

CORRESPONDENCE

The Editor does not hold himself responsible for the views expressed by correspondents. The names and addresses of the writers, not necessarily for publication, must in all cases accompany letters.

Seating and Safety

WITH reference to the letter "Seating and Safety" published in *Flight* of July 20th, perhaps Mr. J. R. Sturge-Whiting has not heard of the Vickers Valetta transport aircraft. This plane, which is quickly converted to a passenger rôle, has 17 double-type seats all facing aft. These seats, which are of tubular construction, are attached by means of hook and claw fittings to lashing points built in the intercostal longitudinal members of the cabin floor and will withstand 25g in a forward direction. They would thus withstand a collective force equal to approximately 83.48 tons.

Egypt.

R. G. S.

"Planned Servicing"

AS a sworn enemy of what is euphemistically called "bumph" I crave the hospitality of your columns to call for someone endowed with more inductive reasoning powers than myself to examine the R.A.F. scheme called "planned servicing."

I myself am incapable of digesting this array of retrospective charts and graphs of what happened the week before. When I read the script and come across such terms as "backers-up," "pupil population," "arisings," "weather cycle" and so on I get an intuitive feeling that I am being led up the garden path. One portion of the publication deals with "the underlying causes for the actual aircraft state departing from the planned state."

The first cause of departure reads "Bad weather resulting in flying getting behind schedule," the second, "High rate of unit repairs," and the third, "Excessive number of aircraft awaiting spares." The "general remedial action" (or, in English, what to do in these cases) is a blinding glimpse of the obvious. For the first you are told to resume flying as soon as the rain stops and for the next two contingencies you draw aircraft out of the reserve "pool," where, presumably they must have got wet.

The next snag listed is "High rate of petty unserviceability due to a variety of causes," etc. These causes the writer has left unspecified because he obviously does not know. There is only one cause of petty unserviceability and that is bad maintenance. And finally we are told that if major inspections flow in irregularly we should construct a stagger chart and also if our minor inspections are becoming more frequent we must cut the flying down.

Here we have six reasons for flying getting behind schedule. Five of them are perfectly obvious and have been known by ground engineers and bus companies for years. The other, petty unserviceability, for which the planned servicing people have neither a reason nor a remedy, is caused almost entirely by slack maintenance personnel. And then, superimposed on the foregoing piece of fatuity are dozens of charts which can only show what happened in the past. We all know what happened last week and every week before; we didn't get as much flying in as we wanted. There is no need to make a graph about it, but to seek means of getting more flying in the future.

A given aircraft has an inspection cycle of 50 hours. If it can be got to fly for 50 hours continuously between inspections till it reaches a major the pilots and engineers know exactly what can be achieved with a number of those aircraft, and a continuous flying programme would result, hampered only by the weather. The idea of graphs and charts simply would not occur to anybody because each aircraft is giving of its maximum and it cannot give more. Now this is what we should like aircraft to do and all problems would be solved if it were achieved.

The answer, then, to obtaining maximum flying for minimum servicing is not drawing charts but strict and minute inspection and thorough workmanship. A new aircraft will fly for its full 50 hours because it was inspected by a highly competent body of inspectors at the works. If this were also done each fifty hours and all snags, repairs and renewals carried out, the aircraft would not degenerate into the state that pilots bewail. The engineer officer should spend his time going over his aircraft with a torch and mirror and see that his N.C.O.s do the same and he will soon find an improvement. It is the aircraft that do the flying, not charts and graphs. An aircraft whose integral parts are in first-class condition because it has

been gone over with a fine-tooth comb at regular intervals will only suffer from defects caused by bad airmanship.

There is nothing new in this; it has just been lost sight of, that's all. The war inevitably caused a reduction in the standard of maintenance and it would appear that the planned servicing scheme is an attempt to improve it again; but I would humbly suggest that an increase in "bumph" will be no help.

Jallahalli,
Bangalore.

LESLIE W. CRAWFORD.

More All-metal Pioneering

I SHOULD like to thank Mr. H. O. Short for his extremely interesting and informative letter published on your Correspondence page in the August 3rd issue of *Flight*. As an ex-member of Short Brothers' seaplane works staff at Rochester, I can assure him I am fully aware of the many outstanding achievements in pioneering aircraft design that he refers to in his letter.

So far as credit is concerned for the pioneering claims of the Silver Streak in 1920 and the little Cockle flying-boat in 1923, I am quite sure responsible opinion in the U.S.A. (and throughout the world, for that matter) acknowledges the genius of the three Short brothers in all they have done in the past in the field of all-metal stressed-skin construction. Only a few months ago, the *Air Trails* American magazine devoted two whole pages of first-class drawings (by a Mr. Douglas Rolfe) illustrating the many outstanding types of flying-boats, seaplanes, and other aircraft built by Shorts from 1909 right up to the Solent design in 1946-7.

As regards the earliest building of stressed-skin all-metal aircraft in the U.S.A., it is worth recalling that Mr. Glenn L. Martin can rightfully claim a "first," since in 1922 he produced a single-engined monoplane known as the MO-1 Series for the U.S. Navy: it was designed for shipboard observation, and was quite successfully employed on these duties. In the 1928-1932 period, Mr. Igor Sikorsky produced his famous S-38 amphibians and S-40 flying-boats for Pan-American, whilst Major Reuben H. Fleet's Consolidated Company built the P.Y. Admiral flying-boats for the U.S. Navy, and its civil counterpart, the Commodore—that was in 1928 and 1929 respectively. All these marine aircraft incorporated stressed-skin all-metal hulls, and all were monoplanes.

There is just a point on which I should like to challenge Mr. Short. He makes no reference to the very early achievements of famous French aircraft builders. As early as 1907—some 13 years before the appearance of the Silver Streak—Robert Esnault-Peltre built a single-seat monoplane with all-metal airframe, although, of course, it did not embody the principle of stressed-skin construction! None the less, it was equipped with cantilever internally braced wings, a radial-type air-cooled engine, the stick-control system, and tandem-wheel undercarriage! In 1911, another Frenchman, the famous Louis Breguet, built and flew an all-metal single-seat biplane which at that time possessed more advanced features than any type of aircraft produced during the next few years. Amongst these were an oleo-leg undercarriage (tricycle type), a horizontally mounted radial motor of 100 h.p. complete with geared airscrew, a single wheel to operate all controls, articulated tail assembly, and monospar wings (warp control). And all that was some 40 years ago!

With these achievements by France's great pioneers, coupled with those later in Germany by the great Prof. Hugo Junkers, it would seem to the undersigned (who has always regarded himself as a thoroughly unbiased student of international aviation affairs) that no particular aircraft designer/builder of any one nationality can regard himself as having contributed more than a just share of pioneering in the field of aircraft designing.

Prestwick, Ayrshire.

DENNIS M. POWELL.

Cloud-boring

YOUR correspondent "Reservist," in the issue of August 10th, asks if any others have seen a hole "bored" through a cloud. Yes, I have—when on observer duties during the war I have two or three times seen thin layers of alto-stratus and alto-cumulus literally cut in two by piston-engined aircraft. One particular instance coming to mind was by a Westland Welkin which did a lot of test flying in this district.

Dursley, Glos.

H. E. NORMAN.