



**AM I A GOOD  
ENGINEER  
OFFICER**

**A GUIDE FOR SELF-CRITICISM  
AT FREQUENT INTERVALS**

## DO I APPRECIATE THAT MY JOB IS ESSENTIALLY A SERVICE?

1. Engineering is not an end in itself. The job of the Engineering branch is to:
  - (a) Maintain technical equipment in the highest possible state of efficiency.
  - (b) Provide serviceable aircraft, properly equipped at the right times and in the right numbers, for the varied flying tasks of the Service.
  - (c) Carry out its work with the greatest possible economy in manpower and materials.
2. The spirit and intention of all engineering rules and regulations is to fulfil this aim and not to create or maintain a technicians' "empire."

## DO I REALISE THE IMPLICATIONS OF BEING A SPECIALIST OFFICER?

3. Certain aspects of R.A.F. work are highly complex or technical and require officers with special training and experience which those of the G.D. branch cannot be expected to acquire. Specialist branches such as Medical, Engineering, Signals, etc., were therefore created.
4. An officer of a specialist branch must:
  - (a) Be a good officer in the best and widest sense of the term.
  - (b) Have a thorough knowledge of the science and technology appropriate to his branch.
  - (c) Understand the organisation and established procedure of technical work in the R.A.F.
  - (d) Be sufficiently acquainted, for the purposes of his appointment, whatever it may be, with the organisation, work, and methods of the G.D., Secretarial, and other branches.
5. A unit Engineer Officer is primarily responsible to, and must satisfy, his own Commanding Officer. That is what his immediate superior in his own branch (e.g., the Group or Command Engineer Officer) mainly requires of him. A Commanding Officer bears ultimate responsibility for all work in his unit (see K.R. and A.C.I., paras. 52, 53, 54 and 56), and his authority over his subordinates is virtually absolute. The Engineer Officer's first loyalty, therefore, must be to his Commanding Officer, whose decisions he must accept and act upon, even though he may not always agree with them.

6. At the same time, many technical instructions from higher authority will, in practice, come directly to the Engineer Officer. He executes these instructions on behalf of his C.O. who, in effect, delegates power of action to subordinate officers (including specialists) in their appropriate fields. It may happen that the C.O.'s orders seem to conflict with such instructions; in this, or any other circumstance where technical efficiency is affected, it is the duty of the Engineer Officer, as technical adviser to the C.O., to bring the matter to his attention. A G.D. Commanding Officer cannot lightly disregard the opinion of a specialist in the latter's field and it is therefore essential for the Engineer Officer to be scrupulously honest in his advice to his C.O. He must use his knowledge to explain technical matters tactfully and in the simplest possible terms, never trying to "blind with Science" or cover up mistakes with technical jargon.

## AM I EXTENDING MY TECHNICAL KNOWLEDGE AND KEEPING ABREAST OF MODERN DEVELOPMENTS?

7. A high standard of technical ability is the primary requirement of an Engineer Officer, and this depends on his having a really wide, thorough, and up-to-date knowledge of the theory and practice of his "trade."
8. Aeronautical Engineering is a vast field of knowledge; moreover, with the rapid progress of technical development, it is a constantly expanding field. No one person could hope to be an expert in every aspect, but it follows that there is always something more to learn. Technical education does not end with the completion of a course - it should be a continuous process throughout an Engineer Officer's career.
9. He should make a point of constantly extending his knowledge, and particularly of keeping himself up-to-date in modern developments, by reference to the wealth of technical literature that is available and by visits, whenever possible, to other units, manufacturing firms, research establishments, etc.

## DO I TAKE EVERY OPPORTUNITY TO GAIN AIR EXPERIENCE AND SEE THAT MY TECHNICAL AIRMEN DO THE SAME?

10. The acid test of an aircraft's serviceability is its behaviour in the air, and it is most important that those who do the servicing should be able to appreciate the point of view of those who fly. A defect which may not

seem very serious on the ground can be a very real danger in flight if only because it is a source of alarm, irritation, or discomfort to the pilot.

11. An Engineer Officer should therefore see that he, and his technical airmen, take every opportunity to fly, particularly in the aircraft for which they are responsible if this is possible. The benefits of this are two-fold:
  - (a) Servicing personnel gain experience which enables them to judge aircraft serviceability from the "user's angle" as well as their own.
  - (b) By flying frequently they demonstrate their confidence in the efficiency of their technical work. This in turn gives the aircrews confidence in the aircraft and fosters the spirit of partnership between ground and flying personnel.

## DO I GIVE ADEQUATE ATTENTION TO THE ADMINISTRATIVE AS WELL AS THE TECHNICAL SIDE OF MY WORK?

12. Every officer - whatever his branch - is concerned to some extent with matters of general administration. A specialist officer must have a good working knowledge of station organisation which is the framework within which his own work must be organised and planned.
13. It is as well to realise at the outset that the domestic administration of a unit is highly complicated, and its requirements cannot help but be, at times, in conflict with the interests of purely technical efficiency. A specialist officer will be aware that, from time to time, his personnel are necessarily away from their work on pay parades, clothing parades, fatigues, station duties, etc., and he should be able to appreciate that matters of station routine cannot always be timed to suit his own plans.
14. Apart from being called upon for station duties, Boards of various kinds, Courts of Inquiry, etc., an Engineer Officer finds much of his time taken up with administrative details relating to the running of his own section. This is an inevitable and perfectly normal circumstance; as a subordinate commander, for example, he must deal with many non-technical matters such as airmen's welfare, complaints and interviews, leave rosters, barrack-room or kit inspections, general discipline, etc. A good Engineer Officer realises that technical efficiency cannot be maintained without the support of smooth local administration, and brings to this side of his work the same care and attention that he gives to purely technical problems.
15. The range and complexity of R.A.F. administration is now so great that no one can hope to be familiar with every detail of established procedure

and regulation. The “Manual of Administration “ (AP. 837), however, is a comprehensive and invaluable guide; every officer should see that he has ready access to a copy (amended up-to-date of course!) and should not hesitate to consult it whenever in doubt.

## AM I CONSTANTLY ALIVE TO THE IMPORTANCE OF THE HUMAN FACTOR?

16. The morale of technical personnel is of paramount importance, and it should be the immediate and constant concern of the Engineer Officer in charge. However efficiently work may be planned, it will not be efficiently executed unless the men\* are in the right frame of mind to tackle their jobs vigorously and cheerfully. No amount of skill in organisation or application of technical knowledge will make up for neglect of this vital factor.
17. The first essential of good man-management is to achieve and maintain the right officer-man relationship. Nothing is more conducive to apathy and inertia than the feeling of being a “cog in a machine”; a man likes to think that his officer is aware of him and interested in him as a human being - not merely as one of a number of “bodies” used for getting work done. He rightly expects his officer to know and address him by name (not as “Hey You!”) and to take a genuine and active interest in both his work and his welfare.
18. An Engineer Officer must therefore make a point of getting to know his men as individuals, and be prepared to spend a considerable amount of time in dealing with them as such. While insisting on a high standard of discipline, he must be sympathetic towards their private difficulties and conscientious in all matters affecting their well-being (e.g. promotion recommendations, leave rosters, working conditions). He must be patient in dealing with requests and complaints, never dismissing any as frivolous without careful examination. Disciplinary matters must always be thoroughly investigated, and dealt with fairly but firmly.
19. Apart from dealing with personnel matters that are brought to his notice, an Engineer Officer must show active leadership. He should keep the morale of his men under constant observation, watching for signs of discontent that may not be voiced to him directly and taking every opportunity to stimulate enthusiasm (e.g., by giving praise where it is due, inviting their suggestions on technical problems, letting them know of any achievements to which their work has contributed, setting “output targets” for them to aim at, etc.). He must take particular care to see that his men are never “pushed around” unnecessarily by persons

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\* Throughout these notes, references to personnel are to be taken as including W.A.A.F. personnel

not authorised to do so; he can and must insist that any complaints regarding them are reported directly to himself for investigation.

20. N.C.O.s form an essential link between officers and men and it is most important that their status should be clearly defined and upheld in the eyes of the men. Except in an emergency, an officer should not give orders directly to aircraftmen but always through the appropriate N.C.O. An N.C.O. who is "short-circuited" is left in an invidious position and cannot be expected to control his men effectively. Similarly, an N.C.O. must be supported wherever possible, and if it is necessary to reprove or criticise him in any way this must be done in private – never within the hearing of his juniors. A good officer always works through his N.C.O.s, defines clearly their tasks and responsibilities, holds them entirely responsible for the work of their gangs or sub-sections, and gives them to understand that he always expects the best.

## IS THE WORK OF MY TECHNICAL PERSONNEL EFFICIENTLY DIRECTED AND CONTROLLED?

21. There must be a clearly-defined chain of command linking the officer in charge of a section, through subordinate officers (If any) and N.C.O.s, with the lowest ranks in the section. Each aircraftman must know who is his immediate superior (e.g., Corporal) who in turn comes under a specified senior N.C.O. Similarly each W.O. and N.C.O. should be quite clear as to who comes under his control. In any but the smallest sections, the allocations of duties and responsibilities should be laid down in writing.
22. To control his section effectively, the officer in charge should know at any time where each man is and what he is doing. He cannot, of course, carry this in his head but he should have in his office, for quick reference, a board showing the names of all his men grouped in their various gangs or sub-sections; some form of annotation should show those who are non-effective on account of leave, absence, sickness, etc. The board must be made up-to-date daily; no change in the distribution of personnel should be allowed except on the authority of the officer in charge.
23. Postings, attachments, and temporary absences are inevitable and frequent re-allocation of duties may be necessary. Such adjustments must be made promptly and the personnel concerned must be informed without delay. (When men are seen to be idle it is usually presumed that they are slacking; the real reason is very often that their N.C.O. is absent for some reason or other, and, due to poor organisation, no one has told them what to do.)

24. No section can function properly without this clear-cut chain of responsibility. The duties of work supervision and control of "gangs" must be systematically delegated to N.C.O.s and the officer in charge must see that they:
- (a) know exactly what their responsibilities are, and
  - (b) discharge them fully,
- but he must never do their jobs for them. If, for example, he notices that a workshop needs to be tidied, he should give the order to the N.C.O. i/c the shop (NOT directly to the men he happens to see in the shop) and hold him responsible.
25. When a subordinate (e.g., N.C.O.) is instructed to get some particular job done, he should at the same time be told:
- (a) exactly when he is to start (e.g., "immediately," "first thing tomorrow morning"),
  - (b) to report immediately any difficulties or delays, and
  - (c) in any case to report back at some specified time later to say how far he has got on with the job.
26. In this way, the officer in charge ensures that he is informed immediately if any job gets "hung up," and keeps his finger on the pulse of his section.

## AM I TAKING ANY ACTION TO KEEP THE MISEMPLOYMENT OF TECHNICAL PERSONNEL TO A MINIMUM?

27. One of the difficulties in the Service during the War and subsequently has been the misemployment of technical personnel. The senior Engineer Officer is often the biggest "employer" on a Station and therefore the one most particularly concerned. It seems likely that this misemployment must go on for some years yet, until the peace-time Air Force is again properly organised and staffed, and Engineer Officers must consider what they should do in the matter.
28. There are two main classes of misemployment:
- (a) Those who cannot be employed in their trade by reason of medical disability or technical inefficiency. Efforts to get rid of such people by "wangling" a posting or attachment elsewhere are usually fruitless and, even if successful, this method is discreditable as it merely shifts the problem on to someone else. The right thing to do (and there is a proper procedure for this which an Engineer Officer should know) is to apply for the man to be remustered to another

trade (if necessary in a lower group) which he is capable of following. There is, incidentally, a similar procedure for the reduction of an N.C.O. who is technically inefficient or unfit for his rank by reason of poor personal qualities, indiscipline. etc. Engineer Officers must be conscientious and ruthless in this matter, It is a waste of public money and an embarrassment to have a man classed (and paid) as an L.A.C. Fitter IIE, who cannot be employed in his trade and Is doing A.C.H. duties. Further, fan airman can do this and get away with it, it does not encourage to greater efforts those who are efficient in the performance of their trade duties.

(b) If the strength of the Station is below establishment in certain trades (e.g., A.C.H.s. Cooks, Police) the Station Commander may find it often (or even continually) necessary to employ some technical personnel on domestic duties. To a certain extent, some misemployment of this sort may be quite unavoidable but it needs to be carefully watched. It can easily get out of hand when a large technical section (e.g., a Servicing Wing) comes to be regarded as a common pool of manpower on which other sections can call for just one more airman for this, that, or the other job.

29. The Engineer Officer should keep lists of all technical personnel misemployed in both the above-mentioned classes. These lists should be reviewed weekly, and all possible measures to reduce them considered. It is a good plan for the Engineer Officer to submit to his C.T.O. a weekly or monthly return of misemployed personnel, showing them under appropriate headings (e.g., Station Duties, Guards, Fatigues, etc.) with suggestions where reductions might be made. This is particularly necessary where authority to draw off men for such duties is delegated to, say, the S.Ad. Officer and the Station Warrant Officer, as it is the only way in which a full picture of the extent of misemployment will be presented to the Commanding Officer.

## AM I INTERPRETING MY “TRAINING OBLIGATION” IN THE FULLEST AND WIDEST SENSE?

30. An Engineer Officer is responsible for the efficiency of all personnel under his control; this means that he must see that their trade proficiency is maintained and increased. He must try to ensure classroom and equipment facilities for this purpose, and that his men have opportunity to take advantage of Station Education facilities.

31. Men should be encouraged to improve their knowledge and skill of hand, and given every opportunity of remustering to higher group trades, re-classifying, and taking Service Educational tests. An Engineer Officer should thoroughly understand the R.A.F. organisation for trade

training and trade testing (*i.e.*, the functions of the C.T.T.B., Group Trade Test Boards, re-mustering and re-classification procedure, etc.).

32. Full advantage should be taken of external courses of instruction, both technical and administrative. Natural reluctance to bear the temporary loss of a good tradesman or N.C.O. should not blind an Engineer Officer to the fact that refresher training courses on new equipment, etc., are continually necessary to maintain technical efficiency. The absence of a small proportion of personnel on such courses should be regarded as a normal state of affairs in the unit.
33. The Engineer Officer must see that each of his men gets experience, as far as possible, on all types of work appropriate to his trade. The temptation to keep men on particular jobs in which they have gained ability by experience is a strong one, but it must be resisted, or technical versatility will be lost. Personnel should be periodically switched from job to job, and never kept too long on "repetition work."

## IS MY LIAISON WORK GOOD?

34. Close liaison with the G.D. branch is essential, particularly where aircraft servicing is concerned. All flying requires the constant support of a highly organised technical service and the G.D. branch must be satisfied, as far as possible, with the "service" they get. Demands for flying, however, are sometimes more than available technical resources can support and technical difficulties are not always obvious to a G.D. officer, who from time to time requires tactful enlightenment on what is, or is not, possible.
35. If a good liaison has been established, the G.D. branch can often be persuaded to make slight alterations to the flying organisation which help the Engineer Branch in their task of providing technical support. Moreover, it should never be supposed that only a technical officer can have a good technical idea. A good Engineer Officer is always interested in flying problems and it pays him to discuss technical problems with G.D. officers, inviting their views and thereby encouraging them to take an interest in the technical service.
36. An Engineer Officer must appreciate the difficulties of Station Administrative and Accountant Officers. These officers have very little limelight and the results of their work are usually taken for granted. Such mundane matters as housing, feeding, clothing, and paying the men will not arrange themselves; the Administrative Branches have to attend to these and a host of other routine details essential to the management of the station. It is necessary for an Engineer Officer to have a knowledge of their duties, particularly in so far as they concern him directly, and it pays to establish friendly relations with them. A well-

disposed Administrative Officer can often help, e.g., by arranging Station Duties to the benefit of technical sections.

37. The supply of technical equipment (tools, spares, etc.) is obviously of vital concern to an Engineer Officer and calls for close cooperation with the Equipment Branch. In his own interests the Engineer Officer should be constantly in touch with this section. He should know, just as well as the Equipment Officer, how and where to get spares regular meetings to discuss outstanding demands, special measures for urgent requirements, etc., are essential. Occasional visits with the Equipment Officer to M.U.s are well worth while.

## AM I SPREADING THE INFORMATION I GET TO THE PEOPLE WHO OUGHT TO KNOW IT?

38. Nothing is worse than an officer who keeps all the "gen" to himself. He must circulate it to junior officers, Warrant officers, and N.C.O.s as appropriate. Particular attention should be paid to the prompt dissemination of information to personnel at satellite airfields. It is surprising how often things go wrong when subordinates are not kept fully "in the picture" as to what is going on.
39. Local technical instructions which are not published elsewhere should be promulgated in a Flight or Section Order Book. These Books require careful scrutiny at frequent intervals or they will "snow-ball." They are useless if they become too voluminous as the personnel for whom they are intended will not be bothered to read them. The tendency for out-of-date or duplicated orders to accumulate must be checked. Orders should be short, concise, and up-to-date, and grouped in sections for easy reference. The books should be reviewed at least once a quarter so that out-of-date orders can be scrapped.
40. An Engineer Officer may, by virtue of his special knowledge, be able to read more into a technical A.M.O. than G.D. or other officers, and it is often incumbent on him to draw their attention to the operational or administrative implications of such orders. For example, a Special Technical Instruction requiring the immediate inspection of all aircraft for a suspected defect will probably have a considerable, if temporary, effect on the flying programme and the responsible G.D. Officer should be warned of this at once.

## ARE MY INSPECTIONS THOROUGH AND UP-TO-DATE?

41. An Engineer Officer must satisfy himself that all offices, workshops and other premises for which he is responsible are always clean, tidy, and working efficiently. Apart from his movements in and about his sections; incidental to his day-to-day work, he should make frequent personal inspections of a more formal nature to ensure that nothing is overlooked.
42. When any section is being inspected, the W.O. or N.C.O. in charge of the section must be present. The inspecting officer should give any instructions arising from the inspection to the N.C.O. in charge, who should at the same time be told to report when he has carried them out. If anything is found seriously amiss, the Engineer Officer should give precise orders for it to be attended to, and arrange to re-inspect it at a later date. (It is sometimes a good plan to tell the N.C.O. to report back when his shop is ready for re-inspection.)
43. During formal inspections, special attention should be paid to the following:
  - (a) General tidiness and cleanliness.
  - (b) Wash places and lavatories.
  - (c) Cupboards, lock-ups, odd corners and "cubby-holes" where junk is liable to accumulate.
  - (d) Orders and notices. (These should be clean, well-displayed and up-to-date. Notice boards tend to become cluttered up with dirty out-of-date notices which no one thinks to remove with the result that new and important orders get overlooked.)
  - (e) Fire appliances and safety devices.
  - (f) Damage or deterioration to buildings, fixtures, and plant which should be reported to S.H.Q. for action by the Works Directorate.
  - (g) Conditions of tools and other ground equipment.
  - (h) Hoarding of equipment in technical sub-stores.
  - (i) Irregularities of dress (e.g., overalls not being worn, airmen working on aircraft in hob-nailed boots, etc.).

## DO I REPORT ALL DEFECTS CONSCIENTIOUSLY?

44. An Engineer Officer must ensure that all defects are reported as soon as possible on Form 1022. Only by receiving reports of defects does a manufacturer know of the failings of his product in the Service, and by this means alone can he be stirred to action to modify the item or replace it by designing something better.
45. Often an Engineer Officer is doubtful whether a defect is worth reporting, and he makes up his mind to let the matter slide when he thinks of the effort of filling up a Form 1022. Thus, unsatisfactory equipment continues in use in the Service and many man hours are wasted in keeping it serviceable. Complaints are often heard that such and such an item requires constant adjustment, servicing or even replacement, but no one has ever bothered to "1022 it." "When in doubt, raise a Form 1022" should be the motto of all Engineer Officers.
46. Completing Forms 1022 is admittedly a binding job, but it is essential that the designers of the item shall have all information asked for on the form, when they come to "think again!". Such details as the modification state of the equipment is essential for a proper investigation. Correct power-plant and engine numbers, and cross reference to Forms 765 (c) in the case of defect reports raised when an accident is caused, are also most important. Furthermore, a copy of the modification certificate must accompany all defect reports raised on complete aero engines, so avoiding unnecessary strip inspections and investigations into defects which have occurred due to non-embodiment of a modification.
47. Action is taken on defect reports. They are not "sat on" as so many Engineer Officers seem to imagine! The result of the investigation on the defect which you have reported and the action which is being taken to overcome it in the future are recorded on the Ministry of Supply Monthly Summaries of Defects in the case of items of aircraft equipment, and by individual notification in other cases. An Engineer Officer who is not receiving copies of the monthly summaries should ask his Command Headquarters to ensure that he gets them.
48. Defective equipment on which Forms 1022 have been raised must be held by the unit for two months, and not handed over to the representatives of the manufacturers, as so often happens. This only leads to confusion in the long run and delay in the investigation of the defect, which in turn results in further delay in putting the matter right.

## IS MY M.T. SERVICING SATISFACTORY?

49. Under the terms of A.M.O. A.30/45 the Engineer Branch is responsible for all servicing, maintenance and repair of M.T. vehicles other than daily servicing. This commitment, as an extra to the normal duties of a C.T.O., can be kept to a minimum by good organisation.
50. The C.T.O. and the O.C. running transport must work in cooperation to ensure that vehicles for repair and inspection are fed into the technical side in a steady flow. Demands for spare parts can often be anticipated by studying the Form 656 some time prior to inspection and time may further be saved by ensuring that vehicles are clean and complete to an agreed scale of equipment before being passed from running transport for repair.
51. Care must be taken to maintain M.T. specialist servicing equipment in good condition, and the care and servicing of this equipment should be made an individual responsibility. Hand tools on personal loan should be the subject of regular inspections by the Engineer Officer or Warrant Officer deputising for him. Stocks of vehicle spare parts should be maintained at a reasonable level; not too little and definitely not too much.
52. Advantage should always be taken of the system of exchanging major components. It often is the case that an Engineer Officer considers a repair to an engine can be carried out within his own organisation whereas his unit is not equipped with the necessary tools, etc. As a result much time is wasted before the component is eventually exchanged for a serviceable replacement.
53. It must be borne in mind that M.T. vehicles are seen by many people in the course of their travels, and their condition and appearance are taken as a reflection of station and technical efficiency.

## IS ALL MY GROUND EQUIPMENT IN A SATISFACTORY CONDITION?

54. The technical efficiency of a unit can be, and usually is, judged by the state of its ground equipment, and specialist officers are well advised to see that their sections are never open to criticism in this respect.
55. Tools and other ground equipment such as starter trollies, compressors, oleo pumps, jacks, petrol tankers, etc., lead a rough life, especially if they are used in the open (e.g., at flight dispersal points). They will often fall into a dirty, dilapidated and unreliable condition unless some system of regular servicing is in force.

56. Servicing schedules for some items of ground equipment are issued by the Air Ministry. Others are usually covered by detailed instructions from Command Headquarters. The Engineer Officer must see that these are properly carried out. A register of all ground equipment requiring periodic servicing should be kept and personal responsibility for the maintenance of each item must be clearly defined. Inspections and repairs should be recorded and signed for, and the Engineer Officer should check these records as well as frequently inspecting the ground equipment itself.

## IS MY OFFICE WORK EFFICIENT?

57. Paper work is a good servant but a bad master. It is axiomatic that correspondence and documentation of all kinds should be kept to a minimum, but a certain amount is obviously necessary for efficient control of any organisation, and it must be dealt with systematically. The officer who lets his paper work fall into confusion sooner or later finds himself more and more "chained to his desk" trying to sort out the muddle. The old saying that "lazy people take the most pains" was never more true than in this respect.

58. There are probably any number of different but equally good systems of dealing with paper work. In a large organisation such as the R.A.F. the important thing is that there should be a uniform system and that everyone should keep to it. An Engineer Officer must be fully acquainted with Air Force methods of dealing with files and correspondence and must deal with all such matters promptly and accurately. The rules for Service writing and treatment of correspondence are fully and clearly described in AP. 837 and it pays to learn these thoroughly; for example, an officer should be able to draft a signal correctly without having to refer to the Manual every time he has occasion to do so.

59. An Engineer Officer must see that he gets and reads A.M.O.s, Command Engineer Staff Instructions, Record Office Memoranda, and all leaflets and correspondence on engineering matters. He must ensure that the Central Registry are aware of what letters, signals, amendment lists and other documents he should see.

60. It is helpful to keep a personal "gen-book" as an index to A.M.O.s and R.O.M.s which contain information on technical, equipment and administrative matters affecting the Engineering branch.

61. Wall charts of various kinds are used to show the position daily of work progress, aircraft states, disposition of personnel, etc. Their object is to enable the officer to see at a glance the general state of affairs in his section. They are, of course, worse than useless unless they can be relied on as being up-to-date, and there must be a cut and dried arrangement

to ensure this. As an additional check, every chart should be marked with the time and date at which it was last made up-to-date

62. Though much of the routine work may be left in the hands of the clerical staff, an officer is well advised to supervise his filing system personally. He should decide on the choice of the file titles and on the number of files to be opened, and he must himself check that the appropriate file is used for each document. This applies particularly to correspondence on technical matters, with which clerks cannot be expected to be familiar. He should keep an index of file numbers and titles in his own office for ready reference.
63. An Engineer Officer must always be looking ahead and he will need an office diary to remind him of various matters to be attended to on specific dates in the future. The diary will also serve a useful purpose as a record of important events and decisions taken.

## AM I CONSCIENTIOUS AND THOROUGH IN DEALING WITH TECHNICAL REPORTS AND RECORDS?

64. An Engineer Officer's duties include the maintenance of numerous technical records and the rendition of technical reports and returns, some as a matter of routine and others as and when the occasion requires. These often require a lot of work on his part, and as, in most cases, they do not produce results that have any immediate effect on his section, they are apt to be regarded as a nuisance and given scant attention. This is quite wrong, and it is essential that Engineer Officers should realise the purpose of these reports and the importance of their being prompt, clear, comprehensive, and, above all, accurate.
65. Reports on accidents and technical defects are among the commonest with which an Engineer Officer is concerned. The Air Ministry and Command Headquarters rely almost entirely on units' reports for accurate detailed information on technical failures (and on defects that might be potential causes of failure). Thus these reports are the essential basis for modifications and other remedial measures on which the safety and operational efficiency of aircraft (and other equipment) depend. Engineer Officers should know and carefully follow the current procedures specifically laid down for reports of this type.
66. It frequently happens that statistics are called for by Command or Air Ministry. These may involve a considerable amount of tedious calculation and clerical work but Engineer Officers should appreciate that they are only asked for when there is a definite purpose in view. For this reason it is essential that the information should be correct and figures quoted must be as accurate as possible. Statistics are required for

such complex tasks as equipment provisioning, modification action, and establishment calculation, and if the figures are wrong the results may be serious and far-reaching.

## HAVE I AN EFFICIENT SYSTEM OF DEALING WITH AIR PUBLICATIONS?

67. An Engineer Officer has to deal with a very wide range of Air Publications (both technical and otherwise) and he must thoroughly understand how:
- (a) Their existence and availability are made known to units. (A.M.O.s N.)
  - (b) Scales of issue are decided.
  - (c) They are demanded by, and issued to, units.
  - (d) Their distribution within units is controlled and recorded.
  - (e) They are kept up-to-date.
68. A.M.O. A.1114/44 describes the system generally and A.P. 2462A gives useful information on the scope and layout of engineering publications. An Engineer Officer must see that he gets the publications that he requires and also the appropriate amendment lists; he must return those publications no longer required. There will be a Unit Air Publications Section to which he sends his demand; he should keep a record of such demands, and note in his diary when to "chase up" the outstanding ones. He should liaise with the Unit Publications Officer to ensure that relevant publications are passed on when equipment is passed from unit to unit.
69. Within his section, the Engineer Officer must see that Air Publications are in the hands of those who are going to use them not all locked up in a cupboard in the office. At the same time, the distribution must be properly controlled and recorded or they will soon mysteriously disappear. A register must be kept of all publications in the section and signatures obtained for issues on loan. Amendment lists should be dealt with in the same way, and holders should clearly understand that they are to incorporate amendments promptly as they are received. The Engineer Officer should make periodical inspections of publications held by N.C.O.s., etc., to ensure that they are amended up-to-date.
70. Some N.C.O.s are peculiarly reluctant to read technical publications – possibly because it takes some time to find the required information until one is familiar with the lay-out of the book. Systematic persuasion to make the fullest use of publications is needed; once a man appreciates

the usefulness of a publication, he will probably keep it properly amended without further pressure.

## IS MY EQUIPMENT ACCOUNTING EFFICIENT?

71. An Engineer Officer must fully understand the system in force for equipment accounting and maintenance of inventories. General information on this is given in A.P. 830, Vol. I.
72. He will be well advised not to take over any inventory without making a 100 per cent physical check, and he should make regular periodic checks of any equipment for which he is responsible.
73. Much of the equipment (e.g., tools) on an inventory can, and should, be "farmed out" to subordinates on loan cards, but the inventory holder must ensure that loan cards are kept up-to-date and signatures obtained for every item out on loan. Particular care must be taken that the appropriate loan cards are cleared when personnel are posted. The officer in charge must see that individuals required to hold equipment on loan have means of locking it up or otherwise securing it against loss.
74. In certain circumstances senior N.C.O.s (and civilians of equivalent status) may hold inventories. N.C.O.s should not be expected to hold large inventories, and the officer in charge must allow for the fact that transactions with the Equipment Section, inventory checks, loan card maintenance, etc., will occupy a fair amount of an inventory holder's time.
75. Very large inventories are undesirable, as they take a long time to check properly. If, with continual addition of equipment, an inventory grows to an unwieldy size, it should be "broken down" into two or more separate inventories. The Equipment Accounts section will be only too pleased to co-operate in this process, as they dislike large inventories as much as the inventory-holders themselves.