

GFA AIRWORTHINESS DIRECTIVE

TYPE AFFECTED: K 8, K 8B, K 8C. All models all serial numbers including kit or licence built gliders.

SUBJECT:

- a) Canopy Retaining Chord
- b) Rudder Pedals
- c) Elevator Pushrod
- d) Inspection of the fuselage tubing and control systems for corrosion.
- f) Flight and Maintenance Manual Amendment.
- h) Tolerances for the wing attachment pins.

BACKGROUND:

- a) Use of an incorrect canopy retaining chord may prevent the canopy from jettisoning in an emergency.
- b) If overloaded the rudder pedals mounts may bend restricting rudder travel.
- c) An accident overseas may have been caused by a bend in an elevator pushrod from an earlier accident eventually failing.
- d) Corrosion may form in the steel tube framework.
- e) The maximum allowable play in the wing to fuselage attachments has been defined.

DOCUMENTATION: Alexander Schleicher K 8 Technical Note number 24 which forms part of this AD.

ACTION REQUIRED:

1. At each Annual Inspection ensure that the correct weak link in the canopy retaining chord is installed as per Action A1 in K 8 Technical Note No. 24.
2. At each Annual Inspection inspect the rudder pedals in accordance with Action A2 of K 8 Technical Note No. 24.
3. At each Annual Inspection inspect the elevator pushrods in accordance with Action A3 of K 8 Technical Note No. 24.

SIGNED:

CHIEF TECHNICAL OFFICER AIRWORTHINESS

For and on behalf of:

THE GLIDING FEDERATION
OF AUSTRALIA

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4. At each annual Inspection inspect the steel tube framework for corrosion in accordance with Action A4 of K 8 Technical Note No. 24. The drawings L-216.11-S1 (both versions) are available from the GFA Secretariat.

5. A copy of K 8 Technical Note No. 24 must be inserted into the back of the K 8 Flight and Maintenance Manual. The Servicing information regarding the tolerances on the lift pins must be complied with. Copies of the Technical Note are available from the GFA Secretariat.

WEIGHT AND BALANCE: The effect of any repairs on weight and balance must be allowed for.

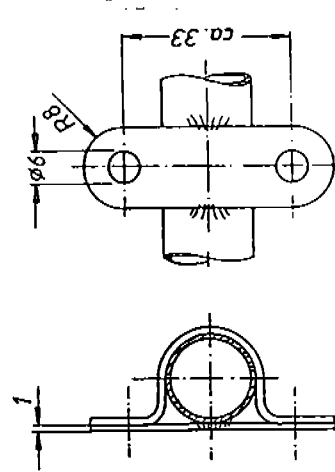
IMPLEMENTATION: The inspections under actions 1 through 4 must be performed by persons rated for Annual Inspections Steel Tube.

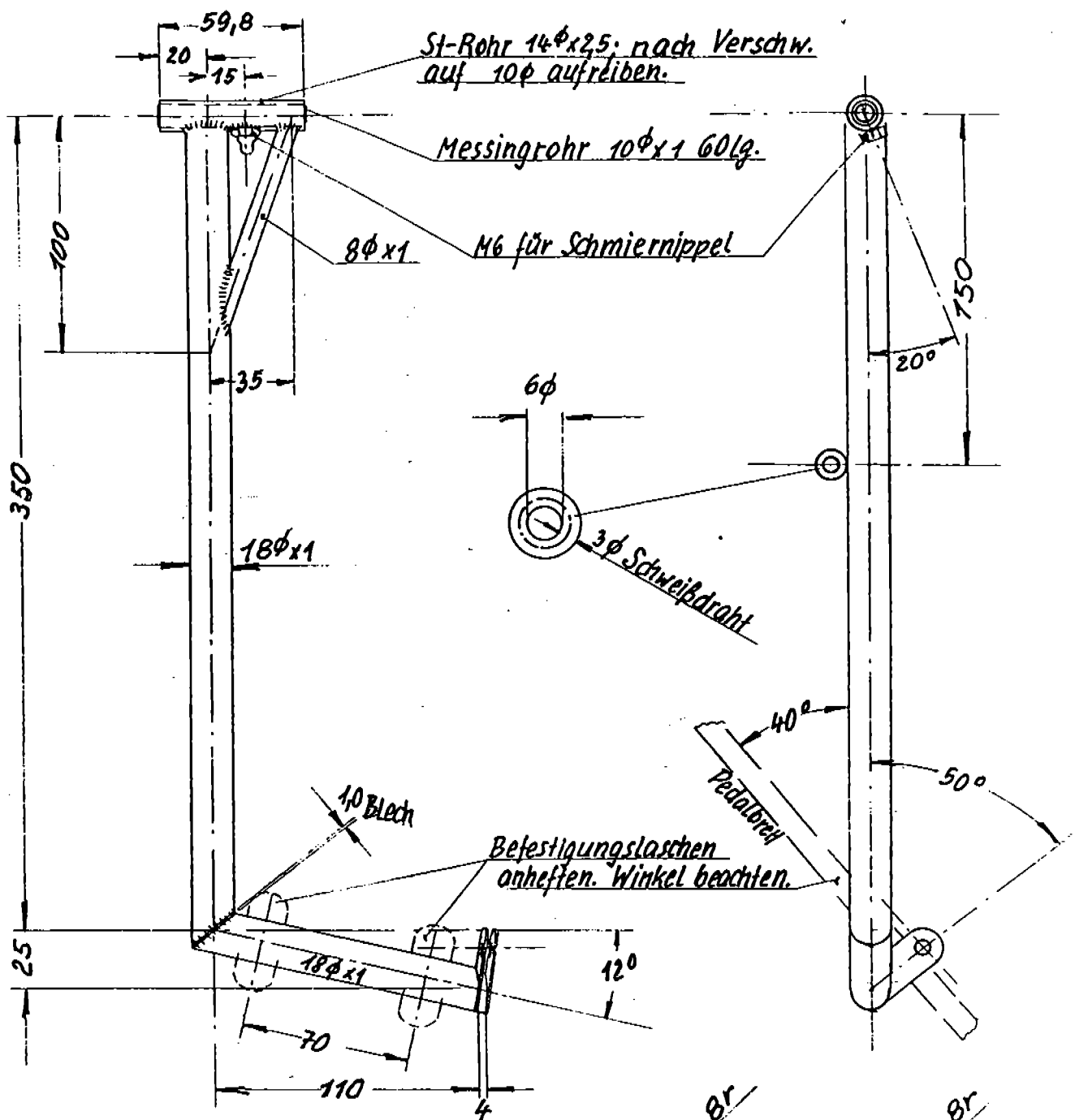
COMPLIANCE: The requirements of this GFA Airworthiness Directive are mandatory. This Directive is issued pursuant to the Rules and Regulations of the Gliding Federation of Australia.

SHEET: 2 of 4	K 8 Technical Note No. 24	Alexander Schleicher GmbH & Co. Segelfluggelbau XXIX-616 Poppenhausen
new zip code: D-36163		
Action: ad A1) Check whether the canopy retaining cord uses a snap hook as weak link at the fuselage leg: Simplex-snap hook to spec DIN 5287, hook length 30 to 35 mm). This snap hook should open at a tensile load of ~ 34 kg. Other means of fixing, such as leather sloop or Nylon cord without weak link are not permissible and must be replaced by the prescribed type of fixing. ad A2) Checking the rudder pedals: With the rudder neutral the pedals left and right must be evenly adjusted. Check the pedal board angle versus the pedal dimensions see drawing L-216.42-U011. The angle must meet the specified dimension. Engage the pedal adjustment into its foremost position and check full deflection of the rudder. Where pedals or attachment collars are bent, these can be either repaired or replaced by new ones. In order to impede the bending of the pedal boards it is optionally recommended to weld an additional butt strap onto the attachment collar (see Fig.A2). ad A3) Inspect elevator push rods L-216.44-U 01 and L-216.44-U 02 for bending, deformation, or damage. If any of these are found, the push rod must be replaced by a new one. Never try to straighten any bent push rod; even only slightly bent rods must be replaced ! ad A4) Inspect for corrosion: If there is suspicion of corrosion, the keel tubes or the primary tubes of the fuselage skeleton as well as all control linkage tubes using a control check hole must be inspected internally for corrosion. Tubes may also use drill holes for the purpose of mounting fairings, pockets etc. and these are particularly endangered. So the wall thickness must be inspected by suitable procedures. The specification of the wall thickness of the fuselage skeleton tubes is detailed in drawing L-216.11-S1, issue Jan.17, 1958, or L-216.11-S1 with revision entry dated Nov.24, 1961, applicable as of serial number 1014. Where in doubt check the wall thickness by knocking (check from the sound) or by a suitable ultrasonics test equipment for measuring the thickness of the layers, else in case of push rods with thread connectors check the inside wall for corrosion damages using an endoscope. If the inside tube walls are all right, then the interior⁴ of the tubes must be preserved. In any case this must not increase the mass of the push rods noticeably! Where rust is found, tubes must be replaced. During each annual C. of A. inspection checks for rust pitting or rust formation must be included.		

SHEET: 1 of 4	K 8 Technical Note No. 24	Alexander Schleicher GmbH & Co. Segelfluggelbau XXIX-616 Poppenhausen
new zip code: D-36163		
Subject: A1) Canopy retaining cord A2) Rudder pedals A3) Elevator control linkage A4) Inspection of the fuselage tube skeleton and the control linkages for corrosion. B1) Amendment of the K8 Flight and Operations Manual. B2) Specification of the max.diameter for the wing attachment pins Serial number applicability: K8, K8B, K8C, Data Sheet no.216, all serial no.s including any license- or home-built gliders and any variations thereof. Compliance: ad A) Action to be accomplished with each annual C. of A. inspection, but for the first time before or on April 30, 1996. ad B1) Action to be accomplished with the next annual C. of A. inspection, but before or on April 30, 1996, at the latest. ad B2) As need be. Reason: For safety reasons and on requirement by the German CAA (Luftfahrt-Bundesamt) a complete inspection of the fuselage tube skeleton and of all control linkages is scheduled and required by this Technical Note. ad A1) When a canopy retaining cord is used which either does not comply with the Type Certification status and/or is wrongly fitted, it may cause the canopy not to detach from the fuselage in case of canopy emergency jettison. ad A2) In case of extreme overloading the rudder pedals the attach collars of the pedal boards may bend. As a result also the full deflection of the rudder can become restricted. ad A3) The inspections of several aircraft reported that pre-damaged, bent and broken elevator push rods had been found. A serious flight accident happened which was presumably due to a bent elevator push rod which remained undetected for a longer period and then caused the rod to break at the kink point. Where the keel tube has been bent leg: in a crash landing! it is possible that also the elevator push rod has been damaged without this being noticed. Also on transport in rough terrain it is possible that the elevator may deflect downwards and hence by its mass may bend a pre-damaged elevator push rod leading to a break of the rod. ad A4) As a consequence of penetrated moisture corrosion damages may develop at the inside walls of the tubes of the fuselage skeleton and of the control linkages. ad B2) Play between wing-to-fuselage attachment can be removed by reaming the attachment fittings and using oversize pins. If "attachment pins for wing, front" and/or "Plug-in pins for wing attachment, rear" have to be replaced, oversize pins may be used.		

SHEET: 4 of 4	K 8 Technical Note No. 24	Alexander Schleicher GmbH & Co. Segelflugzeugbau XXG 0618 Poppenhausen
new zip code: D-36163 Notes: If the inspection as per actions A2, A3, or A4 reveals any damages, a copy of the report of findings must be returned to Messrs. SCHLEICHER including the serial number of the aircraft in question, its number of take-offs and total flight hours! The above actions must be accomplished by a competent person. The accomplishment of the actions must be certified by a licensed aviation inspector in the glider's inspection documents, in the Flight and Maintenance Manual, and in the log-book. Poppenhausen, Dec.4., 1995 ALEXANDER SCHLEICHER GmbH & Co. <i>(Signature)</i> The German original of this Technical Note has been approved by the LBA under the date of Dec.7, 1995 (signature: WALTER). The translation into English has been done by best knowledge and judgement; in any case of doubt the German original is controlling.		

SHEET: 3 of 4	K 8 Technical Note No. 24	Alexander Schleicher GmbH & Co. Segelflugzeugbau XXG 0618 Poppenhausen
new zip code: D-36163 ad B1) This Technical Note must be inserted into the Flight and Maintenance Manual K 8 as annex to "Attachments" and the insertion must be certified in the Manual. ad B2) For the maximum oversize diameters of the "attachment pins for wing, front" (AS P/N 080.11.0730) and/or "Plug-in pins for wing attachment, rear" (AS P/N 080.11.0511) please observe: the material thickness of the fitting around the bore at its thinnest section must still be at least half of the diameter of the pin! The bore in the "wing attachment fitting, front" and in the "main fitting, rear" must have H7 tolerance (off size). If tolerance is exceeded, the fittings must be replaced. Material & drawings: Any required materials and/or replacement parts may be ordered from Messrs. SCHLEICHER (Tel. +49(0)6658-890 or -8929, FAX +49(0)6658-8940) stating the glider type and the serial number of the aircraft in question. For the interior wall preservation of the tubes you may use e.g. the preservative agent "Hochdruckkonservierung ML", P/N 3762, by Messrs. VOSSCHEMIE or any equivalent product. Drawings applicable to this TN: L-216.42-U01; L-216.44-U 01; L-216.44-U 02; L-216.11-S1, Issue 17.01.1958 or L-216.11-S1, rev. of 24.11.1961, valid as of s/n. 1014. Fig. A2 Reinforcing the attachment collars for pedal boards at the pedal assembly. Material: 1.7734.4 Welding procedure WIG to spec DIN 1912, welding wire material: 1.7734.2 		



Werkstoff:

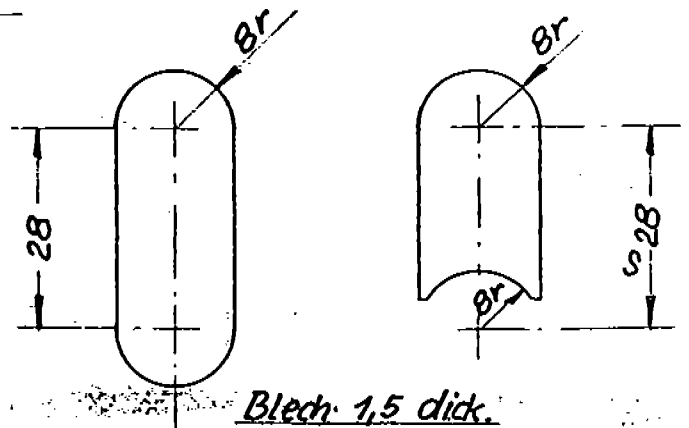
Stahlrohr DIN 3529

Blech Fl. W. 1604

Alexander Schleicher

GmbH & Co.
Segelflugzeugbau
Postfach 60

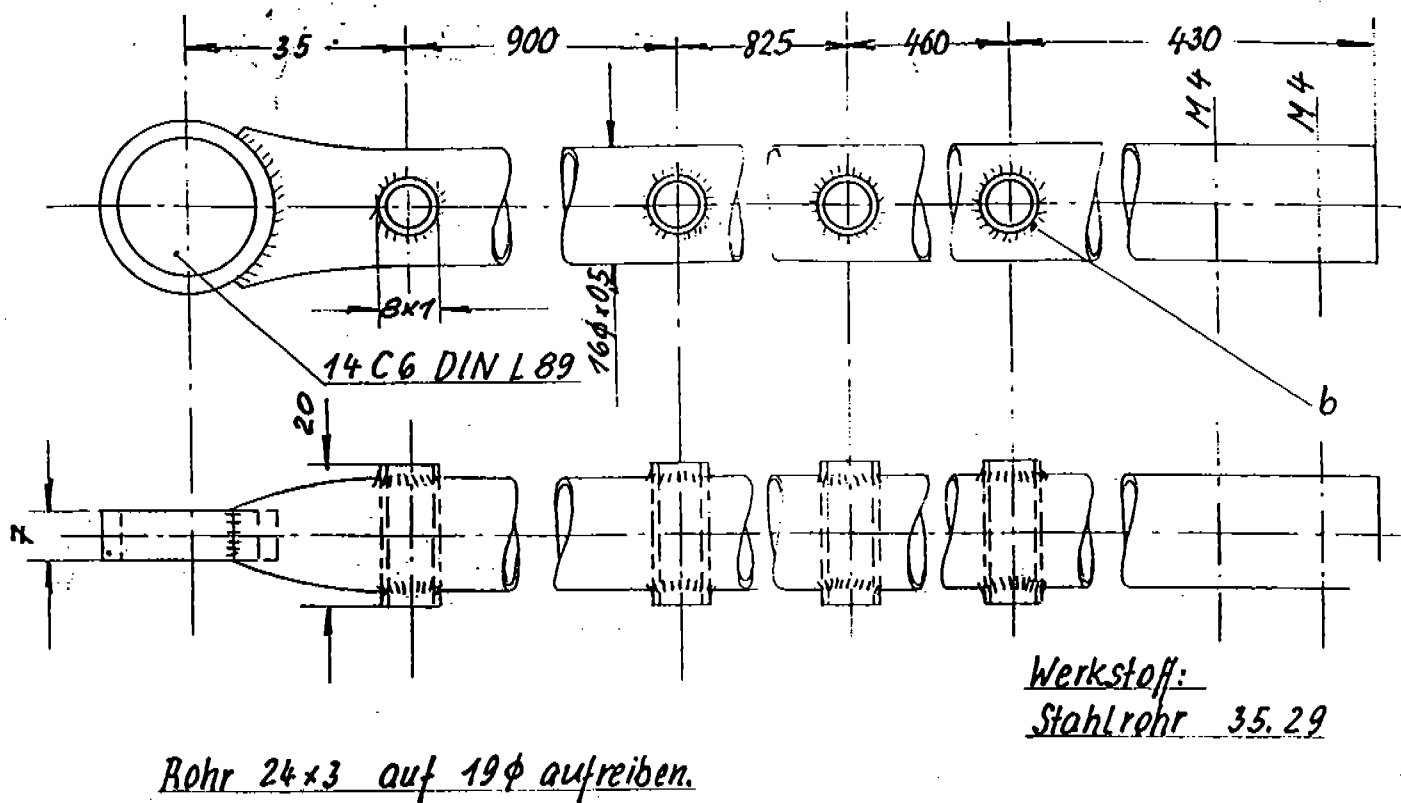
D-36161 POPPENHAUSEN



Blech 1,5 dick.

Fußsteuer L-216.42-401

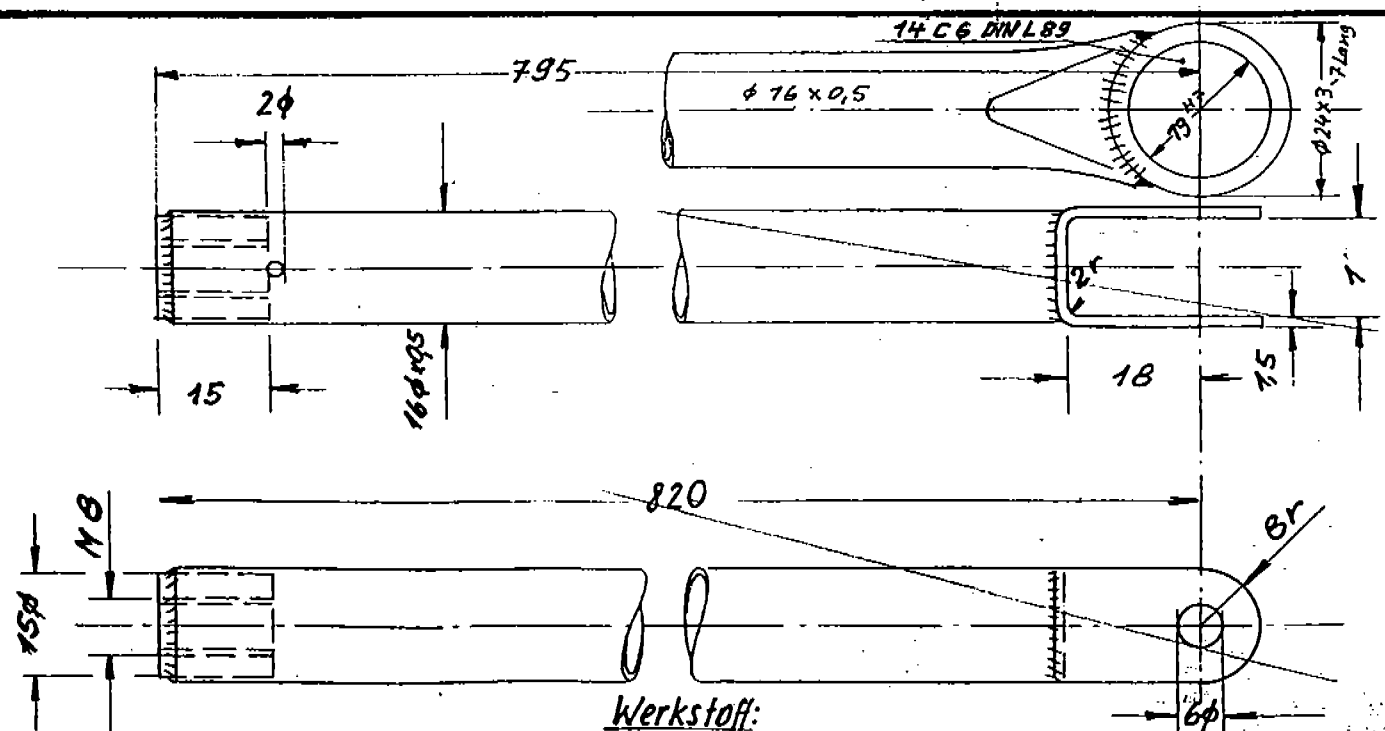
M = 1:2,5 1:1	1 Stk. rechts 1 Stk. links
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Höhenst.-Stoßstange (hinten) L-216.44 - U02

M=1:1

1 Stück



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Höhenst.-Stoßstange (vorne) L-216.44 - U01

M=1:1

1 Stück