



Civil Aviation Authority

MANDATORY PERMIT DIRECTIVE

Number: 2026-004

Issue date: 24 August 2026



In accordance with 41(1) of Air Navigation Order 2016 as amended the following action required by this Mandatory Permit Directive (MPD) is mandatory for applicable aircraft registered in the United Kingdom operating on a UK CAA Permit to Fly.

Type/Design Approval Holder's Name:

Type/Model Designation(s):

YAKOVLEV /	Yak-18A
INTREPRINDEREA DE AVIOANE BACAU /	Yak-50
AEROSTAR SA /	Yak-52
STROJIRNY PRVNI PETILETKY	Yak C.11

Effective Date:	07 September 2026
TADS / AAN (as applicable):	Various
Foreign AD (if applicable):	Not Applicable
Supersedure/Revision	Not Applicable

Pneumatic System – Landing Gear and Flap Actuator – Inspection

Manufacturer(s):

YAKOVLEV /
INTREPRINDEREA DE AVIOANE BACAU /
AEROSTAR SA /
STROJIRNY PRVNI PETILETKY

Applicability:

Yak-18A
Yak-50
Yak-52
Yak C.11

Definitions:

For the purposes of this MPD, the following definitions apply:

The Modification:

Acro Aeronautical Services Modification AAS 6236 – Yak 18A, Yak 50, Yak 52, Yak C.11, Yak 3 - Replacement Silicon-Based Lubricating Fluid in the Pneumatic System, Issue 2, dated 3rd August 2026.

Reason:

A Yak-52 whilst under maintenance suffered an inadvertent left main landing gear collapse and the aircraft sustained damage to the left-hand wing. In the reported incident, the left-hand main landing gear actuator internal lock failed with the gear selector set at 'Neutral' and the air pressure released.

The investigation found that the internal lock mechanism was contaminated to such an extent by corrosive deposits, that the actuator was unable to operate through its full range of motion (Figure 1 and 2 below).

The pneumatic system on Yak aircraft is susceptible to moisture ingress which can cause corrosion issues as observed in Figure 1 and 2 below if not regularly inspected and lubricated. The investigation also found widespread use of unapproved alternative fluids which contained substances known to be hygroscopic. The original silicon-based fluid lubricant specified by the OEM is 132-25 fluid to GOST 10957-74, however this is not readily available from recognised suppliers. The modification as per AAS 6236 approves the replacement of the OEM specified 132-25 fluid to GOST 10957-74 with XIAMETER™ PMX-200 Silicone Fluid (200 cSt), which is commercially available.

This MPD requires embodiment of the required actions below in order to correct the unsafe condition.

Required Action(s) and Compliance Time(s):

- 1) No later than 50 flight hours or next annual inspection from the effective date of the MPD, whichever occurs first, perform the following:
 - i) Remove, disassemble, and perform a detailed visual inspection of the flap and undercarriage actuators and seals for corrosion and contamination of the internal lock mechanism. (Note – Yak-50 has an external down lock mechanism and is not subject to item (i) and (iii)).
 - ii) During reassembly*, only the use of approved lubricants is permitted in the aircraft pneumatic system, different lubricants must not be mixed.

Approved Lubricants

- OEM recommended fluid - 132-25 fluid to GOST 10957-74
- Approved alternative - XIAMETER™ PMX-200 Silicone Fluid (200 cSt)

If XIAMETER™ PMX-200 Silicone Fluid (200 cSt) is used as an alternative to OEM 132-25 fluid to GOST 10957-74 follow instructions and the silicone fluid specification as detailed in AAS 6236.

*Note for Yak-50 and Yak-18A - this modification is applicable only to aircraft where the rubber seals on the pistons (rams) are lubricated with silicon-based fluids. Earlier aircraft, including some Yak-18A aircraft, are equipped with leather seals on the pistons, with glycerine-based lubrication.

- iii) Replace any damaged components and seals as required, re-assemble the flap and undercarriage actuators and install to aircraft.
 - iv) Check mechanical rigging and microswitch adjustment, setting and system indications, in accordance with OEM recommendations.
 - v) Carry out functional checks of undercarriage and emergency systems; to include extension and retraction checks in accordance with OEM recommendations.
 - vi) Carry out functional checks of aircraft flap system in accordance with OEM recommendations.
 - vii) Check aircraft pneumatic systems for security of attachment and system leaks.
- 2) Aircraft Owners, Continuing Airworthiness and Maintenance Organisations shall amend the aircraft maintenance programmes to align with OEM servicing recommendations of the pneumatic system actuators, by incorporating details of the approved lubricants as detailed in (1)(ii) at the recommended intervals and quantities, to maintain the integrity of the pneumatic system components.

- 3) Affected aircraft which have complied with this MPD will be certified in the aircraft logbook supported by a Permit Maintenance Release (PMR) issued by an Approved Organisation, PMR authorised signatory, or LAA Inspector as applicable.
- 4) For Yak-18A, Yak-50 and Yak-52 - Repeat Items 1 and 3 at intervals not exceeding every 200 hours or every 36 months, whichever occurs first.
- 5) For Yak C.11 – Repeat lubrication of the aircraft pneumatic system in accordance with the OEM recommendations every 50 landings.

Reference Publications:

Acro Aeronautical Services Modification AAS 6236 – Yak 18A, Yak 50, Yak 52, Yak C.11, Yak 3 - Replacement Silicon-Based Lubricating Fluid in the Pneumatic System, Issue 2, dated 3rd August 2026. For a copy of AAS 6236 Issue 2, please e-mail ga@caa.co.uk.

The use of later approved revisions of this document is acceptable for compliance with the requirements of this MPD.

Remarks:

1. The safety assessment has warranted immediate publication and notification without implementing the full consultation process.
2. If requested and appropriately substantiated, the CAA can approve Alternative Methods of Compliance for this MPD.
3. Information about any failures, malfunctions, defects or other occurrences, which may be similar to the unsafe condition addressed by this MPD, and which may occur, or have occurred on a product, part or appliance not affected by this MPD, can be reported to the CAA aviation safety reporting system [Occurrence reporting | Civil Aviation Authority](#). This may include reporting on the same or similar components, other than those covered by the design to which this MPD applies, if the same unsafe condition can exist or may develop on an aircraft with those components installed.
4. Enquiries regarding this MPD should be referred to: ga@caa.co.uk

Figures:



Figure 1 - Main Landing Gear Actuator Corrosion



Figure 2 - Main Landing Gear Actuator Corrosion