

A/C TYPE EC155B
 A/C REGN 9M-SAS S/N 6583
 TYPE OF CHECK _____



EUROCOPTER SOUTH EAST ASIA PTE LTD
 48 Loyang Way Singapore 508740

NO: **14428** FORM NO: M/003
 JOB NO. _____
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DEFECT AND RECTIFICATION WORKSHEET/CERTIFICATE OF RELEASE TO SERVICE

ITEM NO.	REPORTED BY DATE	DEFECT/WORK REQUIRED	ACTION TAKEN	COMPONENT CHANGES		G.I.N.NO. OR O/HAUL REPORT NO.	MAN HOURS	MECH	LIC/ APP NO. DATE
				S/N OFF	S/N ON				
1.	SIEWLAY 18/3/02	COMPLY WITH ALERT TLX 52-A008 - CHECK AND ADJUSTMENT OF THE DOORS (REF. AD 2002-186-005(A))	COMPLIED WITH BY ECF SPECIALISTS JEAN-PIERRE OLIVA AND B. MERCIER. (REFER TO IRS # 13600) day .						<i>[Signature]</i> A1719 30/5/02
2.	SIEWLAY 01/4/02	COMPLY WITH TELEX INFO. TFS NO. 00000057 - REMINDER OF BOOSTER PUMP OPERATION	NOTED.						<i>[Signature]</i> A1719 30/5/02
3.	SIEWLAY 01/4/02	COMPLY WITH AD 2002-104 (AB) - SAFETY BELTS AND RESTRAINT SYSTEMS TYPE 343-1	N/A. PAX BELTS QTY 5 P/N FME 361678 - AE -180 - AIRCRAFT BELTS INC. (USA) PILOTS BELTS QTY 2 SCHROTH P/N TYPE 1-09 - 273201 OFF . SAFETY PRODUCTS GMBH ARNBERG (GERMANY)						<i>[Signature]</i> A1720

THE WORK RECORDED ABOVE HAS BEEN CARRIED OUT IN ACCORDANCE WITH THE FOLLOWING REQUIREMENTS FOR THE TIME BEING IN FORCE AND IN THAT RESPECT THE AIRCRAFT/ EQUIPMENT IS CONSIDERED FIT FOR RELEASE TO SERVICE:

- SINGAPORE AIR NAVIGATION ORDER
- MALAYSIAN CIVIL AVIATION REGULATIONS
- JAR 145 NO : F-04E
- MANUFACTURER'S PUBLICATIONS



T.F.S. No. 00000057 dated March 25, 2002
EUROCOPTER - MARIIGNANE - TLX 42506F

TELEX INFORMATION

AIRCRAFT: AS 365	<u>Civil Version:</u> N3
AIRCRAFT: AS 565	<u>Military Versions:</u> MB, SB, UB
AIRCRAFT: EC 155	<u>Civil Version:</u> B

SUBJECT: FUEL
Reminder of Booster Pump Operation

CAUTION

**THE INFORMATION AND INSTRUCTIONS
CONTAINED IN THIS TELEX INFORMATION ARE
INTENDED FOR MAINTENANCE PERSONNEL AND
CREWS**

Dear Customer,

During a flight, shortly after taking off, the crew of a helicopter noticed that the "FUEL Q" warning light was lit. The crew applied the procedure described in the Flight Manual and landed as soon as possible. After having checked the fuel quantity and fuel pressure, the pilot decided to take off again although the warning lights were still lit.

After a twenty minutes' flight, the left engine stopped operating despite a remaining fuel quantity of 13 percent in the left fuel tank group.

Following the technical investigation and flight tests carried out by EUROCOPTER, a similar situation has been simulated by switching the booster pumps OFF.

Furthermore, EUROCOPTER would like to remind operators of some general information given in Flight Manual Chapter "GENERAL" concerning the operation of booster pumps.



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Pressurization of each one of both the engine fuel supply systems is ensured by two booster pumps that are located in the feeder tank of each of the two tank groups. These pumps ensure the transfer of the fuel from these tanks to the feeder tank by means of ejectors that are located in the tanks.

Analysis:

In the event of (intentional or unintentional) switching-off of the two booster pumps of one of the two fuel tank groups, the system which ensures the fuel transfer to the feeder tank no longer operates. The engine continues to be fed due to suction of fuel from the feeder tank. The fuel level in the feeder tank is gravity-balanced with the fuel level in the other tanks.

In these conditions:

- The complementary fuel tanks are gravity-emptied into the center fuel tank.
- The center fuel tank gravity-replenishes the feeder tank.
- Non-consumable fuel quantities are increased.
- The "FUEL Q" warning light on the caution advisory panel informs the pilot of the low fuel level in the feeder tank (the remaining time to fly is 5 minutes).
- The pilot reads the low fuel pressure message on the "14-DATA" indicator (AS 365 N3, AS 565 MB, SB, UB) and on the CAD (EC 155).
- In the event of abnormal pressures, the message on the CAD is provided in the form of a digital reading underlined in yellow.

NOTE

In this case, the fuel pressure indicator light "FUEL P" (for AS 365 N3, AS 565 MB, SB, UB), or "PRS" (for EC 155) on the fuel management panel does not come on. In fact, this warning light indicates only fuel pressure drops at the power plant.

In this case, this pressure remains nominal, (operation by means of fuel suction), even if the booster pumps do not operate.

This information is given in the Flight Manual:

- Fuel System Failures (Section 3.2):

Simultaneous illumination of the "ALARM" ("WARN" on EC 155) and "FUEL Q" warning lights indicates a fuel level drop in the feeder tank. Moreover, if the fuel quantity gage indicates a fuel quantity above zero, the quantities of non-consumable fuel are increased, whatever the failure (refer to the Flight Manual).

Operating Procedures (Section 4.1):

After engine start-up, before and during taxiing and on takeoff, check that the (red and amber) warning lights are not lit and that the indications on the monitoring instruments are within the normal operating ranges.

BOOSTER PUMPS MUST BE KEPT IN OPERATION IN ALL FLIGHT PHASES.

Best regards,

GSAC

AIRWORTHINESS DIRECTIVE

released by DIRECTION GENERALE DE L'AVIATION CIVILE

Inspection and/or modifications described below are mandatory. No person may operate a product to which this Airworthiness Directive applies except in accordance with the requirements of this Airworthiness Directive.

**Translation of 'Consigne de Navigabilité' ref. : 2002-104(AB)
In case of any difficulty, reference should be made to the French original issue.**

ANJOU AERONAUTIQUE

Safety belts and restraint systems Type 343-1

Inspection and replacement - Life limit (ATA 05, 25)

1. APPLICABILITY :

This Airworthiness Directive is applicable to all Part Numbers of :

- All safety lap belts type 343-1,
- All safety belt extensions type 343-1,
- All torso restraint systems that incorporate a buckle type 343-1,

manufactured by ANJOU AERONAUTIQUE, formerly TRW Repa SA, formerly L'AIGLON.

Note :

- 1) When manufactured no individual serial number had been given to any or these pieces of equipment.
- 2) Marking identification (P/N) is stamped on the buckle. For type 343-1, the following markings can be found :
 ANJOU AERONAUTIQUE TYPE 343-1 or,
 TRW Repa S.A. TYPE 343-1 or,
 L'AIGLON TYPE 343-1.

Manufacturing date is indicated on identification labels located on each lap belt. Indicated date is : WW/YY where WW stands for week and YY for year.

2. REASON :

Poor functioning of the buckle's latch may create an unsafe condition.

3. COMPLIANCE :

3.1. Repetitive visual inspection :

3.1.1.

Within 6 months after the effective date of this airworthiness directive, visually inspect the buckle spring for presence (the 3 blades of the spring must be visible), and detect defect, as per instructions given in paragraph B of Service Bulletin ANJOU AERONAUTIQUE 343-1-25-01.

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3.1.2. Repeat this inspection at intervals not exceeding 18 months.

3.2. Life limit :

Discard equipment when they reach 60 months after manufacturing date. This life limit also includes storage time as well as usage time of the equipment.

For equipment already older than 48 months at the effective date of this Airworthiness Directive, a 12 month grace period is granted.

REF. :

Service Bulletin ANJOU AERONAUTIQUE No. 343-1-25-01.

EFFECTIVE DATE : MARCH 02, 2002

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