)	1430(1420)	1480(1470)
Circling W RWY		680(670)	820(810)	1210(1200)	1310(1300)

Alternativflygplats NCO.OP.142

The pilot-in-command shall ensure that sufficient means are available to navigate and land at the destination aerodrome or at any destination alternate aerodrome in the case of loss of capability for the intended approach and landing operation.

Nya krav gällande
GNSS och att man
måste planera för GPS-
bortfall

The pilot-in-command shall only select an aerodrome as a destination alternate aerodrome if either:

- (a) an IAP that does not rely on GNSS is available either at the destination aerodrome or at a destination alternate aerodrome, or
- (b) all of the following conditions are met:
 - (1) the onboard GNSS equipment is SBAS-capable;
 - (2) the destination aerodrome, any destination alternate aerodrome, and the route between them are within SBAS service area;
 - (3) ABAS is predicted to be available in the event of the unexpected unavailability of SBAS;
 - (4) an IAP is selected (either at destination or destination alternate aerodrome) that does not rely on the availability of SBAS;
 - (5) an appropriate contingency action allows the flight to be completed safely in the event of unavailability of GNSS.

Planeringsminima alternativ NCO.OP.143

An aerodrome shall not be specified as a destination alternate aerodrome unless the available current meteorological information indicates, for the period from 1 hour before until 1 hour after the estimated time of arrival, or from the actual time of departure to 1 hour after the estimated time of arrival, whichever is the shorter period:

- (a) for an alternate aerodrome with an available instrument approach operation with DH less than 250 ft,
 - (1) a ceiling of at least 200 ft above the decision height (DH) or minimum descent height (MDH) associated with the instrument approach operation; and
 - (2) a visibility of at least 1 500m; or
- (b) for an alternate aerodrome with an instrument approach operation with DH or MDH 250 ft or more,
 - (1) a ceiling of at least 400 ft above the DH or MDH associated with the instrument approach operation; and
 - (2) a visibility of at least 3 000m; or
- (c) for an alternate aerodrome without an ILS
 - (1) a ceiling of at least the higher of 2 000ft and the minimum safe IFR height; and
 - (2) a visibility of at least 5 000m.



Vad gäller på flygbolaget?

Flygplan..

Utan IAP:

Molnbas högsta av 2000 ft eller lägsta IFR-flyghöjd

Sikt minst 5000 m

DA/H + 400 ft

Sikt minst 3000 m

250 ft

DA/H + 200 ft

Sikt minst 1500 m

Helikopter..

Utan IAP:

Molnbas högsta av 2000 ft eller lägsta IFR-flyghöjd

Sikt minst 1500 m eller 3000 m vid mörker

DA/H + 200 ft

Sikt minst 1500 m eller

3000 m vid mörker



Tankning med motor eller rotor igång

NCO.OP.147

- Helikopterspecifikt.
 - Ställer krav på förutsättningar när man får tanka med motor eller rotor igång, finns ett AMC som ställer krav på befälhavarens ansvar och att det ska ske enligt en fastställd checklista

Refuelling with engine(s) and/or rotors turning shall only be conducted if all those conditions are met simultaneously:

- (a) if it is not practical to shut down or restart the engine;
- (b) in accordance with any specific procedures and limitations in the aircraft flight manual (AFM);
- (c) with JET A or JET A-1 fuel types;
- (d) with no passengers or task specialists on board, embarking or disembarking;
- (e) if the operator of the aerodrome or operating site allows such operations;
- (f) in the presence of the appropriate rescue and firefighting (RFF) facilities or equipment; and
- (g) in accordance with a checklist that shall contain:
 - (1) normal and contingency procedures;
 - (2) the required equipment;
 - (3) any limitations; and
 - (4) responsibilities and duties of the pilot-in-command and, if applicable, crew members and task specialists.

Förutsättningar för start NCO.OP.175

Gammal regel:

Before commencing take-off, the pilot-in-command shall be satisfied that:

- (a) according to the information available, the weather at the aerodrome or operating site and the condition of the runway or FATO intended to be used would not prevent a safe take-off and departure; and
- (b) applicable aerodrome operating minima will be complied with.

Before commencing take-off, the pilot-in-command shall be satisfied that:

- (a) according to the information available, the meteorological conditions at the aerodrome or the operating site and the condition of the runway/FATO intended to be used will not prevent a safe take-off and departure; and
- (b) the selected aerodrome operating minima are consistent with all of the following:
 - (1) the operative ground equipment;
 - (2) the operative aircraft systems;
 - (3) the aircraft performance;
 - (4) flight crew qualifications.

Förutsättningar för landning

NCO.OP.205

Gammal regel:

Before commencing an approach to land, the pilot-in-command shall be satisfied that, according to the information available, the weather at the aerodrome or the operating site and the condition of the runway intended to be used do not prevent a safe approach, landing or missed approach.

Before commencing an approach to land, the pilot-in-command shall be satisfied that:

- (a) according to the information available, the meteorological conditions at the aerodrome or the operating site, and the condition of the runway intended to be used will not prevent a safe approach, landing, or missed approach; and
- (b) the selected aerodrome operating minima are consistent with all of the following:
 - (1) the operative ground equipment;
 - (2) the operative aircraft systems;
 - (3) the aircraft performance, and
 - (4) flight crew qualifications.

Fortsätta inflygning NCO.OP.210

- (a) The pilot-in-command may commence an instrument approach regardless of the reported runway visual range/visibility (RVR/VIS).
- (b) If the reported RVR/VIS is less than the applicable minimum, the approach shall not be continued:
 - (1) below 1 000 ft above the aerodrome; or
 - (2) into the final approach segment in the case where the decision altitude/height (DA/H) or minimum descent altitude/height (MDA/H) is more than 1 000 ft above the aerodrome.
- (c) Where the RVR is not available, RVR values may be derived by converting the reported visibility.
- (d) If, after passing 1 000 ft above the aerodrome, the reported RVR/VIS falls below the applicable minimum, the approach may be continued to DA/H or MDA/H.
- (e) The approach may be continued below DA/H or MDA/H and the landing may be completed provided that the visual reference adequate for the type of approach operation and for the intended runway is established at the DA/H or MDA/H and is maintained.
- (f) The touchdown zone RVR shall always be controlling.

Fortsätta inflygning NCO.OP.210

Nytt krav på 550 m
och ingen text om
att fortsätta om
sikten går ner efter
1000 fot..

- (a) If the controlling RVR for the runway to be used for landing is less than 550 m (or any lower value established in accordance with an approval under SPA.LVO), then an instrument approach operation shall not be continued:
 - (1) past a point at which the aircraft is 1 000 ft above the aerodrome elevation; or
 - (2) into the final approach segment if the DH or MDH is higher than 1 000 ft.
- (b) If the required visual reference is not established, a missed approach shall be executed at or before the DA/H or the MDA/H.
- (c) If the required visual reference is not maintained after DA/H or MDA/H, a go-around shall be executed promptly.

► Vi genomför en IFR-flygning från KPSP till KMYF, eventuellt alternativ tänker vi blir KCRQ



- Innan flygning
 - Kontrollera höjdmätare
 - Fastställa operativa minima
 - Bränsleplanering



- Fastställa operativa minima
- Högsta av?
- OCH
- Publicerat minima
- Systemminima
- AFM begränsning



CATEGORY	A	B
S-ILS 28R	673-3/4	250 (300-3/4)
S-LOC 28R	820-3/4	397 (400-3/4)
CIRCLING	920-1	493 (500-1)



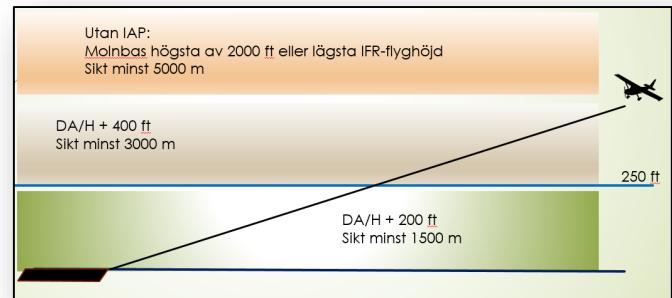
- Innan flygning
 - Behöver vi ett alternativ?

TAF KNKX 2909/3009
16005KT 9999 OVC010
QNH2988INS

For IFR flights, the pilot-in-command shall specify at least one destination alternate aerodrome in the flight plan, unless the available current meteorological information for the destination indicates, for the period from 1 hour before until 1 hour after the estimated time of arrival, or from the actual time of departure to 1 hour after the estimated time of arrival, whichever is the shorter period, a ceiling of at least 1 000ft above the DH/MDH for an available instrument approach procedure (IAP) and a visibility of at least 5 000m.

- Ja, men vad är kravet för alternativet?

- Alternativ KCRQ
- # KCRQ 291129Z 2912/3012 14005KT



CATEGORY	A	B
S-ILS 24	527/40 201 (200-¾)	
S-LOC 24	1000/40 674 (700-¾)	
C CIRCLING	1000-1 669 (700-1)	1020-1 689 (700-1)

- Innan flygning
 - Kontrollera höjdmätare
 - Fastställa operativa minima
- Bränsleplanering
 - IFR, vad var kravet?
 - Till destination, till alternativ plus 45 min reserv med holding speed på 1500 fot.





- ▶ Under flygning
- ▶ Följa upp bränsle
- ▶ Vid inflygning?
- ▶ Hur långt fick vi gå?

- (a) If the controlling RVR for the runway to be used for landing is less than 550 m (or any lower value established in accordance with an approval under SPA.LVO), then an instrument approach operation shall not be continued:
- (1) past a point at which the aircraft is 1 000 ft above the aerodrome elevation; or
 - (2) into the final approach segment if the DH or MDH is higher than 1 000 ft.
- (b) If the required visual reference is not established, a missed approach shall be executed at or before the DA/H or the MDA/H.
- (c) If the required visual reference is not maintained after DA/H or MDA/H, a go-around shall be executed promptly.

Part NCO updates – sum up

- NCO.OP.101 Altimeter check
- NCO.OP.110 Aerodrome operating minima IFR
- NCO.OP.111 3D & 2D operations
- NCO.OP.112 Circling minima
- NCO.OP.125 + AMC1/2/3 Fuel/energy & oil supply
- NCO.OP.140 Destination alternate
- NCO.OP.142 Destination alternate – instrument approach
- NCO.OP.143 Destination alternate – planning minima
- NCO.OP.185 In-flight fuel management
- NCO.OP.210 Commence and continue approach

EASA FEM

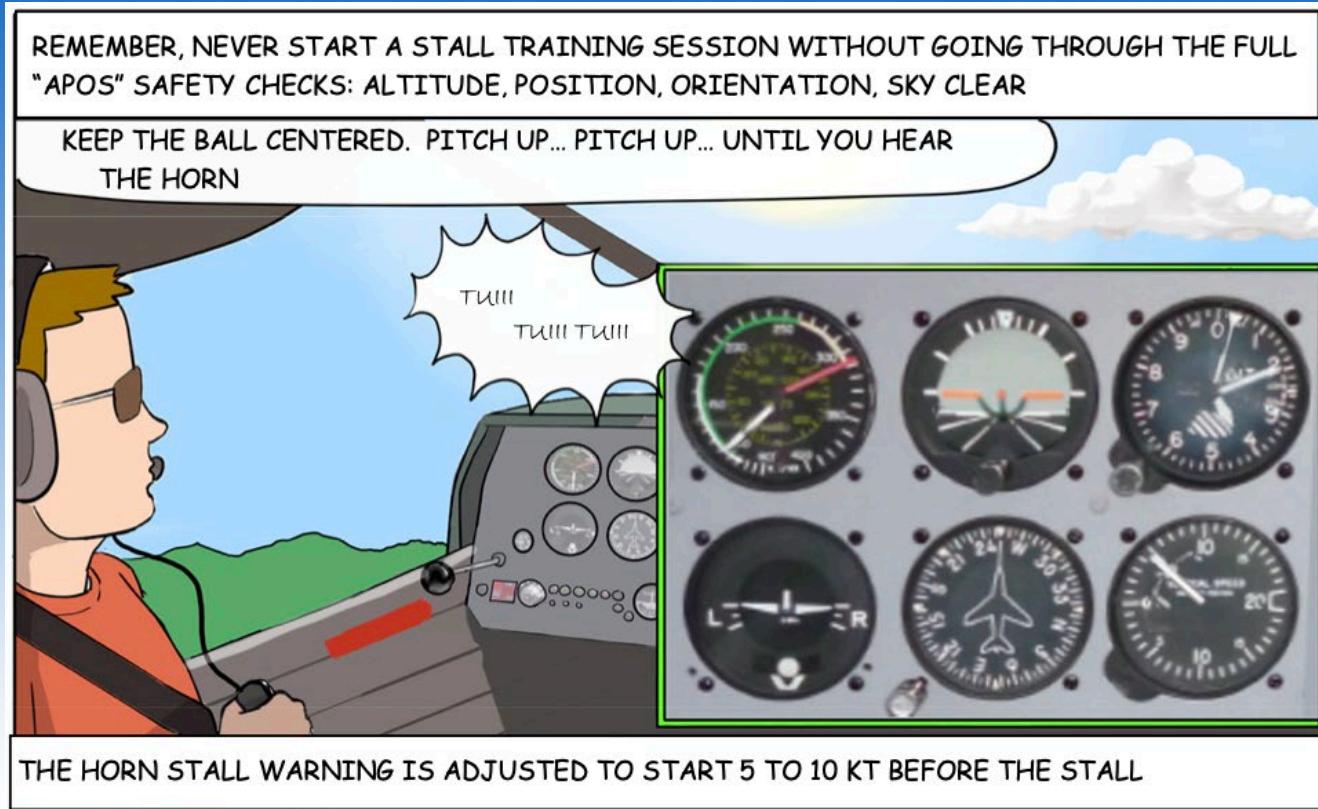
Flight Examiner Manual



FEM

- Not regulation but strong guidance for examiners
- <https://www.easa.europa.eu/document-library/general-publications/flight-examiners-manual-fem>

Discussion – Slow flight & Stall (spin awareness)



The list goes on..

- Ängsö 2016 (DA42 spinn)
- Umeå 2019 (GA8 spinn)
- Borås/Viared 2020 (UL spinn)
- Örebro 2021 (DHC-2 stall/loc efter start)
- Oslo 2021 (DA42 spinn)

Slow flight & stall – SEP/MEP

- FEM?

Straight and
level flight at various

- *demonstrate control of heading, altitude and airspeed in straight and*

4.2 Threat and Error Management (TEM)

sound judgement when deciding how to proceed. For instance, a LAPL or PPL candidate may be unfamiliar with the TEM terminology but may still exhibit sound decision-making skills in the pre-flight and the flight. In this case, the Examiner can simply ensure that the Candidate is made familiar with the TEM principles in the flight debrief and may also consider briefing the HT/CFI of the ATO/DTO ensure that future candidates are better prepared.

- EASA
https://www.easa.europa.eu/sites/default/files/2020-05/Sunny-Swift_0.pdf
- Threat

3
M

Stalls and recovery:
i. clean stall
ii. approach to stall in descending turn with approach configuration and power
iii. approach to stall in landing configuration and power
iv. approach to stall in climbing turn with take-off flaps and climb power (single-engine aeroplanes only)

- *consider safety checks before the manoeuvres where necessary*
- *establish the stall entry as appropriate from straight or turning flight and select the required aeroplane configuration*
- *recognise the symptoms of incipient and full stalls*
- *recover systematically by reducing the AoA and then re-establishing a safe and stable flight path*
- *complete all necessary checks and drills*
- *maintain lookout throughout*



Slow flight & stall – SEP/MEP

- How do you perform slow flight & stall during a test?
- Name some PASS/FAIL items for this exercise?
- Give some sound TEM examples?

Discussion – Bad attitude kills



Pilot attitudes

- Discuss your experiences on pilot attitudes
 - both good and bad!
- Should/shall we judge pilots attitude?
 - what does Part FCL tell us?

UPRT & for the last(?) time



Work together and find out:

- 3 different variants UPRT?
- Is A-UPRT mandatory for commercial pilots ? If yes, when?
- How many hours training is an A-UPRT?

UPRT – NOTEX 1/2021

AUPRT regulations update

A short update about the amendment to Part-FCL which came in to force on January 12th 2021 concerning AUPRT.

On December 16th 2020, a decision was made concerning COMMISSION IMPLEMENTING REGULATION (EU) 2020/2193 and one of the changes made was the requirements for AUPRT. The change is relevant for all those who apply for a first MPA or SP HPA typerating, where it is now allowed to credit the AUPRT course with certain previous experience.

The way FCL.720.A b) 5) is written after the update of January 12th 2021 is;

Have completed the training course specified in point FCL.745.A, unless they comply with any of the following:

- (i) they completed, within the preceding 3 years, the training and checking in accordance with points ORO.FC.220 and ORO.FC.230 of Annex III (Part-ORO) to Regulation (EU) No 965/2012;
- (ii) (ii) they have completed the training specified in point FCL.915(e)(1)(ii);

In practice this means that an applicant for a first MPA or SP HPA who, in the three year period preceding the application, has completed all the training and checking in ORO.FC.220 (Operator conversion training and checking) and ORO.FC.230 (Recurrent training and checking) will be able to credit the AUPRT course. If an applicant decides to claim previous experience in accordance with FCL.720.A b) 5), a course completion document must be attached to the application.

Form 7077 is updated with the following information on page 10 in order to make your work a bit easier

AUPRT is required according to the table below and a certificate or verification of training/checking must be attached to the application.

First typerating	AUPRT required
MPA→MPA	AUPRT not required (credited)
SP HPA→SP HPA	AUPRT not required (credited)
SP HPA →MPA	AUPRT required *
MPA→SP HPA	AUPRT required *

* An Advanced UPRT course is not required for a pilot who, within the three preceding years, has completed one of the following;

- all the training and checking items in accordance with points ORO.FC.220 and ORO.FC.230 of Annex III (Part-ORO) to Regulation (EU) No 965/2012 or;
- completed the training for an AUPRT instructor specified in point FCL.915(e)(1)(ii).

Applicants who wish to convert a third-country type rating into a Part-FCL type rating need to comply with the advanced UPRT prerequisite

<https://www.transportstyrelsen.se/sv/luftfart/Certifikat-och-utbildning/kontrollanter/notices-to-examiners-notex/notex-1-2021/>



That's all Folks!