



NOTICE TO AERODROME LICENCE HOLDERS

Aerodrome Standards Department, Aviation House, Gatwick Airport South, West Sussex, RH6 0YR

5/2008

TRANSPORT OF BIO DIESEL IN MULTI-PRODUCT PIPELINES

INTRODUCTION

- 1 UK transport fuel including Jet Kerosene has been successfully transported in multi-product pipelines for many years. The practice represents an efficient, practical and environmentally sound option for transporting large volumes of Jet Kerosene over long distances. Strict procedures are followed to ensure that cross-contamination is minimised including the correct sequencing of fuels being put down the pipelines and large interface batches between different fuel batches, which are being returned to refineries for reprocessing.
- 2 Bio diesel has been used in the UK since 2002. However, it is only since the start of the Renewable Transport Fuel Obligation (RTFO) on 15 April 2008 that any significant amounts of bio diesel have been put down multi-product pipeline systems in the UK. The introduction of bio diesel into a pipeline has the potential to impact upon other forms of fuel being transported. The main issue is that the bio-component in bio diesel (FAME – Fatty Acid Methyl Ester) is a surface-active material. Following some recent testing it has become apparent that there is potential for Jet Kerosene, when transported in pipelines following a batch of bio diesel, to be degraded if FAME desorbs off the pipeline wall. This process is referred to as FAME carryover.
- 3 The Joint Inspection Group (JIG) Product Quality Committee has been co-ordinating action in this area, and further information can be found in JIG Bulletin No.15.

PURPOSE

- 4 The purpose of this NOTAL is to raise awareness of the issue of FAME carryover and in particular to remind Aerodrome Licence Holders and Fuel Installation Managers that they should ensure they are familiar with the requirements of the Air Navigation Order 2005: in particular with Articles 128, 137 and Schedule 13 where they relate to the contents of the Aerodrome Manual, and the procedures for the operation of fuel installations.

SCOPE

- 5 Due to the potential of cross-contamination within fuel supply equipment, this NOTAL applies to all licensed aerodromes, which have the facilities for fuel storage and dispensing.

DEFINITION

- 6 Fuel Equipment is any device or apparatus or part thereof through which fuel passes when being transferred into or from an aircraft, or between fuel installations.
- 7 Fuel Installation is any container or vessel used for the storage of fuel, including a vehicle designed, manufactured or adapted for this purpose or for the delivery of such fuel to an aircraft or another installation.
- 8 Fuel Installation Manager is the Aerodrome Licence Holder, or a person designated by the Licence Holder as being responsible for ensuring and maintaining the quality of fuel received and stored at the aerodrome, and of fuel subsequently delivered to aircraft.

REQUIREMENTS

- 9 Aerodromes will have fuel supplies delivered either by road tankers, or via a fuel pipeline. The Aerodrome Licence Holder should seek written assurance from their fuel supplier that procedures are in place that address the potential for FAME carryover and ensure the fuel is fit for use in aircraft.

IMPLEMENTATION

- 10 Aerodrome Licence Holders should review their current processes for the management of fuel and ensure that fuel delivered is fit for use in aircraft.
- 11 Where necessary, Aerodrome Licence Holders should provide to Aerodrome Standards Department an amendment for inclusion into their Aerodrome Manual accurately reflecting the processes in place for ensuring that fuel is fit for use in aircraft.

QUERIES

- 12 Any queries or further guidance required on the subject of the transport of bio diesel in multi-product pipelines should be submitted by email to the Head of Aerodrome Standards Department at the following email address: aerodromes@caa.co.uk.

May 2008

The following NOTALs remain effective:

- 1/92 Procedure for the Issue of Notice to Aerodrome Licence Holders (Revised)
- 1/93 Helicopter Wake Vortex
- 1/97 Safeguarding the View from Visual Control Rooms
- 5/02 Issue of Authorisations to Non-CAA Personnel
- 2/03 Requirements for Code F Facilities and the Introduction of A380 Aircraft Operations
- 5/04 Rescue and Fire Fighting Services Remission
- 6/04 The Introduction of Combined Licensed Aerodrome and Air Traffic Control Service Safety Audits
- 5/05 Changes to Bird Control Measures Under The Wildlife and Countryside Act 1981 & The Wildlife (Northern Ireland) Order 1985
- 6/05 Light Emitting Diodes (LEDs) Used In Markings, Aeronautical Ground and Obstacle Lighting Systems
- 2/06 Operations by Aircraft Deploying Brake Chutes
- 3/06 Naming of Aerodromes Notified in Aeronautical Information
- 5/06 Delethalisation of Structures in a Runway Cleared and Graded Area
- 7/06 Dangerous Goods Issues Relevant to an Aerodrome Rescue and Fire Fighting Service (RFFS)
- 8/06 Initiation of Low Visibility Procedures Due to Low Cloud Ceiling
- 9/06 Winter Operations
- 10/06 Operational Trials
- 1/07 Runway Incursions (Revised Definition)
- 2/07 Assuring the Safety of Operations with Reduced Runway Length Available
- 3/07 Submission of Required Documents in Electronic Form
- 4/07 Introduction of RNAV (GNSS) Instrument Approach Operations
- 5/07 New Style Aerodrome/Heliport and Aircraft Parking/Docking Charts in the UK Aeronautical Information Publication
- 6/07 UK Implementation of Aerodrome Movement Area 'Hot Spots'
- 7/07 Calibration of Runway Visual Range (RVR) Assessment Using Human Observers
- 1/08 Blast Pads and Runway Ends
- 2/08 On-Aerodrome Development
- 3/08 Aerodrome Boundaries
- 4/08 RFFS Category Special Aerodromes, Initial Emergency Responder