EASA
European Aviation Safety Agency

EASA CS-STAN

DOA Workshop
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Köln

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Your safety is our mission.

An agency of the European Union

6 Key Objectives

GA Roadmap:
towards simpler, lighter, better rules for General Aviation

IFR Flying
Easier access of GA pilots to IFR rating, as a concrete measure that will improve safety.

Training
By end of 2018 the 3rd option for licensing will be fully developed providi
system for pilot training outside ATO.

Part-M 'Light'
Work towards a simpler and more proportionate framework for aircraft
licenses: a Part-M 'Light'.

Technology
Continue development of CS-STAN and other similar tools to enable th
new technologies which contribute to safety.

Simpler Certification
Towards a simpler framework for certifying LSA aircraft in the short te
support to applicants e.g. workshops , document templates etc. in th
amending applicable regulations in order to bring a radical simplific

Industry standards
Build on the improvements of CS-23/Part-23 on other CS or regulations in order for EASA to focus on its safety objectives and to delegate the preparation of associated standards to industry groups (ASTM, ASD etc.)

CS-STAN -- Set the scene

Basic Regulation

Airworthiness

Initial Airworthiness

Part 21
A/TC
STC
Production Org
Design Org
CofA
Noise
Parts
Repairs
ETSO
Permit to fly

B/Authority RQ

AD/LTA
Airworthiness Directives

Continuing Airworthiness

Part M
A/Maintenance
M/F
CAMO
B/Authority RQ

Part 145
Maint Org

Part 66
Maint Licences

Part 147
Maint Trg Org

Flight Standards

AIR Crew

Part FCL
Flight Crew Licences

Conversion
from National

Non EU
Licences

Part Medical

Part CC
Cabin Crew Lic

Part ARA
Authority Rq

Part ORA
Organizational Rq

AIR Operations

Definitions

Part ARO
Authority Rq

Part ORO
Organizational Rq

Part CAT
Comm Air Transp

Part SPA
Special Approvals

Part NCC
Non-Comm
Complex

Part NCO
Non-Comm
oth than Complx

Part SPO
Special Ops

TC Oper

TCO

ART

ATM/ANS

ATC Licence

Overseight

ANS Providers

AUR/ACAS II

SERA
Std. European
Rules of the Air

?

...

Occurrences
Report - Analysis

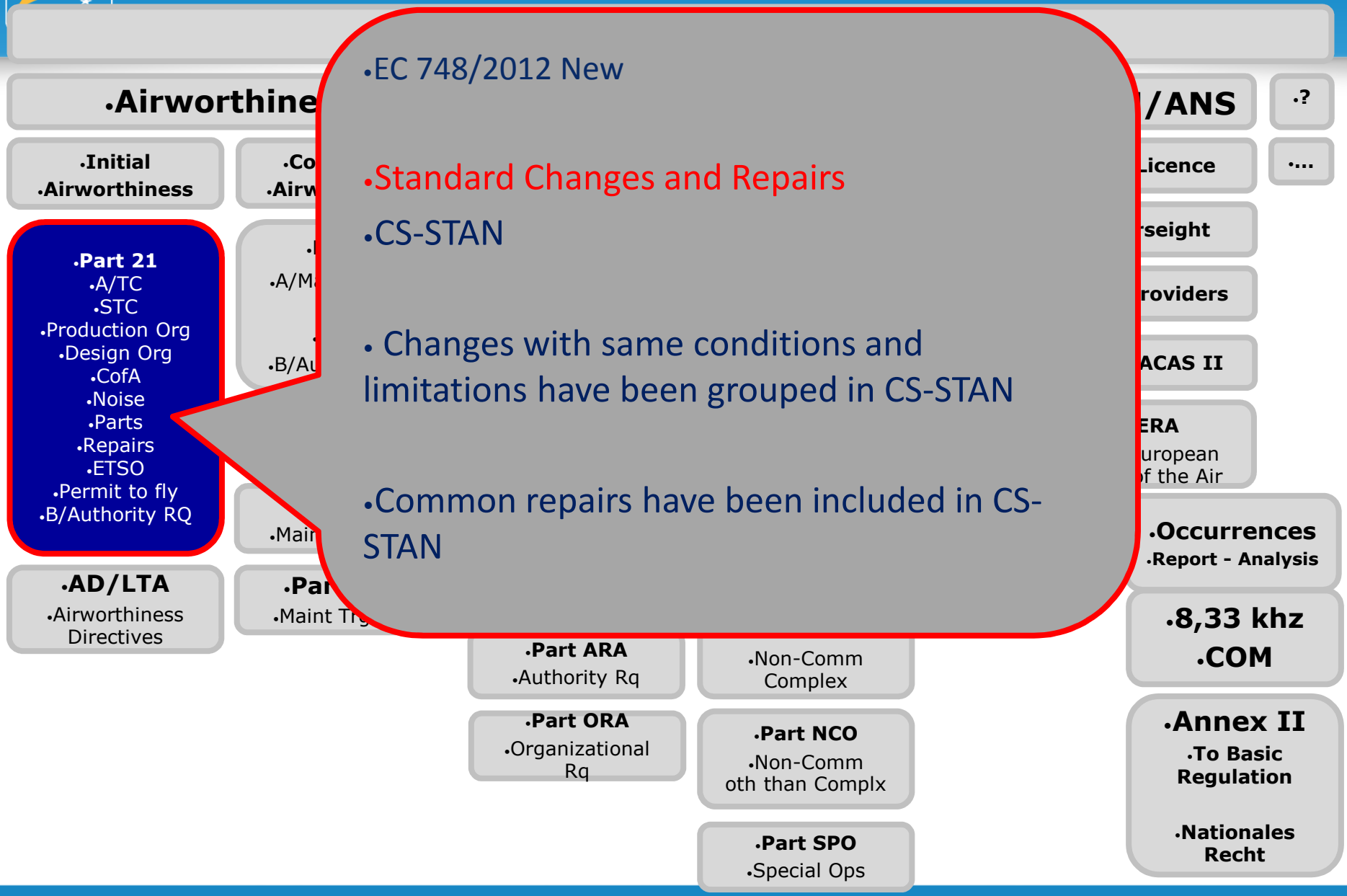
8,33 khz COM

Annex II
To Basic Regulation

Nationales Recht

CS-STAN -- Set the scene

- EC 748/2012 New
- Standard Changes and Repairs
- CS-STAN
- Changes with same conditions and limitations have been grouped in CS-STAN
- Common repairs have been included in CS-STAN



Part 21 -- CS-STAN, Phase I

- Eligibility
- Basic Principles of Part 21 – CS-STAN
- Part 21 – Changes - Responsibilities
- CS-STAN Standard Changes
- CS-STAN Standard Repairs
- EASA -Form - Process

NEW since July 2015

CS-STAN -- Phase I, Eligibility

- Eligible for aeroplanes up to 5700 kg and helicopter up to 3175 kg
- Sailplanes, Balloons, and Airships, ELA 1 and ELA 2
- But there are limitations and conditions (aircraft, operation, release to service,..) within each CS-STAN
- No conflict with the TC Holder data is permitted (Limitations)
- Legal basis is 21A.90B and 21A.431B
- CS-STAN is a listing of changes and will be regularly amendet as necessary / possible (Phase 1,…)

Limitations

CS-STAN -- Basic Principles

- Every change of an aircraft design needs an approval
- Posibilities for approvals
  - Directly EASA (Minor or Major Change, STC)
  - DOA (Approved Design Organisation, z.B. TC Holder)
  - Standard Change/Repair in CS-STAN

NEW

- The installation is done in accordance with the content of the approval and needs a release in accordance wit Part-M (Release to Service)
- Installed parts might need a Form 1

CS-STAN -- Responsibilities

- The „Installer“ is responsible (conditions of applied CS-STAN met, no conflict with the TC Holder data)
- „Installer“ means any natural or legal person „Release to Service“ to be done in accordance wirh the instructions of the Standard Change (Certifying Staff Part 66, Maintenance Organisation)
- Owner (Operator) or CAMO is responsible for the inclusion of the documents in the technical files, manuals, etc., and the adaption of the Maintenance Programme.

CS-STAN -- Documentation

- In each CS-STAN it is mentioned what has to be recorded and which documents are necessary
- Example:

Additionally, the following applies:

— the equipment is authorised according to the applicable ETSO/JTSO or equivalent;

— the equipment has at least the audio functionality of previous installed equipment, and is compatible with the existing installation;

— the equipment is compatible with connections to existing communication and navigation systems;

— the equipment is qualified for the environmental conditions to be expected during normal operation; and

— instructions and tests defined by the equipment manufacturer are followed.

CS-STAN - Subpart A - General

SUBPART A — GENERAL

CS STAN.00 Scope

CS STAN.10 Applicability

CS STAN.20 Operational limitations or restrictions

CS STAN.30 Changes/Repairs that are not in conflict with TC holders data.

CS STAN.40 Referenced documents

CS STAN.50 Instructions for Continuing Airworthiness

CS STAN.60 Aircraft Flight Manual (AFM) Supplement

CS STAN.70 Acceptable Means of Compliance (AMC)

CS STAN.80 Definitions

CS-STAN - List of Changes (Phase I)

Group Systems—Communication:

CS-SC001a — Installation of VHF voice communication equipment

CS-SC002a — Installation of a Mode S elementary surveillance equipment

CS-SC003a — Installation of Audio Selector Panels and Amplifiers

CS-SC004a — Installation of antennas

Group Systems — Electrical:

CS-SC031a — Exchange of conventional Anti-Collision Lights, Position Lights and Landing & Taxi lights by LED type lights

CS-STAN - List of Changes (Phase I) contd.

Group Systems — Avionics/NAV/Instruments:

CS-SC051a — Installation of 'FLARM' equipment

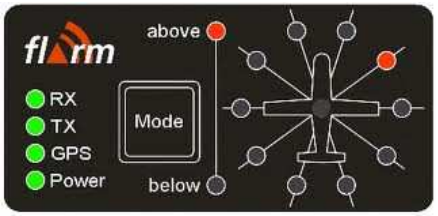
CS-SC052a — Installation of moving-map systems to enhance situational awareness

CS-SC053a — Installation of Radio Marker Receiving equipment

CS-SC054a — Exchange of Distance Measurement Equipment (DME)

CS-SC055a — Exchange of ADF equipment

CS-SC056a — Exchange of VOR equipment



CS-STAN - List of Changes (Phase I) contd.

Group Cabin:

CS-SC101a — Installation of Emergency Locator Transmitter (ELT)

Group Survivability Equipment:

CS-SC151a — Installation of headrest

CS-SC152a — Changes to seat cushions including the use of alternative foam materials

CS-SC153a — Exchange of safety belts — torso restraint systems

Group Powerplant:

CS-SC201a — Exchange of power plant instruments

CS-SC202a — Use of Avgas UL 91

CS-SC203a — Use of Avgas Hjelmco 91/96 UL and 91/98 UL

CS-SC204a — Installation of external powered engine preheater

CS-STAN - List of Changes (Phase I) contd.

Group Flight:

CS-SC251a — Installation of an Angle of Attack (AoA) indicator system

Group Miscellaneous:

CS-SC401a — Exchange of basic flight instruments

CS-SC402a — Installation of sailplane equipment

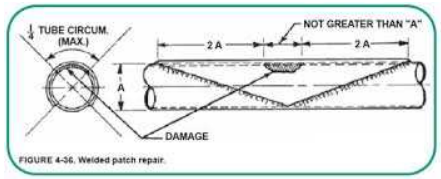
CS-STAN - Repairs (Phase I)

LIST OF STANDARD REPAIRS

CS-SR801a — Aircraft Repair according to FAA Advisory Circular AC 43.13-1B

CS-SR802a — Repair of Sailplanes, Powered Sailplanes, LSA and VLA

- FAA AC 43.13-1B
- Only ELA 2 non complex
- Limitations (i.e. critical parts)
- Repairs of sailplanes



for composite structures:

— ‚Kleine Fiberglas Flugzeug Flickfibel' by Ursula Hänle[4], and

for wooden and mixed structures on sailplanes and powered sailplanes:

— 'Standard Repairs to Gliders' by the British Gliding Association[5], or

— ‚Werkstattpraxis für den Bau von Gleit- und Segelflugzeugen' by Hans Jacobs.

CS-STAN – Form & Process

- Files on EASA website for CS-STAN

http://easa.europa.eu/document-library/agency-decisions/ed-decision-2015016r

- Form EASA 123

Adobe Acrobat Document

EASA
European Aviation Safety Agency

Thank you for your attention

Your safety is our mission.

An agency of the European Union