Subject:

a. Checking the cooling air temperature in flight.
b) Improvement and change of the fan of the engine internal air cooling.
c) Exchange of the temperature sensor of the internal air cooling.
d) Inspection of further engine unit parts.

Serial number applicability:

All serial no.s. ASH 26 E, Data Sheet No.04.883.

Compliance:

a) As of the next take-off.
b) At the earliest possible date; immediately in case of increased cooling air temperature, however, at the latest with the next annual C. of A. inspection.
c) Within the action as under point b).
d) Prior to the next take-off.

Reason:

a) and b):
Performance loss in the case of some few engine units has shown that the fan performance of the engine internal air cooling may be adversely affected under certain conditions. If a temperature alarm by the ILEC-engine control unit is not regarded or is not given because of a defective sensor (no temperature indication) as a possible consequence the engine will be operated at higher temperatures than permissible and may become damaged gradually. For this reason there must be at once a better check of the cooling air temperature. In order to solve this problem generally the fan of the engine internal air cooling must be exchanged for an upgraded unit within the deadline stated under point compliance.

c) Exchange of the temperature sensor at the outlet duct of the internal cooling air as an adjustment to the increased airflow.

d) Experience and feed back from operational service so far has shown that minor incidents may happen. These are described under point action d).

Action:

a) As of this date during each powered flight the engine internal air cooling temperature must be read at the ILEC-engine control unit in regular intervals (of about 2 minutes). Depending on the outside air temperature this temperature should be between 90° and 110°C. If there is however, no temperature indication after about 3 minutes of engine running time with full throttle (defective reading) or if it is in the range of 120°C, then immediately contact Messrs. Schleicher prior to the next take-off. In that case the engine should no more be operated until accomplishment of action b).
b) If temperature indication is in the normal range, action a) must be regarded during each flight until the action as described in Service Bulletin No.1 of the engine AE 50RA has been accomplished which must be done at the latest with the next annual C. of A. inspection.

c) For the exchange of the temperature sensor of the internal air cooling first the cable connection is undone and then the existing sensor is screwed out. When screwing in the new sensor 800.61.1005 the existing gasket may be used again if it is undamaged. The cable must be reconnected and the heat shrinkable tubing must be replaced.

d) The following parts must be checked in addition:

1) Cable connections at the engine main switch. Where instruments have been fitted subsequently, it may happen that by the change to the wiring some cables have been wired with too much tension so that the cable lugs slip off the main switch. Where cables are too tight, they must be refitted and where necessary they must get a tension relief.

2) The correct connection between ignition trigger and ignition boxes is specified on the revised page 2.18. This correct coordination must be checked as per diagram 268.64.9001 (particularly sheets 1 & 4) and where necessary changed.

3) All fuses in the instrument panel must be checked for bad contact and where necessary replaced for new fuse boxes.

4) The radiator mounting must be checked at the bottom for cracks. If the crack is only in the small, 8mm long 90° angle, it can be stop-drilled with a drill of 3mm diameter. At the next annual C. of A. inspection this mounting must be reinforced as per drawing 800.67.0021.

5) The air filter may slip off the ram pipe. Check prior to next take-off. Tighten clamp and during accomplishment of action b) part must be fitted as per drawing 800.61.1001.

e) The following pages in the manuals must be exchanged for new pages with the revision entry "TN 1" date "Oct.96" :

Flight Manual: 0.2, 0.4 thru 0.6, 2.1, 2.2, 3.8, 4.1, 4.9, 4.11 thru 4.34, 5.9, 7.35

Maintenance Manual: 2.18, 2.25, 2.80, 5.7, 5.8, 7.7 thru 7.11.

The accomplishment of the change to the manuals must be documented on the respective page "Record of Revision" in both manuals (page 0.2 /0.3).
Material &
Drawings:

Mid-West modification kit R1K555A.

Drawings by Messrs. Schleicher:
268.64.9001 Wiring diagram engine unit, sheets 1 &
800.67.0021 Mounting for radiator
800.61.1001 Ram Pipe Assembly

Mass and C.G.:

Influence is negligible.

Notes:

Entitled to accomplish the actions:

a) Pilot himself
b) & c) These actions must be accomplished by the manufacturer
Schleicher, or by an appropriately licensed aviation
service station. The accomplishment of this mod must
be inspected by a licensed aviation inspector and cer-
tified by him in the glider’s inspection documents,
the log-book. For countries who require to keep a sep-
rate engine log-book, the inspector must make the
entry therein. If this engine logbook is not avail-
able, the accomplishment must be certified in the
enclosed sheet for insertion in the engine log-book.

d) & e) Any competent person, with inspection and certi-
fication by a licensed aviation inspector at the next
annual C. of A. inspection.

Poppenhausen, October 31, 1996

ALEXANDER SCHLEICHER
GmAh & Co.

(The original name appears to be Walter, not M. Heider)

The German original of this Technical Note has been approved by the LBA under the
date of Nov. 12, 1996 (signature: WALTER). The translation into English has been
done by best knowledge and judgement; in any case of doubt the German original is
controlling.