CAMO

Operator

DAH

Part-26 Additional airworthiness specifications for operations

Part-26

COMMISSION REGULATION (EU) No **2015/640** of 23 April 2015 on additional airworthiness specifications for a given type of operations and amending Regulation (EU) No 965/2012

…IDE…
SPA

CS-25, -27, -29

Presentatör
Johan Brunnberg

Flygteknisk Inspektör
Sjö- och luftfartsavdelningen
Enheten för operatörer, fartyg och luftfartyg
Sektionen för teknisk operation

2024-05-30

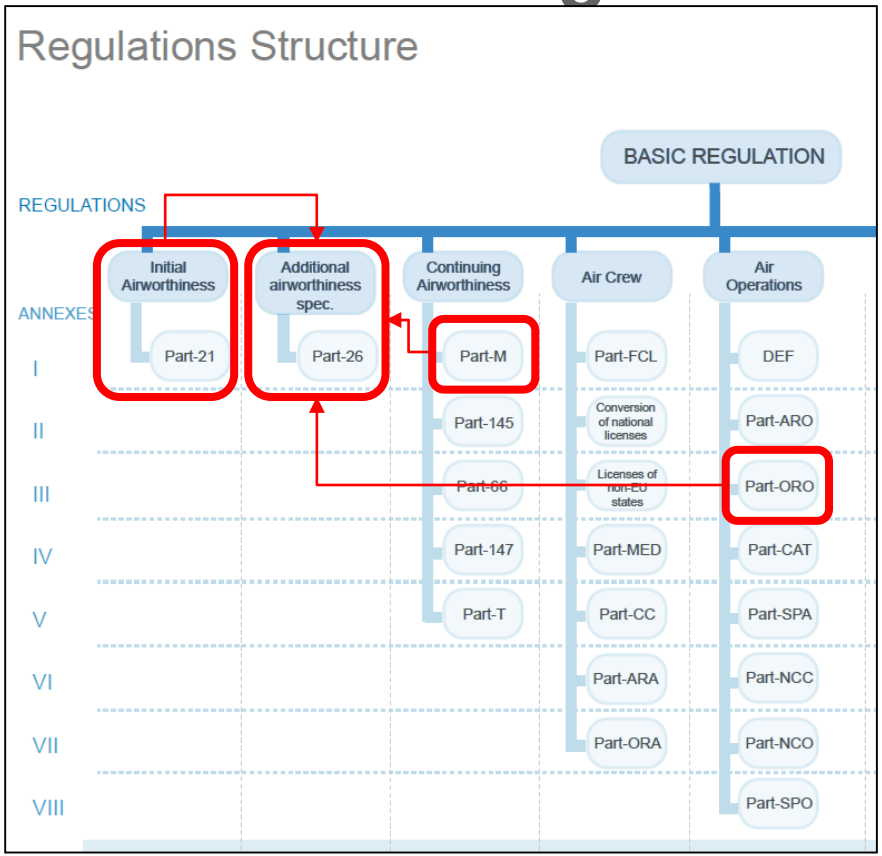
TRANSPORT STYRELSEN

Innehåll

- Part-26 i regelstrukturen
- Part-26 innehåll övergripande
- Ändringar
- Koordinering CAMO (CAO-L) – Operatör
- 26.201 Tyre inflation pressure
- 26.370 Continuing airworthiness tasks and aircraft maintenance programme
- 26.410-435 Helicopter ditching and water impact occupant survivability
- Övrigt
- Summering

TRANSPORT STYRELSEN

Part-26 i regelstrukturen



ORO.AOC.100 Application for an air operator certificate

(c) Applicants shall demonstrate to the competent authority that:

(1) they comply with all the requirements of annex IV to Regulation (EC) No 216/2008, this Annex (Part-ORO), Annex IV (Part-CAT) and Annex V (Part-SPA) to this Regulation and Annex I (**Part 26**) to Regulation (EU) 2015/640;

M.A.302 Aircraft maintenance programme

(d) The AMP shall demonstrate compliance with:

(3) the applicable provisions of Annex I (**Part-26**) to Regulation (EU) 2015/640.

21.A.65 Continuing structural integrity for aeroplanes structures

…Part-26

TRANSPORT STYRELSEN

Part-26 – Relation till andra regler

Operator
ORO.AOC.100 (a)(1)

Part-M

M.A.301(f)(2)
operational directive with a continuing airworthiness impact;

M.A.302(d)(3) – Ref **Part-26**

Part-21

TC/RTC
21.A.65 – Ref Part-26
Changes
21.A.101 – Ref (EU) 2015/640
Repairs
21.A.433 – Ref (EU) 2015/640

Tilläggskrav pga operation och typ av luftfartyg

Tilläggskrav för AMP

Tilläggskrav/ ”Retroaktiva” CS-krav

CS-25, -27, -29

(EU) No 2015/640

Article 1 Subject matter and scope

1. This Regulation lays down common additional airworthiness specifications **related to the continuing airworthiness and safety improvements of aircraft**.

2. **This Regulation applies to:**
(a) **operators**:
(b) **holders** of a type-certificate, restricted type-certificate, supplemental type-certificate or a change and repair design approval
(c) **the applicants** for a type-certificate or a restricted type-certificate for a turbine-powered large aeroplane

Part-26

ADDITIONAL AIRWORTHINESS SPECIFICATIONS FOR OPERATIONS

SUBPART A
GENERAL PROVISIONS

SUBPART B
LARGE AEROPLANES

SUBPART C
HELICOPTERS

”**Additional**”
Kan gälla:

- Alla luftfartyg
- Äldre konstruktionsstandard (TCB)
- Beroende på vikt, pax etc
- Typ av operation
- Ändrade miljökrav
- Etc
- Dvs:
  - ”Riskreducering av olika skäl”

Ändringar

TRANSPORT STYRELSEN

Ändringar (förenklat)

1. Införande av t.ex.:
   - 26.170 Fire extinguishers
   - SUBPART C – LARGE HELICOPTERS – 26.400 Fire extinguishers
2. Införande av t.ex.:
   - *Ageing aircraft structures*
     - 26.300 Continuing structural integrity programme for ageing aeroplanes structures – general requirements
     - 26.370 Continuing airworthiness tasks and aircraft maintenance programme
   - *Reduction of runway excursions*
     - *26.157 Conversion of class D compartments*

TRANSPORT STYRELSEN

Ändringar (förenklat) forts

3. Införande av t.ex.:
   - 26.60 Emergency landing – dynamic conditions
   - Och mindre ändringar och korrigeringar

4. Införande av t.ex.::
   - *Large aeroplane tyre pressure monitoring*
   - *Helicopter ditching and water impact occupant survivability*

TRANSPORT STYRELSEN

Koordinering

CAMO (CAO-L) - Operatör

TRANSPORT STYRELSEN

M.A.301 Continuing airworthiness tasks

Regulation (EU) 2019/1383

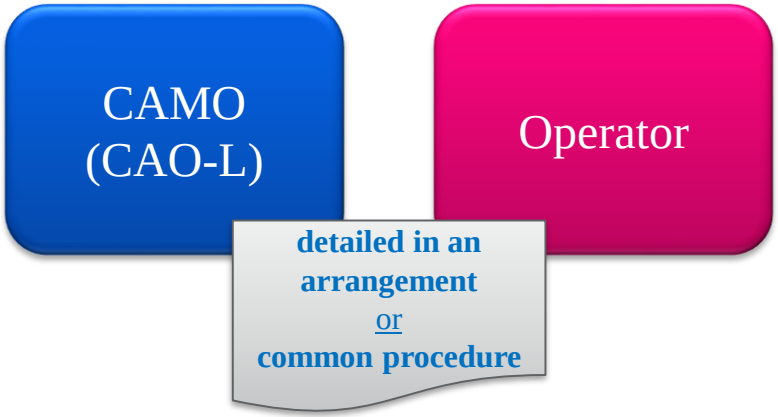
The aircraft continuing airworthiness **and** the serviceability of operational and emergency equipment shall be **ensured** by:

(f) the **accomplishment** of **any** applicable:

(1) airworthiness directive (AD);

(2) operational directive with a continuing airworthiness impact;

(3) **continuing airworthiness requirement** established by the Agency;



AMC M.A.301(f) Continuing airworthiness tasks

ED Decision 2020/002/R

OPERATIONAL DIRECTIVES

Operational directives with a continuing airworthiness impact include operating rules **such as** extended twin-engine operations (ETOPS) / long range operations (LROPS), reduced vertical separation minima (RVSM), MNPS, all-weather operations (AWOPS), RNAV, **etc**.

Any other continuing airworthiness requirement established by the Agency includes TC-related requirements such as: certification maintenance requirements (CMR), life-limited parts, airworthiness limitations contained in CS-25 Book 1, Appendix H, paragraph H25.4, fuel tank system airworthiness limitations including Critical Design Configuration Control Limitations (CDCCL), etc.

The operator is responsible for the incorporation of operational directives (ODs) and in cases where there is an impact on the continuing airworthiness, **the CAMO has to assess this and take appropriate actions to ensure the continuing airworthiness**. **The process to incorporate the ODs should be detailed in an arrangement or common procedure.**

26.201 Tyre inflation pressure

TRANSPORT STYRELSEN

26.201 Tyre inflation pressure

Regulation (EU) 2022/1254

Operators of large aeroplanes **shall** *minimise the risk* of a tyre being below its **minimum serviceable inflation pressure** during operation.

- *Gäller från 2022-09-09*

TRANSPORT STYRELSEN

26.201 Tyre inflation pressure

26.201 Tyre inflation pressure
Regulation (EU) 2022/1254
Operators of large aeroplanes shall minimise the risk of a tyre being below its minimum serviceable inflation pressure during operation.

CS 26.201 Tyre inflation pressure
ED Decision 2022/019/R
Compliance with point 26.201 of Part-26 is demonstrated by **complying with** CS 25.733(f) of CS-25 ***or*** its equivalent, ***or*** with the following:

Kontrollera med DAH om konstruktionskravet uppfylls.
Ref: 26.30(c)

(c) **Holders** of a type certificate, restricted type certificate, supplemental type certificate or a change and repair design approval shall make available to each known operator of the aeroplanes any changes to the "**Instructions for Continued Airworthiness" (ICA) required to demonstrate compliance with this Annex**. …

(a) '**Minimum serviceable inflation pressure**' means a tyre inflation pressure specified by the aeroplane type certificate holder below which damage to the tyre, potentially leading to a tyre failure, may occur.

26.201 Tyre inflation pressure

26.201 Tyre inflation pressure
Regulation (EU) 2022/1254
Operators of large aeroplanes shall minimise the risk of a tyre being below its minimum serviceable inflation pressure during operation.

CS 26.201 Tyre inflation pressure
ED Decision 2022/019/R

(b) The operator ensures that **one, *or* a combination**, of the following means is (are) used:

(1) **A task is incorporated in the aeroplane maintenance programme (AMP)**

(2) **The aeroplane is equipped with an installed system that monitors the tyres inflation pressures and** that:
(i) provides an alert to the flight crew whenever a tyre inflation pressure is below the minimum serviceable inflation pressure, ***or***
(ii) allows the tyres inflation pressures to be checked prior to the dispatch of the aeroplane, **and** a tyre inflation pressure check task is included in the pre-flight procedures of the operations manual.

26.201 Tyre inflation pressure

26.201 Tyre inflation pressure
Regulation (EU) 2022/1254
Operators of large aeroplanes shall minimise the risk of a tyre being below its minimum serviceable inflation pressure during operation.

CS 26.201 Tyre inflation pressure
ED Decision 2022/019/R
(b) The operator ensures that **one,** ***or*** **a combination**, of the following means is (are) used:

(1) A task is incorporated in the aeroplane maintenance programme (AMP)

145
Certifying Staff (145.A.35)
Eller
Limited certification authorization
(145.A.30(j)(4))

+

CS 26.201 Tyre inflation pressure
ED Decision 2022/019/R
(c) Tyre inflation pressure checks in the AMP
A '**suitable time interval**' is the maximum time interval between two consecutive tyre inflation pressure checks.
These pressure checks are conducted daily in order to ensure that the elapsed clock time between two consecutive tyre inflation pressure checks **does not exceed 48 hours**.
Time intervals longer than 48 hours may be used if they are **substantiated and agreed by the competent authority**. This substantiation **includes at least** an analysis of the expected loss of tyre pressure during operation, taking into account environmental and operational factors, **including** the potential for pressure loss at a rate that exceeds the normal diffusion resulting from damage to or degradation of the tyre/wheel assembly. **If available**, statistical data related to pressure losses gathered from the service experience of aeroplanes equipped with equivalent wheel designs may also be used. **The substantiation** is made in **cooperation with the tyre manufacturer(s)**. **In addition**, the operator may take credit from an installed system monitoring the tyre inflation pressures.
The time interval does not exceed the applicable value provided by the type certificate holder in the instructions for continued airworthiness.

26.201 Tyre inflation

26.201 Tyre inflation pressure
Regulation (EU) 2022/1254
Operators of large aeroplanes shall minimise the risk of a tyre being

CS 26.201 Tyre inflation pressure
ED Decision 2022/019/R
(b) The operator ensures that **one,** ***or*** **a combination**, of the following means is (are) used:

(1) A task is incorporated in the aeroplane maintenance programme (AMP)

145
Certifying Staff (145.A.35)
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This substantiation **includes at least** an analysis of the expected loss of tyre pressure during operation, taking into account environmental and operational factors, **including** the potential for pressure loss at a rate that exceeds the normal diffusion resulting from damage to or degradation of the tyre/wheel assembly.

If available, statistical data related to pressure losses gathered from the service experience of aeroplanes equipped with equivalent wheel designs may also be used.

The substantiation is made in **cooperation with the tyre manufacturer(s).**

In addition, the operator may take credit from an installed system monitoring the tyre inflation pressures.

The time interval does not exceed the applicable value provided by the type certificate holder in the instructions for continued airworthiness.

26.201 Tyre inflation pressure

26.201 Tyre inflation pressure
Regulation (EU) 2022/1254
Operators of large aeroplanes shall minimise the risk of a tyre being below its minimum serviceable inflation pressure during operation.

CS 26.201 Tyre inflation pressure
ED Decision 2022/019/R
(b) The operator ensures that **one, *or* a combination**, of the following means is (are) used:

(

dispatch of the aeroplane, **and** a tyre inflation pressure check task is included in the pre-flight procedures of the operations manual.

CS 26.201 Tyre inflation pressure
ED Decision 2022/019/R
(d) Tyre pressure monitoring system

Tasks are included as necessar
instructions for continued airwo
holder) **to ensure that the calib**
system is maintained.

Kontrollera med DAH om konstruktionskravet uppfylls.
Ref: 26.30(c)

(c) **Holders** of a type certificate, restricted type certificate, supplemental type certificate or a change and repair design approval shall make available to each known operator of the aeroplanes any changes to the "**Instructions for Continued Airworthiness" (ICA) required to demonstrate compliance with this Annex**. …

"development assurance level"
se Part-21
och AMC 20-115

26.201 Tyre inflation p

26.201 Tyre inflation pressure
Regulation (EU) 2022/1254
Operators of large aeroplanes shall minimise the risk of a tyre being

CS 26.201 Tyre inflation pressure
ED Decision 2022/019/R
(b) The operator ensures that **one,** ***or*** **a combination**, of the following means is (are) used:

(2) The aeroplane is equipped with **an installed system** that monitors the tyres inflation pressures **and** that:

(i) provides an alert to the flight crew whenever a tyre inflation pressure is below the minimum serviceable inflation pressure, ***or***

(ii) allows the tyres inflation pressures to be checked prior to the dispatch of the aeroplane, **and** a tyre inflation pressure check task is included in the pre-flight procedures of the operations manual.

+

CS 26.201 Tyre inflation pressure
ED Decision 2022/019/R
(d) Tyre pressure monitoring system

If a tyre pressure monitoring system is installed, its **development assurance level** is commensurate with the potential consequences of an alert not being provided, **as well as** with the consequences of false alerts.

“development assurance level”
se Part-21
och AMC 20-115

If the system includes the indication of tyre pressure levels, the consequences of a false indication are also taken into account.

The assessment of these consequences **includes** the effects of the failure of one ***or*** more tyres (including simultaneous tyre failures) that may be caused by the operation of the aeroplane with under-inflated tyres.

Tasks are included as necessary in the AMP (taking into account the instructions for continued airworthiness provided by the design approval holder) **to ensure that the calibration of the tyre pressure monitoring system is maintained**.

26.201 Tyre inflation pressure

26.201 Tyre inflation pressure
Regulation (EU) 2022/1254
Operators of large aeroplanes shall minimise the risk of a tyre being below its minimum serviceable inflation pressure during operation.

CS 26.201 Tyre inflation pressure
ED Decision 2022/019/R
Compliance with point 26.201 of Part-26 is demonstrated by complying with CS 25.733(f) of CS-25 or its equivalent, or with the following:
(a) …
(b) …
(c) …
(d) …

eller

CAMO.A.120 Means of compliance
Regulation (EU) 2019/1383
(a) Alternative means of compliance to the AMC adopted by the Agency may be used by an organisation to establish compliance with Regulation (EU) 2018/1139 and its delegated and implementing acts.

Ansökan med:
- CAME med föreslagen procedur
- Gapanalys (AMC/CS)
- Motivering (Hur BR+IA/DA uppfylls)
- Riskassessment inkl riskhantering
- Övrigt som kan stödja/motivera

26.370 Continuing airworthiness tasks and aircraft maintenance programme

- *Gäller från 2021-02-26*
- AMC 20-20A Continuing structural integrity programme
- M.A.302 Aircraft maintenance programme

TRANSPORT STYRELSEN

DTBIP

An approved Damage-Tolerance-Based Inspection Programme

Ett godkänt skadetoleransbaserat inspektionsprogram

R&M on FCS & on DTBIP

A means for addressing the adverse effects that Repairs and Modifications may have on Fatigue-Critical Structure and on inspections provided for in point (a)(i)

Ett förfarande för att hantera de negativa effekter som reparationerna och modifieringarna kan ha på utmattningskritisk struktur och på de inspektioner som anges i led a i

Continuing structural integrity programme for ageing aeroplanes structures

Program för fortsatt strukturintegritet för åldrande flygplans strukturer

LOV

An approved LOV
(Limit Of Validity)

En godkänd giltighetsgräns

CPCP

A CPCP
(Corrosion Prevention and Control Programme)

Ett program för förebyggande och kontroll av korrosion

Vem berörs av vad

- Detta började gälla även för TCH, RTCH, STCH **2021-02-26**.
- De ska etablera en plan för 26.302 till 26.309 (26.332 till 26.334)
- Planen ska skickas till EASA före 2021-05-27.

TCH & RTCH

26.300 Continuing structural integrity programme for ageing aeroplanes structures — general requirements

26.301 Compliance Plan for (R)TC holders:

- 26.302 Fatigue and damage tolerance evaluation
- 26.303 Limit of Validity
- 26.304 Corrosion prevention and control programme
- 26.305 Validity of the continuing structural integrity programme
- 26.306 Fatigue critical baseline structure
- 26.307 Damage tolerance data for existing changes to fatigue-critical structure
- 26.308 Damage tolerance data for existing repairs to fatigue-critical structure
- 26.309 Repair evaluation guidelines

STCH

26.330 Damage tolerance data for existing supplemental type-certificates (STCs), other existing major changes and existing repairs affecting those changes or STCs

26.331 Compliance Plan for STC holders:

- 26.332 Identification of changes affecting fatigue critical structure
- 26.333 Damage tolerance data for STCs and repairs to those STCs approved on or after 1 September 2003
- 26.334 Damage tolerance data for STCs ***and*** other changes and repairs to those changes approved before 1 September 2003

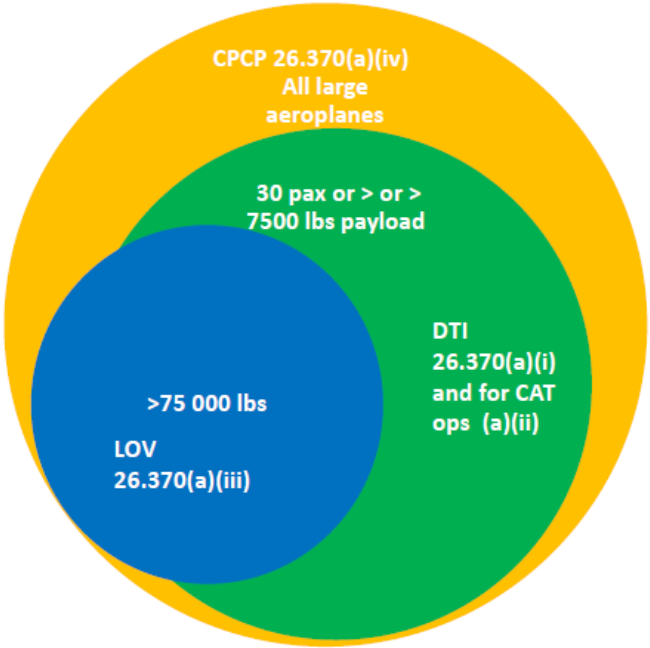
Operator/Owner

26.370 Continuing airworthiness tasks and aircraft maintenance programme

Vilka berörs av vad?

Summary of applicability

26.370



EASA

Hur vet vi när det är ”EASA-klart”?

Submittal and approval of data

- One standard major change application per type accompanied by compliance plan which is due 27th May 2021
- Use of existing data is expected to support compliance demonstration wherever possible
  - Need to ensure it is clear to operators that final approved data complies with Part-26
- EASA will amend TCDS to include each applicable point of Part-26 when the compliance demonstration is complete
- TCDS provides additional visibility to operator that compliance has been shown
- Early submittal of data is encouraged to help operator compliance

Förenklad sammanfattning

~~26 FEB 2021~~
~~26 AUG 2021~~
~~26 FEB 2022~~
~~26 MAR 2022~~
~~26 AUG 2022~~
~~26 FEB 2024~~
26 FEB 2026

DTBIP

An approved Damage-Tolerance-Based Inspection Programme

Ett godkänt skadetoleransbaserat inspektionsprogram

R&M on FCS & on DTBIP

A means for addressing the adverse effects that Repairs and Modifications may have on Fatigue-Critical Structure and on inspections provided for in point (a)(i)

Ett förfarande för att hantera de negativa effekter som reparationerna och modifieringarna kan ha på utmattningskritisk struktur och på de inspektioner som anges i led a i

LOV

An approved LOV
(Limit Of Validity)

En godkänd giltighetsgräns

CPCP

A CPCP
(Corrosion Prevention and Control Programme)

Ett program för förebyggande och kontroll av korrosion

För luftfartyg där det funnits från början
Införliva i AMP före 26 FEB 2024 eller…x

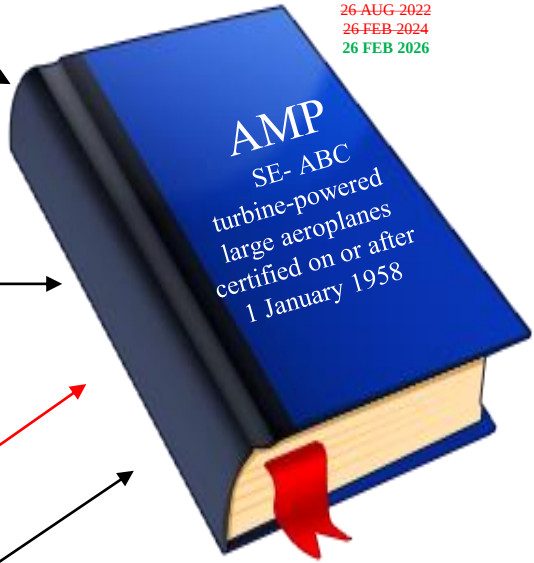
DTBIP

För luftfartyg där det inte det funnits från ”början

Mer detaljer nästa sida

Införliva i AMP före 26 AUG 2021 eller…x

Införliva i AMP före 26 FEB 2024 eller…x



TRANSPORT STYRELSEN

Tidplan - R&M on FCS & on DTBIP

CS 26.370(b) → (c till e) + (g-h)

För varje berört luftfartyg:

R&M on FCS & on DTBIP

A means for addressing the adverse effects that Repairs and Modifications may have on Fatigue-Critical Structure and on inspections provided for in point (a)(i)

Ett förfarande för att hantera de negativa effekter som reparationerna och modifieringarna kan ha på utmattningskritisk struktur och på de inspektioner som anges i led a i

36 M

- **26 FEB 2021** – Part-26.370 börjar gälla
- **Senast 26 FEB 2022** – Granskat luftfartygsdokumentationen och efterfrågat data
  - Identifierat de större modifieringar som påverkar/kan påverka FCS
  - Upprättat en ”***aspirantlista***” för dessa
- **Senast 26 MAR 2022** – För de modifieringar som berörs av ”***aspirantlistan”***:
  - För STC och modifieringar (annan än TCH) som är godkända före 01 SEP 2003
    - Efterfrågat en FCMS list & DTIs för dessa hos DAH eller alternativ källa
- **Följ upp**
- **Senast 26 AUG 2022**
  - Evaluerat och sammanställt en ”***slutgiltig lista***” baserad på tillgängliga data (för FCBS) och vilka större modifieringar som påverkar/kan påverka FCS
- **Följ upp** - Utgivning av DAHCD (från TCH, STCH)
- **Före 26 FEB 2024** – Granskat DAHCD
  - Granskat tillgängliga DAHCD som stödjer identifieringen av FCS & DTIs
- **Senast 26 FEB 2024** – AMP
  - För de godkända DTIs som finns, ska dessa vara införda i AMP

”Steg 1”
Inventera och efterfråga

”Steg 2”
Följ upp

”Steg 3”
Inför tillgängliga och godkända DTIs enligt EU Part-26 i AMP

24 M

- En upprättad plan för att erhålla och implementera DT data till 26 FEB 2026 för de *större modifieringar* **och** *förstärkningsreparationer* som **inte** har DTIs vid denna tidpunkt
  - Planen ska vara införd i AMP (eller referens till plan)
- Följ upp och slutför enligt plan (löpande införa DTIs)
- Om någon ytterligare *större modifiering* **eller** *förstärkningsreparation* upptäcks – Fyll på listan (”***slutgiltiga listan***”)
- **Senast 26 FEB 2026** – AMP klar
  - Erhållit DTIs enligt plan
  - DTIs för *större modifieringar* **och** *förstärkningsreparationer* (enligt ”***slutgiltig lista***”) införda i AMP

”Steg 4”
Säkerställ att plan för ”kvarstående” DTIs införs i AMP

”Steg 5”
Klart!

DAHCD = Design Approval Holder Compliance Data

Att tänka på för CAME & AMP

- CAME 1.2 AMP – development amendment and approval
- CAME 1.7 Repairs and modifications
- CAME 2.9 Control of personnel competency
  - Att Part-26 & AMC 20-20 ‘Continuing Structural Integrity Programme kunskap krävs för:
    - CAM/NPCA, SM, CMM
    - AMP-personal, auditör, ARS
  - Att ”*Competency assessment*” omfattar Part-26 & AMC 20-20A kunskaper
- Bevakning av ändringar av Part-26/CS-26/GM & AMC 20-20A som påverkar CAME & AMP

AMC4 CAMO.A.305(g) Personnel requirements
ED Decision 2020/002/R
OTHER TRAININGS
(a) The organisation should assess the need for particular training; for example, with regard to the competency standards established in AMC 20-22 ‘Electrical Wiring Interconnection System’ (EWIS), the **AMC 20-20 ‘Continuing Structural Integrity Programme**’ or ‘Critical Design Configuration Control’ (CDCCL).

TRANSPORT STYRELSEN

Helicopter ditching and water impact occupant survivability

(EU) 2022/1254

ED 2022/019

TRANSPORT STYRELSEN

Part-26

Part-26

SUBPART C – HELICOPTERS

- 26.410 Emergency controls operated underwater
- 26.415 Underwater emergency exits
- 26.420 Emergency equipment for flight over water
- 26.425 Provision of substantiated sea conditions
- 26.430 Resistance of an emergency flotation system to damage
- 26.431 Determination of the robustness of emergency flotation system designs
- 26.435 Automatic deployment of an emergency flotation system

Kommentar

T.ex.:

- **Operatörer** av *små helikoptrar* och *stora helikoptrar* som, i enlighet med punkt CAT.IDE.H.320(a)…
- **Operatörer** av *små helikoptrar* och *stora helikoptrar* som är skyldiga att uppfylla kraven i punkt CAT.IDE.H.300, NCC.IDE.H.227, SPO.IDE.H.199…
- **Operatörer** av *små kategori A-helikoptrar* och *stora helikoptrar* som, i enlighet med punkt CAT.IDE.H.320 a…
- **En innehavare av ett typcertifikat** för en liten helikopter eller en stor helikopter ska säkerställa…

TRANSPORT STYRELSEN

Övrigt

TRANSPORT STYRELSEN

Övrigt

- Guide finns på både Fortsatt luftvärdighet och Flygbolag
  - Ska användas vid import (om man inte redovisar på annat sätt) Anges i:
    - Checklista för utfärdande av miljö- och luftvärdighetshandlingar för begagnat EASA luftfartyg (Del-M och Del-ML) från tredje land

TRANSPORT STYRELSEN

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TRANSPORT STYRELSEN