

92. (U) Ltr. 25 Jan. 1945
Fr: Col. V.R. Haugen
Asst. Chief, Bomb. Br.,
Eng. Div., WF
To: Dir., ATSC, WF
Attn: Capt. R.F. Bache
Airc. Proj., Eng. Div.
(File: Central Files)

Col. Haugen, writing from Headquarters, A.S.C., U.S. Strategic Air Forces in Europe, stated that difficulty had been encountered with the nose gear installation on the A-26. During taxi and takeoff, mud was splashed on to the gear mechanism, and, after the airplane was airborne, the mud froze, locking the gear in the up position. A mud guard over the nose wheel had been tried but proved to be unsuccessful.

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HEADQUARTERS
AIR SERVICE COMMAND

UNITED STATES STRATEGIC AIR FORCES IN EUROPE

WH/mb

A.P.O. 633

(Rear)

Director of Technical Services

25 January 1945

SUBJECT: Design Deficiencies - A-26 Series Aircraft.

TO : Director, Air Technical Service Command, Wright Field, Dayton, Ohio
Attn: Captain R.F. Pache, Aircraft Projects, Engineering Division

1. Information furnished in this letter will supplement that recently obtained by Captain S.R. McFadden, and is merely to add emphasis to certain troubles reported by activities not investigated by Captain McFadden.

2. Considerable difficulty has been reported from all service activities with failure of the nose wheel to extend. The principle cause for these failures appears to be the freezing of mud and water on various moving parts after the airplane is airborne. With the present design of landing gear doors, which are open in the wheels down position, great quantities of mud is splashed on to the gear mechanism during taxiing and take-off. This subsequently freezes, and thus locks the doors and gear in the up position. It is understood that a small mud guard over the nose wheel has been tried with some success, however, the complete solution appears possible only by having the doors closed in the wheels down position. Request that you take this matter up with Douglas, Long Beach, to determine the best solution.

3. A new Vickers airplane, the Windsor, was recently inspected and found to have landing gear doors designed to close in the wheels down position in a very ingenious manner. The idea appears useable on a nose wheel of the A-26. A section of the fairing is mounted on the shock strut in such a manner that it is flush with a skin line when the wheel is in the up position. Another smaller piece of fairing is mounted on the shock strut approximately at right angles to the first piece of fairing in such a manner that it is flush with the door skin line when the wheel is in the down position. The regular doors close and open in rear of the above fairing and hence do not interfere with the shock strut as the wheel is being raised or lowered.

4. The ohmite resistors in the fuel boost pump circuits are burning out due to water leaking thru the canopy on to the resistors when the airplane is on the ground. None of the activities reporting this trouble have airplanes equipped with the new raised canopy. The service activities desire cockpit covers to help keep water out of the cockpit.

5. Ground equipment for the airplane is almost entirely lacking. The engines are being changed by using hoists designed for A-20's. These hoists are not sufficiently rugged and are giving considerable trouble on this account. Trouble is being reported by service activities in ground testing the various electric equipments on the airplane. This appears to cause very heavy drain on the batteries which consequently have very short life. Complete details on this report are lacking - it is not known for instance, whether full use is being made of auxiliary power sources or whether the engines are being run up to the point where the voltage regulator throws in before heavy loads are drawn from the battery.

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6. Many miscellaneous hydraulic troubles are being experienced. Principally, the plastic poppet valves in the pressure regulators, and in some of the selector valves, are swelling and sticking, usually in the open position.

Victor Haugen
V.R. HAUGEN,
Colonel, A.G.

Noted:

Jos. Hunker, Ma; As.
H.G. HUNKER,
Colonel, A.C.,
D/Tech. Services.

cc: Mr. F. Herman, Douglas
Aircraft Co., Long Beach,
Calif.
and
Mr. Cannon, Douglas Rep.,
London.



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