



REC'D AUG 20 2007

**Julian Hall • Continuing Airworthiness Manager**

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**ARSA  
(Aeronautical Repair Station  
Association)**

Mr Marshall S. Filler  
121 North Henry Street  
Alexandria, VA 22314-2903  
USA

Cologne, 10 August 2007

Ref. Letter: EASA D(2007)/JH/ARSA/01656

**Subject: Human factors Training under the Maintenance Implementations  
Procedures**

Dear Marshall,

My apologies for the delayed response to your letter reference 8 May 2007.

Following a review of your letter the Agency would concur with the content of your letter and we believe that the most pragmatic solution is to permit the use of the current FAA material quoted as an equivalent to the EASA Part-145 guidance material specified in GM 145.A.30(e).

We have discussed this issue with Mr Bill Henry of the FAA and hope to include more clarification on the subject in the proposed new bilateral agreement.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Julian Hall', is written over a faint, illegible printed name.

Julian Hall

Continuing Airworthiness Manager

Cc: Mr William Henry – FAA AFS 300  
Ms Ingrid Seyrlehner – EASA  
Mr Claude Probst – EASA  
Mr Wilfried Schulze - EASA

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08 May 2007

VIA E-MAIL TO: [julian.hall@easa.europa.eu](mailto:julian.hall@easa.europa.eu)

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Manager, Maintenance Organizations  
European Aviation Safety Agency  
Postfach 10 12 53  
D-50452 Köln, Germany

RE: Human factors Training Under the Maintenance Implementations Procedures

Dear Julian:

The Aeronautical Repair Station Association (ARSA) requests your assistance in clarifying a subject of great interest to our members. The issue is defining the appropriate regulations and guidance for human factors training courses adopted by U.S. repair stations seeking or holding European Aviation Safety Agency (EASA) Part 145 approval.

ARSA members have had difficulty discerning what requirements to follow. The level of uncertainty is evidenced by the following question posed to EASA:

Question: *Following your Maintenance Implementation Procedures Guidance (MIP) with the FAA, what training do you expect to see the EASA approved FAA 145 Repair Stations to provide? Do you expect them to comply with GM 145.A.30(e) for the training syllabus?*

EASA response: *EASA requires that the entire syllabus as defined in GM 145.A.30(e) is covered during the Initial training; either as a dedicated course or else integrated within other training... So we would say... that your programme does not meet the requirement as... it is based on material which is not in line with EASA guidance.*

ARSA submits that the relevant standard for EASA Part 145 approvals issued in the U.S. is not the "personnel requirements" specified in GM 145.A.30(e). Rather, as the MIP states in Section 1.1, a repair station is eligible for certification if it meets the "special conditions" designated in the MIP and 14 CFR part 145. Under Section 1.1(d)(v), the "special conditions" require a repair station's EASA supplement to include "a procedure for [it] to ensure that the *Federal Aviation Administration (FAA) approved* initial and recurrent training program and any revision thereto includes human factors training." (Emphasis added.)

The pertinent FAA regulations require initial and recurrent training programs to ensure that employees are capable of performing their assigned tasks (14 CFR § 145.163). The regulations also require a repair station to maintain a quality control system (14 CFR

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§ 145.211). To address training issues generally as well as human factors training required by EASA, the FAA initially developed a detailed training manual template for U.S. repair stations (see AC 145-10, *Repair Station Training Program*).

ARSA recognizes that while Title 14 CFR does not specifically require human factors training, it is a requirement for U.S. repair stations under MIP-G. In implementing the MIP, the FAA issued additional guidance to its Aviation Safety Inspectors outlining the acceptable components of a human factors training course needed to secure EASA Part 145 approval (see HBAW 06-04).

The HBAW established six key areas a human factors training course should address and outlined various subjects to be incorporated into the training program, with a specific notation that the topics are in alignment with current EASA requirements.

Subsequently, FAA Order 8300.10, Volume 2, Chapter 168 incorporates the substantive guidance from HBAW 06-04 while also describing the relationship between EASA and the FAA on the acceptance of a repair station's human factors training program:

Before a repair station may be approved by EASA under EASA Part 145, the repair station must prepare an EASA supplement to its RSM/QCM. The FAA will review and accept the initial supplement on behalf of EASA. (Order 8300.10, Vol. 2, Ch. 168, §1 (3(A)))

Order 8300.10 mirrors the guidance in HBAW 06-04, outlining 12 subject areas a repair station's training program should cover when appropriate. Specifically, chapter 168, page 168-10 suggests the following topics for inclusion in a human factors program:

- General/introduction to human factors
- Statistics
- Safety culture/organizational factors
- Human error
- Types of errors in maintenance tasks
- Human reliability
- Human performance and limitation
- Vision
- Hearing
- Stress
- Situational Awareness
- Workload management

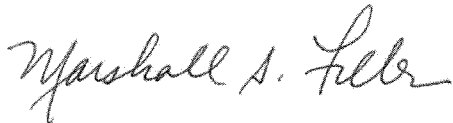
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Further, the Order states that until the FAA "officially approves repair station training programs, the inspector must confirm if the EASA supplement contains procedures for initial and recurrent training programs that address training and qualification in human factors." Therefore, the FAA has established a human factors training outline with which a repair station must comply in order to obtain EASA Part 145 approval.

For the foregoing reasons, ARSA requests that EASA clarify this issue by allowing U.S. repair stations seeking EASA Part 145 certification to follow FAA guidance on human factors training programs rather than GM 145.A.30(e).

ARSA looks forward to working with EASA on this issue and towards an ultimate resolution.

Sincerely,

A handwritten signature in cursive script that reads "Marshall S. Filler".

Marshall S. Filler  
Managing Director and General Counsel

cc: Claude Probst  
Dr. Norbert Lohl  
William Henry, AFS-300