

Correspondence

controls of something chunky; during the war I served with units equipped with Catalinas, and for test and ferry trips it was a common practice to make up a scratch crew from the penguin fitters and riggers. Quite often we were able to try our hands at the controls, all very unofficial, of course, and I shudder to think how many K.R. and A.C.I.s we must have violated, but everyone concerned must be safely chalk-striped by now! Anyhow, most of us managed quite well, and I believe the "Cat" is by no means easy to fly. At least one fellow reached the stage of competence where the skipper felt it safe to let him try a take-off and landing.

A point which will I think, carry much more weight is the recent report of the experiment carried out by the U.S. Navy, in which, for one intake of students the primary aircraft was cut out altogether and the *ab initio* stages were carried out on the type of machine we know as the Harvard. The idea was to familiarize the pupils from the beginning with the essential features of modern aircraft, flaps, retractable undercarriage, etc. Apparently the general progress and reduction of "prangage" was so outstanding that the old primary syllabus has been dropped entirely.

Bearing this in mind it would be an interesting experiment to carry the whole thing through to its logical conclusion, which fetches us back to where I started. One obvious objection that would be raised is, of course, the expense attached to the use of high-powered aircraft. Yet viewing the subject as a whole, would it not be more economical due to the reduction in types of equipment and probable reduction in the length of the training period.

G. A. HENWOOD.

Wandsworth Common, S.W.18.

UP THE POLE

Flying at Constant Latitude or Constant "G"

WITH reference to W. Reginald Dainty's recent letter (May 13th) about the aircraft designer's headache regarding the increase in aircraft weight when travelling from the Equator to the Pole, I would like to point out that on such a journey the consumption of fuel and its ejection to the atmosphere compensates partly for the adverse conditions of loading. The condition is more serious in taking off a fully loaded aircraft from the Pole itself, and then flying to climes of lesser latitude. Members of the crew may also suffer from light-headedness as they approach the Equator.

To avoid these awkward variations in weight, I suggest that aircraft be fitted with a "g" meter so that the pilot might control his height and fly at constant "g," whatever the latitude. Alternatively, all the world's air routes should be along lines of constant latitude, with aircraft stressed to operate on particular latitudes. Inter-latitude services might well be served by road transport of one kind or another.

The question raised by your correspondent is of widespread interest, and he is to be congratulated on having the courage to air his doubts. The experiences of many air pilots in the vicinity of the Pole in trying to grapple with that sinking feeling emphasizes the necessity for a co-ordinated and systematic attack on this aspect of design for safety.

S. W. G.

St. Albans, Herts.

TASTE IN UNDERCARRIAGES

"Comparator" Replies to Conway

I AM piquantly perturbed at the disingenuous effort of H. G. Conway, in your issue of May 27th, to get me "in dutch" with my American friends. Apparently, in my recent causerie on British and American transport trends, I had the shocking bad taste to suggest that British undercarriage designers had no need to offer any apology to the rest of the world in this sphere of the engineering game. I now bow my head and blush with shame, for I was artless enough to include the British-Messier Co., of which firm Mr. Conway is the distinguished technical head.

In writing of "the misplaced enthusiasm by some of our British publicity men who talk such nonsense about the advantages of levered-suspension" Mr. Conway seems to have overlooked the fact that at least one very popular American personal plane, the Ercoupe, has been bumping around all kinds of cow pastures with an articulated landing gear for quite some time. I had no idea that Fred Weick, its designer, felt that easily for the publicity bluffers, whether British or American. I was under the impression that he was just a good engineer—an American one, I am happy to say, in this case.

I find it difficult to follow the logic of friend Conway's

remarks about liquid springing. I am well aware that Lankester (another distinguished Englishman, by the way) took some four years trying to persuade the U.S. Patent Office pundits that liquids were compressible and, therefore, excellent media for springing. Oddly enough, Dowty—who unquestionably pioneered the successful engineering development of the principle—had much the same experience on this side when trying to persuade certain American engineering executives that liquid-sprung shock-struts were already a physical *fait accompli* on British aircraft; despite which, one eminent American technician, a Ph.D. of course, flatly told him that it simply couldn't be done because fluids were incompressible—it said so in the textbooks! However, if in his hurried hop, skip and a jump around the U.S.A., Mr. Conway "re-discovered" an American aircraft with a liquid-sprung landing gear, I will cheerfully take a large nibble out of my Hollywood stetson.

Isn't it just possible that the tide of ideas ebbs and flows both ways and that bread cast upon the waters may return after many days on one side or the other? Stones, on the other hand, make a slight ripple on the surface and then sink without trace.

"COMPARATOR."

Los Angeles, U.S.A.

"BOXCAR AERODYNAMICS"

Convair XC-99 Seriously Considered for Civil Transport

I READ with interest the comment by "Comparator" in an article in *Flight* of May 13th which said: "One incredulous blink at the boxcar aerodynamics of the XC-99 shows that it can have no possible future as a commercial passenger transport."

In September, 1946, I was invited by Mr. Andre Preister, first vice-president of Pan American Airways, to inspect a full-scale cabin mock-up of this very aircraft, which had been erected in a warehouse on one of the Fortieth Streets in New York.

At that time P.A.A. were most enthusiastic about this aircraft, and were hoping that it might bring nearer an age-long dream of theirs for passenger carriage at a cent per mile.

It was also their intention to introduce "class" travel on this aircraft, with "coach" seats for the third-class passenger on one deck and luxury seats and sleeping cabins (as opposed to berths made up in the main cabin) for the wealthier passenger on another level.

As far as I can remember, about 240 passengers were to be carried, together with a large crew. Washroom accommodation on this mammoth was more reminiscent of Grand Central Station, and almost everything else was on the same lavish scale.

Whether the plans which resulted in this elaborate mock-up are still under active consideration, or whether they have been shelved, I do not know, but at least to my certain knowledge, they were being taken very seriously only a year and a half ago.

DAVID BRICE.

Effingham Common, Surrey.

FORTHCOMING EVENTS

- June 19th.—Old Comrades Day for the Air Force, Parachute Regt., Aldershot.
- June 19th to 21st.—Royal Aero Club: Week-end for Foreign Guests, London.
- June 20th.—Northern Heights Model Flying Club: Gala Day, Queen's Cup and Helicopter Trophy, Langley airfield, Bucks.
- June 26th.—Derby Aero Club and No. 16 Reserve Flying School: Flying display at Burnaston airport (postponed from June 5th).
- June 26th and 27th.—Butlin's Week-end Air Rally, Broom Hall, Pwllheli, N. Wales.
- July 3rd.—Air Service Training: Flying display and "Open Day," Hamble airfield, Hants.
- July 3rd to 5th.—Private Air Rally for members and associates of the Royal Aero Club at Deauville, France. (Guests of M. F. André.)
- July 3rd.—R.Ae.S. (Glasgow). Visit to Blackburn Aircraft Ltd., Dumbarton.
- July 4th.—Leicester Aero Club: Air Day and Club "At Home," Ratcliffe airfield.
- July 10th.—Daily Express Air Pageant at Gatwick.
- July 14th.—R.Ae.S. (Hatfield): Film Evening.
- July 17th.—Southend-on-Sea Air Rally.
- July 19th to 31st.—Swiss International Gliding Competitions, Samaden.
- July 24th to 26th.—Private Air Rally for members and associate members of the Royal Aero Club at La Baule-Escoublac, St. Nazaire. (Guests of M. F. André.)
- July 31st.—Aero Club of Orange Air Rally.
- July 31st to Aug. 8th.—International Model Aircraft Meeting, Eaton Bray, Beds.
- Aug. 1st.—Boroden Cup for Model Aircraft with mechanical engines, London Region.
- Aug. 7th.—Air Meeting and Competitions at Ypenburg, Holland.
- Aug. 14th and 15th.—Butlin's Week-end Air Rally at Broom Hall, Pwllheli, N. Wales.
- Aug. 26th.—R.Ae.S. (Glasgow): Lecturettes, Grand Hotel, Glasgow.
- Aug. 27th to Sept. 5th.—Aero Club de France. "Tour de France."