

FLIGHT

and
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The Outlook

On Aircraft Controls

TWO articles which appear in this issue are of particular interest to aircraft designers: the one because it deals with the layout of the controls in the cockpit, and the other on account of the novelty of a new push-pull-cum-rotary system of control lines which should make for simplification, ease of maintenance, saving of space, and possibly for standardisation.

Many have been the discussions on the subject of standardisation of cockpit layouts, and a certain amount of uniformity has been achieved, but by no means as much as some could have wished. Our contributor this week, who is a test pilot of long and very varied experience, comes to the conclusion that standardisation is impossible, and is not worth the extra trouble and complication involved. "Sparrow" makes two interesting suggestions: that the pilot's cockpit should be divided into three zones, and that each control should always be allocated to a certain zone, although its actual position in that zone could be varied; and that control levers or handles of any given control should always be of the same shape, length and colour. Arising out of the latter suggestion follows the very logical one that indicator dials should match in colour the control handle to which they relate. "It does not matter a scrap," our contributor states in emphasising his plea, "how the lever works the flap, whether it be through bits of string, masses of bell cranks, or miles of pipes."

The second article to which we have referred deals with the avoidance of precisely these "bits of string and masses of bell cranks." The pilot is not greatly interested ("Sparrow" writes from the pilot's point of

view, of course) in that aspect, but the designer definitely is. If the type of flying control proves satisfactory in extended service, there does appear to be a chance of standardisation. The aircraft manufacturer would probably have in stock the three tube sizes specified in any case, and all he would have to do, therefore, would be to buy the bearings, gear boxes, square-section rods, connectors and adjusters, etc., and assemble them, very much as a youngster assembles a set of standardised Meccano parts. A simple process indeed.

However, the matter may not prove quite so simple, and it will be chiefly the pilot (in spite of "Sparrow's" disclaimer) who will have to decide after a thorough test. The rotary movement of this type of control must be arranged to match-up with the linear movement in the matter of harmonisation of controls. If difficulty should arise the appeal of the system would suffer. Practical experience alone can provide the answer, but the Saunders system is in any case a welcome contribution to a problem which merits more careful study.

The R.A.F. in Libya

ALL has gone well on the Libyan air front in recent weeks. It is for the Army authorities to discuss why the battle round Sidi Rezegh took so long. The Prime Minister admitted that things had not gone as fast as had been expected. In other quarters disappointment has been expressed because, as we had air superiority, we did not finish the matter off at once. The public has been told many times that the British or their Allies lost battles because the enemy held the air superiority, and, naturally, people came to expect that