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# Changed Product Rule

## Outreach meeting with European Industry

**David Hempe**  
**Aircraft**  
**Engineering**  
**FAA**

**Peter Corbeel**  
**Rulemaking**  
**EASA**



# Overview

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- Purpose of this outreach meeting
- Background
- International Implementation Team (IIT)
- AC/GM change process
- planning
- Key areas of interest



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# Purpose

**The CPR International Implementation Team (IIT) would like to:**

- **Brief the Industry on the IIT activities to date and the future.**
- **Share the intent of the revision to the current CPR Guidance material.**
- **Solicit comments or reactions to the draft material before the IIT submits their proposal to EASA/FAA/TCCA management. This does not circumvent public-wide consultation required under the NPA or Federal Register process.**



# Purpose (continued)

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**The IIT was NOT tasked to discuss or resolve pending or on-going projects involving CPR, but would welcome examples that could assist in the clarification or improvement of the draft.**



# Background

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- CPR fully effective June 2003
- Rule and guidance material fully harmonised between FAA, TCCA and JAA/EASA
- Continuous Improvement Team (CIT) set up to monitor implementation
- CIT active till September 2005
- Final report with 12 recommendations (2 are highlighted):
  - ✧ **initiate a revision of AC/GM**
  - ✧ **continue CIT**
- CPR coordination continued through focal points



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# CPR International Implementation Team (IIT)

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- Initiated end 2007 by FAA, EASA and TCCA
- Charter: review policy / guidance and make recommendations for improvement
- 17 items of attention identified in ToR
- Recommendations will contain text proposals



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# CPR IIT Activities

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## ➤ Past

1st Meeting – Oct. 2-4, 2007 in Cologne: EASA, FAA and TCCA

2nd Meeting – May 1, 2008 in Ottawa: FAA and TCCA

3rd Meeting – Oct. 21-22, 2008 in Seattle; FAA and TCCA

4th Meeting – Jan. 27-29, 2009 in Cologne: EASA, FAA and TCCA

5th Meeting – Jun. 9-11, 2009 in Denver: FAA and TCCA

## ➤ Present

European CPR Outreach – Sep. 23, 2009 in Cologne

North America CPR Outreach – Oct. 7, 2009 in Washington, DC

## ➤ Future

Public consultation on draft CPR guidance materials

Joint disposition of public comments

Publish revised CPR guidance materials (EASA/FAA/TCCA)



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# IIT Composition

## Organization

European Aviation Safety  
Agency:

Federal Aviation  
Administration:

Transport Canada Civil  
Aviation:

## Participants

Peter Corbeel, Jan Novak, Catherine  
Dartois, Phil Blagden

HQ AIR-100, -110:  
Dave Hempe, Chris Carter, Randall  
Petersen

Transport Directorate:  
Dorr Anderson, Mike Kaszycki, Meghan  
Gordon

Small Airplane:  
Directorate Bill Timberlake

Rotorcraft Directorate:  
Sharon Miles

Engine and Propeller Directorate:  
Mark Bouyer

Eric Lucas, David Turnbull, David Austen



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# AC/GM development process

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- EASA could not fully participate in IIT due to limited resources  
Therefore rulemaking cooperation method II: FAA/TCCA take the lead
- For EASA changing GM is rulemaking: normal rulemaking process
- FAA and EASA agreed to synchronise consultation
- Objective: fully harmonised AC/GM
- Industry will be involved



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# planning

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- Pre-draft AC ready September 2009
- “industry outreach”
  - ✧ 23 September Cologne
  - ✧ 7 October Washington DC
- October – December 2009 finalisation of draft AC with industry inputs
- January 2010: publication of EASA NPA and draft FAA AC for public consultation
- April 2010: joint disposition of comments
- July 2010: FAA/TCCA issue AC
- September 2010: EASA issue GM



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# Key areas of interest



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- **FAA, TCCA and EASA agreed that 21A.101 rule does not need amendment to deal with the 17 IIT issues**
- **Criteria for 21.19: changes requiring a new TC**
  - ✦ **Application of 21.19 enhances safety during extensive design changes**
  - ✦ **Need definition and threshold for “substantially complete investigation of compliance”**
  - ✦ **Work continues on definition; possibly new guidance material tasking**



# Key areas of interest

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- **Process for identification of design change for determining applicability of 21.101**
  - ★ **Design changes can be broken down into related/unrelated changes**
  - ★ **Related changes must be grouped for determination of “significance”**
  - ★ **Can be broken up further for not affected areas**



# Key areas of interest

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## ➤ Secondary changes definition:

- ✦ Clarification of “secondary change” is necessary
- ✦ Secondary changes are a part of a significant change. Not to be used as an independent exception clause.
- ✦ Does not add to new design capacity or capability
- ✦ Qualifies for application of “does not contribute materially to the level of safety”

## ➤ Application of later requirements for non-significant changes in case of inadequate TC basis

- ✦ EASA / TCCA: through special condition
- ✦ FAA: through 21.21(b)(2)



# Key areas of interest

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- Avionics examples in AC/GM conflict with guidance material
  - ★ Two avionics thresholds will be provided in the guidance material
- Some aircraft interior changes rise to the level of significant
  - ★ Additional examples will be added
- Impracticality exception
  - ★ A qualitative engineering assessment of the consequences will be included with financial justification



# Key areas of interest

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- **Additional clarification will be incorporated into the guidance material:**
  - ★ **Application of partial certification basis**
  - ★ **Changes to products with a “hybrid” certification basis**
  - ★ **21.101(g), Part 26 information**
  - ★ **Documentation of the certification basis**