BGA TECHNICAL COMMITTEE

TECHNICAL NEWSHEET 5/6/98

PART 1 Airworthiness "AGGRO"

Please add to the 1998 Yellow Pages.

1.1. ASW20 and 24. LBA A/D 1998-255 (attached) increases the Service Life to 12,000 hours, subject to a multi-stage inspection.

1.2. CIRRUS & CIRRUS VTC. LBA A/D 1998-251(attached) increases the Service Life to 12,000 hours subject to multi-stage inspection.

1.3. "JUNIOR". BK006/90 (attached) requires placement of Lower Rudder Hinge at 1000 hours. Cracks in the GRP structure below this hinge have been identified by Southdown Aero Services.

1.4. GROB G.109B (SLMG). Canopy door Jettison Controls were jammed by screws attaching the roof trim. Check operation a.s.a.p. (Reported by RAFGSA Bicester).

1.5. L33 "solo" WING HINGE Replacement at 1500 hours. A/D 1/024/98 (attached) has been sent to owners.

1.6. FOURNIER RF4D - Failed Main Landing Gear Fork. Extract from GASIL illustrates the problem.

1.7. VENTUS 2CT and CM. Tech Note 825-20 introduces changes to Flight and Maintenance Manuals. (from UK Agents).

1.8. VENTUS 2a and 2b. Tech Note 349-23 introduces changes to Flight & Maintenance Manuals.

1.9. ASW19's with increased Speed Brake Modifications. Check that bolts do not prevent correct operation at all speeds, by fouling against the standard brake assembly.

1.10. MOSQUITO - Crack in Rudder Drive Pintle. Replacements are of an improved design and manufacturing standard. (Ref TNS 3/4/98

1.11. AMT - 100/200 SLMG's FAA A/D 98-05-05 draws attention to potential failure of MAIN LANDING GEAR on X-IMANGU's.

1.12. BENDIX (Teledyne) MAGNETO's. A reminder that FAA A/D's 94-06-09 and 96-12-07 (attached) are mandatory whether fitted to SLMG's or other aeroplanes.

PART TWO GENERAL MATTERS

2.1. The Weight of non-lifting parts should be established , in order to calculate the maximum disposable load. (Tim Macfadyen).

2.2. ENGINE FIRES, GASIL 2/98 draws attention to the need to have a FIRE EXTINGUISHER readily available.

2.3. G.A. AIRCRAFT SPARES & ENGINEERING STANDARDS. CAA Statement in the Flight Safety Bulletin is copied herewith, and gives useful information to OWNERS, OPERATORS AND INSPECTORS.

2.4. ROTAX ENGINES, Fuel and lubricant specifications. ROTAX Document 18 UL 97 R1-D/E details the various combinations of Fuels/Avgas/Mogas /Leaded/Unleaded. and the recommended lubricants (20 variants) applicable to 912 and 914 series engines. (Available from Rotax Engine Agents).

Dick Stratton
Chief Technical Officer

BULLETIN No BK-006/90 "JUNIOR"

Ref: Replacement of the rudder lower hinge in the fuselage.

Way of introducing: If a damage appeared-immediately.
In other case - at the 1000 flying hours inspection or repair.

Elaborated in PDPS-TKE.

Director of "PZL-BIELSKO"

Juliusz BORTH, M.Sc.

This is the translation of the original Polish text approved by C.A.C.A.

Translated by

Wiesław Stafiej, D.Sc.

Luftfahrt-Bundesamt
Airworthiness Directive Section
Lilienthalplatz 6
38108 Braunschweig
Federal Republic of Germany

Airworthiness Directive 1998-255

Schleicher

Effective Date: May 21, 1998

Affected:

Kind of aeronautical product:	Sailplane
Manufacturer:	Schleicher, Poppenhausen, Germany
Type:	ASW 20 and ASW 24 Prototype
Models affected:	all
Serial numbers affected:	all, (No. 24000 for ASW 24 Prototype)
German Type Certificate No.:	314, 363 and 851

Subject:
Amendment of the Maintenance Manual / Inspection Program to Increase the Service Life

Reason:
Fatigue tests on Glas fibre reinforced plastic (GRP) wings and GRP wing spars have shown that a service life expectancy of 12000 hours can be reached for these components without problems. However, as this fatigue test program did not examine the entire aircraft made of GRP, this service life of 12000 hours can be granted only if the long-term airworthiness of each individual aircraft is demonstrated in a special multi-stage inspection program (over and above the mandatory annual C of A inspections) for the purpose versions of increasing the service life. For the ASW 20 TOP production versions the service life increase applies to the airframe only, the removable engine unit is not to be affected by this AD. The ASW 24 prototype corresponds to an ASW 20 B with fixed flaps and therefore falls within the scope of this AD.

Action:
Exchange of pages into the Service Manual.

Compliance:
Exchange of pages into the Manual: prior to the next annual inspection, but not later than December 31, 1998.
The Inspection Program must be performed before reaching a service life of 3000 or 6000 flight hours.

Technical publication of the manufacturer:
Schleicher Technical Note No. 39/2 dated April 17, 1998 which becomes herewith part of this AD and may be obtained from Messrs.:

Alexander Schleicher
GmbH & Co.
Segelflugzeugbau

D - 36163 Poppenhausen
Federal Republik of Germany

Accomplisishment and log book entry:
Action to be accomplished by an approved service station and to be checked and entered in the log book by a licensed inspector.

Holders of affected aircraft registered in Germany have to observe the following:
As a result of the a.m. deficiencies, the airworthiness of the aircraft is affected to such an extent that after the expiry of the a.m. dates the aircraft may be operated only after proper accomplishment of the prescribed actions. In the interest of aviation safety outweighing the interest of the receiver in a postponement of the prescribed actions, the immediate compliance with this AD is to be directed

Instructions about Available Legal Remedies:
An appeal to this notice may be raised within a period of one month following notification. Appeals must be submitted in writing or registered at the Luftfahrt-Bundesamt, Lilienthalplatz 6, 38108 Braunschweig.

Enquiries regarding this Airworthiness Directive should be referred to Mr.Olaf Schneider, Airworthiness Directive Section at the above address, fax-no. 0049 531/2355-254. Please note, that in case of any difficulty, reference should be made to the German issue!

TN 5/6/98
To: CN NRS 20/4

CAA

CIVIL AVIATION AUTHORITY
CZECH REPUBLIC

airport Ruzyne, 160 08 Prague 6
tel: 420 02/324086, fax: 420 02/364112

AIRWORTHINESS DIRECTIVE

Number: CAA-T-AD-1-024/98
Date of issue: March 23, 1998

LET Inc. Kunovice
L 33 SOLO

SAILPLANE - WING MAIN HINGES - REPLACEMENT

Applicable: L 33 SOLO, S/N: 930101-930205; 940206-940308; 940310-940316; 950318-950401; 960402-940404; 950405-950406; 960407-960408; 960410.

Reason for issuance:
Fatigue of wing attachment discovered by fatigue testing

Effective date: May 1, 1998

Apply until:
After AD receipt, not later than 1 500 hours TIS (time in service)

Accomplishment Procedure:
L-33 SOLO sailplane operators shall replace main wing attachment and wing spar root pins according to the Mandatory Bulletin L-33/008a .

Remarks:
- Where applicable, the requirements of this AD must be integrated into the aircraft's log
- Address inquiries this AD to: Civil Aviation Authority, Airworthiness Division, Ruzyne Airport, 160 08 Prague 6, Czech Republic, tel: 420 2 324086, fax: 420 2 364112
-Operators of affected sailplanes obtain copies of mandatory service bulletin No. L-33/008a directly from manufacturer. Contact address: LET' Inc.,686 04 Kunovice, CZECH REPUBLIC

v.z.

Ing. Pavel MATOUŠEK
Director of Airworthiness Division
CAA CZ

Airworthiness Directive 1998-251

Luftfahrt Bundesamt
Airworthiness Directive Section
Lilienthalplatz 6
38108 Braunschweig
Federal Republic of Germany

Schempp-Hirth

Effective Date: May 21, 1998

Affected:

Kind of aeronautical product:	Sailplane
Manufacturer:	Schempp-Hirth, Kirchheim/Teck, Germany
Type:	Cirrus
Models affected:	Cirrus and Cirrus-VTC
Serial numbers affected:	all
German Type Certificate No.:	265

Subject:
Extension of the service life / Flight & Service Manual

Reason:
The results of fatique tests (subsequently carried out on wing spar sections) have demonstrated that the time in service of GFRP sailplanes and powered sailplanes may be extended to 12000 hours, provided the airworthiness of each individual aircraft is evidenced by a special multi-stage inspection program, which is then to be incorporated into the service manual of the model concerned.
Supplements to chapter „Hinge moments and weights"

Action:
Exchange of pages into the Service Manual.

Compliance:
Action must be done when reaching a service life of 6000 flight hours, but not later than December 31, 1998.

Technical publication of the manufacturer:
Schempp-Hirth Technical Note No. 265-9 dated March 03, 1998 which becomes herewith part of this AD and may be obtained from Messrs.:

Schempp-Hirth
Flugzeugbau GmbH
Postfach 14 43

D- 73222 Kirchheim / Teck

Federal Republik of Germany

Accomplisishment and log book entry:
Action to be accomplished by an approved service station and to be checked and entered in the log book by a licensed inspector.

Holders of affected aircraft registered in Germany have to observe the following:
As a result of the a.m. deficiencies, the airworthiness of the aircraft is affected to such an extent that after the expiry of the a.m. dates the aircraft may be operated only after proper accomplishment of the prescribed actions. In the interest of aviation safety outweighing the interest of the receiver in a postponement of the prescribed actions, the immediate compliance with this AD is to be directed

Instructions about Available Legal Remedies:
An appeal to this notice may be raised within a period of one month following notification. Appeals must be submitted in writing or registered at the Luftfahrt-Bundesamt, Lilienthalplatz 6, 38108 Braunschweig.

Schempp-Hirth
Flugzeugbau GmbH
Postfach 1140
D-73222 Kirchheim unter Teck
LBA-Nr. DB 5

TECHNICAL NOTE NO. 265 - 9

Page No.

No. of pages

Subject : a) Extension of the service time
b) Flight & Service Manual

Affected : Sailplanes model "Cirrus" and variant "Cirrus VTC"
(F.R.G. Type Certificate No. 265)

Urgency : On reaching a service time of 6000 flight hours, but not later than December 31, 1998

Reason : a) The results of fatique tests (subsequently carried out on wing spar sections) have demonstrated that the time in service of GFRP sailplanes and powered sailplanes may be extended to 12000 hours, provided the airworthiness of each individual aircraft is evidenced by a special multi-stage inspection program, which is then to be incorporated into the service manual of the model concerned.

b) Supplements to chapter "Hinge moments and weights"

Actions : Amendments of the Service Manual

(insert revised pages dated March 1998 and destroy superseded pages)

Page 2	-	Amendment list
Page 27	-	Hinge moments and weights
Page 30 Page 31	-	Inspection program for extending the service time

Material, Weight, C/G position : Not affected

Note : Accomplishment of actions to be entered in the sailplane's log book by a licensed inspector.

THIS ISSUE SUPERSEDES THE ISSUE DATED DECEMBER 6, 1985

Kirchheim/Teck, March 3, 1998

Issued: H. Treiber

(H. Treiber)

LBA-approved:

The German original of this Technical Note has been approved by the LBA under the date of March 16, 1998
and is signed by Mr. Skov
The translation into English has been done by best knowledge and judgement.

TNS 51.6/98

SCHEMPP-HIRTH FLUGZEUGBAU GMBH.

Schempp-Hirth Flugzeugbau GmbH · Postfach 1443 · D-73222 Kirchheim/Teck

British Gliding Association
Technical Committe
Kimberly House
Vaughan WAY
LEICESTER / ENGLAND

Ihre Zeichen:
Ihre Nachricht vom:
Unsere Zeichen: Tr/wz/180
Tag: 14.05.1998

Technical Notes for sailplanes and powered sailplanes

Cirrus- und Cirrus VTC	(F.R.G. Type Certif.-No. 265)
Ventus-2a /-2b /-2c	(F.R.G. Type Certif.-No. 349)
Janus CM	(F.R.G. Type Certif.-No. 809)
Ventus-2cT / -2cM	(F.R.G. Type Certif.-No. 825)

Dear Sirs,

enclosed please find the following Technical Notes for the sailplanes and powered sailplanes mentioned above:
TN-No.: 265-9 (new issue)

Subject of this Technical Note is the extension of service time (12.000 hours).
Our German Luftfahrtbundesamt will publish a new Airworthiness Directives for this TN.

TN-No. 349-23

Subject of this Technical Notes is the Flight & Maintenance Manual. (Supplemental information concerning landing procedure and optimum flap settings)

TN-No. 809-13

Subject of this TN is the Flight Manual (minimum seat load with two occupants)

TN-No. 825-20

Subject of this TN is the Flight and Maintenance Manual.

Affected serial numbers are shown on page 01 of these Technical Notes. We kindly ask you to pay attention the mentioned times for carrying-out the required steps.

We also include the according latest Summary of SCHEMPP-HIRTH Technical Notes and LBA-Airworthiness Directives.

Yours sincerely
Schempp-Hirth
Flugzeugbau GmbH.
i.A. G. Weinzierl

Encl.:
as mentioned above

BW 98-06

AEROMOT
AIRWORTHINESS DIRECTIVE
SMALL AIRCRAFT & ROTORCRAFT

98-05-05 AEROMOT-INDUSTRIA MECANICO METALURGICA LTDA: Amendment 39-10366; Docket No. 97-CE-78-AD.

Applicability: Model AMT-100 powered gliders (serial numbers (S/N) 100.001 through 100.039 and 100.041 through 100.044), and Model AMT-200 powered gliders (S/N 200.040 and 200.045 through 200.080), certificated in any category.

NOTE 1: This AD applies to each glider identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For gliders that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (c) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required within the next 30 days after the effective date of this AD, unless already accomplished.

To prevent failure of the main landing gear, which could result in loss of control of the glider during landing operations, accomplish the following:

(a) Replace all main landing gear attaching bolts (part number (P/N) TH 6x30 PL11 or an FAA-approved equivalent part number), nuts (P/N 6 PA-108 or an FAA-approved equivalent part number) with attaching bolts (P/N DIN 931 M6x30 (Pitch 1.0) Class 10.9 or an FAA-approved equivalent part number), and nuts (P/N DIN 982 M6 (Pitch 1.0) or an FAA-approved equivalent part number) in accordance with the Procedures section in AEROMOT-IND. MECANICO-METALURGICA LTDA. Service Bulletin No. SB-200-32-044, Issue Date August 18, 1997.

(b) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the glider to a location where the requirements of this AD can be accomplished.

(c) An alternative method of compliance or adjustment of the compliance time that provides an equivalent level of safety may be approved by the Manager, Atlanta Aircraft Certification Office, One Crown Center, 1895 Phoenix Blvd., suite 450, Atlanta, Georgia 30349. The request shall be forwarded through an appropriate FAA Maintenance Inspector, who may add comments and then send it to the Manager, Atlanta Aircraft Certification Office.

NOTE 2: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Atlanta Aircraft Certification Office.

(d) Questions or technical information related to Aeromot-Industria Mecanico Metalurgica Ltda. Service Bulletin No. SB-200-32-044, Issue Date: August 18, 1997, should be directed to Grupo Aeromot, Aeromot-Industria Mecanico Metalurgica Ltda., Av. das Industries-1210, Bairro Anchieta, Caixa Postal 8031, 90200-Porto Alegre-RS, Brazil. This service information may be examined at the FAA, Central Region, Office of the Regional Counsel, Room 1558, 601 E. 12th Street, Kansas City, Missouri.

(e) The replacements required by this AD shall be done in accordance with AEROMOT-IND. MECANICO-METALURGICA LTDA. Service Bulletin No. SB-200-32-044, Issue Date: August 18, 1997. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Grupo Aeromot, Aeromot-Industria Mecanico Metalurgica Ltda., Av. das Industries-1210, Bairro Anchieta, Caixa Postal 8031, 90200-Porto Alegre-RS, Brazil. Copies may be inspected at the FAA, Central Region, Office of the Regional Counsel, Room 1558, 601 E. 12th Street, Kansas City, Missouri, or at the Office of the Federal Register, 800 North Capitol Street, NW, suite 700, Washington, DC.

NOTE 3: The subject of this AD is addressed in Brazilian CTA AD 97-09-06, dated August 14, 1997.

(f) This amendment (39-10366) becomes effective on April 17, 1998.

FOR FURTHER INFORMATION CONTACT:
Curtis Jackson, Aerospace Engineer, Atlanta Aircraft Certification Office, One Crown Center, 1895 Phoenix Blvd., suite 450, Atlanta, Georgia 30349; telephone: (770) 703-6083; facsimile: (770) 703-6097.

Bendix Mags

BW 94-10

TELEDYNE CONTINENTAL MOTORS
AIRWORTHINESS DIRECTIVE
FINAL RULE OF PRIORITY LETTER
APPLIANCE
SMALL AIRCRAFT & ROTORCRAFT

94-06-09 Teledyne Continental Motors: Amendment 39-8895. Docket 94-ANE-12.

Applicability: Teledyne Continental Motors (TCM) (formerly Bendix) magnetos new and rebuilt TCM Model SC-20, Part Number (P/N) 10-500XXX-X series; Model SC-200, P/N 10-600XXX-X series; and Model S-1200, P/N 10-349XXX-X series, magnetos with Serial Numbers (S/N) J2793XXX(R) through J3193XXX(R), K0193XXX(R) through K3093XXX(R) and L0193XXX(R) through L2293XXX(R) inclusive, with capacitor, P/N 10-349276, with date code 93-40 or 93-42. In addition, all TCM Model SC-20, P/N 10-500XXX-X series; SC-200, P/N 10-600XXX-X series; and S-1200, P/N 10-349XXX-X series, magnetos that have capacitor, P/N 10-349276, identified with date code 93-40 or 93-42, installed after October 27, 1993. Also, any TCM or Bendix magneto regardless of serial number that was fitted after October 27, 1993, with capacitors P/N 10-349276, sold as individual replacement parts with date code 93-40 or 93-42. These magnetos are installed on but not limited to reciprocating engine powered Beech, Cessna, Maule, Mooney, Piper, and Robinson aircraft.

NOTE: The "X" represents numbers in the P/N and S/N that have no significance in determining applicability: only the first five digits are needed. The "(R)" at the end of the S/N indicates a rebuilt magneto. The absence of an "(R)" indicates a new magneto.

Compliance: Required as indicated, unless accomplished previously.

To prevent possible injury or death to ground personnel due to a non-grounded magneto, accomplish the following:

NOTE: WARNING: Do not move propellers by hand on engines that may contain affected capacitors until the inspection procedures required by this airworthiness directive (AD) are completed. Ground personnel should avoid the propeller arc.

(a) Within the next 10 hours time in service after the effective date of this AD, inspect affected magnetos for the presence of capacitor P/N 10-349276, in accordance with the Detailed Instructions, paragraphs 1, 1.1, and 1.2 of TCM Critical Service Bulletin (CSB) 641, dated February 1, 1994, and, if necessary, replace with a serviceable part as follows:

(1) If the capacitor is marked with a date code other than 93-40 or 93-42, reinstall the capacitor in the magneto and metal stamp the letter "E" in accordance with the Identification paragraph of TCM CSB641, dated February 1, 1994, to show compliance with this AD. No further action is required.

(2) If the capacitor is marked with either date code 93-40 or 93-42, replace with a serviceable capacitor of the same P/N but with a date code other than 93-40 or 93-42, and metal stamp the letter "E" in accordance with the Identification paragraph of TCM CSB641, dated February 1, 1994, to show compliance with this AD.

(b) Prior to installation, inspect uninstalled capacitor, P/N 10-349276, and replace, if necessary, with a serviceable part, in accordance with the Detailed Instruction, paragraph 2.1 of TCM CSB641, dated February 1, 1994.

NOTE: TCM Critical Service Bulletin CSB94-1 dated February 1, 1994, and Lycoming Service Bulletin 517 dated February 25, 1994, refers to this subject.

(c) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Atlanta Aircraft Certification Office. The request should be forwarded through an appropriate FAA Maintenance Inspector, who may add comments and then send it to the Manager, Atlanta Aircraft Certification Office.

NOTE: Information concerning the existence of approved alternative methods of compliance with this airworthiness directive, if any, may be obtained from the Atlanta Aircraft Certification Office.

BW 96-13

Bendix BCD TNS 1/18 19?

TELEDYNE CONTINENTAL
AIRWORTHINESS DIRECTIVE
APPLIANCE
SMALL AIRCRAFT & ROTORCRAFT

96-12-07 Teledyne Continental Motors: Amendment 39-9649. Docket 93-ANE-07. Supersedes AD 78-09-07 R3, Amendment 39-4538.

Applicability: Teledyne Continental Motors (TCM) (formerly Bendix) S-20, S-1200, D-2000, and D-3000 series magnetos equipped with impulse couplings, installed on but not limited to reciprocating engine powered aircraft manufactured by Beech, Cessna, Mooney, and Piper.

NOTE 1: This airworthiness directive (AD) applies to each magneto identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For magnetos that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must use the authority provided in paragraph (c) to request approval from the Federal Aviation Administration (FAA). This approval may address either no action, if the current configuration eliminates the unsafe condition, or different actions necessary to address the unsafe condition described in this AD. Such a request should include an assessment of the effect of the changed configuration on the unsafe condition addressed by this AD. In no case does the presence of any modification, alteration, or repair remove any magneto from the applicability of this AD.

NOTE 2: The FAA has received reports of some confusion as to what is meant by S-20, S-1200, D-2000, and D-3000 series magnetos as referenced in TCM Mandatory Service Bulletin (MSB) No. MSB645, dated April 4, 1994, and this airworthiness directive (AD). A typical example is S6RN-25, where the S designates single type ignition unit (a D designates a dual ignition unit), the 6 designates the number of cylinders, the R designates right hand rotation, the N is the manufacturer designation (this did not change when TCM purchased the Bendix magneto product line), and the number after the dash indicates the series (a -25 is a S-20 series magneto while a -3200 is a D-3000 series magneto, etc.).

Compliance: Required as indicated, unless accomplished previously.

To prevent magneto failure and subsequent engine failure, accomplish the following:

(a) For magnetos with riveted or snap ring impulse coupling assemblies, having less than 450 hours time in service (TIS) since new, or overhaul, or since last inspection, on the effective date of this AD, accomplish the following:

(1) Prior to the accumulation of 500 hours TIS since new, or overhaul, or since last inspection, inspect riveted or snap ring impulse coupling assemblies for wear, and replace, if necessary, prior to further flight, with serviceable riveted or snap ring impulse coupling assemblies, in accordance with the Detailed Instructions of TCM MSB No. MSB645, dated April 4, 1994, and TCM SB No. 639, dated March 1993.

(2) Thereafter, at intervals not to exceed 500 hours TIS since the last inspection, inspect riveted or snap ring impulse coupling assemblies for wear, and replace, if necessary, prior to further flight, with serviceable riveted or snap ring impulse coupling assemblies, in accordance with the Detailed Instructions of TCM MSB No. MSB645, dated April 4, 1994, and TCM SB No. 639, dated March 1993.

(b) For magnetos with riveted or snap ring impulse coupling assemblies, having 450 or more hours TIS since new, or overhaul, or since last inspection, on the effective date of this AD, or an unknown TIS on the effective date of this AD, accomplish the following:

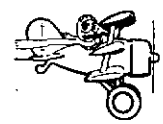
(1) Within the next 50 hours TIS after the effective date of this AD, inspect riveted or snap ring impulse coupling assemblies for wear, and replace, if necessary, prior to further flight, with serviceable riveted or snap ring impulse coupling assemblies in accordance with the Detailed Instructions of TCM MSB No. MSB645, dated April 4, 1994, and TCM SB No. 639, dated March 1993.

(2) Thereafter, at intervals not to exceed 500 hours TIS since the last inspection, inspect riveted or snap ring impulse coupling assemblies for wear, and replace, if necessary, prior to further flight, with serviceable riveted or snap ring impulse coupling assemblies, in accordance with the Detailed Instruction of TCM MSB No. MSB645, dated April 4, 1994, and TCM SB No. 639, dated March 1993.

GASIL
GENERAL AVIATION SAFETY INFORMATION LEAFLET

The CAA Accident Prevention Leaflet **2 of 1998 issued April**

ENGINE FIRE ON START-UP



Aircraft type : Cessna 152
Date : December 1997

File photo

Another thought provoking letter from a reader describes an incident involving an engine fire while starting his Cessna 152 and makes the point that the Pilot's Operating Handbook (POH) contains no specific drill for engine fire on start up.

'Fortunately, due to an article I had read in an Aviation magazine, I had amended the POH by adding procedures for an engine fire during start as follows. *Fuel and magnetos 'off', throttle wide open and continue to motor engine.* This procedure draws ignited fuel in the induction system back into the cylinders to be evacuated through the exhaust ports.'

'Since this incident I now

- Mentally review emergency drills for fire on start up prior to commencing.
- Set throttle correctly.
- Ensure that I know the location and operation of any nearby ground based fire extinguishers (in addition to the one in the aircraft).
- Avoid over-priming.'

CAA COMMENT:

There is plenty of information available to us through the aviation press - some good, some bad and some indifferent. We do not always make the best use of it. Perhaps it is too easy to skim through the magazines and fail to recognise the worthwhile parts. This incident clearly makes the point.

CIVIL AVIATION AUTHORITY

FAILED MAIN LANDING GEAR FORK

Aircraft type : Fournier RF4D

Following the item in Issue 5 of 1997 a reader has sent us details of problems with a very similar casting on an RF3. The main difference was that this one came miraculously close to failing but was still supporting the aircraft weight on an eighth of an inch of light alloy casting.

The first sign of the problem was that the wheel was seen to be leaning very slightly; closer inspection revealed that the bottom edge of the outer web had a small notch between the reinforcing plates, so it was decided to remove the landing gear as a complete assembly. It was only when the unit was removed into a good light that the amazing extent of the crack became apparent. It was estimated that the number of landings left, was between one and two before it collapsed. Once the fork was stripped down, it was possible to flex the ends back and forth manually and to see daylight through the gap.

The important detail is that this was an early casting and had curved reinforcing plates around the web between the two locking lugs and the web was therefore narrower. The plates are bolted on and all the cracks had propagated from these bolt holes as they run across the areas of stress concentration shown in the photo. The other side had also started to crack in two positions from the same bolt holes, although not as extensively. The problem is that, until they have been removed, the outer plates cover up the worst of the cracks and the crack out to the arch was just a hairline. However, these plates do not in any way hold the casting together and would not prevent failure. The new castings have a thicker web, larger radius and have no outer plates and are less prone to cracking. It is worth noting that the earlier castings may have cracks hidden between the plates and even the crack shown in these pictures was not really apparent with the landing gear fully installed. It was very lucky that the defect was noticed while changing the oil during a minor inspection as it would probably have escaped even a thorough daily inspection.

View looking down on forward flange and inside edge of uplock notch. (Dye penetrant reveals crack continues into radius.

CAA COMMENT:

We are pleased to pass on the information given us by this Fournier owner and would recommend that other owners have a thorough look at their landing gear in order to avoid the possibility of what could be an expensive failure. Ironically the reader also informs us that, since the work described, he has landed the aircraft gear up. Perhaps even a cracked landing gear is better than none at all! BUMPH!

Next, the response from our own CAA on a closely related topic.

Safety Regulation Group
Civil Aviation Authority
Gatwick

GA AIRCRAFT SPARES AND ENGINEERING STANDARDS

Cost of Spares

CAA are aware that approved spares for aircraft are often expensive when compared with other 'engineering' spares. This cost however has to be related to the airworthiness approval requirements with which the supplier has to comply, intended to ensure acceptable levels of aviation safety. Compliance with the requirements imposes a financial burden arising from the ditional provisions the supplier has to make, such as:

(i) Continuing Airworthiness - Monitoring in-service performance, issue of Service Bulletin and Manuals Etc.
(ii) Quality and Quality Audits.
(iii) Storage Control and Segregation.
(iv) Record Keeping and Retention.
(v) Design Substantiation.
(vi) Drawing and Modification Control.
(vii) Material Control.
(viii) Staff Training and Qualifications.
(ix) Testing of Procedures.
(x) Procedures Control.
(xi) Approved Facilities

Other sectors (eg Nuclear and Oil) which have similar safety related requirements, perience the same sort of high costs for spares supply.

Additionally in the aerospace sector, 'production runs' for aerospace products are usually (relatively) small which of itself contributes significantly to cost since it is considerably more expensive (per item) to set up small 'production runs' than long-duration, high volume runs.

Light Aircraft Maintenance Schedule

The CAA Light Aircraft Maintenance Schedule (LAMS) has now been in use for 20 years and has been successful in applying a reasonably common standard of scheduled maintenance to light aircraft. It has to be remembered (especially for older types) that the manufacturer's service information is not always as comprehensive as LAMS.

CAA have recently carried out a review of LAMS and the associated procedures and consequently are planning to introduce a revised version of LAMS in 1998. During the review we consulted extensively with industry and will continue to do so before its publication. There will be very few changes to the scheduled maintenance but the applicability will be significantly altered (eg no turbine-powered aircraft), the procedures will be clarified and the maintenance information presented in a more adaptable, 'user friendly' format.

All light aircraft operators are able to produce their own schedule based on the manufacturer's requirements and submit the schedule to the CAA for individual approval. It has to be remembered however, that only a very small number of light aircraft operators are equipped to produce and control their own schedules, making LAMS usage a very convenient process, to assure both the CAA and the operator that a satisfactory standard of maintenance is being applied to the aircraft.

Service Bulletin Compliance

Compliance with the manufacturer's information (eg Service Bulletins) has been left to the judgement of the operator or his selected maintenance organisation. It has to be remembered that some service information is 'optional' and as such is not necessarily applicable to all operators.

Some (but not all) manufacturers declare some of their Service Bulletins to be 'mandatory'. This classification has almost certainly arisen from problems associated with product liability and is not considered to be equivalent to the Regulatory Classification of 'mandatory.'

The UK CAA and US FAA believe that the operators should be responsible for monitoring Service Bulletins and selecting those deemed by the operator (or the selected maintenance organisation) to be applicable in a particular case.

The 'mandatory' manufacturer bulletins are reviewed by the appropriate Regulatory Authority and when necessary, 'Airworthiness Directive' action is taken. Only a small number of manufacturer 'mandatory' bulletins (of which there may be large numbers) become Airworthiness Directives.

Service Life Limits

Service Life Limits published by the aircraft or equipment manufacturer should be complied with unless the CAA has declared or accepted an alternative (eg Airworthiness Notice AN35: Piston Engines, AN75: Propellers, AN41: Combustion Heaters).

Service Information Availability

There are two CAA/JAA Maintenance Organisation approvals relating to the scheduled maintenance of light aircraft. These are British Civil Airworthiness Requirements (BCAR) A8-15 (M3) and Joint Airworthiness Requirements (JAR) 145 (A2/A3).

Both JAR 145 and BCAR A8-15 require that the organisation holds the appropriate service information but make provision for some information (eg 'operator customised' manuals or infrequently used manuals) to be externally sourced.

CAA Monitoring

CAA Aircraft Maintenance Standards Department (AMSD) Regional Office Surveyors survey light aircraft and maintenance organisations regularly to ensure (amongst other things) that the scheduled maintenance is carried out to an acceptable standard and that the aircraft remains airworthy.

With nearly 5,000 light aircraft with a C of A on the UK register, 94 M3 organisations and 158 JAR 145 A2/A3 organisations to survey, the individual operator will not see one of the 65 UK Regional Office Surveyors very often. Light aircraft operation and maintenance is only a part of their daily workload. CAA have however committed to surveying each light aircraft at least once in 10 years.

I realise that this is a lengthy reply to the queries raised, but we believe that it is worthwhile taking the opportunity to give as full a response as possible to the point made. I hope the foregoing provides you with sufficient background for you to be able to respond to Mrs Ruth Edwards and Mr R J Reeve accordingly.

Editor's comment: Thanks to the Chief Surveyor's Office, the Safety Regulation Group and the others at the CAA for the time and effort spent to provide such a comprehensive reply. We hope everyone now has a clearer vision of the other side of this particular coin. It may hurt the pocket to have to pay the price for authentic aircraft spares but it can cost a lot more to use 'cheap' spares.

BULLETIN No BE-005/89 "JUNIOR"

Ref: Replacement of the rudder lower hinge in the fuselage.

Way of introducing: If a damage appeared-immediately.
In other case - at the 1000 flying hours inspection or repair.

BULLETIN No BE-005/89 "JUNIOR"

Ref: Extension of glider life time up to 3000 flying hours.

Way of introducing: Acc. to user's decision (the 1000 flying hours inspection is obligatory).

Elaborated in: PDPS-TKE on 09.11.1989.

Director of PDPS "PZL-BIELSKO"

Juliusz [illegible], M.Sc.

This is the translation of the original Polish text approved by CACA.

Translated by
W.Stafiej D.Sc.