

Correspondence

The Journal

MAY I please take up Prof. Baxter's invitation to comment on his Editorial in the March issue?

The rôle of the JOURNAL should be primarily to record the proceedings of the Society. "Country" members cannot in general attend many London, or other provincial "Main" lectures, and indeed a London member may not be able to attend a particular meeting, so that unless *all* lectures and discussions, including those of Sections and Groups, are printed (if only in summarised form) they are lost to the Society as a whole.

If to do this would crowd out other papers and Technical Notes, then I would suggest that the AERONAUTICAL QUARTERLY and the technical and scientific press are the natural place for them—unless they are particularly intended to invite discussions by correspondence.

Yes! I think the Society should not confine itself too narrowly, to purely technical or scientific aspects; management and technical *policy* are a vital part of aeronautics today.

If it is not going too far from the limits of the Editorial, may I applaud the spirit of the footnote on p 390 (March JOURNAL)? When speakers in even more august assemblies have to submit to their utterances being published directly from the immediate recordings, why should speakers at lectures and conference sessions have any different treatment? Those weighty bound Proceedings appearing three years after the event are usually, for the greater part, just so much waste paper!

R. K. PAGE (*Associate Fellow*).

4th April 1966.

POOOR old editor, he (or she) does get loaded with some heavy cans to carry!

It is obviously difficult for you to answer some of the comparatively vicious criticism levelled at you in the correspondence columns of the May issue so, as editorial consultant of a technical journal myself, may I jump in and put a point of view which may well offend some of your contributors.

One of these attacks was on the delay between the receipt of manuscript and publication, averaging apparently five months. Since most engineers are lacking in any knowledge of how a magazine is produced, may I point out that, at best, the process, physically, takes one month. Copy, even when approved (I'll deal with that later) has to be type-set. Galley proofs have to be read and corrected and returned to the printer. Illustrations require blocks to be made and proofs approved. And often the illustrations are so poor that artwork has to be done before they are fit for use, anyway.

Then the galleys have to be cut to size and fitted, with the block pulls, on to dummy pages, with some consideration for appearance. Page proofs are next prepared and these have to be checked just as carefully as everything else before passing them back to the printer for final production. Alongside this is the chasing of advertisers for their copy—and they often make changes at the last moment.

A newspaper is a whole company geared to produce nothing but that newspaper. Journals are almost always printed outside and, by an unhappy coincidence, the printer is usually overloaded with work. And the editorial staff is always at an absolute minimum.

So much for the mechanical problems; if that were all,

the editor's life would be bearable. Unfortunately, in the case of highly technical journals, it isn't all.

Engineers, and scientists generally, are usually clever men, much cleverer in fact than the average editor. But technical ability and the power to create interesting prose seldom go together so the result, when one of these learned gentlemen wants to burst into print with his new formula or his appraisal of some old concept in modern application, is usually a document of anything up to 10 000 words, often accompanied by a collection of sketches on the backs of envelopes. Alternatively, there are nearly as many illustrations as there are words and that's when the editor really gets down to it. (It is also quite common for these wordy expositions to be sectionally numbered, sub-sectionally numbered, paragraph numbered, littered with cross-references and looking generally like some report of a Royal Commission. And it's worth adding that manuscript often arrives in longhand which has to be laboriously typed before it can be read with ease, let alone presented to some unfortunate compositor for type-setting).

The next stage is to decide whether to publish or not—after suitable cutting and editing. Journals of learned societies usually have an editorial committee, all of whom may wish to read the work. That takes time as the members have other commitments.

However, in due time a decision is reached and the editor is told to get the story cut down to half its length and keep the block costs to a reasonable minimum. That involves finding the author who, in the transport business, may well be on the other side of the world. When found, he has to be approached with the skill of a diplomat and persuaded to reshape his effusion.

Naturally, this takes time but it never absolves the editor from doing a vast amount of "subbing" because the author has either flatly refused to conform to the style of the journal or, worse, has spelt "realize" with a "z" and "organise" with an "s" all the way through.

By the time the manuscript has reached finality months have gone by but, by an unhappy coincidence, the next two issues are "specials", quite unsuitable to include Mr. X's discussion of some totally different subject, so the article has to wait.

So five months isn't all that unreasonable and most of the blame lies with the writers who are (a) firmly convinced they are heaven-sent authors, (b) obsessed with the idea that all the readers will lap up and understand their abstruse mathematics and (c) unable to understand that an article in a journal is quite different from a patent specification. It is worth adding (d) that some of them cannot spell.

And when the article does finally appear in print the author nearly always complains about the type faces and the size of the illustrations, being, apparently, completely unaware that paper costs money and, within reason, must be used economically. Yet the same person would raise the roof if his design staff used two $\frac{1}{4}$ " Whitworth bolts where one would do.

Authors might also remember that they are usually specialists. The editor is expected to know all the answers for every technical subject under the sun. Unfortunately he does not so he has to consult other authorities. And that takes time, too.

So pity the poor editor. He, or she, tries to satisfy everybody and usually finishes by pleasing none.

BASIL CLARKE, *Editorial Consultant—Tech Air*.
2nd June 1966.

The Industrial Training Act

WE CONSIDER that the Industrial Training Act is a very valuable step forward in that it focuses the eyes of all employers on the need for training, and attempts to apply a fair method of rewarding efforts put in by those companies who take training seriously.

One of the dangers of the Act and the setting up of Boards is that it could well finish up with a grant system which pays many of those companies continuing with the traditional type of training which applies at the time of formation of the Board. In our opinion an examination of the grant and levy system, as already applied to various industries, shows so much inconsistency that we are sure better and quicker results would have been achieved had the Government applied a grant and levy system effective from the date of the Act, based on some rough yardsticks of measurement, designed only to encourage a greater awareness of the problem, and a penalty for those companies not carrying out any training.

However, the past is the past and we now come to the setting up in 1967 of yet another Board to cater for civil air transport. We feel that this Board also may fail to assess the needs of the industry, may end up by merely expanding the type of training already being done by those companies having the largest representation on the Board, and not take into account the present and future needs of the industry. We assume, and are informed, that the Board will have a strong Corporation and Trade Union flavour and, although it can be argued that the Corporations employ the majority of the staff in civil aviation, it is felt that to allow this dominance to go unchecked would lead to the wrong types of training being given financial support, resulting in the long run to harm to British aviation as a whole.

Our basic idea on the proper approach to training is that the Training Board should, first of all, carry out a complete appraisal of the present trade structure and its applicability to present day requirements and also to cover future developments. In addition, before any training needs can be assessed, a careful job analysis should be carried out in respect of tasks involved in aircraft maintenance. This analysis should be carried out by a team of experts, who are not biased and are not actively employed by the company whose work is being examined.

The following points should also be carefully considered by the Board:—

1. Future training courses should be based on what the operator has to do rather than on what questions he will be asked to answer. He should be taught the best method of doing a job and the reason for doing it.
2. Specialist training, which is perhaps a more logical development in the larger companies but which would be uneconomic in the smaller companies, should be broken down still further so that it becomes the preserve of semi-skilled operators.
3. Apprentices. The syllabus at present is tailored to achieve passes in City and Guilds and HNC or ONC examinations rather than an end product of staff skilled in the techniques of aircraft maintenance.

The Committees responsible for these examinations, and the Colleges giving the theoretical training, do not keep in touch with the rapid development in the aviation industry, consequently instruction is still given on such things as the use of the lathe, surface grinders and other machines, at a time when the whole tendency of aircraft maintenance is towards repair by replacement and the present regulations do not permit a pure maintenance organisation to manufacture aircraft parts. Whilst dealing with Apprentices, it is noted that obsolete systems are frequently used as examples during training, and examination papers look backwards instead of forwards.

Although boys are apprenticed as Aircraft Engineers and pass out full of enthusiasm and keenness, the Air Registration Board does not accept them for Licence examinations and their qualifications are not recognised. This frequently leads to these young men suffering from depression immediately after completion of training and many of them take their talents elsewhere, where they can be appreciated.

Finally, Apprentice training should be of a much broader nature, it should be available to people of all age groups and, by using the spectrum principle, it should be possible to make re-training in new techniques a natural and logical development. At the same time the present non-related certificates and diplomas should be replaced by a national standard recognised by the Air Registration Board.

4. There should be a greater study of the effects that maintenance recording will have on the future pattern, and an awareness that the whole technique of aircraft maintenance has changed completely over the last ten years, and that the rate of change is likely to accelerate.

Conclusions

It is our earnest hope therefore that, before the Board is set up, a proper forum is established for an interchange of information, which will lead to some forward looking objectives being decided in the early stages of the formation of the Board.

The structure of the Board itself should also be so arranged to afford proper protection against the danger of continuing with the present unwieldy training machine using an out of date syllabus.

It is imperative that the correct emphasis is placed on those types of training which will lead to a more efficient civil air transport system in the future.

It is as well to remind people that, in the United Kingdom, the Direct Operating Costs in respect of maintenance are still much higher than those obtaining in the United States, in spite of our lower wage level, and we hope that this letter may lead to something which will emphasise the need for an urgent look at the whole problem before the Board for Civil Aviation is set up.

J. M. RAINBOW

G. D. PEACOCK (*Associate Fellow*).

21st June 1966.