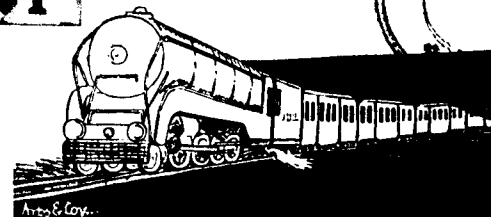


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CONTENTS

	PAGE
EDITORIALS :	
TRAINING OF RAILWAY ACCOUNTS STAFF ..	313
APPENDIX II-A AND III-A EXAMINATIONS — DECEMBER 1957 ..	316
RAILWAY MINISTER'S PROPHECY ..	316
CONTRIBUTIONS :	
THE ECONOMICS OF ELECTRIFICATION ..	317
ECONOMY DRIVE ON INDIAN RAILWAYS ..	319
ACADEMIC OCCASIONS ..	320
TRAINED SUPERVISORS CAN INCREASE EFFICIENCY ..	321
YOUR PROVIDENT FUND ACCOUNT ..	324
SUBJECTS OF MOMENT ..	328
NEWS, NOTES & COMMENTS ..	334
READERS' FORUM ..	340
STUDENTS' CORNER ..	341
PERSONNEL ..	342

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course of their training or at the end thereof, to give an idea to the authorities as to their capacities. These schemes of training pre-suppose a duly qualified staff to undertake such training. But very often, a person entrusted with such work gets into a rut after some time and the higher authorities should see that such instructors, particularly when exclusively allotted for instruction work, should be changed periodically not only to give a change to the instructor, but also to import new material into that branch of work. It is also essential that instructors should have every facility to keep themselves posted with current orders and procedure. It is doubtful to what extent a practical approach has been made in this direction by the various railways. The experience has been that the administrative set-up does not provide adequate facility in this direction and this requires looking into. The above applies in full so far as training of recruits of the lowest standard is concerned; but in regard to the other recruits in higher grades, the procedure varies to a very great extent. The trainees are to be sent round to the various sections of the office for getting instructions from the staff according to a previously approved programme and they are subjected to a test from time to time as each aspect or branch of the work is finished. There is a snag in this arrangement in that in the absence of current manuals laying down correct procedures, the information furnished by the staff, who may either have been ill-informed or may be indifferent, is accepted by the trainees, without question. The need, therefore, for a proper selection of the staff, for instructing the trainees is obvious. But such people would necessarily feel that being already pressed with their regular office work, the imposing of training is adding to their troubles. Such staff should, therefore, be contacted by the authorities and the sense of loyalty to their work should be impressed upon them and appreciation shown in the shape of an entry in their service records if their instructions are found satisfactory both from the trainees' point of view and from the administrative point of view; such entries being taken into consideration when promotion has to be decided later on.

In respect of gazetted probationers, normally the senior supervisory staff will be required to devote a portion of the day for giving instructions to the probationary officers so that they might be able to discuss, if necessary, doubtful points and thus enable them to grasp the procedure. In the absence of up-to-date codes and of office manuals defining detailed procedure, the supervisory staff will have to shoulder a lot of responsibility when they take up instructing.

In view of the above position, it is apparent that a refresher course should also be provided for from time to time for the various categories of staff in service. This is an essential point as in various time-scales of pay, efficiency bars have been prescribed; the

test of such efficiency being carried out by examination of the knowledge of the staff concerned either orally or in writing.

Another aspect that has to be considered, very seriously also, is that whenever a qualifying examination has been passed by a candidate for further promotion, the result of such examination should not be treated as equipping him with the requisite quality of knowledge which would be required in his day-to-day work. The examination would only declare that under certain circumstances, the knowledge he has acquired is superior to that of others. But unless, such book knowledge which he has acquired is supplemented by a practical knowledge, the quality of work that can be expected from such candidate is bound to fall short of requirements. We have many times before pointed out that these passed candidates should also undergo a course of instructions in practical working to acquire sufficient capacity to enable them to render efficient service in a higher post.

Summarising, it will be found that not only initial training is required, but also a practical training and a refresher course of training will also be required in due course to get satisfactory work from the staff.

Suffice it to say that time, labour and money spent on such training is bound to be of utmost value to the administration in later stages as the quality of work turned out by them is bound to be far superior to that got from them without such assistance. We have often heard complaints from Divisional Officers that newly passed candidates do not give them as much assistance as is to be expected of men holding such positions by years of experience. While, therefore, we have to raise the standards of work suited to the times, we have also to see that the necessary staff to cope with such standards should also be available. There is no use, in referring to orders affording facilities of training, because more often than not, lectures etc. to examinees in particular, are started very late and sometimes even half-heartedly. There should be a systematic approach to the subject and what has to be done, has to be done well.

We also feel that in the Railway Accounts Field, the attention paid to training of Staff is not either very serious or programmed in such a manner as in the Railway Audit Department or for the matter of that in the Civil Accounts side. It is certainly worth considering the feasibility of having a regular Accountancy Training School attached to every office similar to such training institutions in the Commercial Branch of the Railway in Station Working, Signalling etc. In the alternative, the Railway Administration should consider the possibility of subsidising Training Institutions for imparting instructions in Railway Accounts and recognising their services. Candidates obtaining such instructions may be required to pass the qualifying examinations prescribed departmentally.

In short, while the Railway Ministry has admitted the need for training staff long ago, they have confined themselves more to the technical and commercial branches of work, and Accounts Branch has not progressed in respect of training as systematically as the other Departments. But to the Railway Administration as a whole, the Accounts Branch is as valuable as any other, and all branches should progress together, as limping by any one would upset the general balance.

It is hoped that the Financial Commissioner will give serious consideration to this aspect, and take immediate steps for the improvement of the position of training facility so far as the Accounts Branch is concerned.

Appendix II-A and III-A Examinations — December 1957

These examinations were held on the prescribed dates and the question papers have been generally accepted as fair. There is, however, as usual some section or other of the candidates complaining about difficulties in one or the other paper. We hope, to review these papers on receipt of a complete set from the authorities and to offer our comments as usual, in due course.

It is obvious that a certain welcome change in the model of the papers is apparent this year. It is hoped that the performances of the candidates are also better than usual and there is every reason to hope for a larger number of passes than in the past.

The number of candidates appearing for these examinations is on the increase and especially those for App. II. The number of candidates on each railway for this December 1957 examination seems to have gone up to thousands. Obviously, the temptation of a higher grade of pay and the retrospective increment have goaded them. It is hoped that they would have earnestly strived for qualifying themselves for better prospects.

Railway Minister's Prophecy

A spate of accidents has occurred in the Railways during the last week, in the wake of the Railway Minister's assurance that railway accidents were on the decrease, just before the commencement of the year. Apart from the magnitude of the accidents, at least one of which was most serious in recent times, there is every reason for an urgent approach to this problem in order to ascertain the causes contributing to the accidents and arranging satisfactorily for a non-recurrence of the same in any place. If the staff responsible had any motives or were slack in their work, they require due attention by the Administration. There is no gainsaying that a little indiscretion or carelessness on the part of even a pointsman for the matter of that, results in a terrible loss to the Railway, loss in traffic, loss of Rolling Stock, loss of life, payment of compensation, etc. It is therefore, the duty of the Administration to bring home to the staff the absolute need of rigid adherence to safety rules and, more than anything else, to a sense of devoted loyalty to the employer who sustains them.

The Economics of Electrification

BY P. R. K. MENON, *Deputy Financial Adviser & Chief Accounts Officer, Eastern Rly.*

In the second Five Year Plan the Government of India expect to spend approximately Rs. 80 crores on the electrification of certain sections of the Indian railways. A major portion of this amount is to be spent on the electrification of the railways around Calcutta, where a start has already been made on the Howrah-Burdwan main line and the Tarakeswar branch. It will be interesting to recapitulate the economies offered by this method of traction with special reference to the Calcutta area.

For a study of the financial appraisal of electric traction, it is really not important to go into the details of the technical questions such as whether electrification is carried out on the 1500 or 3000 volt D.C. system or on the 50 cycles 25000 volt single phase A.C. system. The capital expenditure for electrification is mainly for the provision of overhead equipment, transmission lines, substations wherever necessary and rolling stock. For the suburban sections, the item 'rolling stock' also includes the electric multiple unit stock. Generally, more than 50 per cent of the expenditure on electrification is for the provision of rolling stock.

RECURRING FINANCIAL ADVANTAGES

The recurring financial advantages of electrification are the savings in operational and maintenance expenditure and the increase in earnings. Whereas a steam locomotive would require an engine driver and two firemen on the foot plate, an electric locomotive requires only a driver and a mate in the cab. For the suburban sections, against three men for a suburban steam locomotive, only one cabman is required for the operation of the electric multiple unit stock.

The cost of running the electric rolling stock is generally cheaper than its steam competitor. The maintenance cost of the electric rolling stock is very much less than the steam stock. At the same time, electric locomotives and multiple unit stock can be used almost for 24 hours of the day whereas a steam locomotive's usage is limited to about nine to ten hours a day. All these factors contribute to the savings on account of electrification.

For the Calcutta suburban sections east of Burdwan, only the saving on account of the introduction of electric traction has been assessed at approximately Rs. 65 lakhs per year.

MORE TRAFFIC BRINGS MORE REVENUE

As electrification increases the capacity of the sections electrified, there is increase in traffic earnings on account of the additional traffic. Experience has shown that as suburban electrification is introduced, more and more of the city dwellers move into the suburbs, coming into the metropolis only for their work every day.

There is also the increase in the traffic in the normal course on account of the establishment of the various industrial projects in India, such as the three new steel plants at Bhilai, Durgapur and Rourkela respectively, and also the increase in the output of coal to meet the Second Plan needs of the country. This additional traffic cannot be carried by the present method of steam traction unless large-scale civil engineering works, such as doubling the sections, remodelling of stations etc. are undertaken. Besides, the gradients obtaining on some sections are so severe that it would almost be an impossible proposi-

tion to haul the additional traffic with steam locomotives.

The increase in traffic earnings on account of these reasons is, therefore, correctly attributable to electrification. The following figures show the anticipations of the increase in traffic earnings on certain sections proposed to be electrified in the Calcutta area :

- (a) Suburban section east of Burdwan on Eastern Railway Rs. 282 lakhs.
- (b) Howrah-Khargpur 90.5 „
- (c) Burdwan-Moghalsarai 497.4 „

It is a generally accepted principle that the thermal efficiency of a steam locomotive is somewhere in the region of 5 to 6 per cent whereas the efficiency of a thermal plant burning coal is in the region of 15 to 20 per cent. Allowing for the losses in transmission lines, overhead equipment, sub-stations etc., the net thermal efficiency of the electric locomotive has been assessed to be in the region of about 12 to 15 per cent, which means that an electric locomotive is $2\frac{1}{2}$ to 3 times more efficient than a steam locomotive. It, therefore, follows that for the same amount of coal burnt, it is possible to get much more work by an electric locomotive than a steam locomotive.

At the same time more coal can be made available for metallurgical purposes.

RELEASE OF OVER-AGE STOCK

Apart from the handsome return on the gross outlay, the proposed electrification of certain sections of the railways in Calcutta is expected to result in the release of a large number of over-age steam locomotives and carriages. Locomotives and carriages are replaced according to the life of the rolling stock and their condition. During the war and for the a few years thereafter, the replacements of rolling stock on Indian railways have been very much in arrears. The result has been that Indian Rail-

ways at the moment carry this over-age stock. Their maintenance and operational costs are naturally very heavy; but they have to be maintained in view of the ever-increasing traffic.

At present, on the Eastern Railway, 352 over-age locomotives and 322 over-age suburban carriages are still being used intensively to meet traffic demands. When the work of electrification is completed on the Eastern Railway, it will no longer be necessary to use them as they have passed their normal life.

In view of the fact that on account of this release, these locomotives and carriages need not be replaced, it is correct from the broader angle to take into consideration the savings on account of the non-purchase of this rolling stock also in assessing the financial advantage of electrification.

Then, again, if electric traction is not introduced, large-scale civil engineering works will have to be undertaken to increase the line capacities of certain sections of Indian Railways.

Rs. 18-CRORE SAVING

Ignoring the savings under the particular head, a conservative estimate of the expenditure that will be avoided on account of non-purchase of rolling stock alone is about Rs. 18 crores. Although according to the present accepted rules of replacing rolling stock, the expenditure on this account is to be debited to the Depreciation Reserve Fund, the fact remains that on account of electrification, approximately Rs. 18 crores will be saved to Government on account of the non-purchase of rolling stock alone.

It is important that these savings in capital expenditure should be taken into account for any financial study of the problem of electrification. While, therefore, electrification at any time would be a financially justified proposition, the change-over at this particular time during the second Five Year Plan, when there are a large number of steam loco-

motives and carriages awaiting replacement, would appear to be most appropriate.

ELECTRIC TRACTION IN COAL AREA,

A question that is very often asked is: "How is electrification justified in the Calcutta area where coal is available in plenty in the neighbourhood?" To understand this problem, it is important to remember certain basic facts. The operational and maintenance costs of fixed electrical equipment and rolling stock are considerably less than those operated by steam.

The real disadvantage of electric traction lies in the cost of overhead equipment and substations (where necessary) required for transmitting power to locomotives, constituting a substantial portion of the total cost of an electric traction scheme. The cost of this fixed equipment does not vary appreciably over wide ranges in traffic density and, therefore, the cost of service on this account per unit of traffic density varies inversely with the density of traffic.

ELECTRIFIED MILEAGE IN INDIA (March 31, 1956)

Railway	Route	Mileage	Track Mileage (excludes sidings)
Central	B.G.	184.85	129.95
Western	B.G.	37.25	112.50
Southern	M.G.	18.14	36.28
Total		240.24	578.73

On the other hand, the haulage costs per unit of traffic density which increases directly with the increase of traffic density will be less under electric traction than that under steam traction. A point will be reached when the saving in haulage costs will equal the cost per unit-traffic density of the fixed equipment under electric traction. Any further increase in traffic density will result in lowering the combined costs of fixed equipment and haulage in favour of electric traction.

The following table shows the estimated traffic density in million trailing ton-miles per single running track-mile on the Eastern Railway proposed for electrification :

Howrah-Burdwan (Main Line)	9.88
Howrah-Burdwan (Chord)	15.51
Burdwan-Asansol	9.83
Gomoh-Gaya	18.90
Gaya-Moghalsarai	19.65

A detailed analysis of the conditions in and around Calcutta on the basis of the cost of coal has revealed that for any traffic density in excess of 4.23 million trailing ton miles per running track mile per annum on a double track route, electric traction will be more economical than steam. As the traffic density of the sections to be electrified is above the minimum requirement, it can easily be understood how electrification is justified in the Calcutta area.

Economy Drive on Indian Railways

In common with other Ministries of the Central Government, the Railway Board has set up an Economy Committee with Additional Members of the Railway Board, the Director in charge of Finance and the Joint Director in charge of the Efficiency Bureau as its Members.

Each of the Zonal Railways will also have a counterpart of this Committee with Senior Officers in charge.

Even before the appointment of this Committee, the Railway Board had taken various measures to effect the strictest economy in railway expendi-

ture. Action has also been taken to ensure that constant vigilance is exercised to get the most out of the railway's existing assets and resources of men and equipment.

Apart from the stoppage of works connected with "prestige buildings", a review has been undertaken of all works sanctioned, but not yet started. The object is to go ahead only with those which are inescapable in the light of the prevailing circumstances, and to prune to austerity standards those which are ultimately to be executed. Although all works to be undertaken under the Railway Plan have been strictly scrutinised, a review will be made with a view to eliminating or modifying any item which may possibly result in economy.

Apart from the pruning of Projects, the Railway Board Committee's attention has first been given to streamlining

of office procedure, reducing correspondence and returns, and exploring ways and means of generally reducing work and raising the standards of efficiency in offices. The justification for the continuation of the sanctioned posts in the light of the present circumstances is also being examined.

Similar economy committees on the Zonal Railways will undertake detailed work in the "field".

Efficiency "cells" have also been set up on the Zonal Railways to carry out "sample checks" of projects to find out whether these have been properly planned and whether they are being executed with an eye on the need for the strictest economy not only of money, but also of essential construction materials which are in short supply.

(By Courtesy—Indian Railways).

Academic Occasions

A professional society such as this Institute (of Cost Accountants) must to a considerable extent be judged by the contribution which it makes, by scientific enquiry, to the sum of knowledge of the subject in which it specializes. In this process, the annual summer school, held in conditions ideally suited to profound study and weighty disputation, plays a vital part. Here, for a few days, members put aside the cares of business and in an atmosphere eminently conducive to constructive thought, discuss with colleagues from a wide variety of industries and places the authoritative papers put before them. Also, by means of those informal contacts in which lies so much of the value of these occasions, they exchange views on a whole host of professional ideas and problems left unconsidered in the press of work-a-day life.

The experience of living and working for a time, albeit only too short, in one of our older universities will be a unique one for the majority of those attending the summer school since there has not—at least until fairly recently—been a large flow of graduates into the profession. Now, however, as readers of this journal will have noted, agreements have been made with a number of universities whereby graduates who have studied commerce, economics and allied subjects are given a measure of exemption from the examinations and so enable them to embark immediately on professional studies proper. This development is welcomed in the belief that the trained graduate mind has a special contribution to make to the Institute and its activities.

[By courtesy—The Cost Accountant (London)].

"Trained Supervisors can Increase Efficiency"

P. C. BANERJEE, B Sc. (Hons.) Diploma in Social Welfare.

Asst. Personnel Officer, Eastern Railway.

"Grow more" is the slogan of the Industrial era. A neck-break competition is going on between one country and the other. The one which has the largest production at its credit is the most prosperous and plays the most vital role in the International sphere today. The bid for increased production has therefore engaged the attention of the capitalists and the government of every country on the globe. The old system of hire and fire has been tried for long years but the changed conditions, ideas and ideals are not congenial for increasing production through this process, which had therefore to be discarded.

Then, what is the golden mean to get more and more from the workers was the question. "Give more" in cash, kind and in any other form which may change the attitude of the workers. It is not the money alone which always helps, not also the amenities to the workers, which of course reflect on the workers, but the best incentive is to respect the worker as man. When a worker comes to a plant, his sole purpose is to have bread. Once the problem is solved, he goes for a shelter. When both these fundamental necessities of life are attained, he wants to live like a man, status, honour, respect, love, affection and everything which a human being in any other sphere wants. He sells his labour in the plant for his sustenance but does not sell himself. In his own domain he is the master and therefore desires the same respect as a master gets. The concept of scientific management has therefore been gradually modified to the concept of study of workers' motivation and morale. The study of motivation and industrial morale in the Hawthorne Plant of the Western Electric Co., revealed that improvement in production was registered even under

unfavourable working conditions and the operatives did not even feel that there have been marked changes in the working conditions due to charming personality of the supervisors and harmonious relation of the supervisors with the operatives. These epoch-making experiments and the wonderful results opened a new vista in the industrial world—the role of supervisors in industrial production! The question then cropped up as to the ways and means to get ideal supervisors. Recruitment will not solve the problem, existing materials will have to be utilised and brought up to the standard with necessary training. This is the concept of training within the industry or the 'T.W.I.'

We are to train the supervisors—a supervisor has been defined as one in-charge of people or one who directs the work of others. If one has to function as incharge of some people or to give them direction to work, he should possess certain qualifications. Studies proved that the following qualifications are essential for a supervisor:—

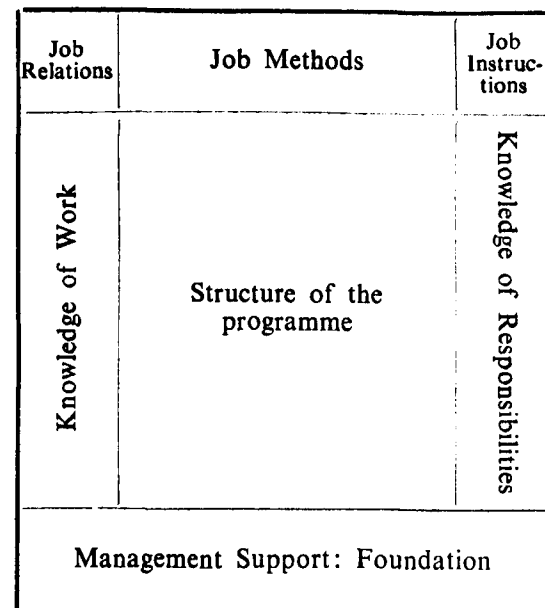
- (i) Knowledge of work.
- (ii) Knowledge of responsibilities
- (iii) Skill in instructing.
- (iv) Skill in improving methods.
- (v) Skill in leading.

As regards the knowledge of work and responsibilities, outside training is not of much avail as these are purely departmental affairs. For a supervisor to improve himself, knowledge of work is an essential criterion, as he can then only try to bring improvement in methods, eliminate waste, re-organise the working methods etc. and in doing so, he has to undertake responsibilities

as well. With these two basic things at credit, the social scientists have tried to study how the supervisors can go ahead. The T.W.I. therefore aims to impart adequate training to the supervisors within the industry i.e., within the work situation on the remaining three items so that, they can secure maximum production from the workers, who will make necessary efforts to effect the production, because they get pleasure in the work.

In regard to the skill in instructing, the supervisor has to learn the technique of imparting instructions to his staff. The approach should be to adopt preventive measures by planning in advance. He has in every dynamic institution to effect improvement. He has to anticipate the psychological reactions in the employees when a new proposal has to be given effect to and create necessary background to see how best the employees would receive the same. Re-organisation, improvements in working procedure and plans, intensive use of man-power and machines, elimination of waste are the goals of every good supervisor and these he has to adopt in his section not by coercion but by tactful approach so that, the employees like the changes and feel that these are necessary in the interest of the organisation and consequently in their own. Skill in leading will bring perfection. The foreman has been termed as the pivot of the plant. The workers rally round him with all their problems and grievances and the management bank on him to get their plans through. With this peculiar position leadership is an essential virtue for his success. For giving effect to the T.W.I. programme however, the co-operation of the management is of utmost importance and if the management mean real business, full facilities are to be given to enable the supervisor to carry the programme through.

It will be worthwhile to illustrate the programme by means of a diagram as follows :—



It will be observed from the diagram that the support of the management is the basic foundation on which the entire programme depends for its success. The knowledge of work and the knowledge of responsibilities are the two pillars to hold the actual structure of the programme. The component parts comprise of job-instructions, i.e., skill in instructing; job methods i.e., skill in improvement by exploring the ways and means to better the working methods, work study, rationalisation, reorganisation, etc., and then job relations, i.e., skill in leading, to get the workers do the work in a happy atmosphere and for the supervisor to be a sea-sound leader among the employees.

Salient features :—The programme is implemented by training a batch of supervisors, who in their own turn dissipate the methods to his colleagues by group discussions. T.W.I. is more a practical theme than a theoretical study and therefore the problems as they crop up require tackling and through this

process, the programme goes through step by step and attains perfection. We shall now discuss some of the steps which successful supervisors have suggested as a result of their experience during the process of implementation of the T.W.I. programme. They are :—

Step I : Make friendly with a new employee. First impress him. How to do it?

- Wear a smile
- Tell him about your name and get his
- Wish him
- Show interest in him by asking questions
- Express sincere desire to help him and to improve his qualities
- Tell him you will welcome questions.

Step II : Explain the important rules and regulations he has to follow or the company want the employees to follow. Such as :—

- Service conditions
- General Safety rules
- Working rules
- Notification of absence, leave, etc.
- Token, passes, identity and badges to be taken.
- Restricted areas, if any
- Plant protective regulations
- Discipline, appeal and conduct Rules, etc.

Step III : Tell him about his prospects, opportunities and amenities etc. Such as :—

- Privilege leave he can get
- Medical & Health services
- Recreation, educational, welfare etc., facilities
- Promotional opportunities, departmental examinations etc.

- Pay rates, overtime allowance, holidays, night-shifts etc.

- Information about other departments

The above is only illustrative and additions and alterations should be made as necessary, to suit the local conditions, after the above steps have been taken, he should be introduced to the persons with whom he has to work or keep contact.

All the above steps represent the psychological approach to create interest in an employee in the plant and the working atmosphere. The foundations of happy industrial relations are to tackle the preventive side of the problem i.e., to see that the problem does not grow to any length but solved immediately at its inception. In the course of the work therefore, the following steps have been suggested :—

(1) Let each employee know how he is getting on i.e., he should have definite idea about the job he has to do and how he is doing the same. To help the employee the supervisor has to :—

(a) decide what is expected of an employee. He has to point out ways and means to improve.

(b) give credit when due and look for extra and unusual performance. The employee has to be told right-away when necessary.

(c) tell people in advance about changes that will affect them and reasons for the same if possible, to get them to accept the change.

(d) make the best use of each person's ability and to look for ability not being used now. He should try not to bring outsiders affecting the avenue of advancement of the existing people. He should never stand in a man's way.

(e) try non financial incentives, which can be given without waiting for any directive from the executives. These are—posting of individual records and

standing, showing results graphically, creating healthy competition among workers, fostering team work, recognising one's abilities, talents etc.

The above are also fundamental principles of psychology which may be applied in every field of human activities.

If however, in spite of best efforts on the part of the supervisor, the problem does actually come, it is to be diagnosed and action taken to solve the same. The proposed steps are as follows :—

1) get the facts i.e., try to probe into the background of the problem when it has actually come inspite of best efforts, there must be reasons behind it. The supervisor has to go into the root.

(2) After the facts have been obtained, the supervisor has to weigh the same and take decision.

(3) The next step is to take action accordingly.

(4) The last is to check the results.

These steps can only complete the cycle of action on the part of a supervisor in tackling a problem successfully and to acquire experience for his future line of action.

T.W.I. has been a house-hold word today in England, America and other such industrially advanced countries, who have found that by actually implementing the programme, the production has registered a considerable increase. In some cases, it has even increased upto as high as 40%. The I.L.O. took the idea and has been sending experts to various countries for setting up T.W.I. centres. A centre for training has also been started in India in Bangalore and named as the Asian Man-Power Field Office. Two batches have already been trained in this organisation and work of training other batches is in progress.

The concept of T.W.I. is now being applied to other categories of staff besides supervisors outside the factories i.e. in offices, institutions etc. and has shown appreciable improvements. For the Indian industries this is particularly effective inasmuch as production is at a low ebb whereas there is vast manpower. If properly canalised, production can be boosted up to a considerable extent, which will go a long way to improve national income and standard of living, in India, which are the crying needs of the day.

Your Provident Fund Account

BY SRI S. K. DATTA RAY

Keeping correct Provident Fund Accounts on railways is a big job. How this is done and steps to improve efficiency are described in this article.

(By Courtesy—Eastern Railway Magazine)

The Provident Fund Act No. XV, which was passed in 1925 extending to the whole of the then British India including British Baluchistan, defined compulsory deposit to Government Provident Fund, Railway Administration, &c. It amended and consolidated the

law relating to Government and other Provident Funds.

Provident Fund of Compulsory Deposit in any Government or Railway Provident Fund cannot be assigned or charged and cannot be liable to attachment under any decree or order of any Civil

Revenue or Criminal Courts in respect of any debts or liability incurred by the subscriber or depositor nor by the official assignee nor any Receiver appointed under the Provincial Insolvency Act 1920.

The rules relating to the State Railway Provident Fund are not, however, applicable to those Railway employees whose services were taken over by the Government from the old Company Railways and who were permitted to remain under the rules of their parent companies as amended from time to time.

TEMPORARY STAFF

Temporary non-pensionable Railway staff are eligible to subscribe to the Provident Fund to the extent of 1/12th, i.e. 8.33 per cent of their pay and dearness pay after completion of one year's service, except casual and daily rated staff. This rate is also applicable to permanent ones. Workshop staff, however, are eligible to contribute to the Provident Fund after the completion of three year's continuous service. The temporary staff allowed to subscribe after completion of one year's service are also eligible to Government contribution to the same extent of subscription and interest thereon at the current rate of interest after completion of three years continuous service with retrospective effect.

For each member eligible to subscribe, a Provident Fund Account Number is allotted by the Accounts Officer on receipt of an eligibility statement from the executive offices, showing the name, designation, station, date of appointment, date of confirmation and date from which it is proposed to make a subscriber of the fund. Each accounting unit has allotted set of numbers from which a number is given. This number is unchangeable throughout the entire service, even if he is transferred from one unit to the other. The eligibility statement is returned by the Accounts Office after entering the name of the staff concerned in an Index

Register which is usually maintained there in alphabetical order. This is nothing but a serial number. On receipt of a copy of the eligibility statement in the Executive Offices, the Account Number is also noted in the service-sheet of the employee and the Pay Sheet Preparing Unit is advised of it to arrange to recover the deduction from his salary.

The recoveries from the staff are made through Provident Institute Journals submitted along with the salary bill to the Accounts Office. In course of audit of the salary bills, the recoveries thereunder are also compared with reference to the particulars in the supporting Provident Institute Journals. After the audit, the Provident Institute Journals are handed over to the Provident Fund Section of the office with the Abstract No. quoted therein, through which the bills were passed for payment.

The Provident Institute Journals are entered serially on the credit side of the Debit and Credit Registers maintained in the Accounts Department and the net total of such journals is tallied with General Books.

* Each register has two compartments, i.e. debit and credit. Provident Institute Journals are then handed over to the ledger posters, who arrange them departmentwise and post the entries in the respective ledger accounts of the staff concerned.

After the completion of posting in the ledger accounts, the recoveries that could not be posted into the Checksheet Part I, which is only a summary of all accounts and contains not only subscription of individual accounts but also provides for a column for Government contribution in each account for both the half years, i.e. September of the year and March of the next year are posted as detailed later on. The recoveries are made from the salary bills for March paid in April to those of February paid in March of the next year i.e., for 12 months to make the account for the year ending the 31st

March. The account also exhibits the opening balances, interest, withdrawal and transfers for both compulsory and contribution sides. The postings in the Check Registers are then totalled and summarised.

The amounts shown in Provident Institute Journals then allocated in the Credit and Debit Registers, i.e. the total amount of each abstract is distributed amongst different ledgers in which postings have already been made. The summary of the Register is then made, thereby arriving at total of individual ledgers which corroborates with the total reached in the check sheet Part I for the compartment, i.e. department. This is known as monthly credit reconciliation.

The check-sheets are then reviewed. The accounts which are left blank and where on postings are made during a month or months are entered into the Unposted Ledger Accounts and compared with the items shown in the Register of Unposted items. Items which appear in both the Registers are then eliminated. The remaining items relate to staff (i) who have not received salary due to leave without pay, (ii) who have ceased to be in service on various grounds and (iii) who have been transferred from one Accounting Unit to another. In regard to item (ii) above, necessary settlement papers are to be called for from the Executive side while for item (iii), balances are to be transferred to the Unit to which they have been transferred.

WITHDRAWALS

The withdrawals, temporary or permanent, from the Institution, are admissible according to the sanction received from the Executive Offices. After a check in the Accounts Office, they are passed for payment.

Temporary withdrawals are admissible on account of the following.

(i) To pay for the passage of the subscriber himself when proceeding on leave

out of India on medical certificate or returning after such absence, or

(ii) To meet the expenses of the subscriber or of any member of his family, his parents, minor brother or unmarried or widowed sisters if they are wholly dependent on him for making a journey in India or outside India under medical advice or to meet expenses incidental to his or their severe illness, and

(iii) to meet the cost of education or overseas passage for education of the subscriber or of any person actually dependent on him in the following types of cases—

(a) for education outside India whether for an academic, technical, professional or vocational courses, and

(b) to pay on obligatory expenses on a scale appropriate to the subscriber's status which by customary usage the subscriber has to incur in connection with the marriage of his/her children and dependent relatives.

The amount of the advance shall not exceed—

(a) under category (i) above, the actual cost to the subscriber of the passage,

(b) under category (ii) and (iii) (a) above, rupees, five hundred if the subscriber is non-gazetted and rupees one thousand if he is a Gazetted Officer and

(c) under category (iii) (b) three months' emoluments. The advance is recoverable in 12 to 24 instalments.

Final withdrawal of Provident Fund Money is also admissible for marriage of children only as follows :

(i) The final withdrawal may be permitted in case of only such subscribers as have either rendered not less than 25 years' service (including broken periods if any) or have less than 5 years to attain the age of superannuation whichever is earlier, and

(ii) The amount of withdrawal in respect of each marriage will be normally limited to—

(a) Six months pay, in case of a daughter's marriage, and three months in the case of a son's marriage.

(b) the amount actually contributed by a railway servant along with interest thereon standing to his credit whichever is less, and

(c) in special cases, the sanctioning authority may relax the limits at (a) above, but in no case more than 10 months' pay be sanctioned provided further that withdrawal for a son's marriage should in no case exceed 6 months' pay.

Two advances, however, should not be sanctioned at the same time.

Final withdrawal from Provident Fund is also admissible (i) when the representatives of a deceased subscriber have been left in indigent circumstances, an advance not exceeding rupees two hundred and fifty may be made to meet funeral and incidental expenses if it is satisfied that the amount advanced can be recovered at the time of payment of the fund money or otherwise, and

(ii) For house building in the case of such Railway servants as have either rendered not less than 25 years' service (including broken periods of service, if any) or have less than five years to attain the age of super-annuation.

Withdrawal from the fund shall not also exceed—

(i) one half of the amount standing to the credit of the Government servant in the cases of non-contributory Provident Fund of the amount actually subscribed by him along with interest thereon standing to his credit in the case of contributory Provident Fund, as the case may be ;

(ii) the actual cost of the house including the cost of site or repayment of the loan in that behalf, whichever is less,

(iii) for retirement or superannuation, (iv) for resignation, dismissal and removal from services,

(v) for death, medically unfit &c.

(vi) for transfer finally from Railway to other Government Department, and

(vii) payment of insurance premia, policy having been already hypothecated in the name of the President of India. This can be withdrawn half yearly and the receipt should be shown to the Accounts Officer.

NOMINEES

Every subscriber to the Provident Fund can make a nomination in favour of certain person or persons called 'nominee' or 'nominees' conferring on them the right to receive the whole or part of the amount that may stand to his credit in the fund (excluding the amount of special contribution) in the event of his death before the amount standing to his credit has become payable, before payment has been made. The nominees may be dependents or other than dependents. If no declaration has been given and nomination is not forthcoming, the amount is payable to the members of his family, as per rules.

The declaration has to be made in the prescribed form which comprises six columns to be filled up properly and submitted to the Accounts Office through the Executive Office for noting in the Provident Fund Declaration Register. One copy should be kept by the Accounts Officer in his safe custody and the other forwarded to the Executive Office for the Service Record.

The nomination can be altered in the case of the death of the nominee or if the subscriber wishes to change it during his service according to his will filling up the cancelling form.

(To be continued.)

Subjects of Moment

Deduction from wages towards voluntary contribution to Government National Development Projects

As deductions from pay on account of voluntary contributions towards National Development projects sponsored by the Government of India are not permissible under Section 7 (2) of the Payment of Wages Act, the Railway Board have ordered that the Staff concerned should be advised to make such contributions direct to the appropriate authorities.

(R.B. No. E(L) 57-AT8-9 dated the 19th Oct. 1957).

Railway Lawyers to refrain from handling cases against Railways

The Railway Board consider that Lawyers selected by the Railway Administrations to conduct Railway cases should refrain from taking on cases against the Railways.

(R.B. No. E(G) 57LL-2-21 dated 6-8-'57 and No. 6578 T.C. dated 14th October 1957).

Permits for entry into Marshalling yards and Goods Sheds

The Railway Board desires that the feasibility of enforcing permit system for regulating entries into Marshalling Yards and Goods Sheds, where either pilferage or trespass is happening or is likely to happen, should be considered, and has asked for the comments of the Railways.

(R.B. No. 57-Security/68/CI/I dated 15-10-1957).

Free Telegrams regarding Passengers' Left Luggage

The Railway Board have decided that telegrams in connection with luggage and other personal belongings which

passengers leave in trains or waiting rooms etc., should not be sent free of cost.

(R.B. No. 703-TG/1/57/Misc/III dated 18-10-1957).

Reservation of first class accommodation

The Railway Board have decided that the present arrangements regarding reservation of first class compartments during days and nights should be continued for a further period of two years, after which it should be reviewed again.

(R.B. No. 171-TG/53/2 dated the 26th Oct. '57).

Telescopic Demurrage Charges

With a view to consider the feasibility of introducing Telescopic demurrage charts, the Railway Board have called for estimates indicating the numbers of wagons per year :

- (i) unloaded within the free time ;
- (ii) sometime after the free time ; and
- (iii) not unloaded at all.

(R.B.No.TCIII/3030/57 dated 2-9-1957)

Staff Benefit Fund Clerks

The Railway Board have decided that on those Railways where there are separate Clerical Staff employed by and at the cost of the Staff Benefit Funds for work in connection therewith, the work should, with effect from the 1st Oct., 1957, be handled by the Staff in the normal Railway Cadre amongst other items of work, since the quantum of work is quite small and should not ordinarily require more than a senior clerk and a junior clerk.

(R.B. No. E(W) 54FU1-1 dated 26th Sep., 1957).

Advertisements of Stores supplied to Railways

The Railway Board have desired that in future when accepting Stores, care should be taken to see that they do not bear advertisements, which should normally be paid for at commercial advertising rates.

(R.B. No. 57/779/56/RS (G) dated 25th Sep., '57).

Free telegrams in cases of Accidents

The Railway Board have indicated to the Railways that telegrams to the closest relatives conveying news of safety of those travelling by a train involved in a serious mishap should be sent free of cost, but that the Senior most officer in charge of the local arrangements regarding the accident should decide when to grant such facilities.

(R.B. No. 703-TG. 1/57/64 dated 6-11-1957).

Reservation of Class III seats a week in advance

The Railway Board have desired the adoption of a uniform policy for advance reservation of Seats in III Class compartments and desire that arrangements should be made by the Railways to reserve seats a week in advance.

(R.B. No. 703-TG1/55/56/XII dated 10th Sep., 1956 ; and 1502-TG/IV/57/1 dated 1-11-1957).

Commission to Tourist Agents

With effect from 1-12-1957, the rate of commission payable to recognized Tourist Agents under Clause (ii) of the Agreement Form III should be reduced from 5% to 3½% (instead of 2½%) on tickets issued under Clause 2 (i) of the Agreement.

(R.B. No. 6194-TC dated 7th September 1957).

Charges for special nursing

The Railway Board have decided that the amount of reimbursement to a Railway servant in respect of special nursing should be limited to the amount which is in cases of 25% of the pay of the railway servant concerned for a period for which special nursing was necessary.

(R.B. No. E57 MEI/5/Medical dated 4-8-1957.)

Commercial Advertising on Railways

The Estimates Committee of the Parliament had suggested that there was considerable scope for improvement in revenue from commercial advertising on the Railways. The Board have asked the Railways that they should take active steps to popularise Railway Stations and premises as well as the various Railway publications as useful media for advertisements. The Board also desire that these steps should include personal contact with the Advertising Agencies at a fairly high level in the business world.

(R.B. No. PR/57/70/S dated the 13th Sep. 1957.)

Copies of Court Judgments

The Railway Board have decided that in future Railway authorities should apply direct to the Courts concerned for giving copies of Judgments in cases where such documents are required.

(R.B. No. E57VG-4-1 dated 14th Sep. 1957.)

Re-employment of non-Railway Government Servants

The Railway Board have decided to delegate powers to the General Managers to some extent in regard to the re-employment of non-Railway Government Servants to meet shortage of personnel on Railways.

While the General Managers will determine, from time to time, the categories in which re-employment may be resorted to in various departments, sanctions in individual cases may be accorded by an officer not below the rank of a Head of a Department for re-employment in the intermediate grades, and by an officer not below the rank of a Junior Administrative Officer in respect of recruitment grades.

(R.B. No. E(G)57EM1-13 dated 21st September 1957.)

Collection of Data for the Second Pay Commission

The Railway Board have called for particulars of actual expenditure incurred by the Railways on providing various non-monetary benefits or amenities for the Staff such as Medical facilities, Educational facilities, Quarters, Institutes, Clubs, Canteens, Holiday Homes, Free Uniforms etc., from 1947-48 onwards.

[R.B. No. E(PC)57/3 dated the 1st Nov. 1957.]

Duties of Passenger Guides

The Railway Board have desired the Railways that sustained and constant supervision should be ensured on the part of the supervisory staff to see that passenger guides perform their duties actively.

(R.B. No. 404-TG I/57/3 dated 15-11-'57.)

Re-employment in non-Technical Posts

The Railway Board have pointed out that a large-scale re-employment is being resorted to against non-Technical posts in the Gazetted and non-Gazetted cadres, which is against the spirit of the Board's directive on the subject.

The Board have, therefore, desired that Railways should carefully review the sanctions for re-employment with a view

to see that re-employment is resorted to only when it is impossible to find serving employees suitable in all respects to fill the posts.

(R.B. No. E(G)57 EM1-23 dated 21-11-1957.)

Chief Finger Print Inspector's scale

The Railway Board have decided that the scale of the Chief Finger Print Inspector should be P.S. Rs. 200-300 and that of other Finger Print Inspectors Rs. 150-250.

(R.B. No. E/S/1-15 TRB/13 dated 12-11-1957.)

Withdrawals from S.R.P.F. to meet cost of higher Education

The Railway have clarified that an advance may be drawn for meeting the cost of higher education of a person who is a member of the subscriber's family and who is actually dependent on him and a final withdrawal on these terms will be permissible only in respect of the dependent children of the subscriber.

(R.B. No. F/(E) 56-Adv-6/I.II/ dated 15-11-1957.)

Retention of quarters by the staff transferred to N.E.F. Railway

In relaxation of para 1921-B of the Engineering Code, the Railway Board have decided that officers both gazetted and Class III, transferred to N.E.F. Railway (to be newly formed) should be allowed to retain their quarters on the Railways on which they were working before, on payment of normal rent as per para 1915 (a) E till such time as suitable accommodation is provided to them on the new Railway. These orders are effective till 30-6-1958.

(R.B. No. F(X)-1-57-OR-13/7 dated 30-11-1957.)

Calculations of time of continuous workers among running staff for days of absence

In the case of running staff, while calculating overtime, the practice of crediting 7 hours 42 minutes per day based on the average of maximum statutory limit of 231 hours per month for continuous workers has been decided by the Railway Board to be in order and all Railways have been requested to adopt this calculation; and in the case of other staff, normal or actual rostered hours of duty should be credited in terms of existing Railway Board's Orders of 1942.

(R. B. No. E (SI) 57-ADJ-17 dated 29-11-'57.)

Grant of House Rent Allowance to both Husband and wife when Employed on the Railway

When both husband and wife are living in the same house engaged by one of them, the Railway Board have clarified that the husband and wife will be treated as unrelated Government Servants living in the same accommodation.

The same procedure will also hold good in respect of other cases where Government servants share accommodation with their relatives, who are also in Government Service; e.g., when father and son/daughter are living in the same accommodation.

(R.B. No. E (S) 57 CPC/AL/32 dated 30-11-'57.)

Treatment of a portion of Dearness Allowance as pay for purposes of pension and gratuity

Ref : R.B. No. E (S) 53DA1/7/dated 20-5-'53. Para 4.

Where the persons concerned had retired on or after the 15th July 1955, due to intervention of leave without pay etc., the period of 36 months for the purpose of calculation of average emolu-

ments commenced from dates prior to 15th July 1952, the benefit of dearness pay under the existing order is not admissible, in respect of emoluments drawn before 15th July 1952. To cover such cases, it has now been decided that the emoluments of such employees reckoned under the existing rules should be increased by the dearness pay appropriate to the pay equal to such emoluments, notwithstanding the fact that a portion of the last 36 months may fall prior to 15th July 1952, the date from which the benefit of dearness pay was allowed for the purpose of pension.

(R.B. E (S) 57/DA1/17 dated 12-12-'57)

Casual leave during a period of deputation abroad

In respect of the question whether casual leave can be sanctioned during a period of deputation abroad, it has been decided that there should be no objection to the grant of casual leave in exceptional circumstances by a competent authority to an officer on deputation abroad subject to the following conditions:--

(i) The grant of casual leave should not have the effect of extending the period of deputation;

(ii) In countries where all inclusive rates of halting allowances have been prescribed, the allowances shall not be payable on the days when the officer is on casual leave. In countries where split rates have been introduced, cash allowances shall not be payable to the officer on days when he is on casual leave. The officer will besides in respect of those days be called upon to pay for the cost of accommodation rented for him by the Mission concerned.

(R.B. No. E (G) 57TR1-87 dated 9th November, 1957.)

Retention of Railway Quarters by staff on re-employment

The following procedure has been prescribed in this connection :—

(i) No fresh allotment of quarters shall be made to a re-employed Railway employee nor is he to continue to occupy quarters unless he is borne on the list of essential category.

(ii) In respect of non-essential staff, continued occupation of quarters should not be allowed unless

(a) Provision is made to all essential staff in the waiting list.

(b) the D.S. or the Head of the Department considers that the continued occupation of quarters by non-essential staff is in the interest of Railway Administration despite the fact that essential staff are in the waiting list.

To avoid requisition from staff for occupation of quarters and unnecessary correspondence thereon, it is desirable to make it conditional before re-employing staff that they will not ask for continued occupation of the quarters.

Joining Time to staff on Transfer at their own request

According to Note under Rule 2138 R-II, as introduced by C.S. No. 9, a Railway servant on transfer is not entitled to be paid while on joining time unless his transfer is made in the public interest. Mutual transfers, and transfers at the request of staff, cannot be treated as in public interest, and the transit time in such cases should not therefore be counted as on duty. There is, however, no objection to treat the period as leave in accordance with Auditor-General's decision as introduced in C.S. No. 592 of 28-11-'55 below F.R. 107.

Deduction of pensionary equivalent in the case of re-employed non-gazetted staff

The revised communication tables, forwarded under Board's letter of even

number dated 8-2-1957 should be used for working the pensionary equivalent in all cases of re-employments sanctioned or extended after 1-2-1957. Re-employments sanctioned prior to that date will not be affected by these tables.

(R.B. F (E) 57/PN-5/1 dated 27-9-'57)

Discipline and Appeal Rules

The following amendments to the Railway Establishment Code take effect from 11-10-'57.

I. Rule 1702-R I

Delete 'Note 2' under this rule.

(R.B. No. E (D & A)-57RG6-33 dated 11-10-'57)

II. Appendix XIV-R I

Delete the existing Appendix.

(R.B. No. E (D & A)-57RG6-33 dated 11-10-'57.)

Up-Grading of Clerical Posts

Ever since the issue of the Railway Board's orders dated 7/3/57 on this subject, the provision in regard to reserving 20% of the posts in grade I for direct recruitment, has given room for a lot of criticism. Several of the opinions have been published from time to time in the earlier issues of the Journal to bring home to the authorities the various viewpoints. We have also had occasion to discuss one or two aspects with the authorities at the highest level and we were confident that defects if any, in the implementation of the orders would be carefully scrutinised and remedied. With this background, it is easy for us to feel satisfied with the provision in para 3 of Railway Board's letter No. 'E(S)I-57-CP C-60 dated 30/11/57, which is reproduced below.

3. In partial modification of the decision contained in para 13 of letter No. E(S)I-57CPC-40 dated 7-3-'57, regarding initial filling up of 20% posts in Grade I reserved for direct recruitment, the Board have decided as under :—

(a) Appendix II-A passed graduate clerks promoted on the basis of their relative seniority on or after 1-4-'55 against 80% promotion quota, will be booked against 20% quota for direct recruits, and the vacancies thus released by them in the promotion quota will be filled by other Appendix II passed hands on the basis of their seniority. If any of these "other App. II-A passed hands" so promoted are graduates, they will also be booked against 20% quota for direct recruitment. This procedure will be followed for filling up 80% posts in grade I reserved for promotion quota. After booking App. II-A passed graduates against 20% quota in this manner, if any posts out of this quota remain unfilled, staff mentioned in sub-para (b) below will be promoted against such posts. After absorbing the staff mentioned in sub para (b) below in this manner, any posts out of 20% quota still left unfilled will be filled by the staff mentioned in sub-para (c).

(b) Graduate clerks grade II, who had already passed the App. II-Exam., and were awaiting promotion as C.G.I. should be appointed against the 20% quota for direct recruitment.

(c) Graduate clerks, Grade II, who have not so far passed App. II-A examination, should be promoted to the rank of Grade I clerks in accordance with seniority-cum-suitability, subject to the conditions mentioned below :—

(i) They will be required to pass App. II-A Exam., and for this they will be allowed two chances viz., the forthcoming examination to be held in Dec.'57 and the first subsequent exam. to be held in 1958.

(ii) Such of them who qualify by passing the exam. to be held in Dec.'57 will be eligible for drawing arrears from 1-4-'56.

(iii) Those who fail to pass Appendix II-A exam. in two chances mentioned in

condition (i) above will be reverted back to clerk, Grade II.

Graduate clerks Grade II may be promoted against 20% quota for direct recruitment in any of the cadres for the clerical posts in the Accounts Department which are ordinarily treated as separate cadres. It may, however, be ensured that such transfers of graduate clerks from one branch to another of the Accounts Department should not result in clerks so transferred gaining an unfair advantage in seniority over other graduate clerks already in the branch to which the transfers are made.

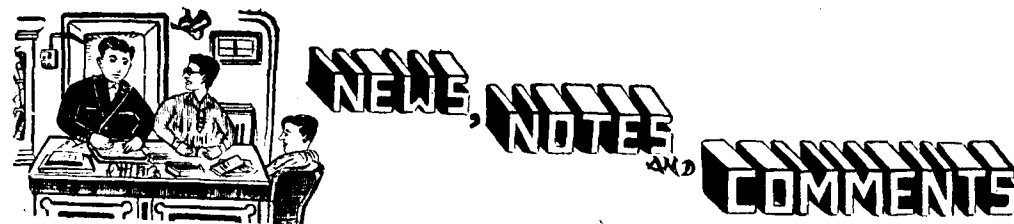
Relief to Passengers involved in Train Accidents

The Railway Board have decided that in the case of persons with limited means, such as 'daily wage earners', who sustain serious injuries or die as a result of the Railway accidents, an *ex-gratia* payment not exceeding two months' approximate wages of the person involved in the accident, or Rs. 200, whichever is less, should be made to the injured or to the dependants of the dead. The amount to be paid should depend upon the extent of injuries and the needs of the persons concerned.

The payments should be made at the spot of the accident, at the personal discretion of a Senior (or Higher) Officer to be nominated by the General Manager, as soon as possible after the immediate needs by way of medical attendance, etc., to injured persons are attended to

These *ex-gratia* payments should not be taken into account at the time of disposal of the formal claims before the *ad hoc* or the permanent Claims Commissioner.

[R. B. No. 893-TG. IV/57/12 dated 16-12-'57.]



Indian Engineers Trained Under Colombo Plan

Twentyfive Indian graduates and engineers will be trained in Britain to join the Durgapur steel works on their return to India. They form the first batch of 300 Indian steelmen who will receive specialized training in Britain over the next four years. The entire cost of the training scheme is being met by the British Government as part of its contribution under the Colombo Plan. Arrangements for the training have been made by the Commonwealth Relations Office in association with the British Iron and Steel Federation. The programme has been carefully phased so that by the time the plant is ready to produce steel, a complete range of engineers will have received specialized training. Of the 25 selected for the first batch, nearly all are already employed in the United Kingdom. The remainder, who have been recruited from various States of India, are to leave for the United Kingdom shortly. Like technicians from other Commonwealth countries, those employed in the United Kingdom have already had experience of working with well-known firms there. The training will be carried out in works throughout Britain and will last from six months to a year. The Durgapur Steel works is being constructed and equipped by the Indian Steel works Construction Co. Ltd., a consortium of 13 British companies—and financed by a loan of some Rs. 35 crores from the United Kingdom under an agreement signed with the Government of India in October 1956.

Importance of Accountants' Role

Delivering the inaugural Address of the Mysore State Chartered Accountants' Association at Bangalore on the 26th Decr. '57, the Chief Minister of Mysore at the outset observed that they were engaged in the building up of the country and innumerable schemes were being implemented. The necessity for the control of money spent and proper scrutiny of accounts was of very great importance. The Governments were investing huge amounts and the public were also asked to invest great sums in industrial and other undertakings. It became very necessary for a set of hard-thinking level-headed accountants to ensure the proper maintenance of accounts, without fear or favour. The accountants were serving a useful purpose and they had a great role to play. He would only ask them: "be hard, but do not be discourteous. We all look up to you to the maintenance of high standards. I am sure, your integrity, honesty, capacity, enlightened approach and efficiency, all can make our new democracy worth developing."

Mr. S. Vaidyanatha Aiyar, President, Council of the Institute of Chartered Accountants of India, who presided, referred to the functions of the Institute. It performed the threefold task of regulating entry into profession, conduct of examinations and taking of disciplinary action against erring members. They in India were far in advance of other countries in this regard. The role of the Accountant was becoming varied and onerous at the present day. He had to play a vital role in the economy of the country. The Accountant was not merely

the tax-consultant, but the key-man on whom the Government was relying to an increasing extent. The Accountant's role, he emphasised, was a very 'substantial' though unostentatious one.

Role of Auditors

While addressing the members of the Madras Region of the Institute of Chartered Accountants in India recently, Mr. Tenneti Visvanatham, Chairman, Company Law Advisory Committee, stated: "The business ethics of the country should be improved. The prosperity of a country depended upon the quality of goods produced and on the business ethics. Without proper business ethics, planning could not succeed. The present im-balance, lopsidedness and gap in statistics were all the accumulated results of defect of character and defect of individual and business ethics. The auditors should discharge their duties without fear or favour and make their due contribution to the reconstruction and development of the country." The profession of the auditors required greater independence and security of employment if they were to discharge their functions fearlessly.

Widening Scope of work of Chartered Accountants

Mr. S. Vaidyanatha Aiyar, President of the Institute of Chartered Accountants of India envisaged for the profession of accountants an important position in the economic organisation of the society and said that the larger the public and Government confidence they could create in their work the sooner would their legitimate goal be obtained.

He pointed out how the scope of the work of Chartered Accountants had been steadily widening far beyond the traditional auditing and accounting spheres and said that not only had they to traverse a wider territory but also adapt themselves to changes taking place in the basic social and economic philosophies and ideologies.

Giving a resume of the recent Manila Conference of the Chartered Accountants of the Far Eastern countries, Mr. Vaidyanatha Aiyar, who attended it as one of the representatives of the Institute of Chartered Accountants of India, said that the development made by the profession in some other countries in the region was not dissimilar to the one made in India.

Mr. Vaidyanatha Aiyar stated that there was a proposal to provide for the regional councils of the Institute in Bombay, Madras and Calcutta, buildings of their own and Government had promised a non-recurring grant of Rs. 5 lakhs for this.

Priority for Schemes for Ry. Expansion over Plans for Amenities

Mr. Jagjivan Ram, Union Railway Minister, while inaugurating the third All-India Transport Users' Conference at Patna on 27th December said: the incidence of Railway accidents was definitely on the decrease and would compare favourably with the most up-to-date railways in the world.

"I am pained when even responsible quarters made the uninformed criticism that the incidence of railway accidents in India was on the increase. They did not realise that such criticisms created an unwarranted scare in the public.

"Given the choice between additional amenities to railway passengers or a few more miles of railways, the Railway Ministry would always choose the latter. I would always prefer a few more miles of railway lines to adding a few amenities to those that already exist."

Mr. Jagjivan Ram assured the conference that the railways will "not prove a limitation to the despatch of food-grains and other essential commodities to the scarcity areas." He said, the railways had taken care to see that the entire demands of foodgrains for north Bihar and U.P. were met with expedition

and for this purpose all movements of foodgrains were programmed in consultation with the Ministry of Food:

* * *

University Centenary - Special Issue of Postage Stamps

To commemorate the centenary year of Bombay, Calcutta and Madras Universities, the Posts & Telegraphs Department issued 3 special Postage stamps on 31st December, 1957 each in the denomination of 10nP distinguishing by design, colour and size. The stamp for the University of Bombay bears a view of the University building and is in violet colours. The Calcutta University stamp also depicts a view of the University Building and is grey in colour. The Madras University stamp depicts the view of the Madras University Building and is in dark brown and in the same size as that of the Calcutta stamp. The first day cover and special folder were also issued to mark the occasion.

* * *

National Railway Users' Consultative Council

At the meeting of the above council in New Delhi on the 28th December, '57 the Railway operating position and a number of other subjects were reviewed and considered. The meeting was presided over by the Railway Minister and Members of Parliament and representatives of Industry, Agriculture, Chamber of Commerce, etc. attended. The Council was informed that during October '57 almost all the railways were able to meet all demands currently.

Members referred to the problem of train unpunctuality and urged that where this was due to human failure or slackness, Railway Administrations should severely deal with those responsible and at the same time provide an incentive for good performance through liberal awards.

The Council generally felt that the existing travel concessions should continue in order to encourage people to see

modern development projects. The members made various suggestions for effecting further improvements, for passenger amenities like better arrangements of reservation of berths more convenient third class sleeping berths, better water supply arrangements and sanitation in compartments.

* * *

Shri K. Sadagopan, Chief Administrative Officer, Integral Coach Factory, Perambur, has after superannuation and extension, been re-employed in the same capacity for a period of one year.



Shri K. Sadagopan, C.A.O., I.C.F.

This is a welcome indication of the recognition by the Government of India of the suitability of an Accounts Officer for a position requiring executive and administrative ability. This at the same time gives the lie direct to the opinion held in some quarters that an Accounts Officer will not make a successful administrator. In this connection, other instances of Accounts Officers being selected for Administrative positions occur to our mind. Sri D. B. Sandilya, also I.R.A.S., is now holding a high executive and administrative position in the State Trading Corporation. Sri D. P. Mathur I.R.A.S. is holding an administrative position as S. Dy., G.M. of the Central Railway.

We congratulate both the Government of India and Shri K. Sadagopan on the

latter's re-employment as Chief Administrative Officer of the Integral Coach Factory for a year, and we hope that the efficiency of the I.C.F., which is already high will soar higher still with the continuance, as Chief Administrative Officer, of Shri K. Sadagopan.

* * *

Amendment of Payment of Wages Act

The payment of the Wages Act is being amended, mainly to increase the present pay limit of the employees covered by the Act from Rs. 200/- to Rs. 400/- per month. This is no doubt a welcome measure, the need for the increase in the pay limit being only natural on account of the increase in the rates of wages generally.

* * *

"See the Country" Educational Tour

A "see the country" tour for children of Railway Board's employees has been organised by the Board's Staff Benefit Fund Committee, to enable the children to see the country at negligible expense to themselves.

The first of its kind to be organised for the employees of the Railway Board, the party consists of 12 children, including children of Class IV employees. On this trip, they would visit Jaipur, Chitorgarh, and Udaipur for a full week, at a cost varying according to the guardian's salary from Rs. 5 to Rs. 20 per child.

* * *

"Increase in Workload"

A Sub-Committee of the tripartite Indian Labour Conference in July drafted a Code for Discipline in Industry in an attempt to tackle the growing indiscipline in industry to which the Labour Minister in his opening speech had drawn pointed attention.

x x x

Among those clauses to which management is to adhere is, first,

"not to increase work-load unless agreed upon or settled otherwise".

Now, at a time when increased productivity is a necessity for the country's economic survival, to place in the most prominent place the phrase "no increase in workload" is dangerous, even though it has been slightly modified. What exactly is meant by no increase in workload, of course, nobody knows, but the worker has a clear enough idea that he can argue that any change in his work is increasing his workload, and it is most noticeable that even among office staff in Calcutta the phrase has caught on, so that, though there may be no increase in his hours of work, and though he may be quite capable of doing the work required of him within the ordinary hours, a clerk will complain of increase in workload if he is asked to undertake some additional duty. When he may know full well that his time was not fully occupied before. In general, it is sound industrial relations to discuss any major changes with the workers before they are introduced, but day-to-day changes simply cannot be discussed beforehand and are naturally left to the discretion of the departmental manager. Until there is a clear definition of what is meant by "increase in workload", the phrase should not be used in a document such as this.

[By Courtesy: Indian Finance]

* * *

Railway Between Ghaziabad and Tuglakabad

The final location survey of the proposed railway line from Ghaziabad to Tuglakabad has been ordered. The length of the proposed line will be 16.08 miles and including the second bridge over the Yamuna river, the estimated expenditure being roughly Rs. 2.97 crores.

* * *

Move to step up Tourist Traffic—High Level Committee set up

A high-level Tourist Promotion Committee has been constituted by the

Government of India to consider ways and means for increasing tourist traffic to India from abroad. The Committee will, in particular consider suggestions made by various non-official and other agencies and ensure expeditious implementation of the suggestions that are found acceptable.

The Cabinet Secretary is the Chairman of the Tourist Promotion Committee and its members consist of Home Secretary; Secretary, Revenue Department, Ministry of Finance; Transport Secretary; Member (Transportation) Railway Board; Secretary, I & B Ministry; Secretary, Ministry of Finance (Department of Economic Affairs); Joint Secretary, Ministry of External Affairs; Joint Secretary, Ministry of Finance (Communications Division); Director-General of Foreign Trade, Ministry of Commerce and Industry; Chairman, Indian Airlines Corporation; Director-General of Civil Aviation; and Director-General of Archaeology. The Head of the Tourist Organisation, Department of Transport, is the Member-Secretary.

At its first meeting held last evening with Shri N. R. Pillai, Secretary-General, External Affairs Ministry, presiding, the Tourist Promotion Committee discussed the question of tourist promotion both in the present context of earning more foreign exchange and the general context of creating goodwill. The Committee felt that steps should be taken to expand Indian tourist publicity abroad.

It was agreed that steps should be taken to improve the amenities available at the international airports of Bombay, Calcutta and Delhi, in particular for transit passengers.

It was decided that India should join the other South Asian countries in conducting a joint tourist publicity campaign for attracting tourists to this region as a whole. In order to step up tourist publicity in the Pacific region, it was also agreed that India might parti-

cipate in the publicity campaigns conducted by the Pacific Area Tourist Association.

To ensure better management of the Rest Houses situated near well-known monuments and tourist centres, it was decided that State Governments be asked to appoint wholtime managers at about 15 selected Rest Houses and that the Central Government should agree to pay 50 per cent of the pay of the managers.

* * *

Monthly Railway Statistics

Gross Earnings: The approximate gross earnings of Indian Railways during the month of November 1957 amounted to Rs. 29.41 crores. They showed an increase of Rs. 1.00 crore as compared with actuals for November 1956.

The total approximate actual gross earnings from 1st April 1957 to 30th November 1957 amounted to Rs. 243.47 crores. This represents an increase of Rs. 21.33 crores as compared with the actuals of Rs. 222.14 crores for the corresponding period of the previous year.

Tonnage Lifted: The total number of tons lifted from 1st April 1957 to 30th November 1957 amounted to 57,820,000 and 14,659,000 respectively over the B.G. & M.G., showing an increase of 4.29 & 10.20% over the actuals of the corresponding period of the previous year.

Wagon Loading: The number of wagons loaded during November 1957 was respectively 451,958 & 279,410 for B.G. & M.G., showing an increase of 0.06 & 7.42% over the figures for October 1957. The total number of wagons loaded from 1st April 1957 to 30th November 1957 amounted to 3,532,490 & 2,174,645 respectively over B.G. & M.G., showing an increase of 5.95 & 11.1% over the figures for the corresponding period of the previous year.

There has been a general increase in the movement of grains and pulses, sugar, iron and steel others, manganese ore and coal for other Govt. Rys. etc; set off by decreases under cotton raw, sugarcane & tea over the B. G.; and similarly, on the M.G. by increases under grains and pulses, jute raw, jute manufactured, sugar, pig iron, metallic ores others, coal for home line and coal for other Govt. Rys. etc., set off to some extent by decrease under Miscellaneous smalls traffic.

* * *

Postal Holidays in 1958

Government of India have published the following list of holidays for the Post Office throughout India in 1958.

Jan. 1	Bank Holiday
Mar. 6	Holi
Apr. 4	Good Friday
Apr. 21	Id-ul-Fitr
June 28	Id-ul-zuha
July 28	Muharram
Aug. 15	Independence Day
Sep. 6	Janmashtami
Sep. 26	Miladi Nabi
Oct. 2	Mahatma Gandhi's Birthday
Oct. 22	Dusserah
Nov. 11	Diwali
Nov. 26	Guru Nanak's Birthday
Dec. 25	Christmas Day.

Some Regional holidays are also allowed in addition.

* * *

Opening of Quilon-Kottayam Section of E-Q. Railway

This section was opened on the 6th January '58 by Sri B. Ramakrishna Rao, Governor of Kerala. Completion of the Ernakulam-Quilon link serves as a life line to bring Malabar, Cochin and Travancore closer and also provides a through link between the Northern and Southern areas. It is hoped, that this Railway link will increase the prosperity and well being of these three pre-integrated units of Kerala.

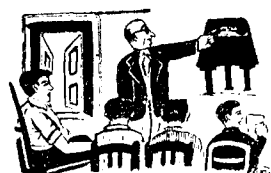


GERSOPPA FALLS (JOG FALLS)

By Courtesy: Southrailnews.

Checking tickets on a railway train, the Inspector came across a woman who said: "I'm sorry, Inspector, but I'm afraid th at my dog has eaten my ticket".

"Then Madam", retorted the Inspector, "I suggest you buy him a second helping".



Readers Forum

Appendix III Examination—December 1957.

Question Papers on Stores and Workshops

A correspondent from Bombay writes :
 "The candidates who appeared in the Bombay Centre felt it beyond their capacity to answer the majority of the questions. The last question in Group A on Single Ledger System, which was deleted long ago, has resulted in the reduction of choice questions of Group A. In Group B, the questions could not be answered with the help of books, though they appeared in the With Books Paper".

Note : The basis of the With Books Papers has yet to be understood by the examinees in general. It is necessary that the Railway Board should issue clear instructions as to how the books are to be utilised in the Examination Hall. The candidates should also realise that the With Books Paper is designed to test the candidates' practical knowledge of the subject concerned, and the books are allowed only for reference and refreshing memory. By merely copying out Code paras, the candidates cannot expect to get marks.

Editor, R.A.

* * *

Appendix III Examination—December 1957.

Station Balance Sheet Questions

A correspondent has sent us the following for publication. Our own views in this connection will be published in a later issue.
 —Ed., R.A.

I. Traffic Accounts (with books)—Question 1.

Goods Balance Sheet

This is more difficult than the corresponding question set in the previous year. Though it looks simple at the outset, it is not without some misleading points in addition to the 'Outwards to pay' and 'Inwards Paid' items.

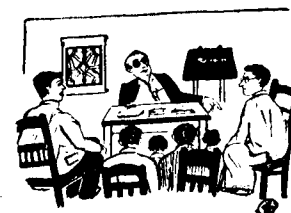
Particular mention should be made of 'wharfage and demurrage' in which the candidates were confused. The sum of Rs. 400, on account of "recovery waived during the month, but final sanction not yet communicated" has been omitted by many to be included in the current debits and outstanding. This is mainly on account of the fact that there is a similar amount of outstanding in the opening balance of wharfage and demurrage; and also because the current debit under the item could be worked out independently without the assistance of the individual amounts of collection, write-off and waiver. Wagon Registration Fee Refunds, Rs. 9,800, have been brought under special credit by one set of candidates, while the same are taken as vouchers by another. Both the principles appear to be in vogue on different Railways.

II. Station Accounts (with books) Question 1. (Goods Balance Sheet)

This is much more difficult than the Balance Sheet Question in the Traffic Accounts paper. It contains too many items requiring a lot of time to work, leaving the candidates insufficient time to answer the other questions. Consequently, some have committed grave mistakes in their anxiety to complete the balance sheet and many had to abbreviate their answers to the rest of the questions. One common mistake appears to be the wrong posting of Rs. 690, 'Debit to Freight Deposit Account.'

III. General

In general, it is noticed in both the papers that the terms used for the various items have been misleading the candidates instead of testing their knowledge and capacity to construct a balance sheet out of questions containing straight and simple terms.



STUDENTS CORNER

Purchase of Stores through D.G., S & D., India

All stores mentioned in Appendix VI of the Stores Code are to be purchased only through the D.G., S & D., except to the extent of the powers for direct purchase by C.O.S's.

On receipt of the necessary indents from the Engineer-in-charge of a Project, the C.O.S. will proceed with the placing of indents on the D.G., S & D., after ensuring that the items are not in stock as they are non-stock items. The indents to be placed on the D.G., S & D., will indicate the descriptions of the stores, specification, quantity required, the officer to whom the stores are to be consigned and the date or dates by which the stores are required to be sent to the consignee.

On receipt of the required number of copies of the indents, the D.G. S & D., will arrange to call for tenders (by open tender or limited tender, as the case may be), and will, in due course, advise the C.O.S, particulars of the acceptance of the tenders of a specified firm or firms, through Advice of Acceptance of Tenders, which serves the purpose of a Purchase Order on the firm, the terms of delivery, accepted rate, date of delivery, quantity to be supplied etc., being specified therein. In the case of Construction Projects, the Stores are normally required to be consigned to the Executive Officer in charge of the Project direct, necessary inspection of Stores being done, where necessary, by the Inspection Officers of the D.G. S & D. Office. After the Stores are certified by the Inspecting Officer of the D.G. S & D., they are sent to the consignee who, on receipt of the stores, will examine the stores and complete a Receipt Note in the prescribed form. One copy of this Receipt Note to the

firm to enable them to attach it in support of their Bill to be sent to the consignee; one copy of the Receipt Note is sent to the Rly. Accounts Officer, I.S.D., to enable him to pay the Suppliers' bill; one copy to the F.A. & C.A.O. of the Railway to enable him to accept the debit (and send the cheque under the revised procedure to the Railway Accounts Officer, I.S.D.)

The D.G., S & D, will arrange for the payment of the Bills of the Suppliers, and the duplicate copies of the Paid Bills supported by the Inspection Certificates (with acceptance of the consignee) will then be sent to the F.A. & C.A.O. through the Pay & Accounts Officer.

When the supplies are accepted by the consignee through the Receipt Note foils sent to the different Officers, as stated above, he accepts the value and debits the amount to the project concerned.

According to the recent procedure, the settlement in such cases is on cash basis. The F.A. & C.A.O., after ensuring that the supplies have been correctly received by the consignee on the Railway, will prepare the cheque for the amount and send the same to the Pay & Accounts Officer, I.S.D., by debit to purchases, credit to which would already have been posted on receipt of the Receipt Note from the consignee. The Debit to the project or work would also have been adjusted by credit to Purchases, when the Stores are received on the basis of the Receipt Note. On some Railways, it appears that the medium of Purchases is not used for Construction Stores and the Debit to Construction work is adjusted only when the PAYMENT IS MADE to the Pay & Accounts Officer.

In connection with the methods recommended by the Committee for improvement in Stores Budgeting, it is only for building materials that operating on the head "Purchases" is dispensed with and the amount directly debited to the Project without passing through Purchases or Stores Suspense.

The accounting entries are as under :

1. On receipt of Receipt Note from the Ex. Engineer duly certifying to the receipt of the stores in good condition and as per A/T

Construction Work, Capital etc. Dr. To Purchases.

2. On receipt of Paid Bill from the Pay & Accounts Officer ISD with the relevant foil of Receipt Note and when the cheque is drawn in favour of the Pay & Accounts Officer, ISD

In Summary	Purchases	Dr.
form	To Cash	

In practice, this will be passed through "Cheques and Bills."

Personnel

Western Railway :

Shri U. B. L. Mathur, Sr. Accountant is promoted as Offg. Assistant Accounts Officer and posted as Divisional Accounts Officer, Rajkot, with effect from 25-9-'57, vice Shri A. G. Koppa, D.A.O., reported sick.

Shri Shyam Lal Sharma, Offg. S.A.O. (W & S), Ajmer is confirmed as A.A.O. with effect from 25-8-'57.

Shri K. Jayaram, is posted as D.A.O., Baroda with effect from 11-10-'57 vice Sri P.C. Gupta.

Shri P.C. Gupta, D.A.O., Baroda, on relief, is transferred and posted as Vigilance Officer at Church Gate, Bombay.

Shri Ved Prakash, Offg. A.A.O., is posted as PA to FA & CAO from 1-10-'57.

Central Railway :

Sri C. I. Jacob, Offg. Asst. D.A.O. Jhansi, posted as Offg. A.A.O. (Stores & Workshops), Jhansi from 1-10-'57.

Sri J. A. De'Souza Offg. A.A.O. (Stores & Workshops), Jhansi, posted as Offg. Asst. D.A.O., Jhansi, from 1-10-'57.

Southern Railway :

Sri M. Ramji, Offg. S.A.O. transferred from Central Railway, assumed charge as S.A.O., Construction, from 28-12-'57.

Sri B. Lingegowda, D.A.O. Hubli, is granted 120 days L.A.P. from date of relief.

Sri B. V. Sanjeeviah, Offg. A.A.O. Madras, is transferred and posted as D.A.O., Hubli, (Class II) vice Sri Lingegowda above.

Sri S. Natesan, Offg. A.A.O., Construction II, posted as A.A.O., Books, (Central) vice Sri B. V. Sanjeeviah.

Sri Jal J. Batliwala, D.A.O., Royapuram, is granted 15 days L.A.P. from 10-1-'58 preparatory to cessation of his services from 25-1-'58.

Sri D. A. Padmanabiah, Offg. S.A.O., (P & S), Madras, is transferred as D.A.O., Madras, (Senior Scale).

Sri A. Venugopal Reddi, Offg. Sr. Acctt., D.A.O.'s Office, Royapuram, is promoted to Officiate as A.A.O. and posted in place of Sri S. Natesan, above.

Sri A. M. Rajarathnam, Offg. Sr. Acctt., (F.B.)-E, Madras is promoted to Officiate as A.A.O. and posted in place of Sri Padmanabiah above, until further orders.

HAPPY NEW YEAR TO ALL CONSTITUENTS

SEVEN-YEAR CALENDAR

1958 TO 1964

January ..	62	63	58-64	59	60	60	61
October ..	62	63	58	59-64	x	60	61
May ..	61	62	63	58	59-64	x	60
August ..	60	61	62	63	58	59-64	x
February ..	60		61	62	63	58-64	59
March ..	x	60	61	62	63	58	59-64
November ..	x	60	61	62	63	58	59-64
June ..	59-64	x	60	61	62	63	58
September ..	58	59-64	x	60	61	62	63
December ..		59-64	x	60	61	62	63
April ..	63	58	59-64	x	60	61	62
July ..	63	58	59-64	x	60	61	62
1— 8—15—22—29	M	Tu	W	Th	F	S	Sun
2—9—16—23—30	Tu	W	Th	F	S	Sun	M
3—10—17—24—31	W	Th	F	S	Sun	M	Tu
4—11—18—25 ★	Th	F	S	Sun	M	Tu	W
5—12—19—26 ★	F	S	Sun	M	Tu	W	Th
6—13—20—27 ★	S	Sun	M	Tu	W	Th	F
7—14—21—28 ★	Sun	M	Tu	W	Th	F	S

NOTE :—To find out the week-day for any date : say, 18th Jan. 1958 : against the month January read horizontally till you get 58, and then pass below vertically in that column till you get across 18 (4th line). You find Saturday is the week-day. Similarly for any date.

With the best compliments of

L. V. GOPALAN, B.A., B.L.,
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Mg. Editor, R. A.



PANDAVA RATHAS — MAHABALIPURAM

(By Courtesy — *Scuthallnews*)

Six Reactions. (of a sincere and Conscientious Worker)

First, the satisfaction of having rendered useful service to society and the common man.

Second, the knowledge that when one has to do a certain thing he has to put forth his heart and soul in the job on hand.

Third, the realisation that reward if it comes at all will be a good and pleasurable thing, but, if it does not come, that event should not damp the enthusiasm of the worker.

Fourth, the awareness that opportunities whenever they come have to be seized with a firm grip and turned into advantage; in doing so, dubious artifices should be discarded.

Fifth, a resolution that it is for others to judge your worth and calibre, and not for you to press your claims incessantly; nor to question the reason why, but only to resign yourself to the situation.

And, lastly, the contentment that when one has striven hard and has failed to reach the Golden Apple in the Garden of Heaven, he should leave things in the womb of the future. This belief will be strengthened if one continues to seek light and enlightenment.

By Courtesy — *E. Ry. Magazine*.

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 Edited & Published by : L. V. Gopalan, B.A., B.L., *Reid. A.A.O., M. S. M. Ry.*
 14, Balakrishna Road, Mylapore-4.

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Edited & Published by :
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CONTENTS		PAGE
EDITORIALS :		
ORGANISATION OF LIBRARIES IN THE RAILWAY ACCOUNTS DEPARTMENT	..	343
CONTRIBUTIONS :		
YOUR PROVIDENT FUND ACCOUNT	..	345
RAILWAY'S LIABILITY FOR COMPENSATION CLAIMS	..	348
COMPENSATION CLAIMS ON BRITISH RAILWAYS	..	349
FINANCIAL SCRUTINY OF WORKS ESTIMATES	..	350
COST ACCOUNTING	..	354
ACCOUNTS SIMPLIFIED BY ELECTRONICS	..	356
SUBJECTS OF MOMENT	..	357
BOOKS REVIEW	..	360
NEWS, NOTES & COMMENTS	..	361
DEVELOPMENTS OF SCIENCE	..	366
LETTERS TO THE EDITOR	..	369
PERSONNEL	..	370
READERS' FORUM	..	371
STUDENTS' CORNER	..	373

EDITORIAL NOTICE

Contributions are invited to this Journal on matters pertaining to Accountancy, more particularly of Railways. Every such contribution must be signed as a guarantee of good faith, even if not intended for publication. They may be in the form of Notes or short paras or fuller articles.

Manuscripts and photographs, if any, sent therewith, if not accepted for publication, will be returned only if the sender so desires and encloses the usual stamped and self-addressed envelope.

All contributions should be addressed to the undersigned so as to reach him not later than the 28th of a month for inclusion in the next month's Journal, which is published on the 15th of every month.

The Managing Editor does not hold himself responsible for the accuracy of the news supplied by correspondents or for opinions expressed by Contributors.

Remittances may be made by M.Os., Indian Postal Orders or Cheques. Remittance by cheque on a Mofussil Bank should include Bank's Clearance charges, usually Seventy naye Paise.

All communications, contributions, subscriptions, advertisements etc., should be addressed to

The Managing Editor,
"The Railway Accountant"
14, Balakrishna Road, Mylapore.
MADRAS - 4.

Recent Releases by L. V. Gopalan

First List of Correction Slips to 73RR: Now available for 25 nP (inclusive of postage) TO BE SENT IN ADVANCE.

x x x

UNDER ISSUE

II List of c/s & Supplement to 73RR. Questions only of App. II & III Exams. Dec. 19 7.

Books Out of Stock

No. 297: Railway Statistics
No. 105: Rects. A/cs. Q & A 1950
No. 471: " 1954

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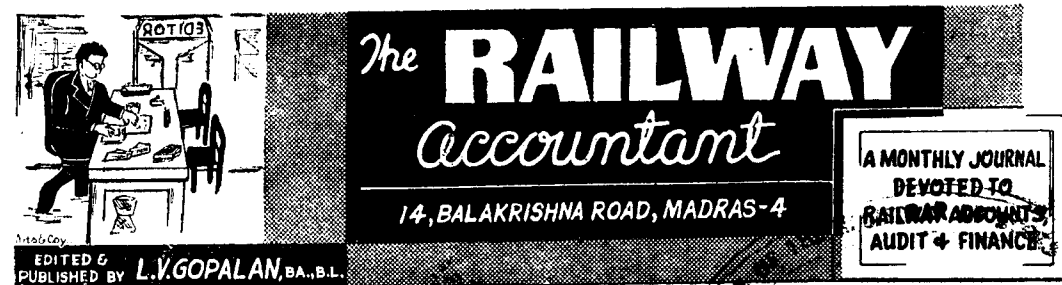
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Central Railway Magazine	Dec. '57 & Jan. '58	Indian Railways	Jan. '58
Eastern Railway Magazine	Dec. '57	Indian Railway Gazette	Feb. '58
Northern Railway Magazine	Jan. '58	Indian Construction News	Jan. '58
Western Railway Magazine	Dec. '57	Chartered Accountant	Jan. '58
Southrailnews	Jan. '58	Careers & Courses	Feb. '58
Chittaranjan	Jan. '58	Educational Review	Jan. '58
Central Railway Newsletter	Dec '57	Australian Accountant	Dec. '57
Eastern Railway (Lifeline)	1-1-'58	Accountants' Journal (New Zealand)	Dec. '57
" Newsletter	7-1-'58	Wednesday Review	up to W. E. 29-1-'58
Southern Railway Newsletter	—	Railway Herald	up to P. E. '58
Western Railway	Nov. & Dec '57	Railway Board's Monthly Statistics	Oct. '5
S. Rly. Accts. Soc. Madras, Bulletin	—		



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7 - MAR

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Organisation of Libraries in the Railway Accounts Department

In the RAILWAY ACCOUNTANT for June '56, we made out a case for the formation of libraries attached to every Railway Accounts Department in sufficient number to reach every supervisory staff and also as many subordinate staff as possible with a view to bettering their knowledge in Railway Accounts and also to help them to become more efficient in their day-to-day work. There is no gainsaying the fact that the libraries are one of the many ways through which the efficiency of the staff can be improved. It is well-known that there has been a rather rapid falling off in the efficiency of the staff; and it is therefore, all the more strange that such a well-known defect still remains to be tackled in every possible way for quick rectification. It is high time that adequate and speedy steps are taken to ensure that the term *efficiency* does not become an archaic word.

The Railway Board having felt the need for a Library Organisation on the Railways passed orders long ago, advising the individual Railway Administrations to set up libraries of their own. Such orders can become effective only if the Authorities concerned are definitely and personally interested in the efficient working of their own offices and of seeing that they get the maximum output out of the staff allotted to them. There is, however, every room to believe that something is wanting in this direction and the libraries have yet to be formed and organized in many places. The fact that there is always a cry of inefficient working and of heavy arrears and so on is sufficient indication of the necessity for adequate remedies to rectify these defects. In our editorial of June '56 referred to above, we have broadly defined the procedure of working these libraries and the importance that such library studies should be given. We still hold to the view and with greater emphasis, since the position of efficiency and punctual working continues to be declining.

Even though not in the innermost confidence of the individual Railway Administrations, it has still been possible for us to feel the pulse from the results we can observe and from the reports we receive from time to time from our readers and contributors. The formation of efficiency cells, the creation of officers on special duty for clearance of particular types of arrears, etc., are also sufficient evidence of our conclusion. We,

therefore, feel that no more time can be lost in doing something effective in order to meet the ever-growing inefficient work, and not only to snub it in time but also to pull up what is wrong, towards the direction of right.

We have also pointed out that the executive of every Department, except the Accounts, have been far more alert in this direction and that adequate training facilities are being provided at various stages of the career of the staff. In the Accounts Department, however, there seems to be provision for new recruits being initiated into their work in the preliminary course of training. But, there does not seem to be a proper recognition of the need for watching their further progress. It does not need a mirror to find out that an efficient staff means smooth working and a better type of disposal and also greater facilities for the supervising subordinate or gazetted officer. The article "Trained Supervisors can Increase Efficiency" by Sri Banerjee, APO, Eastern Railway, published at pages 321 to 324 of the RAILWAY ACCOUNTANT for January '58 generally indicates the difficulties of supervisors and suggests certain practical remedies for getting over them. The article, "Fall in Standard of Efficiency of Accounts Department" published in pages 215 to 217 of October '57 issue of the RAILWAY ACCOUNTANT gives a more pointed picture of the position. In our Editorial for January '58, we have also pointed out the urgent need for training of Railway Accounts staff and analysed the situation at the various stages. The equipment necessary for such training can be best got through the medium of office libraries and it is definitely in the interests of every Railway Administration not only to provide such facilities but also to watch how far such facilities have been properly utilised by the respective staff.

In this connection, a rather out of the way analogy, but nevertheless pertinent, may be pointed out. In various educational institutions, Hindi was taught compulsorily, but the examination in the subject was not made compulsory nor was a failure in this subject treated as a bar to promotion to higher classes. Similarly, in several Christian Institutions in the past, the Bible was taught but a failure in that subject was ignored while considering promotions, though a distinguishing pass in that subject was rewarded by a prize. Even now, in colleges and schools, religion is a subject taught to students but without requiring a compulsory knowledge thereof. Similarly, library study might be insisted upon in offices as a part of the regular work of the staff, but inattention thereto by any of them need not be specially noticed, as the result will be otherwise reflected in the quality of work turned out by the staff and such quality is bound to be taken into consideration while considering promotions.

We therefore, earnestly appeal to the head of the Accounts Department of every Railway and to the Financial Commissioner for Railways to ensure that an efficient and up-to-date library is formed at every Head-Quarters Office and in every Divisional or Regional Office of the Accounts Department and that a proper record is kept of all the users of the Library. If, we are able to make the use of the library by every grade of staff a force of habit, it is certain that the use will become a regular feature of its own accord in the later stages. The law of nature that habit will persist needs no further proof.

Your Provident Fund Account

BY SRI S. K. DATTA RAY

Continued from page 327 of
January 1958 Issue of the RAILWAY ACCOUNTANT

... ..
Employees Co-operative Credit Societies' dues may, however, be recovered from Provident Fund bonus and SCPF on the authority of a consent letter executed voluntarily by the employee concerned or his legal heir/recipient thereof. The question, viz. whether ECCS dues can be recovered from Provident Fund assets, is under examination by the Railway Board. Pending further instructions it has been decided in consultation with the Accounts department that ECCS dues may be recovered from the Provident Fund assets as a whole, i.e. inclusive of the employee's own contribution on the authority of the employee's/heir's consent memo, as was done previously.

Special Contribution to Provident Fund is admissible to Railway Servants in the following circumstances.

(1) If a subscriber, being a Gazetted Officer quits service on (a) completion of 30 years' service (b) attainment of the age of 55 years or (c) retirement on account of permanent incapacity due to bodily or mental infirmity or (d) abolition of appointment due to reduction of Establishment.

(2) If a subscriber who is not a Gazetted Officer quits service on (a) completion of 30 years' service or (b) attainment of 55 years of age after 15 years service or (c) retirement or resignation after 15 years' service on grounds admitted by the Controlling Officer as

goodland sufficient from the point of view of the Administration or (d) discharge or dismissal after 15 years of service for reasons other than misconduct or (e) retirement with less than 15 years service due to permanent physical or mental incapacity or abolition of appointment, provided he has joined service on or before reaching the age of 40 years.

The amount of special contribution to Provident Fund is—

(i) If service does not fall short of 15 years, half a month's pay for each completed year of service not exceeding 15 months' pay or Rs. 35,000/- which even is less ; and

(ii) If service falls short of 15 years, half a month's pay for each completed year of service but not exceeding 6 months' pay provided that in the case of non-gazetted staff the Controlling Officer may on being satisfied that the circumstances are special, increase the Special Contribution to one month's pay for each completed year of service subject to a maximum of 6 months pay.

The Special Contribution to Provident Fund may be paid to the widow or dependent child or children if the Controlling Officer so directs.

Special Contribution to Provident Fund may also be withheld due to serious offences and the percentage thereof is laid down below :—

- | | |
|---|------------------|
| (i) For Three Serious Offences | 75% may be paid. |
| (ii) For removal from service for unauthorised absence and/or malingering | 50% may be paid. |
| (iii) For removal from service for serious offences like conviction in a criminal court, theft, bribery, corruption, etc. | Nil may be paid. |

(iv) For removal from service for other offences like neglect of duty, repeated minor offences etc.

50% may be paid.

(v) For removal from service for inefficiency and cannot be accommodated in a lower capacity.

60% may be paid.

The above curtailment will require Accounts concurrence.

The Pay Orders are accounted for through relative abstracts. The Debit side of the Debit and Credit Register is posted from the General Books. The amount under each abstract in the Debit Register is then allocated compartment-wise on the authority of payorders and the same is reconciled through the check-sheet Part II like the reconciliation of the credit side.

EVERY SIX MONTHS

At the end of each half year i.e. September and March, the Government contribution is credited in each account which is the total of six months of the subscriber's own contribution. These are posted in the check-sheet part I from the ledgers i.e. G 1301 (i), viz., Bonus under contribution to Provident Institution. Similarly, the interest is also adjusted annually in each account over both the opening balance and subscription. Staff who joined the P. F. before 7th March 1938 are eligible for interest at a guaranteed rate of 4 per cent while those joining after that date are paid at the current rate of interest which varies from year to year. In the case of interest, calculation is made on the monthly minimum balances.

Month	Monthly deduction	Monthly Minimum Balance
April	 10	10
May	 10	20
June	 10	30
July	 10	40
August	 10	50
September	 10	60 and soon
March	 10	120

Interest is given on the amount of the minimum balance at a monthly rate. These are again posted in the check-sheet Part I on both the compulsory and contribution sides and totalled up. This is adjusted through the Railway Board under the Head "Civil Grant No. 22 Interest and other obligations".

The interest and bonus over the settlement cases are, however, calculated and paid up after due adjustment against the heads concerned and when they fall due.

After the closing of accounts for March each year, each individual P. F. account is closed and the postings of opening balances and closing balances are made in the check-sheet Part I. These are totalled up. The summary of opening balance is tallied with the summary of closing balance of the previous year to ascertain that the "brought forward" of the previous year's account has been correctly made. The 10 columns in the check-sheet Part I are then cross-totalled to be definite that the arithmetical calculation in each individual account is correct.

After the above operation, each individual subscriber is given a P. F. slip showing the opening balance, total deposit during the year, withdrawals, if any, refund of withdrawal, interest and closing balance. The purpose served by this is to appraise the subscriber of the correct position of his P. F. account. Any discrepancy noticed, may be represented within three months from the date of receipt of P. F. slip which is rectified. It is the implied duty of each individual to check up each column to see this is correct, pointing out any discrepancy. Similarly, it is also an

Feb. '58

implied duty of each individual in his own interest to note down the monthly deductions and to see that they are done correctly by the Pay-Bill preparing section and the P. I. deduction lists are correctly prepared and submitted regularly to the Accounts Office to avoid any future dispute.

P. I. Journals are to show the name, designation, station, Account No. and Folio No. correctly but it is not always done. This must also show the movement of staff, i.e. the station to or from which he has been transferred.

The machinery for the account of P. F. as stated above, if followed correctly and rigidly cannot have any loophole in accounting. But during recent years, it has been observed that due to slackness and carelessness all over the position has deteriorated. There have been cases where an individual member has more than one account. A subscriber's account is scattered all over the Accounting Units due to frequent transfers. Therefore, it is also a duty to see that their accounts are transferred time.

In an Accounts Office in the absence of the above information, new ledger cards are often opened without any reference to the previous one. Naturally, at the end of the financial year, a subscriber has more than one account which must not be the case. There are also instances in the Accounts Offices of the Registers of Unposted Ledger items and Unposted Ledger Accounts not being adjusted in due time.

To avoid the aforesaid irregularities, Railway Board has ordered centralisation of Pay Bill Units. The P. I. Journals are to be signed by a Gazetted Officer who should check up the entries therein before the issue.

For further improvement, it has been suggested that the P. I. Journals are to be printed with full name, designation,

station, correct P. F. Account No. and also the ledger folio No. The present bound ledgers contain two years' accounts only. For facility of posting and reconciliation, the serial order is changed and a new serial number is given when a new ledger is opened, known as a folio number. The ledger is not maintained as per account number. This will facilitate posting the ledger accounts and avoid loss of time in tracing out any account. It has further been suggested to quote folio Nos. in the Index Register in order that in case the folio number is omitted by the Pay-sheet Preparing Office, this can be easily traced out if the correct P. F. Account No. is quoted.

Adherence to rules in respect of maintenance of Register of Unposted Ledger items and Ledger accounts has been enforced strictly in the Accounts Offices and timely arrangement for adjustment of the P. F. accounts is assured. It has also been arranged that if the Account No. has not been quoted and movement of the staff has also not been shown in the P. I. Journals, a monthly statement of the items in the Register of Unposted items should be sent to the Pay-sheet preparing Offices for quoting the particulars of movement to enable the Accounts Office to trace out correct account.

Regarding the settlement of P. F. dues to the staff, the Railway Board has directed arrangements to ensure this is done within 10 days from the date of termination of service. In order to facilitate payment, arrangement has also been made to review the P. F. accounts of the staff going to retire within subsequent months on receipt of statement in advance from the Executive Offices so that any discrepancy should be set aright well in advance to make the case ready for payment.

(By Courtesy—Eastern Railway Magazine)

Railway's Liability for Compensation Claims

The following is an extract from a speech delivered by Sri S. K. Mukerji, C. C. S., Northern Railway, at the Chandausi Railway Training School, a few months ago.

The difference between railway risk and owner's risk rates should normally be related to the actuarial value, an expression derived from insurance and determined in the light of the theory of probability. About 10% of the commodities are chargeable at the optional owner's risk rates and the rest are chargeable at railway risk rates only.

The execution of *Risk Note* for the purpose of allowing the owner's risk rates was a tedious process, particularly in the case of illiterate persons. The station staff sometimes did not help, and risk notes were not executed. In some cases where they were actually executed, but the staff failed to make suitable remarks in the relevant railway receipts, the higher rates had to be levied at destination. The difference in freight was sometimes considerable. The failure on the part of the staff to make a suitable remark showing that the relevant note was duly held also reacted adversely to the railway's interest in the event of litigation for a compensation claim.

The old procedure was modified from August, 1950. The revised forwarding note now serves the purpose of both a consignment note and a risk note. *Where two alternative rates exist, the owner's risk rate applies unless the sender specifically elects to pay the higher railway risk rate.* There is a tendency on the part of traders to ask for more and more owner's risk rates. This may seem attractive, but on closer examination, it will be evident that the small trader will suffer. The big industrialist despatches a large number of consignments every month at the reduced owner's risk rates. One or two of them may be damaged or go astray. His overall saving in freight will cover

the loss sustained on these one or two consignments. What he loses in one consignment, he will be able to make up in the few other consignments that are delivered safely. The small trader, however, can have no such satisfaction. The policy at present, therefore, is to limit the owner's risk rates to certain specific commodities like perishables.

Then there is another class of commodities known as 'excepted articles'. They are listed in a schedule of the Indian Railways Act. This schedule can be amended by the Central Government. We need not go to Parliament for this purpose. The excepted articles have to be declared at the time of booking and a percentage of the value (4 annas per Rs. 100 for fragile articles and 2 annas per Rs. 100 for other excepted articles per 100 miles) is recovered if the goods in a package is worth more than Rs. 300. If the special charges are not paid, such consignments are carried entirely at owner's risk, and no legal liability for loss, destruction or deterioration rests on the railway. Growing industrialization and the rise in the general standard of living have brought many excepted articles such as electric bulbs, watches, musical instruments, etc., of cheaper varieties, into more or less general use. It is, therefore, contemplated to delete some of these articles from the schedule.

When goods are lost, damaged or deteriorated in transit, the railway as a bailee has to pay the cost of replacement to the claimant. That is, you must put the consignee in the same position as if he had received the goods in proper condition in proper time. There is sometimes a dispute as to whether profit has to be allowed or not. Profit can result

from the procurement and sale of goods. It can accrue only after the consignee has received the goods and has traded upon it. If he has not received the goods, he can only be given the cost and not the profit.

Among the effects of the war were some which are relevant in this connection. The packing materials which used to be in abundant supply and durable in the past became scarce and flimsy in character. Indigenous could not stand up to the rigours of transit to the same extent as the imported varieties. Social changes following the aftermath of the war resulted in a lax sense of responsibility all over the country and not only among the railway staff. The undesirable elements found it more profitable to turn their attention to the Railway rather than to the countryside. Now you have criminal gangs operating particularly round about industrial towns like Calcutta. Their occupation is to commit running train thefts. They are armed and many people thrive on this business. Railways have organized armed Railway Protection Force and in the Calcutta area they have shot down some of the running train thieves. The Railway Protection Force will shortly be given statutory recognition and invested with powers of arrest.

Internal causes have to be countered by domestic action. The need for a Claims Prevention Organisation has been felt not only in our country but in many foreign countries as well. The causes that give rise to claims are not unknown. It is only the remedies that require skilful selection and application.

Claims Prevention sections have been set up on all Indian Railways and Claims Bulletins are being published by the Claims Prevention Organization. Some years ago, Mr. Brown, Director, Traffic, Railway Board, was put on special duty to examine the causes of and suggest remedies for the steady increase in compensation claims. He was followed by another elaborate study by the Director of Intelligence Bureau, Government of India. The two reports thus produced discuss INTER ALIA the relationship between the District Police, the Railway Police, the Railway Watch & Ward and other Departments of the Railway, and offered many valuable suggestions for reducing the incidence of claims, many of which were accepted and have been either implemented ahead, or are in the process of being implemented.

(By Courtesy—Northern Railway Magazine)

Compensation Claims on British Railways

The steady reduction of the number of claims against British Railways for loss or damage to goods and property is a story of quiet important progress. In 1948, the first year of nationalisation, the amount claimed reached the alarming total of more than £. 4,000,000, with some 1,200,000 separate claims lodged. This was the peak year, and the situation probably was the result of the lower standard of behaviour brought about by the war, the difficulties of

obtaining adequate packing materials, and possibly the comparatively low standard of railway maintenance after the years of intense wartime activity. The railways have tackled this problem effectively. In 1949, despite increased monetary values, claims were reduced to £. 2,750,000. They fell again slightly in 1950 but rose again in 1953 to some £. 3,000,000. This was only a temporary setback, and last year the total value was £. 1,786,488 and the number of

claims some half-million. Pilferage has been much reduced, largely through the efforts of the British Transport Commission Police. Even so, as "The Man on the Line" points out in the November issue of British Railways Magazine, this is still a serious problem, not least because of the loss of goodwill thereby occasioned among customers. The dissatisfaction is all the more intense because the record of road transport is generally believed to be better than that of the railways and, with a driver travelling on each road vehicle, has every reason for being better. This fact is inescapable, but the railways can do, and are doing, a great deal to minimise damage to goods in transit. This damage is usually caused by goods getting wet or by breakage. Total or partial loss, the other great cause of claims, is all too often the result of insufficient labelling by the consignor. Increased use of steel wagons, obviating the seepage of wet through the timbers of wooden wagons, is doing much to

prevent damage by damp, and the general improvement in wagon maintenance is also helping. Breakages are usually caused by movement of the load when wagons receive a violent shock, as they may in marshalling yards. Shock-absorbing wagons have helped in the case of particularly fragile loads, and the fitting of braces and partitions in wagons has shown good results. The use of conveyors, packed by the consignor and left undisturbed in transit, is another system which, by obviating transhipment, has been valuable, and there is much to be hoped from the fitting of hydraulic buffers and vacuum brakes to freight vehicles under the modernisation plan. Both these latter measures will minimise shock. The railways cannot afford to be complacent—there are signs that claims this year may cost as much as in 1956—but their efforts in general, are being well rewarded.

(By Courtesy -
Railway Gazette, London)

Financial Scrutiny of Works Estimates

(Contributed)

Expenditure on works and schemes requires a greater degree of control not only at the outset, but also throughout the period during which expenditure is incurred, and in this respect, the nature and extent of control for works differs from that in regard to recurring expenditure on repairs and maintenance, operation etc.

On a vast organisation like the Railways, the provision of suitable equipment and facilities, the bulk of which will go under the title of 'BLOCK' in commercial and industrial parlance, is an essential prerequisite for the efficient running of the Railways. This naturally involves heavy expenditure and a great deal of planning and forethought

from the technical angle is required in regard to the nature and type of facilities and equipment to be provided to cope up with the particular situations arising out of the operating needs, and other relevant considerations. It also, at the same time, points to the necessity for adequate financial control right from the very start of the proposal so that the possibility of wasteful expenditure could be reduced to the minimum, if not altogether avoided. A question may be asked: "It is all right for an Accounts man to keep proper accounts, check vouchers and so on, but how does he come into the picture when the proposal itself is formulated by the technical experts and

before it is sanctioned by a competent authority?" The answer is not far to seek. It is admitted that a Finance man is not a technical expert to study the technological, operating and other aspects of the schemes put forward, but it is obviously necessary that some scrutiny is made to safeguard the interests of the tax-payer but also to assist the management in a proper financial appraisal of the scheme before it is sanctioned. This, however, is not to say that the technical expert who prepares the scheme does not have the interests of the tax-payer at heart. But the emphasis is that, in the realm of human affairs, it would be difficult to expect that a technical expert could or should devote as much attention as would be necessary for scrutiny of his own proposal from a financial angle. Take for instance the Cabinet. The Ministers are not generally technical experts themselves, though the ultimate power of sanctioning or vetoing a proposal or scheme or modifying it lies in their hands. For them to come to a proper conclusion, the scheme will have to be studied from different angles and a proper appraisal covering all the aspects, not excluding financial, should be laid before them for consideration. It would not be correct to say that because a technical expert has spent his time and energy—indeed, put his best—into the preparation of the scheme in the development of his idea, his scheme should not be subjected to scrutiny by any other person, particularly a non-technical person, because if this view were to be taken to its logical conclusion, only the technical expert, each in his own line, will be the final arbiter of his proposals, without having regard to the repercussions of the proposals on other aspects of administrative and Government activities, let alone other financial considerations.

It is, therefore, an orthodox and wholesome principle of efficient administration that Finance is associated with

proposals initiated by Executive and technical authorities, even from the very start and it is in pursuance of this that, before schemes are sanctioned, proper estimates of costs are required to be prepared and scrutinised by Finance *pari passu* with the technical experts, who exercise the scrutiny from the technical angle.

The financial scrutiny of estimates of costs of works is done in two stages. The first stage is when the proposal in its broad form is put up by the Executive, and the second stage is when, after the proposal is broadly accepted by the management, at the appropriate level, detailed estimates of the several sub-works are prepared. It is in the first stage that a large amount of intelligent thinking on the part of Finance is required. In regard to the second stage, very often, the usual routine checks laid down in the Codes (check of allocation, classification, provision of funds etc.) would be adequate so long as the detailed estimates or the detailed proposals are within the framework of the scheme as administratively approved and the substratum of the original scheme is preserved. But even at this stage, new conditions might have cropped up necessitating a review of the scheme either as to its necessity or as to the need for any amendment or modification of the original scheme, which may be substantial or minor.

We shall now deal with the method of financial scrutiny of proposals for schemes etc., which are put forward by the Executive. It should be said to the credit of Executive that a thorough study of the requirements is generally made and it is on the basis of such study that proposals for the provision of facilities, equipment etc., are put forward. In order that a scheme may be studied properly, it need hardly be said that the proposal should be prepared with the utmost lucidity so that, shorn of all technical jargon and idiosyncrasies, the sum and substance of the propo-

sal indicating its object is clearly intelligible even to a layman. At the stage at which the scheme is presented for administrative approval, the financial scrutiny would embrace only an examination of the proposal in its broad features and not with reference to minute details which would be taken care of at a later stage. Thus the initial scrutiny would be the financial prudence of expenditure from the tax-payer's point of view. For this purpose, the scheme will have to be thoroughly studied and properly understood. The abstruse points in the scheme should be got clarified by discussion with the Executive, who should realise that the objective examination of the proposal by Finance is only for the purpose of assisting the Executive to ensure that only schemes which are really sound from every point of view, go through, and in this respect both the Executive and Finance are equally interested. A mutual understanding of the respective roles of the Executive and Finance is no doubt a great help in such matters. Cases are not wanting in which as a result of such mutual consultation, the Executive actually benefited by the views expressed by Finance and the schemes were either withdrawn or suitably modified with reduction in costs. It may as well be added that some knowledge of the technical details of the scheme will be of immense advantage to the Finance Officers not only for understanding the implications of the scheme, but also for carrying on intelligent discussions with the Executive on matters arising out of a study of the scheme.

It may be pointed out here that the scrutiny by Finance is made at different levels. Technical scrutiny is also made at different levels. This means that at each level the Executive and Finance are associated and the scheme, if it emanated from a lower level, would have the benefit of financial scrutiny at the earlier level also.

From the technical angle, directives and policy decisions are issued, and it should naturally be seen whether these are adhered to in the schemes put forward. Thus, for waiting halls at stations, certain yardsticks for this are to be provided with reference to number of passengers handled etc. For covered good-shed also a yardstick is laid down with reference to the number of Wagon loads received per day at the station requiring covered accommodation. For running sheds the equipment (machinery, etc.) is standardised. For quarters for the different categories of staff, types, and specifications are laid down and ceiling costs are also prescribed. But these can be deviated from on sufficient grounds, the financial prudence and necessity in particular circumstances being the ultimate criterion.

The necessity for a particular scheme for providing facilities, equipment etc., having been accepted by Finance, the next question is whether the facilities proposed constitute the only method by which the object with which the scheme is proposed could be secured or whether there are any other alternatives. Though prima facie this should be for the technical experts to analyse and examine, Finance can assist by pointing out how similar situations were dealt with in other Railways or Branches (Central P. W. D. etc.).

Needless to say, the scheme should fit in with the policy of the Government. In regard to costs, several considerations arise. Sometimes, in their enthusiasm for getting the schemes sanctioned, the Executive put down the estimate of cost at a very low figure (of course in the earnest hope that it would be possible for them to carry it out at that cost) but very often, as experience has shown, the estimates get revised a number of times to higher and higher levels of expenditure so that the Management is left with no alternative but complete the scheme, which might not have been approved of by them, were the true costs known at

the outset. On the other side of the scale, there may also be cases where the costs are put down at the highest pitch providing for all sorts of contingencies, imaginable and unimaginable, but this is with the object of not being caught for criticism at a later stage for under-estimation. If a higher cost is administratively sanctioned, it gives room for a number of irregularities and malpractices. The rates may go up. Even though open public tenders might be called for, the tenderers would be sure to know of the provision made in the estimates and their quotations would in all probability be regulated accordingly, with the result that even the lowest quotation might be pitched at a cost higher than what could reasonably be expected for similar work under similar conditions. This may also give room for the savings in costs being utilised for putting up facilities and works which might not have been originally contemplated and which might not really be considered as absolutely essential, as the feeling will persist, that, because the amount is available in the estimate, it could be utilised for the provision of certain facilities which, though not urgently necessary, may perhaps be desirable, as this could not possibly be obtained at a later stage after the scheme is closed. Thirdly, wasteful and infructuous expenditure might also go un-noticed, under the cloak of the high estimated cost, and this may either altogether escape disclosure or, even if disclosed, it might be passed off lightly on the score that the estimate as a whole has not been exceeded. It is, therefore, necessary that a happy medium will have to be struck in the matter of costs; the esti-

mate should neither be an over-estimate nor an under-estimate. Both the features are open to objection.

It is difficult to lay hard and fast rules for specifying the detailed method of financial scrutiny of works estimates at the time the proposals are framed. All that can be said is, over and above the application of the conventional procedures as laid down in the Codes and orders, an intelligent scrutiny of all the aspects with a comparison of costs with reference to whatever data that may be available (such as DGSD contracts, previous tender rates, cost of similar works etc.) will be useful. Such a scrutiny has resulted in reduction in costs. In one case, for watering arrangements at a station, a water meter at a cost of about Rs. 2,000 was provided in the estimate. But it was cut down subsequently when it was pointed out that water was not being purchased from any other agency and only a departmental well was being sunk for obtaining the required supply of water, which required no meter to be provided. Duplicate provision of the same facilities in different estimates has also occurred and was rectified. In another case, the provision of fish-plates for permanent-way per mile in the estimate was found, on calculation by Finance to be excessive; presumably, it was due to an error in calculation in estimating and this was rectified. It is certainly desirable that at least once in a way, the detailed basis on which provision is made for materials etc., is checked up in active consultation with the Executive which will be in the interest of the Administration and good estimating.

A Government clerk sat at the table after breakfast one morning, engrossed in his newspaper for over an hour. Finally, he asked for another cup of coffee. "Coffee!" echoed his wife. "But look at the time. Aren't you going to the office today?"

"Office?" exclaimed the startled man. "Heavens! I thought I WAS at the office."

Cost Accounting

At page 290 of the Railway Accountant for December '57 a summary of the debate in the Lok Sabha initiated on this subject by Sri C. R. Narasimhan M. P. was given. We have since received his complete speech and the following is an important excerpt therefrom.

The resolution which I want the Government to accept is intended to attract the attention of the Government to a very important aspect of business management, namely COST ACCOUNTING. Accounting can be divided under two broad heads—financial accounting and cost accounting. Financial accounting has been recognised by the Government as being of such importance that a statutory body called the Institute of Chartered Accountants of India has been created for the purpose of fixing the qualifications, both theoretical and practical, of the entrants to the profession, holding graded examinations enrolling members, and for controlling the conduct of its members. This was a move in the right direction, but it is unwise to neglect the other side of accounting, namely cost accounting.

The two are like Siamese twins, inseparable and co-existent. The development of both is essential for a satisfactory picture of any accounting statement.

Financial accounting is aimed at the presentation of a profit and loss account for a stated period and a balance sheet as at the end of the period. I shall confine myself to the two important aspects of cost accounting which affect the Government.

Firstly the balance sheet shown by the profit and loss account is mainly dependant on the value placed on the last date of the financial period on the balance on hand of the finished and semi-finished stock. Their value is taken credit for in the statement. Any variation in their value will naturally affect the final balance or profit or loss.

Unless a fairly accurate value based on a scientific cost accounting system is placed on the balance of the finished and semi-finished stock, the manufacturing and trading results shown by the financial statement will be unsatisfactory. Auditors normally do not take responsibility for this stock. They generally say: "Stock as valued by the Manager". Therefore, if the real state of affairs is to be known, a proper certificate with regard to the stock-in-trade, finished goods etc., is very necessary. Otherwise, the accounts statement will not be complete. We will be only knowing about the profit, but not about further important details.

Secondly, in the public sector, Government is taking over the production of important materials necessary for the industrial development of the country. They are also the main consumers of the products coming out of the activities of the private sector. More over, they give out a major portion of their constructional side, both labour and material, of their various projects to contractors by calling for tenders. The cost of production, purchase price of material and the reasonableness of the tenders can be materially affected by a want of or erroneous system of cost accounting.

Apart from the above, as regards the direction of the policies of Government, unless an efficient system of cost accounting is maintained by the industry seeking complete or partial protection, Government will have inadequate data on which to base their policies.

These are some of the main reasons which directly point to an immediate recognition of the importance and need for a compulsory adoption of cost accounting by all major manufacturing, industrial and commercial undertakings.

This can be done only by legislation and legislation should aim firstly at the creation of a statutory body on the lines of the Institute of Chartered Accountants of India. When this Institute was started, doubts were expressed about the utility of such an Institution, but later, Government took into confidence those in the profession, and ultimately with the consent and co-operation of the profession, the Institute of Chartered Accountants was created, and in the last few years it has been working, very well. It has helped in maintaining standards, and the country is now provided with duly qualified auditors, and naturally when the Companies Act was amended, the companies' obligation to engage auditors, the duties of auditors, etc., were all properly and statutorily fixed. They are all functioning well, and there is security in the financial field both for the investor and the Government and all concerned.

In the same way, if a similar spirit is shown in regard to cost accounting, and a new statutory body on the same lines is created for cost accountants, equal benefit will accrue, if not more.

Secondly, when such an Institute for Cost Accountants is started, I request Government to require the major industrial and commercial undertakings

compulsorily to maintain a thorough cost accounting system in respect of the products manufactured or dealt in by them. So far, there is no arrangement for this purpose.

Therefore, my solution to the problem is two-fold. The first is to create cost accountants through a statutory body; and the second is to oblige the undertakings to keep these cost accountants and get proper figures of accounts through these people. Since credit-worthy statements are required, those who give the statement, namely the cost accountants should be proper persons, should be reliable people, and should be responsible people. This responsibility and reliability can only be created if these accountants are placed within the purview of a body which will keep discipline over them. For that, I urge that body be created statutorily. Then, cost accountants will be created statutorily and their discipline will be ensured by a statutory body. Just as we have a statutory body, namely the Medical Council to maintain discipline in the case of doctors, the Bar Council in the case of lawyers, and the Institute of Chartered Accountants in the case of Auditors; likewise, an Institute of Cost Accountants with an additional statutory obligation to keep discipline over these cost accountants will serve the purpose very well. The obligation on the part of undertakings to engage cost accountants should also be created statutorily, so that they may engage these people and also provide the public and all concerned with the necessary statements on which they can rely.

At a State banquet given by Frederick the Great of Prussia to his courtiers and noblemen, the monarch asked those present to explain why his revenues continued to diminish in spite of incoming taxes. An old general of the Hussars remarked dryly, "I will show Your Majesty what happens to the money."

Procuring a large piece of ice, he lifted it high for inspection; then he handed it to his neighbour and requested that it be passed on from hand to hand to the King. By the time it reached Frederick, it was about the size of a pea.

Accounts Simplified by Electronics

To simplify the intricacies of accounting, the Northern Railroad of the U.S.A. has appointed a Computer Research Committee to examine how electric devices can help.

With accounting requirements growing ever more complex, the officials of Great Northern Railroad, U.S.A., felt a need to simplify such operations. To aid management in the intelligent operation of the railroad, the accounting department collects, sorts out, processes, and interprets many facts and figures. The resulting reports are put before top management without delay so as to be useful in making decisions.

The Great Northern had used punched card equipment since 1930 and pioneered in the direction of electronic data processing with the installation of two high-speed electronic calculators in 1953. Believing that a large electronic computer might simplify accounting procedures, the administration appointed a Computer Research Committee to consider the matter and plan its adoption.

VAST MEMORY

The electronic computer has a vast memory from which one can draw facts and instructions. A rapid input as well as output is necessary if the high-speed calculating features of the machine are to be utilised fully. The computer adds and subtracts 1905 times a second. In one second, it can do 465 multiplications, 257 divisions, and 2,740 comparisons. To match this, magnetic tape, much like that in home tape recorders, is used for both input and output. If it is desired to feed information manually into the computer, information must first be put on tape. An electric typewriter, does this by recording data directly via, electronics on magnetic tape.

When information is fed into the machine from punched cards, the data are first placed on magnetic tape, using a card-to-tape converter. This handles

cards at the rate of 240 per minute. By the judicious use of these auxiliary input devices, the electronic computer can be kept operating at full speed.

Data are coded and recorded on tapes in the form of invisible magnetized spots. Standard combinations of these spots represent the various numbers and letters. Since 128 digits can be placed on one inch of magnetic tape, an entire 1,500 ft. tape will hold up to 1.5 million digits.

One operator controls the entire operation.

To ensure smooth transition and a sound system, months of study and preparatory work were undertaken. As a first step, the machine has been utilized for payroll operation (this involves some 30,000 staff) and it is expected that the savings in this field will provide economic justification for its use. But ultimately most problems involving mass data handling will be transferred to the electronic computer.

The importance of full utilization of the machine can be appreciated when it is realized that the rental cost is 140 dollars per hour based on current one-shift utilization. On an outright sale basis, it would have cost about 1.5 million dollars. It weighs 9 tons and has approximately 975,000 individual parts. It occupies 3,000 sq. ft. of floor space. To remove the enormous amount of heat developed three 20-ton air-conditioning units were installed on the floor below ("Modern Railroads", Chicago).

(By Courtesy: Eastern Railway Magazine.)

[Really a giant machine turning out a giant's work. Ed. R.A.]

Subjects of Moment

Efficiency Bar test for officers promoted to the Indian Railway Accounts Service.

The Railway Board have decided that in the case of officers permanently promoted to the I. R. A. S. from Class III/II, the Efficiency Bar test for allowing them pay above the Efficiency Bar stage in the Junior Scale should consist of the following :—

(i) *For officers who have passed the first Efficiency Bar test in Class II or are more than 50 years of age on the date of permanent promotion to Class I.*

Such officers will have the option of taking the written test only in one of the two subjects prescribed in the Railway Board's letters No. E 51 EF1/21/2 dated 4—1—52 and 7 8—52 besides the viva-voce test, which is compulsory.

(ii) *For officers who have not crossed any of the Efficiency Bars in Class II.*

They will be required to take the Efficiency Bar test as prescribed for direct recruits vide Railway Board's letters No. E 51 EF 1/21/2 dated 4—1—1952 and 7—8—1952.

(iii) *For officers who have crossed both the Efficiency Bar tests in Class II.*

The orders contained in the Rly. Board's letter No. E 51 CPC/177 dated 20—12—1954 will apply.

The Board desire that in order to obviate any requests from promoted officers for exemption from passing the prescribed tests, the orders contained herein should be given wide publicity and the instructions contained in para 3 of the Railway Board's letter No. E 51 EF1/21/2 dated 4—1—1952 regarding adequate opportunities being given to officers of gaining adequate experience required for passing the test borne in mind.

(R. B. No. E (O) 57 EF 1/17 dated 14—1—58)

Changes in the basis of allocation of Railway expenditure

(Effective from 1st April 1958)

Under Paras 906 (2) and 910 (3)-G I the cost of unremunerative works for improvement of operational efficiency is chargeable to O. L. W. R. if it does not exceed Rs. 3 lakhs and to DF (3) if it exceeds Rs. 3 lakhs. A question has been raised whether an unremunerative operational improvement work costing not more than Rs. 3 lakhs excluding the cost of land but more than 3 lakhs including the cost of land should be allocated to O. L. W. R. or D.F (3). It has been decided that as land necessarily forms part of the work, the cost thereof should be added to the cost of unremunerative operational improvement work for purpose of allocation. Thus, if total cost of the work including land exceeds Rs. 3 lakhs, the cost of the work itself should be allocated to D. F (3) and if it is not more than Rs. 3 lakhs to O. L. W. R., the cost of land being allocated to Capital in both cases.

(R. B. No. F (Spl) 54 FCC-21 dated 16—12—57)

Advance payments to suppliers for supply of stores delivered direct to works

The Railway Board have decided that advance payments to Contractors (suppliers) should be recorded in the Register of Works under suspense head "Advance payment (for supply of materials)" to be introduced under the head of account that will record a major part of the cost of the work. As and when the materials are received, the suspense head "Advance payment for the supply of materials" should be cleared to "Materials-at-site Account" or to the final head of account, if no Materials-at-site Account

is to be maintained in the Register of Works. Necessary returns similar to those submitted for the materials-at-site by the Supervisors i.e., IOWs & PWIs., should be rendered for this so that readjustments can be made from the suspense head.

(R. B. No. 56Acs/Inspn/19 dated 21-1-58)

Permission to take Legal Proceedings

A Railway servant who wishes to institute legal proceedings against another Railway servant for any reason should apply to the administration for permission, which should be granted as a matter of course without delay, except in cases where the authority granting the permission considers that recourse to courts is for the vindication of an official act which has been the subject matter of adverse criticism. In the latter case, a decision will have to be taken on the merits of the case and communicated to the employee as early as possible.

Revision of scale of pay of certain Categories of staff

Ref. Board's Letter No. E(S)56CPC/122 dated 28-8-56. It is clarified that the clerks and other non-clerical personnel belonging to the categories detailed therein who were officiating in posts carrying the scales of pay higher than Rs. 55-4-85-EB-3-125-5-130/55-3-85-4-93-EB-4-125-5-130 on 1st Aug. 56 are not entitled to the *ad hoc* increase of Rs. 5/- in the scales of pay of the higher posts. However, such of those individuals as were serving as clerks or in other non-clerical grades in the scale of Rs. 55-3-85-EB-4-125-5-130/55-3-85-4-93-EB-4-125-5-130 and would have been entitled to the *ad hoc* increase but for their promotions to higher grade posts may have their pay notionally fixed in the revised scale of Rs. 60-3-81-EB-4-125-5-130/60-3-81-4-93-EB-4-125-5-130 in terms of Board's letter referred to above. If the pay so fixed exceeds their pay in

the officiating posts, they may be allowed the difference as personal pay to be absorbed in future increments, provided the pay in the revised scale together with the *ad hoc* increase does not exceed Rs. 130/-.

(R. B. E(S) 1-57CPC/223 dated 18-12-57).

The increment of Rs. 5/- sanctioned in Board's letter of 28-8-56 referred to above should be treated like any other increments and all staff who were in service on 1-8-56 even though on leave preparatory to retirement should be deemed to be eligible for that. This *ad hoc* increase, therefore, should be taken into account for the purpose of special contribution/gratuity.

(R.B. E(S)-57CPC/236 dated 17-12-57).

Grant of Leave to Female Gazetted Railway Service in Continuation of Maternity Leave

Number the existing Note as "Note 1" and add the following as "Note 2" below this rule.

Rule 2231-RII (SR 224)

Female Gazetted Railway Servants applying for leave, in continuation of maternity leave under Rule 2267-R.II (S. R. 268) must produce the required certificate from the Medical Committee in the form mentioned in this Rule, unless this requirement is relaxed under Rule 2233-R.II (S. R. 226) by the competent authority to grant leave.

(R. B. No. F(E)57/FR-6/1 dated 21-12-57.)

Continuance in Service of Government Servants Declared Temporarily Physically Unfit

Under the existing rules no person will normally be recruited to a post in Railway Service without a medical certificate of fitness of Health. In exceptional cases of urgency, however, it occasionally becomes necessary to

appoint an individual straightaway and arrange for medical examination by the competent medical authority immediately thereafter. In such cases where the competent medical authority declared an employee as 'not fit' for appointment to the post specified, the services of the employees are generally terminated. Though in such cases, medical opinion should not declare a candidate as "fit for temporary employment", it may sometimes happen that such a candidate is declared 'temporarily unfit' as requiring re-examination after a specified period in cases where the condition of temporary unfitness is curable in a reasonable period. The Board have decided that in such cases, there should be no objection to a Railway Servant declared 'temporarily unfit, physically being retained in service for the period specified by the competent medical authority provided that :—

(i) the period after which a second medical examination is to be conducted is specified by the competent medical authority ;

(ii) the condition leading to temporary unfitness is declared as being curable within a reasonable period ;

(iii) the disease is not of such a nature as to be a source of risk to others with whom the Railway servant may have to come in contact in the course of his duties ; and

(iv) where the period of such retention is likely to exceed six months, the approval of the Board shall be obtained.

2. The Board have further decided that a Railway servant so appointed in advance of medical examination should be paid his salary for the period of his employment if he is declared "unfit" and for the period of his retention in service if he is declared "temporarily unfit".

(R. B. No. E57ME1/45/Medical of 18-12-57)

Issue of Post Retirement Complimentary Passes to Retired Staff

Total Service rendered including service on re-employment is to be taken into account for eligibility of issue of post-retirement complimentary passes. The number of post retirement complimentary passes admissible, will, therefore, be determined on total service rendered by the employee including the service rendered by him during the period of re-employment.

The class of passes will be determined by the status of the post held by him at the time of original retirement.

(R.B. No. 1000-TG/55/5/E(G) dated 23-11-1957)

Treatment of the Periods spent by Government Servants in Attending Courts to give Evidence or to serve as Assessors or Jurors

(a) Where a Government servant is summoned by courts of law, whether criminal or civil, or by a Court Martial or by a properly constituted authority holding a departmental enquiry in India or by a Court in foreign territory, to give evidence regarding facts which came to his knowledge in the discharge of the public duties, the period of absence will be treated as on duty.

(b) Where the Government servant is summoned as a witness by the courts or authorities referred to in (a) above to depose about facts which came to his knowledge in his private capacity, the period of absence should be treated as casual or ordinary leave as may be due to him under the rules. No special leave will be granted for this purpose.

(c) The period spent by Government servants in attending courts of law as jurors or assessors, with the permission of their respective Heads of Departments, should be treated as special casual leave, which should not be debited to the casual leave account.

2. The Government servants attending courts of law in circumstances mentioned in para 1 above during periods of leave, will not be given any extra leave for such attendance, nor will their leave be considered to have been interrupted by such attendance.

3. These orders have been issued with the concurrence of the Comptroller and Auditor General in so far as the personnel serving in the Indian Audit & Accounts Department are concerned.

(R. B. No. E(G)55LE2/127/3 dated 18-12-57)

* * *

**Remarks of Police Investigating Officer
to be called for in the Cases Finally
Disposed of by the Police**

It is observed that there have been many cases which necessitated departmental enquiry despite the police investigation and that negligent or defaulting staff have gone unpunished for want of proper evidence.

It is therefore considered advisable that a copy of the concluding remarks of the investigating officer recorded in the case diary with which the police submit final report to the court is invariably called for on such occurrences as are investigated by the Police.

The Board therefore desire that suitable steps be taken to ensure compliance of this procedure.

(R. B. No. DIG—Cir/10/57 dated 22-10-1957.)

* * *

Correction Slip

Substitute the following for item No. 39 (ii) of Appendix VII-G, II :—

“On Works costing above Rs. 1 lakh but not more than Rs. 3 lakhs each, upto a limit of Rs. 20 lakhs in all in a financial year, provided that the sanctioned budget for works costing over Rs. 1/- lakh each is not exceeded.”

(R. B. No. F(X)I—56—PW/1 of 11-1-1958.)

Books Review

WELCOME TO MADRAS :

We have received a booklet under the above title issued by M/s. Burmah-Shell Oil Storage & Distributing Co. of India Ltd. Besides very interesting and useful matter for a tourist on a visit to Madras, classified under various headings, like hotel accommodation, hair dressers, churches, cinemas, shopping centres etc.; sight seeing and places of interest have also been described in detail together with distances and modes of conveyance. Nearby places of interest like Kancheepuram, Mahabalipuram, Sadras etc. have also been described. The enclosures to this book include a very explanatory map of the Madras City showing specially Burmah-Shell service filling stations (very useful to motorists); ready reckoner of conversion of Annas and Pies into Naye Paise and a table showing the

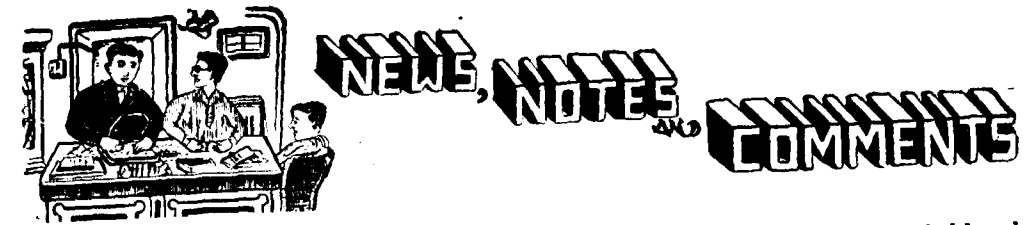
comparative rates of boarding, lodging, etc. in various hotels in Madras.

The sponsors of this booklet deserve congratulations for their excellent idea in their desire to help tourists, both inland and foreign. It is correctly the duty of the State Government, but the fact that a private institution has undertaken this task is really commendable.

(Editor—R.A.)

EIGHTH ANNIVERSARY NUMBER OF “CHITTARANJAN”

We have received the eighth anniversary number of *Chittaranjan*. This has been got up in a very attractive style with tri-colour design and contains many useful articles of a technical nature, relating to locos in particular. The articles have been well illustrated to enable the reader to grasp the subject thoroughly. There are, besides, matters of ordinary interest also as in the usual monthlies. (Editor—R.A.)



International Civil Engineering Contracts Agreement on Standard Conditions

After two years' joint discussion and negotiation, the International Federation of Building and Public Works and the International Federation of Consulting Engineers have reached agreement on the Conditions of a Standard Form of Contract for works of civil engineering construction which are the subject of international tender.

An interesting feature of the conditions is a provision under which the procedure of the Court of Arbitration of the International Chamber of Commerce will be used for the settlement of any disputes that may arise.

The formal signing of the document took place at Zurich on August 29, at a conference of the International Federation of Building and Public Works. The signatories were the president, Mr. Norman Longley, C.B.E., and Mr. Julian S. Tritton, M.I.C.E., M.I. Mech. E., Mem. A.S.M.E., president of the International Federation of Consulting Engineers, who had made a special journey to Switzerland for the occasion.

Mr. Tritton was accompanied by his vice-president, M. Georges Bory (France), and his immediate past-president, M. Robert A. Naef (Switzerland), while those present at the formal signing also included Senator Linsenhoff (Germany), M. Andre Borie (France) and Sir Andrew MacTaggart (Great Britain), who have taken a prominent part in the negotiations leading to agreement on the conditions.

Initially, the conditions have been printed in English, but French and Ger-

man translations will be available shortly, and translations into other languages are contemplated in the near future. A copy of the conditions of contract has been presented to the World Bank.

By courtesy—The British Constructional Engineer.

We would suggest that in respect of standard conditions of contract for civil engineering works, the Railway Board may contact Contractors' Associations and finalise an agreed form which would admit of satisfactory completion of contracts without dispute with regard to interpretation etc.

Editor R. A.

Meeting of Railway Statistical Officers at Delhi in December '57.

A meeting of Railway Statistics and Compilation Officers was held in New Delhi from December 5th to 7th 1957.

The meeting reviewed the progress made since the last meeting in April '57 in various directions, viz., elimination of delays, accuracy in compilation, change-over to mechanized compilation etc. The meeting also discussed the facilities for training of Railway staff requiring knowledge of Railway statistics; effects of introduction of metric system of weights and measures on the Railway Statistical Officers; inspection of statistical works on railways; uniformity in the form and contents of domestic statistics and questions relating to methods of compilation and procedure in Railway Statistics.

Sri N. C. Deb, Additional Member (Finance), Railway Board, while addressing the meeting on the opening day,

emphasised the need for promptness and accuracy in the compilation of statistics. Improvement in the quality and content of Railway Statistics should come first before any improvement in the executive direction could be expected, since it was on the basis of statistics presented to them that the executive could arrive at correct policy decisions. He wanted the Statistical Officers to pay particular attention to the accuracy of statistics and to their being made available in time.

Short Notes on many of these subjects have already appeared in July and August '57 issues of this Journal. We hope, to deal further, on some of these aspects if and when we get some more material about the discussions.

* * *

Railway Budget 1958-59.

It is understood, that the Budget Session of the Parliament commences from the 10th February '58 and that the Railway Budget will be presented to the House on the 17th February '58. The General Budget will be following on the 28th February. The Finance Bill will also be introduced in this session.

* * *

Meeting of General Managers of Railways

On the 28th January, a special meeting of Railway General Managers was convened by the Railway Minister at Delhi to discuss problems relating to the inculcation of higher standards of safety consciousness amongst Railwaymen responsible for the running of trains.

The Railway Minister told them, that even though statistics could be produced to prove that the performance of the Indian Railways in the field of safety was better now than previously or that it was better than that of some other leading Railway systems, the travelling public would feel satisfied only by a tangible reduction of the accidents. It was therefore necessary for the Railway Administrations to satisfy themselves that all necessary steps were being taken

to minimise the incidence of accidents occurring due to failure of the human element, either from laxity or negligence on the part of staff. Further, accident cases should be carefully analysed to pinpoint areas where the situation needs special remedial measures. The Minister also emphasised that staff indiscipline must not be tolerated in any shape or form and the guilty persons should be given swift and exemplary punishment and also deterrent in cases connected with the safe running of trains. The trade unions of Railwaymen, he said, should play a positive role and help actively in increasing safety-consciousness amongst Railwaymen.

The Railway Board had instructed the General Managers to appoint senior scale Safety Inspectors on the basis of one for every 200 miles of Railway line. The staff slackness wherever noticed was being combated through better education and training. The General Managers also referred to the dilution amongst experienced supervisory staff resulting from quick promotions consequent on expansion of developmental activities. Steps have, therefore, been taken to give intensive training to the Supervisory staff.

The discussion dealt also with a several technical problems and difficulties of procurement of materials, particularly signalling; also the absolute need for improving standards of punctuality in intensifying efforts therefor.

* * *

N. F. R. Railway Zone

The Eighth Railway Zone was opened by Sri Jagjivanram, Union Minister for Railways, on the 15th January '58 by switching on an electric button at Maligaon, the Headquarters of the New Zone, when the Assam Governor Mr. Fazal Ali presided.

The new Zone, almost entirely a metre gauge section with a route mileage of 1738.3 miles includes 2½ miles of B. G. section, and 49½ miles of 2 ft. narrow

gauge section. The line serves two distinct geographical units, one on the north and the other on the south of the river Brahmaputra. Marshalling yard and interchange arrangements are being constructed at Barauni, and when these works are completed, the jurisdiction of the new zone will be extended up to Barauni, which becomes an important tranship point between B. G. & M. G. after the completion of the Ganga Bridge.

The peculiarity of this zone consists in its being a portion cut out from the N.E. Railway where it was originally Pandu region, in the main.

The new Railway is literally a Frontier Railway bounded by Nepal, Tibet and China in the North, Burma in the East and East-Pakistan in the South.

The N.F.R. serves the northern portion of Bihar and West Bengal and the entire Assam. It is a very fertile area and grows in abundance tea, jute and rice. The vast forests of Assam abound in elephants and weird fauna; about 70 kinds of woods are available, many of them being rare varieties. Large quantities of bamboo for paper production are also derived from this forest. Assam also produces cane in very large quantities; it has vast stores of subterranean oil, perhaps some of the biggest oil fields in South-East Asia. Limestone, and coal are the important minerals available here. The most flourishing industries are hand-loom and sericulture. Assam has, however, to depend on substantial imports of textiles, iron and steel, sugar, pulses and salts. Amongst the places of tourist interest on this Railway are Darjeeling, and Shillong. There are also pilgrimage places like the Kamakhya temple between Pandu and Gauhati and temples of Lord Shiva on the hills Jainti and Shibsagar.

* * *

Remodelling of Gwalior Yard

The Railway Board has decided to remodel the station yard of Gwalior on the

Jhansi-Agra section at a cost of Rs. 2.20 lakhs. This has been necessitated by the growing needs of current traffic and that anticipated during Second Five Year Plan period.

* * *

Supply of Cranes to Indian Railways

A contract has been entered into with a British Engineering Firm for supply of 27 Diesel and Steam cranes, worth about 11 lakhs to the Indian Railways. These are part of large orders placed in connection with the electrification plans of Indian Railways. It is expected that deliveries will begin in October '58.

* * *

Air-Conditioned De-Luxe Coaches

With effect from the first week of February '58, it has been decided to include in the composition of the air-conditioned De-Luxe trains ordinary 3rd class coaches. The New Delhi-Madras Train will have 3 coaches, the New Delhi-Bombay, and New Delhi-Calcutta trains, 2 coaches each. The train from Madras on the 3rd February '58 and the return train from Delhi on the 5th February will have the additional 3rd class coaches.

As these trains are the fastest on their respective routes, it is anticipated that besides abating the overcrowding in 3rd class in long distance trains, the new arrangements will provide 3rd class passengers with a substantial faster service than hitherto.

* * *

Fuel Consumption on Indian Railways

The Railway Board has set up a six-member committee under the Chairmanship of Sri Karnail Singh, Member (Engineering) Railway Board, to examine the increased cost of fuel consumption on the Indian Railways and to plan the railways' requirements of high grade coal during the next few years. Other members of the Committee are: Shri R. Krishnaswamy, Director, Mechanical Engineering; Director, Transportation

(T): Shri J. W. Whitaker O. S. D. (Mining Research), C.S.I.R.; Shri P. M. Nayak, I.C.S., Coal Controller, Calcutta; and Sri D. P. Mathur, now Sr Dy. General Manager, Central Railway, Bombay (whole-time Member-Secretary).

The terms of reference to the committee are as follows:

I. (i) To examine and to report on the factors responsible for increase in railway expenditure on coal, commenting particularly on the extent to which the quality of coal is responsible for increase in consumption and expenditure and for poor performance; (ii) The expenditure incurred on handling charges keeping in view the load and lift involved; (iii) The comparative merits and demerits of employing departmental or contract labour for coal handling; (iv) The causes and quantum of wastage and losses of coal in transit, in sheds and otherwise; (v) The extent to which the increase in expenditure on coal is due to increase in traffic, coal prices, freight charges on coal, etc.

II. To examine the railways' future requirements of high grade coal for steam traction and the prospects or adequate supplies and to recommend measures for meeting any anticipated shortages.

Igatpuri Train Accident

At page 297 of the issue of this Journal for December 1957, reference was made to the Commission appointed to enquire into the rail accident near Igatpuri. The Report of this Commission declared that the accident was the result of a deliberate act of sabotage committed by some person or persons unknown. Since a criminal case had been registered by the police and investigation had already started, the Commission felt that they could not fix any responsibility for the accident. In regard to the suggestion of safe-guards against similar accidents in future, the Commission felt that it would be impossible to keep a constant

watch over every yard of the track and to protect it completely and at all times from unauthorised interference. Further, the Conference of Railway Chief Engineers had already decided upon several measures to ensure safety of the track. The Commission, therefore, laid emphasis on the use of reversed jaw type sleepers, welding of rail joints, more powerful engine headlights with a swivelling arrangement, effective security patrolling over some sections where acts of sabotage may be expected, etc. The Commission also suggested special legislation to provide deterrent penalties on those found guilty of attempts at train-wrecking and the offer of substantial awards to those who give information leading to the arrest of saboteurs.

Prices of 'Telco' Locos

As a result of adverse criticisms in the Lok Sabha recently, negotiations are in progress between the Railways and TELCO in order to fix the price to be paid by the railways during the next financial year for locos to be supplied by TATA Company. It is hoped that a mutually satisfactory settlement would be reached before the 1st April when the new prices are to take effect.

Stripes as Punishment for Ticketless Travel

It is understood that whenever school and college students travel without tickets, the Railway Authorities have been reporting such cases to the heads of the institutions to which offenders belong for exercising their corrective influence over them. In a recent case, a Head Master of a Secondary School in Hooghly District reported that the student had been given 10 stripes in the presence of all students of the school who have been warned about the consequences of ticketless travel.

To what extent such type of punishment would be really corrective remains yet to be seen.

Ed. R. A.

Conference of C.O.P.Ss.

Recently, the Railway Board held a four-day conference of the Chief Operating Superintendent of the Eight Zonal Railways, when they discussed detailed plans for dealing with the heavy pressure of Railway Traffic in 1958-59, particularly, in connection with the new Steel Plants.

The pressure would start by about July and would have to be borne mainly by the Eastern and South-Eastern Railways. Higher targets of operating performance were fixed for the current year. It was also decided that at important loading points and transshipment junctions, steps should be taken to enforce more strictly, scientific loading of commodities in order to utilise wagon capacities to the maximum extent.

The Conference laid stress on increased loading of coal from Bengal and Bihar coalfields and also decided on higher targets for movement of traffic through Moghalsarai to North and Western India and through Waltair and Bezwada for South India.

The Conference also decided that steps to enforce various measures would be taken through Safety Officers and Inspectors (sanctioned for each Railway by the Railway Board) for increasing the efficiency of the railway's safety organization. Measures for improving punctual performance of passenger trains were also discussed at length by the Conference.

Monthly Statistics

Gross Earnings: The approximate gross earnings of Indian Railways during the month of December 1957 amounted to Rs. 30.31 crores, showing an increase of 0.90 crores as compared with November 1957 approximates, i.e., an increase of 3.06%.

The total approximate actual gross earnings from 1st April to 31st December 1957 amounted to Rs. 274.84 crores repre-

senting an increase of Rs. 22.56 crores over the actuals for the corresponding period of the 56-57 i.e., an increase of 8.94%.

Tonnage Lifted: The total number of tons lifted from 1st April 1957 to 31st December 1957 amounted to 65,797,000 and 16,600,000 respectively over the B.G. and M.G. showing an increase of 4.90 and 7.90% over the actuals of the corresponding period of the previous year.

Wagon Loading: The number of wagons loaded during December 1957, was, 4,79,044 and 3,08,595 for B.G. and M.G. respectively showing an increase of 5.99 and 10.4% over the figures for November 1957. The total number of wagons loaded from 1st April 1957 to 31st December 1957 amounted to 4,011,534 and 2,483,240 respectively over the B.G. and M.G. showing an increase of 5.56 and 10.4% over the figures of the corresponding period of the previous year.

General increases have been observed in the movements of the following over B.G. & M.G. respectively.

B. G.

Grains
Pulses
Sugar
Cement
Pig Iron and Steel others
Manganese ore
Coal for other Government Rlys. etc.

M. G.

Coal and Coke for public
Grain and Pulses
Jute Raw, Jute manufactured
Sugar, Cement, Pig Iron and Steel
Other metallic ores
Coal for home line
Coal for other Govt. Rlys. etc.

These increases are set off to some extent by lesser movements of sugar cane, cotton raw, and sea on the B.G. and miscellaneous smalls on the M.G.

Developments of Science

[This section has been newly introduced to improve the utility of the Journal. Various up-to-date advances will be classified here under sciences like Medicine, Engineering, etc. It is hoped that readers will benefit substantially by this section.

Ed., R.A.]

NEW HEART APPARATUS DISPENSES WITH NEED FOR SURGERY

Science and medicine have collaborated in the production of a new heart machine which shocks uncontrolled heart rhythm back to normal without chest surgery. The new heart apparatus was described in Baltimore recently at the Johns Hopkins Hospital by Dr. W. B. Kouwenhoven, Professor of Emeritus of Electrical Engineering, and Dr. W. R. Milner, Assistant Professor of Medicine.

Kouwenhoven developed the method with the help of Milner and several other Johns Hopkins doctors. He said his new device already has saved several lives. He also said the machine is simple to operate and that it was produced to combat what medical men call "fibrillation", a fatal condition in which the heart muscles lose coordination and death occurs within a few minutes. Kouwenhoven's new electric de-fibrillator can be applied swiftly and with ease, eliminating the surgically open chest method. Two electrodes, copper discs three inches wide, are placed on the chest and 480 volts of electricity are administered for one quarter of a second. About five amperes are used. Kouwenhoven pioneered the use of electricity for the correction of fibrillation with experiments he started some 30 years ago after two Italian scientists published a medical paper in which they stated that fibrillation could be stopped by electric current.

RADIOACTIVE DRUG TO MEASURE BURNS

Radioactive phosphorus, a peaceful product of atomic energy, can be used to determine quickly the depth of serious skin burns. This was reported recently to the American

Association of Plastic Surgeons by Dr. Reed O. Dingman of the University of Michigan Medical School. To know how to treat burns, the doctor said, it is vitally important to know their depth. When the full skin thickness is destroyed by a third-degree burn, for example, early removal of the skin and the grafting of a new skin are required. When radioactive phosphorous is injected, it is quickly absorbed by the body and can be measured around the burned area with radiation detection instruments. The amount of radiation around a third degree burn differs sharply from that found in a first or second degree burn.

ULTRASONIC ENERGY TO TREAT BONE CANCER

Ultrasonic energy, consisting of sound waves too high in frequency to be heard by the human ear, is being used experimentally in the United States to treat bone cancers. Such cancers in laboratory animals have been at least partially destroyed by this means, researches at the Mayo Clinic at Rochester, Minnesota, report. The application of ultrasonic energy to bone cancers in rabbits has killed an estimated 90 percent of the cancerous cells in some tests. The main cause of the cell destruction appears to be the heat generated in the bone by the high-frequency sound waves. The outstanding feature of ultrasound is its ability to heat bone selectively in a more effective way than any other known agent.

TINY RECHARGEABLE DRY-CELL BATTERY

A dry-cell battery, not larger than a rupee coin, that can be recharged to provide power for years has been developed by the U. S. asthma and hay fever. Development of the

drug is said to represent the latest advance in the search for a hormone with great potency but without some of the undesirable side effects of older hormones. Potencies of the new hormone have been termed 'fantastically high'. When administered to laboratory animals by injection, it proved to be 120 times as active biologically as hydrocortisone, a substance now widely used in medicine. When administered by mouth, the new product was 190 times as active as hydrocortisone.

TV SIZE ELECTRONIC BRAIN

An electronic 'brain' which is about the size of a home television set and requires less power to operate has been built at the Bell Telephone Laboratories in the United States of America. Compared with previous computers, this new one operates with many less parts. Of its 9,000 electrical components, more than half are transistors—the tiny electronic devices that are now replacing vacuum tubes for many uses. The machine can store 1,024 'words' in its memory, each word consisting of 18 binary or dual digits. It can perform several computing operations in just a few seconds, which would require a mathematician or statistician several hours. In computers of its type, all information is translated into a special code which uses only combinations of zero to one.

TIME SAVING X-RAY MACHINE

An X-ray machine that permits safe filming while the patient is on the operating table has been developed by the U. S. Veterans Administration. Officials say the machine cuts the time required for pre-surgery X-ray diagnosis to two or three minutes in crucial cases.

HEAT TWICE AS THE SUN

Scientists of the University of Chicago in the United States announce that they have developed a device which can produce heat twice as hot as that of the sun's surface. This heat will be used to test metals for use in the aircraft and spaceships of tomorrow and in

nuclear reactors for the production of electricity. The device, called a water-stabilised electric arc, squeezes out and concentrates the heat from an ordinary carbon arc the type used in searchlights at the bottom and a ring-shaped top electrode. The concentration, in turn, produces a jet stream of vapour through the top ring electrode which reaches a temperature of 25,000 degrees F. This compares with the sun's surface temperature of 11,250 degrees F.

HELICOPTERS TO REPLACE AUTOS

The United States helicopter industry is concentrating on the development of low-cost, one-man machines. A number of different types already have been produced and are being tested. These helicopters may be the forerunners of the flying machines of which people have long dreamed—small, light-weight vehicles that will lift a single person and carry him through the air as though, in effect, he were a bird. The object of the helicopter manufacturers is to produce machines which have the helicopter's unique advantages—the ability to travel in all directions and to hover almost motionless a few feet above the ground. In addition, they are concentrating on creating machines that will fly fairly fast, will have simple and safe controls, and will be economical both to buy and to maintain. One of the most recent small helicopters of this type is the so-called "Pinwheel" manufactured by the Rotor-Craft Corporation of Glendale, California. It consists of a small upright framework with a single helicopter blade mounted at the top. Its total weight is 170 pounds. The pilot sits on a bicycle-type seat and straps the machine to his back. It is the lightest and simplest helicopter produced to date.

NEW AUTOMATIC GEAR

A new type car gearbox which combines the advantages of automatic gear-changing with those of cheapness and efficiency, has been developed by the British Motor Industries

Research Association. The new gearbox selects automatically the most economical gear for any road conditions. As, in use, it continually adjusts the gear to the most economical setting without any roughness or jerking, it will result in fuel economy.

So far, three prototypes have been built in laboratories, and one of these is now installed in a car which has just started road trials. Another unit has been on show at the recent Motor Show in London in October '57.

NEW ELECTRIC WRIST WATCH WILL RUN INDEFINITELY

An electric wrist watch that automatically recharges its own battery, and so keeps itself running indefinitely, has been patented by the Radio Corporation of America. The watch is run by an electric motor which is powered by a tiny storage battery. The normal movements of the wearer's wrist operate a simple generator. This consists of a small spring, which is wound up by the wearer's movements. The spring is periodically released and sends surges of electric current through the battery. The battery should last for a number of years, it is said, as compared to the batteries in other electric watches, which last for only about a year and then must be replaced. Although RCA has no present plans to manufacture the watch, there is widespread interest in electric watches. At least one electric watch has already been produced and offered for sale.

PUMP HEATS AND COOLS BUILDING

A system that automatically heats a building in winter and cools it in summer is now in use in a large grocery store in America. The system is controlled by a heat pump, which takes out of the building by airconditioning in the summer or when the store is crowded in

the winter. On cold days this heat is used to warm the outside walls of the building. If it is not needed at once, it is stored for use later. The master control centre of the system automatically disposes of excess heat and regulates the pressure and flow of water and conditioned air throughout the building. In addition, it regulates the domestic water supply, automatically controls snow melting equipment, and supervises the disposal of excess water into the ground or into a nearby lake.

NEW CLOCK POWERED BY SUNLIGHT

A "Solar Clock" operated by sunlight has been perfected by the General Time Corporation in the United States. It is a clock that never needs winding, the company says.

The clock contains a series of voltage generators, which are silicon cells. When they are exposed to light, these cells generate voltage, which charges an accumulator cell. This, in turn, operates the clock mechanism. The equivalent of a day of exposure to sunlight will operate the clock for a month.

The accumulator will last for the life of the clock, the company says. The energy storage unit can keep it operating for a year without any light, according to company officials. If the clock should stop after storage in a dark place, exposure to light will start it working again.

ELECTRIC TRAFFIC REGULATOR

A new electronic system has been developed for fire engine and ambulance drivers, which will enable them to control traffic lights by radio and thus avoid accidents. The device, demonstrated in Washington, allows a driver to regulate traffic lights by flashing a signal from a transmitter under the dashboard to the traffic control box at each intersection.

A budget is a plan which enables you to pay as you go—if you don't go anywhere.

Letters to the Editor . . .

This Section has been started at the request of readers to ventilate their grievances. The Management does not take any responsibility for the opinions of correspondents; but reserves to itself the right to tone down any objectionable language that may appear in the originals.

Pay Structure for Union Government Employees

One of our correspondents has written to us as under:

"The Commerce Graduates' Association of India also submitted a memorandum to the Pay Commission re: basic pay structure in broad outline and also re-classification of staff as follows:

Class I (Senior Scale & Junior Scale), Class II (Senior & Junior scale) & Class III. Consequently, scales proposed: III Rs. 60-130, II (Jr.) Rs. 160-250, II (Sr.) Rs. 250-500. It is silent about Class I services. They also pointed out that the scales should not be overlapping—

so that a person may feel promotion in his purse. Too much Gradation should also be avoided. Real wages should be increased by granting Children allowance and provision of quarters to all should be the ultimate goal, in lieu of house-rent allowance. D. A. should be based on percentage of basic pay etc."

Note: The Commission appointed by the Government of India now will certainly have a hard time in sifting the various suggestions and assigning to them their proper priority. It is hoped that the result of their efforts will be one that will please a maximum number of beneficiaries.

Editor—R.A.

Amenities to III Class Passengers

Though there is a lot of official propaganda about the amenities offered to III Class Passengers, still there seems to be a lack of vision and foresight in several cases. To take an instance: while Janata Trains were running from Madras to Howrah, facilities for long distance reservation were available to passen-

gers entraining at Madras. But when these trains were diverted as through trains from Hyderabad to Howrah no arrangements were made for continuing these facilities to through passengers from Madras to Howrah and back. Consequently, many passengers were put to great inconvenience as they had, for no fault of theirs, to forego the conveniences which they had been enjoying for a long time. If the authorities really desired to provide some facilities for Hyderabad passengers, that should not have resulted in taking away the benefits enjoyed by the Madras passengers. Even though they diverted the trains to Hyderabad, they could have provided a through bogie between Madras and Howrah attached to some convenient train for being attached to the Hyderabad train.

[This is since done as can be seen from the Paper announcement effective from 11th Feb. 58.]

Further, provision for sleeper accommodation for these through passengers has yet to be made.

Another instance relates to the provision of sleepers coaches on some of the mail trains for III Class Passengers. It is found that the existing III Class sleeper coaches, particularly those attached to Bangalore Mail trains between Madras and Bangalore, are extremely uncomfortable for use by ladies and children. Only upper berths are provided and these are only wooden planks without any side protection. Further, the provision of sleeping accommodation in a place which has no relation to the corresponding seating accommodation for each passenger is a very great drawback. It is absolutely necessary that these two should be as near as possible

and that sleeping accommodation should be provided in the lower tiers also.

It is understood, that a new design of sleeper coaches is being got out and it would be very essential that before these designs are actually confirmed, the travelling public should be apprised of such designs and their comments called for. After all, they pay for the convenience and whatever inconvenience arises out lack of forethought on the part of the designers will affect the users.

Yet another instance is the *withdrawal of dining cars* on some of the trains. The dining cars should be designed not only for the rich man, but also for the poor traveller, particularly in long distance trains, where it is an absolute necessity since the train passes through places where food may not be easily available to him, and also where speed is essential both from the Administration's point of view and the public. Hence, arrangements for supply of at least food packets should be made at convenient spots enroute. It brings to my mind another case, of where III

Class Passengers travelling by Bangalore Express Train for instance, can hardly expect to get some food enroute, as the refreshment rooms provided at important junctions do not cater to the *passengers in the train*; but expect even women & children to go to the stall which is absolutely overcrowded by hefty men, owing to the limited halt provided at the place. More thoughtful arrangements would be needed in such cases.

Reservation of III Class seats well in advance is also an item which requires to be looked into with regard to the actual practice and the advantage gained by the passengers.

There are many more instances of this nature, where the amenity intended for III class passengers can be more practical and really beneficial to them. Many amenities are announced on paper; but to what extent these are practically effective requires constant vigilance.

It is hoped that the authorities will review the situation an effect some tangible improvements.

— A Passenger.

Personnel

S. Railway:

The following promotions of A.A.O.s as S.A.O.s have been ordered:

Sri S. Ramamurthi, Offg. A.A.O.

Sri K. Ramachandran, Offg. A.A.O.

Sri R. Muthuraman, Offg. A.A.O.

The following transfers have been ordered:

Sri S. Ramamurthi as SAO/W/Perambur.

Sri K. Ramachandran as SAO/W/Golden Rock.

Sri K.N. Rabindranath as DAO/Trichy.

Sri T. Ramamurthi as AAO/Stores Perambur.

Sri A. M. Rajarathanam as P.A. to CAO in addition to his own duties.

Sri R. Muthuraman as SAO/TA/TPJ

Sri K. Srinivasa Iyengar, A.A.O., TPJ, has proceeded on L.P.R. from 3rd February 1958.

C. Railway:

Shri A. Padmanabhan, Assistant Audit Officer, transferred from Southern Railway, Madras, as Deputy Chief Auditor, Bombay from 25-9-57.

Shri E. S. Pathre, Assistant Audit Officer, Secunderabad, posted as Assistant Audit Officer, Establishment and Bombay Division at Bombay from 25-9-57.

Continued on page 376



Readers Forum

Fixation of Pay of Retired Employees on Re-employment

In the matter of application of rules to the railway employees based on the Central Government Rules for their employees, the import and the spirit of the rules is not only lost sight of but mercilessly mutilated to the grave disadvantage of the railway employees. One of the cases, for example is that of fixation of pay of retired employees re-appointed to railway service.

The Fundamental principle for fixation of pay of such persons is that they should not draw more than the pay that they were drawing at the time of retirement, after, adding the pensionary contribution. In simple words, if an employee at the time of retirement was drawing say Rs. 160 and if he had been subjected to the pension rules and had been entitled to a pension of Rs. 60/- on re-employment he should not be paid more than Rs. 100/- whether he is appointed in the scale of Rs. 100-185 or even in the lower grade scale of Rs. 60-150. But for all purposes of fixation of his pay on re-employment he should not be given more pay than what he was drawing at the time of his retirement.

However, on the railways, several improper conditions have been enforced for refixation of pay of the retired employees on re-employment. These principles have been too funny and strike at the very root of the orders for fixation of pay of such staff and the principles on which they are to be based.

In the earlier days, it so happened on many railways and specially on the Northern Railway that retired employees on re-employment were given the minimum pay of the lowest grade from which pensionary contributions were deducted. This meant that a Station

Master or a Goods Clerk, drawing say Rs. 150 or so, on re-appointment was allowed the initial pay of Rs. 60/- as a Commercial Clerk, minus Rs. 53 towards pensionary contribution, giving a net salary of Rs. 7 to this official for doing 30 days work on the railways, adding his experience and knowledge of the working which was better than that of any new recruit.

This misinterpretation of the rules and the principles of fixation of the pay of the retired employees on re-employment went on unchecked specially on Delhi division of the Northern Railway for some time. Appeals from staff for proper fixation and payment of the amount so withheld, are pending disposal for years as no one is willing to touch the papers.

It often happens on the Railways that when appeals are addressed to authorities specially on matters of payments denied to the railwaymen, they continue to lie undisposed of for years and then the Accounts come in the picture and this fear acts as a check on the executive to do bare justice to the railwaymen affected by improper application of the rules and orders and in this way the staff are continued to be harassed.

After much agitation, it is understood, that it was ruled that in calculating the pay that would be admissible to a retired employee on reappointment his emoluments were the pay that he last drew, while in service before retirement, provided he was in the lowest grade pay scale, minus equivalent of the pensionary contribution. This was satisfactory so far as it went and was applicable to simple cases, but the same troubles continued to visit the employees who happened to be in the intermediate grade while in service. In their case, when the grade in employment was

higher say two grades above the initial recruitment grade, such employees on certain railways and specially on Delhi division of the Northern Railway were reappointed in some lower grade and the equivalent to pensionary contributions was deducted. This did not satisfy the condition of an employee so reappointed not getting less or more than the pay that he was drawing immediately before retirement by fixation of his pay on reemployment in such a manner that the pay allowed to him plus the pensionary contribution was equivalent to his previous pay in regular employment.

The case of others, who were reappointed in somewhat a lower grade has been still worse in the matter of pay fixation. For instance, a Goods Clerk in the scale of Rs. 100-185 drawing Rs. 160 at the time of re-appointment is appointed on pay that he would have drawn in the lower grade of Rs. 60-150 as if he had not been promoted to the higher scale of Rs. 100-185 which may be Rs. 125; minus pensionary contribution. This is quite unfair. How can there be reduction in the employee's substantive pay for re-fixation of his pay on re-employment in this manner?

At the most, if such an employee is re-employed in the lower grade he may be allowed the maximum of the lower grade i.e., Rs. 150 for goods clerks in the scale of 60-150 minus pensionary contributions. There is absolutely no sanction and no justice in lowering his pay even in the lower grade post on the basis of what he would have drawn, had he not been promoted to the higher

grade while in service. How that consideration comes in passes one's comprehension.

There are many such cases of reduction of pay in this manner on fixation of pay of the retired personse re-employed in railway service.

The only just principle is that the following considerations should be given in fixation of the pay of retired employees on re-appointment.

(i) the grade to which an employee is to be appointed is to be determined first, whether it is his re-retirement grade or even a lower grade.

(ii) he should then be allowed the maximum pay on the lower grade, minus the pensionary contribution provided that his total emoluments do not increase (including the pensionary contribution) beyond what he was drawing while in service.

Thus, there is no room for giving him the lowest stage in the lower scale of pay minus the pensionary contribution, nor any commutation of his pay on the basis of what he would have drawn in the lower scale had he not secured promotion to the higher grade while in service. These considerations have no place in fixation of the pay of the re-employed retired hands.

Note: The above article is reproduced by courtesy of the RAILWAY HERALD. How the rules are actually applied on each Zonal Railway and to what extent the above criticism is correct requires investigation. We shall welcome a discussion on this subject from our readers.

Editor, R.A.

OBITUARY

The W. Ry. Administration regrets to announce the sad demise of Shri A. G. Koppar, Divisional Accounts Officer, Rajkot Division, at Bombay, on 29th November, 1957, due to Nephritis.

Our condolences to the members of the bereaved family.

Ed. R. A.



STUDENTS CORNER

Structure of Railway Accounts

By K. S. Ananthapadmanabhan, B.A.

"ACCOUNTS" are statements of facts relating to money or things having money value. These facts are called "transactions". Accounting is the process of classifying the transactions under various heads or items of receipts and expenditure and showing the results of such transactions arranged in such a form as to show clearly not merely the significance of each transaction, but also the combined effect of these transactions.

The main functions of a commercial concern is to trade in order to make profit, while that of Government is to govern a country by administering several departments. It is, therefore, necessary in the case of commercial accounts that they are maintained on an accrued basis, i.e., taking into account not only the earnings realised and expenditure actually incurred, but also the accrued earnings and anticipated liabilities. The Government accounts require only a systematic record of the actual receipts and expenditure excluding the accrued earnings and anticipated liabilities.

The State-owned Railways in India are as much a Government concern as a Commercial enterprise. The Railway Accounts should, therefore, not only follow the essential formalities of commercial accounting, but also conform to the requirements of Government accounting. This objective is achieved by keeping the Accounts of the Railways on a commercial basis outside the regular Government accounts and maintaining a link between the two to show how much is coming into the Government Revenues from Railways and how much is spent by Government whether on Capital or

Revenue account in carrying on its activities. This link is effected by utilising separate suspense heads to indicate the accrued earnings and anticipated liabilities. The most important suspense heads are as follows:

1. *Demands Payable* (Under Major Head XV - Indian Railways - Deduct working expenses)

All the liabilities of the month are collected under this head which is debited with payments thereof as and when made. A separate account is maintained for each month. The balance in the account, which is always a credit balance represents outstanding liabilities.

2. *Traffic Account* (Under Major Head XV - Indian Railways - Gross Receipts.)

This serves the same purpose for earnings as "Demands Payable" does for expenses. This is debtor for all earnings of the Railway whether realised or not and creditor for all recoveries. The balance is always a debit balance and represents unrealised earnings.

3. *Labour* (A sub-head of the workshop suspense account Capital 9600.)

As the payment to labour employed in the workshops is not made in the same month in which the labour is performed (but is made only in the following month), the total value of labour during the month is credited to this head and, as payments are made, they are debited to this account. The balance is therefore, always a credit balance representing outstanding liabilities under Labour Pay Sheets, as in the case of "D.P."

The commercial accounts of the Railway are called "Capital and Revenue Accounts" while the accounts of the Railway maintained in accordance with the requirements of Govern-

ment (as distinguished from Commercial accounts) are termed "Finance Accounts".

Although under the Convention established in 1924, the finances of the Railways have been separated from the general finances, the Ways and Means part of the two accounts has not been separated. The money required for Capital expenditure of the Railways is to be found by the Government and an annual dividend of 4% on the capital at charge is paid out of the Railway Revenues to the General Revenues. Further, the Government acts as a banker for the Railways: The Revenue Reserve Fund, Development Fund and the Depreciation Reserve Fund are deposited with the Government who are at liberty to utilize them for their "ways and means."

From 1st January 1950 the transactions of the Government of India are grouped as under:

- (1) Consolidated Fund of India
- (2) Contingency Fund of India
- (3) Public Account.

All moneys received by the Government of India either as revenue, (including that from Railways) loans or advances (including those by 'ways and means') are credited to the Consolidated Fund of India and all expenditure (including that on Railways) is met out of this. The Contingency Fund which will be at the disposal of the President is intended for meeting unforeseen expenditure. The Railway part of it will be placed at the disposal of the Financial Commissioner. All other Public Moneys received by or on behalf of the Government of India are credited to the Public Account of India and disbursements therefrom are made in accordance with the prescribed rules.

The transactions of the Railways in India, based on the above principles are classified broadly into four divisions:

- (i) Revenue; (ii) Capital (iii) Debt (iv) Remittance.

Revenue deals with receipts and expenditure therefrom as a deduct entry, so that the net result represents the revenue surplus or deficit for the year.

Capital deals with expenditure met usually from borrowed funds, such expenditure being incurred with the object of increasing assets or earnings, or reducing expenditure etc. It also includes receipts of a capital nature which can properly be applied as a set off to Capital Expenditure.

Debt deals with receipts and payments in respect of which Government incurs a liability to repay the money received or has a claim to recover the amounts paid, together with repayments of the former and recoveries of the latter.

Remittance comprises of all adjusting heads, e.g., transfers between different accounting circles for services rendered by one Government Department to another.

Within each of the above four divisions, the transactions are further divided into major heads, minor heads, main heads, sub-heads detailed heads and sub-detailed heads.

This classification of Railway Accounts serves the following important purposes.

1. To secure utmost possible uniformity of accounting amidst the immense volume of financial transactions of the Railways.
2. To enable comparison between different Railways and different accounting periods.
3. To facilitate preparation of Budget Estimates.
4. To enable executive and administrative authorities to review the transactions and exercise necessary financial control with a view to securing ultimate economy.

* * *

APPENDIX III-A—EXAMINATION -1957

Compulsory Subjects

The papers set for this examination are reported to be generally satisfactory.

It is note-worthy that in the *Book-keeping* paper, theory questions have been grouped together separately and at least one of the three questions has been made compulsory.

The paper on *General Rules and Procedure* contains 12 questions out of which 4 relate exclusively to Traffic Accounts and even these questions are simple and straightforward. Otherwise also, there are questions dealing with each subject of General Accounts side, viz., Books and Budget, Workshop Accounts, Stores, Establishment and General Expenditure; and only six questions have to be answered on the whole.

Receipts Accounts

Traffic Accounts (With Books): The compulsory question on Balance Sheet is a pretty long one; and even without any complications, it would take a substantial amount of time to answer this question. This question is one that usually determines the fate of a candidate. If he succeeds in answering it correctly, his answers to the other questions are also bound to be fair and he can be sure of a pass mark in the paper. But, if the balance sheet is not tallied in the first instance, nervous tension is created at once, upsetting all the rest of the work. The other questions are straightforward and cover various aspects of Traffic Accounts.

Traffic Accounts (Without Books): This paper also does not call for any special remarks. A candidate with tolerably good preparation and who has answered papers set in previous years, should be sure of clearing this paper without any difficulty.

Traffic Statistics and Traffic Book (With Books): The statistics portion of the paper is really practical and also includes several current topics. The Traffic Book portion of the paper contains easy questions which do not require much thought and analysis for answering.

In the *without books* paper, in the Statistics portion, 2 questions not belonging to Statistics have been included and only 5 other questions appear in the Traffic Book section. Thus, the candidate who is weak in Statistics gets a benefit by having to attempt only one question in statistics and the other 5 in Traffic Book.

Station Accounts (With Books): Here also the compulsory Balance Sheet question is a

little long and suffers from the same defect as the Balance Sheet in the Traffic Accounts paper. The other questions expect the TIA to possess detailed knowledge of his work and of Station Accounts.

The *without books* paper tests the T.I.A.'s knowledge of the procedural portion of his work and, in a few cases of the rules prescribed for observance by Station Staff.

Books and Budget

The inclusion of the Profit and Loss Account in the *with books* paper has become a standing feature. Eight other questions, covering various topics, comprise the paper, out of which, only 5 have to be selected for answering. In view of the importance attached to correct budgeting, it would be advisable that questions on Books are separated from those on Budget and grouped separately in the paper; so that an adequate knowledge of budgeting might be expected from the candidate.

The *without books* paper is a simple one, except for the fact that some of the questions require lengthy answers, like V & VI on the Balance Sheet and monthly Revenue Account Current.

Workshop Accounts

The *with books* paper tests the critical capacity of the candidate on principles. Question on the inspection of a saw-mill shop looks very fine. But when a PROFORMA Inspection Report is expected to be drawn up, the candidate's difficulty comes up both in regard to matter and in regard to time. The *without books* paper, contains straight questions and does not call for any remarks.

General Expenditure

The General Expenditure paper *with books* seems to be a long one; otherwise, there is nothing to complain about the questions themselves. In the *without books* paper, however, the questions require answers of varying lengths. This usually upsets a candidate, especially, when he knows them well, but suffers

from want of time for attempting them all within a limited period.

Establishment

In the *with Books* paper, one problem has been set on fixation of pay in an officiating and a permanent capacity; the data being few, the candidate should be able to easily handle this question. Another problem deals with the travelling allowance for air journeys. This problem is also a simple one. The other questions are all straightforward ones and such as a candidate meets with in his day to day work.

The *Without Books* paper tests the practical faculty of the candidate only in one question; the other questions are all normal ones and such as any candidate aspiring for a responsible post should be thoroughly conversant with. The question on Provident Fund account is based on the difficulties faced in their maintenance. This is really a topical question for which every candidate should have prepared answers in advance.

Stores Accounts

In the *with books* paper, one candidate from Bombay has taken objection to Question IV of the General part regarding the single ledger system. Being the theory question covered by option, the objection need not be given much weight. The questions in Group B for Accountants

test the capacity of the future accountant to deal with circumstances that usually arise in the course of work. Group C for Inspectors deals with plain topics except in the case of investigation of a fraud in stock balance. This practical question, the inspector cannot take objection to.

Without Books: The general part contains two questions requiring analytical study and deals with reconciliation of ledgers. In the group of questions for accountants also, two questions which are optional require a practical knowledge of the actual working, and of the procedure regarding sleeper acquirements. In the group of questions to Inspectors, there are practical questions, but which deal with topics with which the inspector should be familiar with.

Controller of Stores Office Procedure

The questions in the *with books* paper, can be easily answered by any inspector who is tolerably well conversant with his work. The Stores Suspense Budget, covered by question II may, however, seem to be a little beyond him; but as it forms part of stores working, the candidate cannot say that it is beyond the scope of an Inspector.

In the *without books* paper, the questions are all simple and plain and the future inspector should be able to easily tackle them.

PERSONNEL—(Continued from page 370)

Shri R. Rangachari, Assistant Audit Officer, posted to Workshop and Stores and Traffic Audit, Parel, from 25-9-57.

Shri M. Krishnamurthi, transferred to Chief Auditor's Office, Southern Railway, Madras from 25-9-57.

Sri R. M. Karnik, Permanent Auditor, promoted to Officiate as Assistant Audit Officer, Jhansi from 7-10-57.

Shri V. S. Pandurangam, Assistant Audit Officer, on return from leave, posted to Secunderabad from 30-9-57.

The following permanent and Officiating Assistant Accounts Officers have been permanently promoted to Indian Railway Accounts Service from 3rd September '57.

Sri M. A. Khaleel	— Southern Rly.
Sri R. P. Wanchoo	— Central Rly.
Sri D. S. Anand	— Northern Rly.
Sri D. C. Joshi	— N. E. Rly.
Sri M. S. Monga	— Eastern Rly.
Sri S. M. Ganguli	— S. E. Rly.
Sri D. A. Padmanabhiah	— Southern Rly.
Sri K. K. Kamat	— Central Rly.

(Our congratulations to the above officers.

Ed. R.A.)

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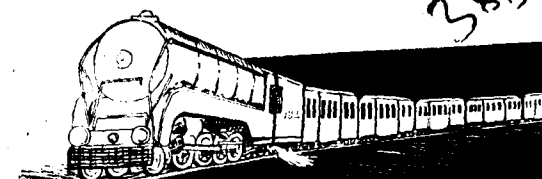
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Feb. '58.

Mgt. Ed., — R. A.

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 L. V. GOPALAN, B.A., B.L.
Retd. A. A. O., M. S. M. Rly.
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(With Budget Supplement!)

CONTENTS

	PAGE
EDITORIALS :	
RAILWAY BUDGET 1958-59	377
CONTRIBUTIONS :	
CHITTARANJAN SLASHES IMPORTED PARTS, SAVES FOREIGN EXCHANGE	379
HUMAN RELATIONSHIP AND HOW TO ACHIEVE IT IN THE SERVICES	380
WORK STUDY AND ITS APPLICATION TO RAILWAY CIVIL ENGINEERING MAINTEN- ANCE	384
ELECTRIFICATION INDISPENSABLE IN SECOND PLAN NEEDS	385
SUBJECTS OF MOMENT	389
GENERAL BUDGET SUMMARY 1958-'59	390
NEWS, NOTES & COMMENTS	391
RAILWAYS IN PARLIAMENT	395
PERSONNEL	398
DEVELOPMENTS OF SCIENCE	399
BOOKS REVIEW	402
STUDENTS' CORNER	404
BUDGET SUPPLEMENT	xxx

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Railway Budget-1958-'59

If the General Budget of 1958-'59 presented by the Prime Minister cum Finance Minister, was described by him as a "pedestrian budget", the same could equally be said of the Railway Budget for 1958-'59 presented by Shri Jagjivan Ram, Minister for Railways, to the Parliament, on 17th February, 1958. No changes in the pattern are noticed and whatever has been provided for is based on the current anticipations based on the previous figures. The 12½% increase in freight charges levied from last year, as a provisional measure, pending decision, by the Government of India, on the recommendations of the Railway Freight Structure Enquiry Committee, is still being continued, as evidently no final conclusions have been come to in regard to this matter. This is what the Railway Minister has stated in regard to freight rates:—

"In regard to the Committee's recommendations pertaining to the revision of rates structure, the examination is now in the final stages, and decisions thereon are expected to be taken and implemented in the near future".

It is, therefore, clearly inferable that the revision of the rates structure would be implemented during the course of the financial year 1958-'59, and, from aught we know, there may be on the whole an upward trend in the freight earnings, the extent of which, however, can only be known when the actual revised rates structure is decided upon and announced. The Budget does not, of course, take into account any possible increase on account of this factor. So also, the additional liability that may be imposed on the Railways, when the recommendations of the new Pay Commission are made and decision taken by the Government, has not been taken into account in the Budget. The trend of events all round would, however point to only one conclusion and that is there will, by and large, be an upward revision of the present pay structure of the Central Government servants and this is bound to affect to a substantial extent the fortunes of the Railway finances.

The financial results of the Indian Railways for the year 1956-'57 on the basis of the actual earnings and expenditure, Revised Estimates for 1957-'58, and the Budget Estimates for 1958-'59 — all these clearly indicate the continuing financial stability of the Indian Government Railways. At a time when the Railways in other advanced countries, including England, are having high operating ratios — in some cases even more than cent per cent — the performance of the Indian Government Railways should be considered

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to be quite satisfactory indeed and, but for the ugly appearance of some accidents involving loss of life and property, the Indian Railways have every reason to be proud of their achievements.

In 1956-'57, the gross traffic receipts were Rs. 347.57 crores, and the net surplus after appropriation to DRF etc., came to Rs. 20.22 crores against the Revised Estimate of Rs. 26.95 crores, the fall in the net surplus being due mainly to heavier expenditure on repairs and maintenance. In 1957-'58 also, the surplus is expected to be only Rs. 21.66 crores against the Budget Estimate of Rs. 30.83 crores and here again, the fall in the net surplus is due chiefly to the interim increase in Dearness Allowance, increase in cost of coal and general increase in the repairs and maintenance of track, bridges etc., due in a large measure to the higher level of prices. In 1958-'59, the total traffic receipts are estimated at Rs. 407.48 crores against which the Working Expenses including Appropriation to DRF of Rs. 45 crores as also contribution to the General Revenues take away Rs. 380.14 crores, leaving a net surplus of Rs. 27.34 crores. If past experience in regard to the actual realisation of the net surplus in the years 1956-'57, and 1957-'58 is any guide, there would again be a repetition of the fall in the net surplus in 1958-'59 also as compared to original anticipation. Thus if the grand sum of Rs. 27.34 crores is now anticipated as the net surplus in the Budget for 1958-59, it may not be surprising if the net surplus is shown at a much lower figure, two years hence when the actuals are known for that year.

The operating efficiency of the Railways, on the basis of the several accepted criteria, has been good, and in fact showing signs of improvement further and further. Thus, the net ton miles per wagon per day have shown a significant rise both in MG and BG. The engine usage has also been satisfactory, and with the increased facilities provided both on the line and in the Running Sheds and Workshops, the statistics of engine usage are likely to improve, and towards this end, the Railway Board are no doubt straining every nerve. This is particularly necessary, as the steadily growing volume of traffic has to be dealt with by the Railway, keeping pace with the Plan works in the other Sections. In one respect, however, the operating efficiency does not show a satisfactory record. While the wagon miles per wagon day are impressive to some extent in the case of BG, it cannot be so said in respect of MG as will be seen from the details furnished in the review of the Railway Board's publication "Indian Railways" appearing elsewhere in this issue. The position on the MG would require special treatment and continuous attention if improvement is to be effected in the immediate future.

When all is said and done, the fact that the efficiency at various levels is still at a low ebb on the Indian Railways compared with that on British, German and Japanese Railways, cannot be denied and a continuing effort should be made to bring home the importance and necessity of efficient work with thorough honesty and integrity to the lakhs of employees on the Indian Railways. In this effort, the newly formed "Organisation and Methods Division" will, no doubt, play its proper role, which will be to the advantage of the Indian Railways. The Vigilance Cells and the Special Cells and the Special Squads will function as a moral force in the set up.

The Budget that has been presented is for the third year of the Second Five Year Plan, and the provision made for new work is considerable (Rs. 260 crores) and this emphasises the imperative need for constant vigilance for control, financial and technical, at different levels.

Chittaranjan Slashes Imported Parts, Saves Foreign Exchange

BY SRI CHALAPATI RAO, Dy. Chief Mechanical Engineer,
Chittaranjan Locomotive Works.

For the manufacture of locomotives certain raw and basic materials and components are required. Similar to the practices followed in other foreign loco manufacturing units, Chittaranjan Locomotive Works were set up for the manufacture of certain components and for the balance these were to be obtained from the trade.

In 1950, production was inaugurated in the Chittaranjan Locomotive Works; the first 10 locomotives produced being assemblages of components obtained from abroad. Since then, gradually as the manufacture of components was stepped up in these works, imports were reduced. It was not possible, however, to completely eliminate imports, as, for certain components manufacturing processes were not set up in these workshops and the indigenous trade was not in a position to supply the components for us.

There was also the difficulty of manufacture of certain components by indigenous trade on account of the proprietary nature of these. In the early stages of development although processes existed for the manufacture of certain components, due to difficulty in meeting the entire requirements to deal with a rapidly increasing production of locomotives, arrangements had to be made to obtain by imports certain finished components.

The number of items, which were obtained by imports as either finished components on account of insufficient capacity in the shops, or as finished components on account of their proprietary nature or as finished components on account of capacity for these not being available from indigenous sources, was roughly 90, mainly consisting of items such as main bar frames, boiler plates, roller bearing axle-boxes, fully machined

steel castings, etc. The cost of such imports was in the region of about 2.5 lakhs of material per locomotive.

The question of eliminating imports by as much as possible has been receiving the constant attention of C. L. W. administration. For various reasons mentioned above, it was not possible to rapidly reduce the imports to a low figure. Efforts were also made from time to time to redesign certain components with a view to eliminate imports.

For example, the existing steel plants in India cannot roll the main bar frame slabs which are 31' long, 32" wide and 5" thick. Similarly, the existing steel plants cannot roll Boiler plates over 6' wide. A fabricated design of main bar frame slabs was developed wherein 3 slabs of about 11' length, which could be rolled by TISCO, are to be welded to make up a complete length of slab; likewise the boiler was redesigned wherein plates less than 6' wide could be utilised by welding. These designs were put to use and a certain number of locomotives turned out. The capacity for the manufacture of fabricated frames or boilers with plates less than 6 ft. wide was limited on account of limited amount of steel available from the indigenous steel plants as well as limited capacity available for fabrication in these shops. Certain steel castings which could not be produced in this country were converted to fabricated design and a notable example of this is the tender bogie.

With the above steps taken, the imported component in a locomotive which was, as mentioned above, in the region of 2.5 lakhs, has been gradually brought down to 1.3 lakhs per locomotive.

With the difficult foreign exchange situation, a fresh drive was instituted early in 1957. Discussions with the in-

indigenous manufacturers and the Central Standards Office were carried out with a view to bringing out further suitable designs which could be produced indigenously.

As a result of this renewed drive, the imports of a large number of items have now been eliminated. It has not been possible, however, to completely eliminate imports as certain raw and basic materials are still not available in the country. The establishment of the new steel plants and firms like India Tubes Ltd. will help us considerably in eliminating further imports.

Even now, with the limited indigenous sources available, the imported content in locomotives has been brought down considerably and only approximately about Rs. 50,000 worth of material, mainly consisting of main bar frames, boiler plates, tyres and axles, continue to be imported.

For certain items for which these shops were not equipped, we have been pursuing with the local agents of foreign manufacturers to set up capacity for the manufacture of these in the country. Response from the foreign manufacturers in certain cases has been poor. In these cases, C.L.W. administration is taking steps to eliminate imports by setting up necessary capacity for the manufacture of the items in these workshops.

With all the above steps taken, with the establishment of a steel foundry at Chittaranjan, with the establishment of the new steel plants at Bhilai, Rourkela and Durgapur, it is expected that by about 1961, that is, by the end of the second Five Year Plan, it would be possible to manufacture all the steam locomotives required with entirely indigenous material.

[By Courtesy—Indian Railways]

Human Relationship and How to Achieve It in the Services

BY A. M. DAS. *Security Officer, Western Railway*

Proper human approach and relationship play as important a role in the management of Service Personnel as in a Scientific Industrial Management. After all the problems of Human Relationship are the same everywhere.

Human Relationship is such a subject that by merely studying the specialised literature, one cannot achieve or expect success in the field of practical application. There is an ample supply of literature on the subject, which should be supplemented with expert advice on how to adapt what has been done by other concerns to his particular situation. This gives the executive officer, eager to improve his own department and his concerns, a feeling of adequacy and security that makes it possible for him to apply what he has learned to his concrete

problems. He in turn contributes the result of his experience to management. In this way, he becomes an inseparable and indispensable part of his team which has to display efficiency and skill of a high order daily.

The situation is entirely different when it comes to the executive's know-how in manpower control, or in the handling of the human element. We must recognize the importance of manpower control and realize that maintenance of all other types of control is dependent on man power control. The approach has to be direct in the manpower control and emphasis must be placed on the human element. The Executive has to have a very clear knowledge of what he has to do and what helps and hinders him. He must be con-

versant with his daily schedules and the method of accomplishing them in the best manner.

Before the human element can be recognised as a vital part of every situation, it is desirable for the administration to clarify its own philosophy and Policy towards man power control. It has been said "Management is the development of people and not the direction of things" Therefore, more and more emphasis needs to be placed on human organisation and relationship. Human Relations cannot once for all be lined up, codified and set down. There must be flexibility in functions and relationships, if man power control is to be effective.

There is a great need for personal and social satisfaction. This satisfaction can only be achieved if particular attention is paid by the executive in his day-to-day duties to the basic principles, which are essentially required to be observed in creating cordial and healthy relationship between the superior and subordinate staff.

The main principles, broadly speaking are:—

(1) *Man Power Control*: Man power control is the planning, setting up and maintenance of conditions, under which a man can function at top efficiency.

(2) *Art of Communication*: Unless staff are given patient hearing, mere talking to them will be ineffective. Success in Human Relationship depends on the ability of the executive staff to give orders, interview, instruct, speak before groups and make reports. Talking, listening and writing are of primary importance to the executive officer in building positive staff relations.

(3) *Selection and Placement*: Sound man power control rests on the proper selection and placement of workers. Each person under the supervisory officer must be so selected, so that there may not be any difficulty on the part of the staff to adjust himself temperamentally

and physically in his job for maximum effectiveness. The result of effective human relationship in the entire Organisation can, therefore, be obtained by

(a) Effective filling up of the vacancy by the available person best able to do the job.

(b) Raising of the general level of output and personnel relations in the department.

(c) Improving standard of unity and co-operation between departments in the same organisation.

(4) *Induction*: The supervisory officers are vested with full responsibility for the quality and quantity of the induction process. Well informed, enthusiastic workers can be inducted easily and quickly into his department and the job. The supervising officer must use proper care in integrating new employees into his department and if he observes the reaction of the new-comer with proper care and interest, the results will be startling. Each employee should be made to—

(a) feel he is needed.

(b) know what is expected of him.

(c) know why he was chosen.

(d) know what the conditions are under which he will work.

These realisations contribute substantially towards the sound service relationship.

(5) *Training*: This is most essential in forming a skilled, loyal and disciplined team of workers. Training should be so phased and worked out that it can readily infuse enthusiasm amongst the trainees and the interest is kept alive the whole time. It is during the training that one comes to know his subordinate staff more intimately. By mutual exchange of views and ideas during the training period, staff come to know each other better and thereby a sound Relationship is established.

(6) *Promotions and Transfers*: These play a very important role in improving

the morale of the staff. The mind of the worker should be so conditioned that he can appreciate the value of promotion to the deserving person. While considering the question of promotion, the seniority of the staff should not be lost sight of. At the same time, it must be impressed on all staff that mere seniority is no criterion for a promotion to a higher rank, where certain amount of skill and efficiency is required to discharge the obligations assigned to the job. As long as the promotion is based on sound and logical principles, a very good relationship will be established between the supervisors and the staff. There should be no parochialism while recommending staff for promotion.

Similarly, the transfer of the staff should create an impression in their minds that these orders have been given in their interest and welfare and that provision for better opportunities, have been made by such transfers.

In short, promotion and upgrading are vertical in their action and transfer is horizontal. Generally, promotion and upgrading are welcome and attractive, whereas transfer may or may not be.

Main points for consideration in the matter of promotion are :

- (a) Could he contribute more if encouraged by promotion?
- (b) Is he temperamentally and emotionally suitable for promotion.
- (c) Does he need additional skill and knowledge for the promotion?
- (d) Is he capable of promotion?
- (e) What preliminary training, outside course, refresher course, etc. are needed before he could fill the higher job.
- (f) What provision can be made for filling his present job.

Similarly, there should be policies towards transfer. These policies can be categorised in the following main heads :—

- (a) No transfer under any circumstances

(b) Medical transfers which are often imperative for indifferent health and change of air.

(c) The casual attitude, which results in a hit-or-miss condition, depending on requests from favoured employees or departmental conditions.

(d) The planned transfer.

It is, therefore, to be appreciated that unless the promotion and transfer problems are properly thought out and executed, good relationship is difficult to establish in any organization.

(7) *Separation* : The word separation means release, discharge, and dismissal of staff. These words have very unpleasant significance. A staff can be released on superannuation and transferred to other departments. But, discharge and dismissal are normally done on disciplinary grounds. The separation policy should also be so planned that the staff appreciate the effect of an action. Any action under separation policy should be in the general interest of the staff and the department.

All causes of disappointment, harassment and sense of insecurity should, therefore, be well guarded to establish a good staff relationship in the service organisation.

(8) *Working Conditions* : The main principles involved in making the working conditions congenial are :

- (a) Good and sanitary living conditions.
- (b) Attention towards physical fitness.
- (c) Guarding against unnecessary physical and mental strain, fatigue and boredom.
- (d) Education by means of lectures and practical training.
- (e) Elimination of personal likes and dislikes.
- (f) Recreation.

There are many other principles involved in improving the working conditions of staff. But, by observing basic

principles and by ensuring their observance in the day-to-day administration of the department, a sound and healthy relationship can be established.

(9) *Security* : Unless the sense of Job-Security grows in the staff, they will never make any determined effort to do their jobs sincerely. It is the duty of the supervisory officers to instil confidence in the mind of everyone working under them and they should also strive to make the staff realise that they are being guided and governed by a fair and fearless policy and there is no insecurity in their job.

(10) *Health and Safety* : There should be provision for the medical aid to staff and their families. A good supervisory officer can get the best out of his men and also will succeed in establishing a good relationship, if he pays prompt attention to the mental and physical health of the staff. Men should be visited periodically in the hospital and similarly they should be seen at their residence with a view to maintain the link of cordiality between the supervisory staff and the ordinary man. A little sympathetic attitude and kindness always pay rich dividends in the long run. In short, it should be the bounden duty of all supervisory staff and officers to take as much care of their men and the family during off hours, as they take while they are on duty. Periodically, medical examinations should be organised and insisted upon, to create better physical conditions for essential duties. By arranging organized games, activities and recreation, the body and the mind of men can be kept in proper tone and thereby the percentage of absenteeism on account of ill-health can be kept well

under check and control. The main object of taking interest in the welfare of the staff in their sickness and sorrows is to establish good Staff-Relationship and a proper team for all time.

(11) *Supervision and Leadership* : The success of good human relationship in the services depends entirely on the standard of Supervision and Leadership.

Constant attention has to be paid to the welfare and amenities of staff. Proper training has to be imparted, without causing much hardship, to improve the discipline and morale of the staff. Men are to be properly guided and counselled constantly whether on or off duty. The leaders' responsibilities are many and the entire success depends on their personal approach to the problems and their relationship with their men.

The purpose of the approach to the problem is more utilitarian. The day-to-day personnel problems on the job have been discussed and if the approach of all supervisory officers to these problems is directed to the right path from the very beginning, it can be very confidently said that there will be no difficulty in the path of establishing good Human Relationship between the members of different categories and ranks in any particular Department.

Human relationship in the services can only be established through proper leadership and other basic principles already discussed. We should not make too much of our own experience. The widest human experience is bound to be narrowed unless it has been broadened by the experience of others.

[By Courtesy—W. Rly. Magazine]

Of all the liars in the world, sometimes the worst are your own fears.

x x x

In the desert all men are enemies until they are proved to be friends.

x x x

Work Study and its Application to Railway Civil Engineering Maintenance

Work study is the tool by which management and staff at all levels are enabled and encouraged to give constant thought to improving the efficiency with which they carry out their work and is best known by techniques such as time and motion study, method studies, materials handling studies, job evaluation, etc. The application of these techniques with full regard to the great importance of human relations brings great advantages to both management & staff.

A proper appreciation of the application of labour control and incentive schemes is obtained by imparting knowledge about them through work study courses and by regular joint consultation meetings where operators and supervisors are made familiar with the advantages of the schemes.

Labour control and incentive schemes based on work study have been developed and applied to railway civil engineering maintenance on the Southern Region of the British Railways. The section where the scheme is introduced is divided into a few equal areas or zones (say, 3 zones for a 15 to 18 gang section) and each zone is placed under the supervision of an inspector. Apart from the general supervision duties, the inspector is responsible for the work study as directed by the central work study office which controls the complete district. The inspector certifies the quality and quantity of work done by each gangman. When the quality of the work cannot be assessed immediately, any additional labour put in by a gangman to rectify the deficiency at a later date is not counted in his favour. Two work study charts are usually maintained by the inspector; one giving details of the progress made on the usual maintenance work, namely, packing, alignment, and other auxiliary jobs of tightening the fastenings, etc. and the other giving details of seasonal work such as replacements of sleepers and the like. Bonus

rates are worked out based on these charts which enable operators to receive extra payment for any performance above a predetermined basic level. In the application of these schemes to track maintenance where conditions of work vary considerably leading to fluctuations in the performance of an operator for no fault of his, an account of these factors is taken in the bonus calculations.

Details of labour control and incentive schemes are communicated to the permanent way staff so that it may serve as a fillip to increased output. The figures of manpower required for particular work determined from the work study based on hourly-rated conditions are utilized to work out economical levels of manpower for regular sections after giving due allowance to the fact that hourly-rated conditions with bonus schemes provide better incentive and therefore produce greater output than under regular conditions.

Modernization plans on the railways make additional demands of manpower which may advantageously be met by the extension of labour control and incentive schemes. Shortage of manpower particularly for specialized jobs has led to the increased application of work study techniques. It is also observed that workshops engaged in the fabrication of permanent way materials can meet the heavy demands required under the modernization schemes, by the implementation of work study recommendations.

For the full benefits of any of these schemes to be realized, it now appears to be essential that financial participation in the economies should be extended to the supervisory grades by introducing a basis where by payment is closely linked to the degree of efficiency with which supervisory duties are carried out.

(By Courtesy—The Indian Railway Technical Bulletin.)

Electrification Indispensable for Second Plan Needs

BY S. SARANGAPANY, General Manager, Eastern Railway

In an article marked by extreme lucidity the author, for long intimately connected with the Calcutta Electrification Project, shows that conditions at present are ideally suited for large-scale electrification in the eastern region of the country. He says that main line electrification is indispensable to cope with second Plan tasks, that it is economically worthwhile and that it will help to save valuable coal. He pleads for high priority for the indigenous manufacture of electric equipment and for electric power schemes.

IMPORTANT EXTRACTS

x x x

It was not till after the second world war that the idea of developing electric traction, both for main lines as well as suburban traffic began to take shape. Indian railways have now come to the conclusion that main line electrification is indispensable to enable them to carry the additional traffic visualised under the second Five Year Plan economically and with the least overall burden on the country's finances.

SECOND PLAN ELECTRIFICATION

Railway electrification during the second Five Year Plan will now comprise the following sections at an estimated cost of over Rs. 100 crores in addition to the first phase of suburban electrification between Howrah and Burdwan, sanctioned at an estimated cost of about Rs. 12 crores in 1954 :

1. All Calcutta suburban sections;
2. Burdwan to Moghalsarai;
3. Asansol to Rourkela;
4. Igatpuri-Bhusawal; and
5. Tambaram-Villupuram.

Ambitious as the Plan may appear, it actually represents the absolute bare minimum mileage to be electrified to enable railways to carry the second Plan Traffic. On purely economic considerations alone, several hundred miles more of Indian railways are ripe for electrification leading to economies in operation, which in the long run must

benefit the commerce and industry of the country.

x x x

COST FACTOR FAVOURS ELECTRIFICATION

The main factors that affect the comparative cost of steam and electric traction are the cost of coal, electricity, fixed equipment for electric traction and rolling stock. It is well known that the thermal efficiency of a steam locomotive is about a fifth of the efficiency of a stationary thermal plant, and after allowing for the losses in transmission from power station to the driving wheels of an electric locomotive, steam locomotive is only about a fourth as efficient as an electric locomotive in terms of coal consumption. With the further increase in the size of modern power stations and the development of modern technique, the disparity in thermal efficiency will be even more marked.

What, however, is more important is that modern power stations are designed to use very inferior coal for which normally there would be no other demand. On the other hand, steam locomotives still require fairly high grade coal for their operation. Basically, therefore, the case for changing from steam to electric traction in India with its limited reserves of high grade coal is both urgent and inescapable.

The difficulties which have faced the Indian railways up till now have been financial, as fixed equipment in the shape

of overhead wires, structures and substations constitutes a very substantial proportion of the total cost of an electrification scheme. The cost of fixed equipment however does not vary appreciably over wide ranges in traffic density. Therefore, the higher the traffic density, the lower will be the cost per unit of traffic of fixed installations. On the other hand, the less operating cost under electric traction for each unit of traffic density will lead to increased savings in operation as traffic density increases. A point will be reached, when this saving equals the cost of service of the fixed equipment and any further increase in traffic density will result in lowering the total cost in favour of electric traction.

Traffic on Indian railways during the war and subsequently has shown considerable increases and the rate of increase is expected to be further accelerated during the course of the second Plan period. The density of traffic at the end of the Plan period will have far outstripped the optimum traffic, above which alone electric traction will be cheaper.

At the same time, it has been proved in all parts of the world that electric traction improves line capacity and handling capacity substantially. Investigations have thus shown that the electrification of some of our main routes will enable us to handle the increased traffic without the necessity for costly engineering works, such as doubling, shortening the length of block sections, providing new crossing stations etc., and at the same time a handsome return will accrue on the capital expenditure on electrification. Over the Eastern Railway, a return of about 15 per cent has been estimated on the capital expenditure outside the suburban area. On other railways where coal has to be transported over longer distances, electrification will be justified with a far less density of traffic.

OTHER ADVANTAGES OF ELECTRIFICATION

Apart from the question of costs, the necessity for large-scale electrification will also be evident from the following considerations.

Electrification will result in the displacement of a large number of steam locomotives and the economic disposal of such locomotives has always been a major problem to be reckoned with. Conditions at present are ideally suited for large-scale electrification as we have to go in for a large increase in the fleet of locomotives and if we go in for electric locos rather than steam, the problem of disposal of released locomotives will not be there.

Also, Indian railways have still to carry a very large number of coverage steam locomotives which are being retained only in view of the acute foreign exchange position. If we electrify now rather than at a later date, we can economise on funds which would otherwise have to be appropriated for the purpose of steam locomotives both for additions and for replacements.

SAVING IN COAL

The expansion of electrification at this juncture will help to reduce the requirement of locomotive coal at a time when a huge increase in coal production has to be achieved for feeding the industries which are being developed under the second Plan. The pressure on coal production will thus be eased to some extent.

The saving in loco coal consumption will automatically bring about a reduction in the tonnage of commodities to be moved by rail. Railways will not, therefore, have to compete with industries in securing a share of the limited transport available. As all these advantages are secured with simultaneous reduction in operating costs, quite a

substantial amount of the revenue can be ploughed back for capital investment.

A point which is likely to pass unnoticed in respect of the total cost of electrification schemes is the cost of electric rolling stock. This generally accounts for more than 50 per cent of the total cost. In the context of the developing economy of the country, when rail capacity has to be built up rapidly, more and more locomotives would have to be built or purchased in any case. The cost of electric locomotives included in the electrification estimates should really be set off against inescapable expenditure on acquisition of additional locomotives. The extra cost of electrification under the second Plan would then be roughly halved.

x x x PLANNING ELECTRIC SUPPLY FOR RAILWAYS

The development of hydro-electric and other sources of power is often being planned and carried out without reference to the expansion schemes of the railways. It is almost axiomatic that railways electrification has to follow the development of cheap power. The fruition of the Calcutta Electrification Project owes not a little to the fact that the Damodar Valley Project had been sanctioned many years ahead and the supply of power at an economic rate had been assured to the railways. The Rihand Project is facing the pruning knife at the moment, but if the fact that railway electrification upto Moghalsarai depends on Rihand for a portion of the power supply is not forgotten the higher priority originally allotted to this project will perhaps be restored.

Electrification of the South Eastern Railway between Khargpur and Waltair cannot long be delayed and it will be upto the Ministry concerned to plan ahead for power supply for this electrification, possibly during the third Plan. I would go further. The development of electric traction on the Eastern and

South Eastern Railways during the second Five Year Plan will justify the capital expenditure on a grid connecting D.V.C., Rihand and Hirakud projects. This will be the starting point for a bigger grid which will finally connect all the major projects in the country.

CO-ORDINATION WITH RURAL ELECTRIFICATION

There appears to be room for greater co-ordination also in respect of the construction of transmission lines for rural electrification. In an under-developed country like ours, the expansion of rural electrification should have a prominent place in our planning and the fullest advantage should be derived from the railway transmission lines for feeding the countryside. It will obviously lead to considerable economies for Government as a whole if strict instructions are issued to the different authorities charged with the execution of electrification schemes to maintain co-ordination and avoid duplication at all costs.

ELECTRIFICATION VERSUS DIESELISATION

It may well be asked why this country is not going in for large-scale dieselization, in preference to Electrification with its attendant capital investment on the fixed equipment. The answer is twofold.

We are still importing the bulk of our requirements of crude oil and it is too soon to say if the new wells being developed in Assam or the new sources which may be located as a result of the intensive drilling operations now in hand yield sufficient oil for our present needs and the needs of dieselization. Immediate dieselization will require more foreign exchange which is so scarce.

Even more important is the economic factor. The capital cost of dieselization will be lower than that of electrification only upto a certain limiting traffic

density, depending on the terrain. If the traffic to be moved is heavier, dieselization will have no advantages over electrification. It is useful to remember that the power of individual diesel locomotives is in the present state of development for less than those of individual electric locos and on a section dealing with very heavy traffic, fewer electric locos could do the work for which a much larger number of diesel locos will otherwise be necessary.

Diesel locomotives have, however, certain advantages of their own and Indian railways have not been slow in recognising this and utilising them where conditions are favourable. It has already been indicated that diesel traction will be cheaper in first cost for moderate densities of traffic and as diesel locos can be obtained and put into commission in much less time than is required for complete electrification, there is a case for the use of diesels where the urgent needs of traffic cannot wait till electrification.

On the Asansol-Moghalsarai and Asansol-Rourkela routes, the impact of heavier goods traffic will be felt much ahead of the completion of electrification. Indian railways have, therefore, placed orders for 100 diesel locomotives for service on these routes and the first 20 have already landed in Calcutta. After these sections are electrified, the diesels will be transferred to other sections where expanding traffic calls for similar assistance.

Diesel locomotives are particularly well-suited for this type of operation. Many countries in the West have introduced a limited number of diesel locomotives and rail cars as a preliminary to electrification and as increasing traffic justified electrification, transferred the diesels to other sections.

The manufacture of new steam locomotives has now been abandoned by all progressive countries and it may not be long before India has to follow suit.

x x x

AN APPEAL

SUBSCRIBERS are requested to note that in spite of the phenomenal rise in cost of paper, the rate of Subscription to the Journal is retained at the old level. They are therefore requested to co-operate with the Management in preventing avoidable correspondence like —

Reminders for arrears of subscription.

Non-receipt of copies due to non communication of changes in address promptly.

Economy in expenditure will enable at least a fraction of the above increase in cost of paper being met.

Enlistment of large numbers of fresh subscribers will also aid by bringing in additional revenue as a set-off.

May we hope for hearty co-operation from you ?

Feb. '58.

Mg. Ed., — R. A.

Subjects of Moment

Reckoning of Officiating Pay for Special Contribution to P. F.

Under Ry. Board's orders of May 1956, a permanent Railway servant who had been officiating on the date of his superannuation/on the date of quitting service, if earlier in a higher post continuously for three years or more would be treated as though he held that post in a substantive capacity for the purpose of calculation of S.C. to P.F. For this purpose, all periods of leave or duty in a still higher post or posts during the three years immediately preceding the date of superannuation or quitting service, if earlier, will count towards the limit of three years under the conditions stated therein.

For intervening periods of less than 22 days between two periods of LAP/PL, officiating allowance is admissible in terms of R.B. No. E 54 PA 4/2 of 4-11-55 & E 54 IC 1/15/2 of 1-2-'57, provided a certificate as required therein is given in respect of the second spell of leave. If, however, such a period is sandwiched between other kinds of leave, officiating allowance is not admissible for the duty period between the two spells of leave and this period will not also count for increments in the officiating post. In such cases, the technical reversion and non-payment of officiating pay for periods of officiation for less than 22 days between two spells of any kind of leave is not a bar for the grant of the concession as per Board's letter of May 1956, provided the required certificate is given in respect of the two spells of leave although the intervening period of duty does not count for increments in the higher officiating post.

* * *

Refund of P. F. Bonus to Subscribers Resigning Within 5 years

Under Rule 1337-R I, Railway servants who resign before completion of

5 years' service are not normally eligible for bonus. Recommendation for the grant of Bonus in such cases should be made only for exceptional reasons, not merely because the employee has a clean service record. G.M.'s sanction would be required for withholding or grant of Bonus in such cases.

* * *

Calculation of Pensionary Equivalent of P.F. etc. of re-employed Railway Servants during L. P. R.

In cases where re-employment is given during leave preparatory to retirement, or during post-retirement leave the pensionary equivalent of P.F. benefits for the purpose of fixation of pay on re-employment should be calculated on the amount that would be due to an employee on the date on which he would have normally retired.

(R.B. No. E (G) 57 EM 1-32 dated 8-2-58)

* * *

Interchange of Privilege Passes & P.T.Os between Indian Railways & Railways of Foreign Countries

First Class 'A' Passes may be issued to Railway Officers of Foreign countries where Air-conditioned accommodation is given free of cost or at a concessional rate to officers of Indian Railways.

This applies to Railway Officers of Foreign countries who visit India and are eligible for free 1 class Passes on Indian Railways on reciprocal basis.

(R. B. No. E (G) 57 PS 5-12/2 dated 20-1-58)

* * *

Privilege of Passes and P.T.Os to an earning Unmarried daughter of a Railway Employee

Unmarried daughters, even if earning, are eligible for inclusion in the Passes/P.T.Os issued to Railway employees.

(R.B. No. E (G) 57 PS 5-2 dated 10-2-58).

* * *

Advance Correction Slips

1. *Service Agreement Form*: App. XXIV-R I: Substitute the following for existing Clause 18 of Service Agreement Form No. 7:

"Should the Apprentice terminate his/her apprenticeship without the prior written consent of the Government, or be discharged therefrom for misconduct or decline, on the completion of his/her apprenticeship, to accept service (if offered to him/her) as an officer in the Mechanical Engineering Department and/or in the Transportation (Power) Department of the Superior Revenue Establishment of Indian Railways as aforesaid or resign such service or be discharged therefrom for misconduct during the probationary period, the Party of the Second Part, in consideration of the promises hereby agrees to repay on demand to the Government all stipends or pay drawn by the Apprentice from the Government under these presents and any premium or premia paid by the Government on his/her behalf to secure an adequate training for the apprentice and all the moneys whatsoever expended on and paid to the Apprentice consequent on his/her

appointment as Apprentice and as a probationer on the completion of such apprenticeship."

[R.B. letter No. E (O) 57 AG 7/3 dated 11-1-58.]

2. *Grant of Increments to Workshop and Class IV Staff*: Rule No. 2022-II: Delete the existing notes i) and ii) below this Rule:

[R.B. No. E (NG) 55 IC 1-2 dated 21-1-58.]

Issue of Passes to Daily Rated Casual Labour

The Board have decided that the present incumbents may continue to enjoy the concession to free residential car passes so long as they continue to serve without break, but this concession should not be given to casual labour employed in future.

[R.B. No. E (G) 57 PS 5-19/1 dated 30-12-57.]

Accounts Training School

The Railway Board have sanctioned a special pay of 20% to the Senior Accountant employed as Instructor in the Accounts Training School, Southern Railway, Trichinopoly.

General Budget for 1958-'59

(GOVERNMENT OF INDIA)

Prime Minister Nehru presenting the Budget for 1958-'59 in the Lok Sabha on 28-2-'58 disclosed a revenue deficit of Rs. 32.85 crores at the existing level of taxation.

Mr. Nehru said with experience some changes might be made here and there (in the structure) but the major steps that were taken last year had to continue.

BUDGET AT A GLANCE

	(in lakhs of Rupees)		
	Budget 1957-'58	Revised 1957-'58	Budget 1958-'59
Total Revenue	708,03	724,63	763,16
Total Expenditure	672,29	719,58	796,01
Surplus (+)	—	—	—
Deficit (-)	35,74	5,05	27,02

* Effect of budget proposals.



NOTE
COMMENTS

Age Limit on Students' Concession Tickets

The Railway Board has imposed an age limit on persons who should in future be regarded as eligible for suburban and non-suburban students concession tickets at concession rates.

With effect from May 1, 1958, such student concession tickets will be available only to students who are not more than 25 years of age.

New Rail Line in Madhya Pradesh to Help Coal Movement

A project estimated to cost over Rs. 8 crores has been sanctioned by the Railway Board for the construction of a new broad gauge railway line in Madhya Pradesh.

The line will be constructed between Bijuri and Karonji, a distance of 57 miles on the South Eastern Railway in the vicinity of the Central India coalfields. When completed, the line will greatly assist in the movement of coal from the Bistrampur coalfields.

Ticketless Travel

It is reported that recently the Railway Minister received by post an anonymous letter together with Postal Orders for the value of Rs. 40.50 said to have been the Railway fare from Calcutta to Bombay not paid at the time of the travel by the sender for want of money.

Note: Such instances of voluntary payment for past ticketless travel are rather rare; but, some similar cases were also reported in the recent past. It is only when public morality improves considerably that we can say the National

character is being built up properly.—
[Ed.—R.A.]

Measures for Improvement of Safety on the Indian Rlys.

ECAFE'S SUGGESTIONS

A recommendation that India, with its large railway system should have a separate Railway Inspectorate organisation for controlling safety on the railways is made in an ECAFE report to the United Nations.

The Inland Transport Committee of the Economic Commission for Asia and the Far East found that "taking the countries in the (ECAFE) region as a whole, the faults of personnel are responsible for the majority of the railway accidents; the failure of rolling stock comes next."

The report said that in the interest of ensuring greater safety "each railway requires one or more experienced personnel attached to the head office exclusively for this purpose."

"This is in addition," the report emphasised, "to the separate Railway Inspectorate organisations in countries with large railway systems like India, Japan and Pakistan."

"There is room for improvement in the various fields of railway working for the achievement of higher standards of safety," the report said.

To carry out this object, investigations in every sphere of railway working should be made, the survey added.

The report is one of a series submitted to the U.N. Secretariat by the ECAFE Committee.

"Funds should be provided for this purpose in the annual budget under a separate heading which may be called 'safety measures'.

"Although the money spent on safety measures does not catch the public eye so readily as the provision of amenities, the reduction in the number of accidents should increase their confidence in railway travel, thereby causing augmentation in railway revenue."

STEPS TO REDUCE ACCIDENTS

It was recommended that in order to reduce railway accidents the ECAFE countries might avail themselves of U.N. technical assistance. As regards the recommendation that one or more "senior men with all-round experience should be attached to the head office of each railway and entrusted exclusively with the task of promoting safety in every sphere of railway working," the report said that "such men should be handpicked and their work should be judged by the actual results in bringing down the number of accidents on the railways."

"In countries with separate railway inspectorates they should work in close liaison with such organisations and attend the inquiries held by the Government Inspector of Railways into the more serious accidents, as far as possible."

The report said that in India and Pakistan, a Government Inspector's inquiry is held only into accidents to trains carrying passengers "and yet no distinction is made in the rules between casualty to passengers and to railway personnel for making such inquiry obligatory."

The report added: "It is apparent from this that the inspectorate is as much concerned about the safety of the railway personnel as of the travelling public. The inspectorates in these two countries do not, however, possess the necessary men for holding inquiries into the more important cases of accidents to

the railway personnel that take place in course of the discharge of their duties nor has any regulation been enacted for this purpose."

The report, however, stated that in India and Pakistan as well as in Japan "there has been some improvement (in prevention of railway accidents) indicating that the steps already taken are becoming progressively effective."

Cranes for Indian Rys.

It is learnt that a British firm has secured an order for the supply to the Indian Railways, of 27 broad gauge steam-operated self-propelled transportation travelling cranes for general purpose service. Deliveries are expected to commence at the beginning of the next year and are scheduled to be completed within a few months.

The total value of the contract awarded to the firm is over Rs. 38 lakhs.

Swiss Trains for Indian Railways

The first of 16 Swiss-built suburban type electric trains ordered by the Indian Railways at a cost of 15 million francs, left the West German port of Bremen in mid-February.

The trains, which are made of light steel and are capable of carrying 1,000 passengers, go to Calcutta where they will be used on a new series of suburban lines.

Indian Railways' Record Performances in the Second Five-Year Plan Period

The Railway Ministry's Annual Report for 1956-57, (the first year of the Second Plan period), disclosed that during this year the Indian Railways touched new peaks of performance, both in regard to goods and passenger traffic.

In spite of heavy rains, floods and other abnormal factors during the year dislocating train services, the Railways showed improvements in various directions.

Goods traffic touched a new height of 125 million tons and 40225 million ton-miles, breaking the previous year's record of 115 million tons and 36472 million ton-miles.

Taking into account both revenue and non-revenue loadings, an average of 14275 B.G. and 8670 M.G. wagons were loaded every day as against the corresponding figures of 13407 and 8026 during the previous year, registering increases of 6.19 and 7.72% respectively.

The number of originating passengers rose from 1297 million in 1955-56 to 1383 million in 1956-57. Passenger miles increased from 39083 millions to 42194 millions.

Net ton miles per wagon day rose from 541 to 570 on B.G. and from 203 to 210 on the M.G., showing an increase of 5.36 & 3.45% respectively over the previous year.

The average daily wagon haul was 47.7 & 28.7 miles on B.G. & M.G. as against 46.3 & 28.5 respectively during 1955-56.

Passenger train miles increased during the year by 2.70% and passenger miles by 8.01%. Goods train miles showed an increase of 4.85% over the previous year while the goods ton miles showed a 10.4% increase.

The Operating Ratio (excluding Suspense and including Appropriation to D.R.F. under working expenses) was 79.90% as against 81.95% in the previous year.

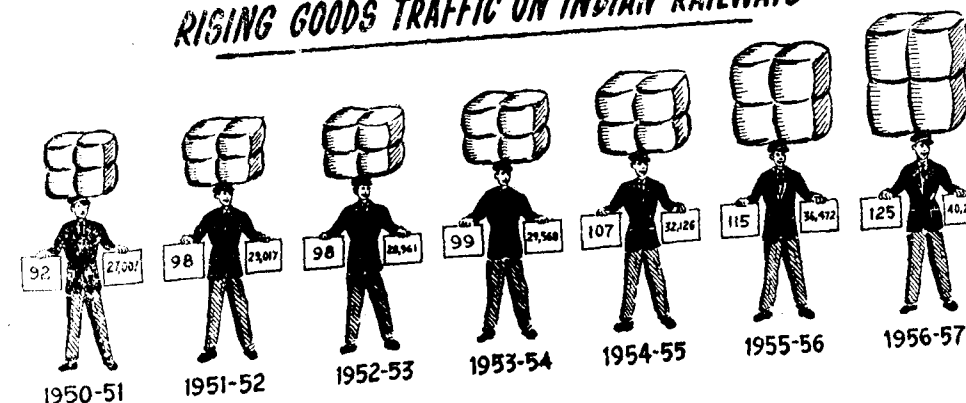
The Railways settled 492,962 claims during the year as against 435,694 during the previous year. The number of claims outstanding at the end of the year was 56,891 as against 73,609 at the end of the previous year.

The increase in Goods Traffic on Indian Railways year by year from 1950-51 is clearly indicated in the following sketch.

Monthly Statistics of Railways

Gross Earnings: The approximate Gross Earnings of Indian Railways.

RIISING GOODS TRAFFIC ON INDIAN RAILWAYS



Left panel shows tonnage total lifted, and right panel shows total ton-miles (both figures in million).

during the month of Jan. '58 amounted to Rs. 31.63 crores showing an increase of Rs. 2.15 crores as compared with the actuals for Jan. '57; or an increase of Rs. 1.32 crores over the figures of Dec. '57; i.e., 4.35% increase.

The total approximate actual gross earnings from 1st April '57 to 31st Jan. '58 amounted to Rs. 308.19 crores repre-

senting an increase of Rs. 26.43 crores over the actuals for the corresponding period of the previous year; i.e., 9.38% increase.

Tonnage Lifted: The total number of tons lifted from 1st April '57 to 31st Jan. '58 amounted to 73,653,000 and 18,514,000 respectively over B.G. and M.G., showing an increase of 4.77% and 9.15% over

the corresponding actuals of the previous year.

Wagon Loading: The number of wagons loaded during Jan. '58 was 4,95,633 and 3,16,338 on B.G. and M.G. respectively, showing an increase of 3.46% and 2.51% over the figures for Dec. '57. The total number of wagons loaded from 1st April '57 to 31st Jan. '58 was 4,507,167 and 2,799,578 over B.G. and M.G. respectively showing an increase of 5.44% and 9.42% over the corresponding figures of the previous year.

General increases have been observed in the movement of the following during the year:

B.G.: coal for non-government Railways, grains and pulses, sugar, cement, pig iron, iron & steel others, and coal for other Government Railways;

M.G.: coal and coke for public, jute raw, jute manufactured, sugar, cement, pig iron, iron & steel others, iron ore, metallic ores others, coal for home-line, and coal for other Government Railways.

These increases are set off to some extent by lesser movements of sugarcane, tea, cotton raw, on the B.G., and cotton manufactured and miscellaneous smalls on the M.G.

Survey for New Line in Eastern Region

The Railway Board has sanctioned a preliminary engineering survey by N.E.F. Ry., for a 17-mile alternative line between Katihar and Barsoi on the North East Frontier Railway. The line would be formed by connecting Kumudpur station on the Katihar-Singabad section to Barsoi on the main line; and it would serve as an alternative to doubling of track between Katihar and Barsoi and would facilitate the opening up of some new areas of West Bengal.

Careers on Indian Railways: Informative Brochure Published

The Railway Board has published a small brochure entitled RAILWAY CAREERS describing in brief the different types of jobs offered by the Indian Railways, their future prospects, emolu-

ments, educational and technical qualifications required and age limits prescribed for recruitment. The brochure, which has been published to assist prospective candidates interested in a career on the railways, has been priced low at 25 naye paise per copy and is on sale with the Manager of Publications' agencies stocking Government of India publications.

Notes in Circulation

The Reserve Bank of India Weekly Statement for week ended 21-2-'58 shows that the notes in circulation on 21st February, 1958, amounted to Rs. 1,546 crores against Rs. 1,506 crores in the corresponding period of the previous year.

The Rupee securities rose from Rs. 875 crores on 22-2-'57 to Rs. 1,077 crores on 21-2-'58, registering an increase of Rs. 202 crores.

The extent of inflation may be inferred from the above figures.

Overcrowding in III Class

A sum of Rs. 2.8 crores has been provided under the Development Fund for amenities of passengers and railway users in the Railway Budget. It is worthwhile consideration whether the bulk of the same may not be profitably utilised for purchasing additional coaching stock, etc., so as to relieve overcrowding in III class which has become a daily grievance. The Minister for Railways has said, that he cannot hold out any promise of relieving overcrowding in III class even in the Second Five Year Plan period. It will not be denied that relief of overcrowding in III class is more urgent than raising platforms, covering over platforms, waiting halls, etc., at stations, and the funds kept for the latter may reasonably be diverted towards the former for the present. The Members of Parliament and the Railway Users' Consultative Committees should press this point on the Railway Board, instead of accepting the continuance of the existing state of overcrowding in III class compartments in trains.



LOK SABHA

Minister's Statement in Parliament on Railway Accidents in January

The Railway Minister, Shri Jagjivan Ram, made the following statement in the Lok Sabha on 10th February.

During the course of the last session, the Speaker suggested, and I agreed, that a statement should be made in the House on every major accident, and that in respect of those occurring when the House was not in session, this should be done on the opening day of the session. Accordingly, I rise to make a statement on two such accidents which unfortunately occurred in the month of January this year.

Mohri Accident

One of these took place at Mohri station near Ambala on the Northern Railway, in which No. 45 Up Delhi-Pathankot Janata Express while running through the station, collided with the stationary No. 2 DU Down Ambala-Delhi Passenger already standing on the loop-line of the station, at about 4.16 hours on 1-1-1958.

As a result of the collision the engines of both the trains derailed and capsized and two bogies next to each of the two engines were smashed.

The approximate cost of damage to railway property was Rs. 3,49,300 (engines Rs. 2,00,000, rolling stock Rs. 1,45,000, permanent way Rs. 4,200 and signalling and interlocking Rs. 100.

An inquiry into the accident is being held by a Commission of Inquiry, with Justice B. N. Nigam I.C.S. of the Allahabad High Court as its chairman and Shri Feroze Gandhi, M.P., and Shri J. N. Nanda, retired General Manager of Indian Railways, as members. The report of the Commission is awaited.

Narasimhapura Accident

The other accident, which was also a collision between two passenger trains, took place at Narasimhapura station on the east coast section of the South Eastern Railway at about 21.37 hours on 23-1-1958. In this case, No. 10 Down Hyderabad-Howrah Janata Express collided with No. 48 Up Puri-Hyderabad Passenger which had already been admitted on the main line of Narasimhapura station.

The cost of damage to railway property is estimated to be of the order of Rs. 12,000.

A statutory inquiry into the accident was held by the Government Inspector of Railways, Calcutta and he submitted his preliminary report on 28-1-1958. His final report is awaited. According to the Government Inspector's provisional finding, the collision was caused by the failure of the human element on the part of the Assistant Station Master and the pointsman on duty at the Narasimhapura station. Both of them have been placed under suspension.

Special Conference Summoned

These accidents have caused all of us serious concern. I summoned a special conference of all the eight General Managers of Indian Railways on 28-1-'58 and had with them a detailed discussion with free exchange of views for taking effective measures for prevention of accidents.

A special drive is being undertaken on all the railways to intensify outdoor supervision on line and in workshops to check up the rules for safe working and their observance by staff and also to impress upon them their responsibility for minimising the incidence of accidents.

Additional officers and inspectors are also being appointed for the purpose. The matter was further discussed in detail at the meeting of the Chief Operating Superintendents of Railways at New Delhi on January 29, 1958.

(References to these Meetings are given at pages 362 & 365 of this Journal for February 1958. *Ed. R. A.*)

Wagon Repair Workshop at Kotah

That a broad gauge wagon repair workshop will be set up at Kotah was stated by the Deputy Minister for Railways, Shri Shah Nawaz Khan, in reply to a question in the Lok Sabha on 20th Feb. by Shrimati Ila Palchoudhuri and two others. The Deputy Minister added that the work has already been sanctioned and that the approximate expenditure on it will be Rs. 2.10 crores.

Amritsar Railway Workshop

In a written reply to a question by Shri Daljit Singh in the Lok Sabha on 28th Feb., the Deputy Minister of Railways, laid the following statement on the table of the House.

Amritsar workshops when under the control of the Punjab Government were engaged on manufacture of stores for

various parties but since June 1, 1956 when they were taken over by the Railways, they are engaged in the manufacture of spare parts for locomotives, carriages and wagons, overhauling of locomotives and execution of orders placed by the Punjab Government. A considerable part of the expenditure incurred during any period relates to work in progress and, therefore, the cost of production on stores and repair work completed during any period cannot be compared with the total expenditure during the corresponding period. The value of articles produced during the period April 1, 1957 to December, 31, 1957 is Rs. 32,53,815 inclusive of items part finished and still under manufacture, but exclusive of the cost of repairs to locomotives and other maintenance jobs carried out during the period. Expenditure incurred from April 1, 1957 to December 31, 1957 up to which the accounts have been closed including the staff salaries has been Rs. 62,93,353.

Electrification of Howrah-Moghalsarai Rail Line

In a written reply to a question by Shri Mohan Swarup on 28th Feb., the Deputy Minister of Railways, Shri Shah Nawaz Khan, placed the following Statement on the table of the House:

The work pertaining to electrification of Howrah-Bandel-Burdwan and Sheoraphuli Tarakeshwar branch on 3000 V.D.C. system is on hand. The section Howrah-Bandel has already been brought into commission.

Electrification of section Howrah-Burdwan (Via Chord)-Moghalsarai is also being progressed on 25 kv single phase 50 cycle system but no commitments except for purchase of 110 locomotives have been entered into so far. However, tenders for supply and erection of structures and overhead equipment for these sections have been invited and are due to be opened on March 4, 1958.

Contract for the supply and erection of about 6000 tons of steel structures for the main line section between Howrah-Bandel and Burdwan has been given to Messrs. S.A.E. (India) Ltd. Contract for 568 prestressed concrete structures for section Sheoraphuli-Tarakeshwar has been given to Messrs. Chanda Engineering Ltd. Contract for the supply and erection of overhead equipment comprising of contact wire, catenary, insulators and associated fitting for the entire section Howrah-Bandel-Burdwan and Tarakeshwar branch on 277 route miles has been given to S.A.E.

The rate for erection of steel structures by S.A.E. (India) Private Ltd. is Rs. 250/- per ton. The cost of erection of prestressed concrete structures by Messrs. Chanda Engineering Private Ltd. is included in the cost of the structures, which varies from Rs. 1000 to Rs. 2558 for portal structures. The rate for supply and erection of a cantilever structure is Rs. 380 each. The cost of installation of the entire overhead equipment varies from Rs. 3000 to Rs. 3800 per single track mile.

Headlights of Railway Engines

The Government of India propose to set up a high-level committee of experts to decide whether engine headlights should be more powerful, the Minister for Railways, Mr. Jagjivan Ram, told the Lok Sabha.

Railway Accident

The Deputy Minister of Railways, Mr. Shah Nawaz Khan, informed the House that five persons had been arrested by the Bombay Police in connection with the accident to the Bombay-Calcutta Mail between Padali and Asvali on the Central Railway on the night of November 23. The Bombay Police were investigating what was the intention of the saboteurs in derailing this train.

Working Hours of Engine Drivers

The Deputy Minister said that the working hours of engine drivers would be looked into very carefully when Mr. Ila Palchoudhuri asked whether engine drivers' working hours would be looked into in view of the fact that sometimes accidents occurred because of the "tiredness" of an engine driver.

Direct Purchase of Railway Stores

Replying to Mr. Feroze Gandhi, at to the amount of saving effected as the result of purchases of foreign stores made recently by direct negotiations, Mr. Jagjivan Ram, Minister for Railways stated that it has been found that purchases made directly by missions sent abroad by the Railways led to substantial savings; the recent transactions accounting for nearly Rs. 7 to 8 crores. He also indicated that, in future, the Railways would rely more on direct negotiations for the purchase of stores from abroad than adopt the normal procedure of inviting tenders from local agents and placing orders through them.

In reply to a question by Mr. H. C. Mathur, the Minister said, that during the last three years, two teams of Railway Officers were sent abroad: the amount of purchases made by one of the teams was Rs. 34 crores worth of steel and iron and by the other about to Rs. 85 lakhs worth of timber.

The Minister stated further that he was not sure whether the direct negotiation procedure would be adopted universally in future; but it would be wherever necessary.

Railway Budget Discussion of Demands

In the discussion the 7th instant, all speakers demanded more facilities on the Railways for their respective regions. Several members urged that the Railways should take more vigorous steps to check corruptions, stop ticketless travelling and improve catering and other

arrangements. A few members also complained about the very low speed of trains at certain places.

Railway Freights Enquiry

In reply to a question, to Mr. D. C. Sharma, the Minister said that the Railway Board and the Railway Ministry

were examining the Report of the Committee and that the Government's decisions on the recommendations of the Committee would be announced in the House during its current session. He stated further that it may not be necessary to have any legislation for carrying out the recommendations.

Personnel

E. Railway :

Sri S. Sarangapani, G.M., Eastern Railway, since August '55, retired from the Railways on the 10th February '58 in order to become the Managing Director of Hindusthan Heavy Electricals (Private) Ltd., a Government undertaking, at Bhopal.

Mr. Kripal Singh, Chief Operating Superintendent took over charge.

Central Railway :

Sri S.S. Gore, provisionally permanent F.A. & C.A.O. is finally confirmed in that appointment with effect from 29-11-'57.

Sri P.L. Krishna Iyer, Offg. Asst. Divisional Accounts Officer, Bhusawal as Offg. D.A.O. Nagpur, from 12-12-'57.

Sri K.S. Haravu, Divisional Accounts Officer, Nagpur posted as D.A.O. Jhansi from 16-12-'57.

Sri C. S. Vaidyanathan, Senior Accountant appointed to Officiate as P.A. to F.A. & C.A.O. from 13-12-'57.

Sri A. V. D'Costa, Offg. Dy. C.E. (Special), Headquarters, transferred as Director, Standardization (Civil Engineering), New Delhi from 2-1-'58.

S. E. Railway :

Sri S. S. Gopalakrishnan, F.A. & C.A.O. Offg., is confirmed provisionally in that appointment with effect from 29-11-'57.

I.C.F. :

Sri B. Bhattacharya, Deputy F.A. & C.A.O., I.C.F. is confirmed provisionally as Deputy C.A.O. with effect from 29-11-'57.

Sri K. Sadagopan, Chief Administrative Officer, is to relinquish his present post in the Railways by about the 19th March '58 and is to take up a new assignment thereafter.

Railway Board :

Sri Y.T. Shaw, Joint Director of Finance is confirmed provisionally as Deputy C.A.O., Indian Railways, with effect from 15-12-'57.

Southern Railway :

Sri B. Madhavan, D.P.O. Guntakal Division, on relief by the General Manager, is transferred and posted as D.A.O. Vijayawada vice Sri K. Rangiah granted L.A.P. from date of relief.

Sri K. P. Ananthanarayana, Offg. A.A.O. resumed duty from L.A.P. on 3-3-'58 and posted to work as P.A. to C.A.O. reverting Sri A.M. Rajarathnam as Senior Accountant from that date.

Western Railway :

Sri Jasavant Singh, Dhupia posted as Offg. A.A.O. (T.A.), Ajmer, from 21-11-'57.

Sri R. D. Kapoor, Offg. A.A.O. (T.A.), Ajmer, is transferred and posted as Offg. A.A.O. (SOR), Church Gate, from 21-11-'57.

Sri M. P. Bhargava, Senior Accountant, (Training) is promoted and posted as Offg. A.A.O. (F), Church Gate, with effect from 5-12-'57.

[Our hearty congratulations to officers who were confirmed.—Ed. R.A.]

Developments of Science

[This section has been newly introduced to improve the utility of the Journal. Various up-to-date advances will be classified here under sciences like Medicine, Engineering, etc. It is hoped that readers will benefit substantially by this section. Ed. R.A.]

New Technique Preserves Blood Indefinitely

Whole blood may now be kept indefinitely because of a new deepfreeze technique. Blood is sprayed on to liquid nitrogen and is frozen so quickly that salt in the blood cannot cause a harmful chemical reaction on the red blood cells.

A new portable refrigerator maintains the minus 320° Fahrenheit temperature for 23 days with a single charge of liquid nitrogen. The blood is quickly thawed and reconstituted when needed. According to the inventor of the technique, Dr. Harold P. Merryman of the U.S. Naval Research Institute in Washington, D.C., "it is as fresh as the day it was donated."

Heart Machine

A machine which can detect the most obscure movements of the heart and which doctors hope will permit the early discovery of heart disease, is in operation at the Charleston (South Carolina) Medical School Hospital.

The machine was invented by Dr. Dale Groom of the Medical School and Mr. Yro Shvonen of the General Motors Corporation Research Centre at Warren (Michigan) and is based on the same principle as the devices which measure the compression of automobile engines. It is capable of recording heart murmurs which until now had been inaudible with even the most sensitive machines. The new device is so sensitive that it can detect the sound of blood circulating through the body.

A part of the machine resembling the end of an ordinary stethoscope is placed on a patient's skin which acts as an electrode for heart signals. The signals

are reproduced on an oscilloscope where they can be photographed or recorded on a graph.

Cancer-Killing Anti-Bodies

Dr. Jonas Salk, the American Scientist who developed the Salk infantile paralysis vaccine, has reported producing anti-bodies in laboratory tests which will kill cancerous as well as healthy body cells.

Dr. Salk, writing in the JOURNAL SCIENCE, described experiments which may provide a new key in the search for a cancer cure.

Scientists have been searching for an anti-body "the body's disease killers" which will attack only cancerous cells.

A leading medical research worker was quoted as saying that Dr. Salk's discoveries would permit "undreamed of approaches" not only to cancer problems, but also to the causes of multiple sclerosis, rheumatic fever, rheumatoid arthritis and some kidney diseases.

Commenting on the discovery, THE NEW YORK TIMES reported: "The studies revealed a complicated set of relationship between normal cancerous tissues and the anti-bodies, or disease killers, that the cancer may stimulate in the body. Possibly, it was suggested, all cancerous growths have a common ability (antigen) to stimulate the production of disease-fighting anti-bodies as has been indicated in some test tube experiments."

Dr. Salk revealed that his experiments were an offshoot of his research for the infantile paralysis vaccine.

Dr. Salk also told of a new colour test to measure the number of anti-bodies in

the blood which he expected to lead to a greater understanding of such mysteries as mutation and heredity.

Artificial Heart

An artificial heart has been successfully used in Russia for an operation on an 11-year-old boy, according to a Moscow Radio broadcast on December 2, 1957.

Dr. Mihail Ananiev, Director of the Scientific Research Institute of Experimental and Surgical Apparatus, said in an interview that an electronically-controlled artificial heart and artificial lung has been created in his institute.

"This apparatus was twice used on a patient for the first time in the Soviet Union by Prof. Aleksandrovich Vishnevsky, a prominent surgeon, for an operation inside the heart," he said.

The patient, a boy of 11, had hereditary disease of the heart, he added, and children did not usually survive this kind of heart disease.

Dr. Ananiev said, the apparatus which imitates the movements of a real heart and works either automatically or by hand could be used for revival.

"If this apparatus is used on a person who has just died, it is possible within certain limitations to revive the organism 15 minutes after death," he said.

But he added: "Unfortunately, in clinical practice this succeeds very rarely as practically it is impossible in so short a time to connect the apparatus to a person who has just died."

Atomic Light

The atomic age came to Moorpark (California) on November 12, 1957, when, for five minutes, the community of 1,500 was lighted entirely by means of nuclear power.

The power came from a nuclear plant for generating electricity in the Santa Susana Mountains, 30 miles north-west of Los Angeles. Engineers said that it

marked the first time an entire town was lighted in this manner.

New Fire Extinguisher

An English firm has produced a new dry powder fire extinguisher for dealing with inflammable liquids of all types, especially fires involving hot oils or asphalt when the body of the fuel is heated to 250° or more, as no boil over is caused by the use of the dry powder.

The dry powder is held with the dry carbon dioxide in a sealed pressure charge so that it cannot be affected by atmospheric humidity. The blanket of carbondioxide, which spreads when the powder is used, smothers the fire.

Lightweight Material Harder than Steel

A new heat-resistant ceramic material that is harder than steel, lighter in weight than aluminium, and nine times stronger than plate glass, has been developed by the Corning Glass Works, New York.

The new material, called Pyroceram, meets the increasing need in industry and in aircraft for materials that will retain their strength at very high temperatures. It has electrical insulation properties and resists corrosion by acids. It will cost very little more than glass and much less than stainless steel which it will replace in many things. Pyroceram retains the full efficiency at temperatures up to 1,300 degrees Fahrenheit. It is made by adding special ingredients to the materials used for making glass. This produces a glass-like material. Heat-treating transforms this into Pyroceram an extremely hard, fine-grained crystalline material.

The first uses for Pyroceram will be, it is expected, in combustion type electric turbines, jet engines of airplanes that fly at supersonic speeds, piping for chemical and oil-refining industries, and in home cooking ware. All of these fields need an economical material that is highly resistant to heat. Besides, it

can be made in almost any finished shape by customary blowing, pressing, drawing or spinning as in the case of glass or it can be cast as a metal.

Safety Device for Carriage Locks

To prevent falls from moving trains the State Railway of Sweden first experimented with a device fitted to the ordinary locks so that two operations were necessary before the door could be opened. Whilst this prevented passengers from opening the doors involuntarily, anyone who for any reason wished to open the door had no difficulty in doing so.

A locking device was then tried which was entirely automatic and operated by the coach dynamo. This consists of an electro-magnet connected to the battery of the coach through a relay operated by the dynamo. The relay is regulated in such a way that the magnet attracts as soon as the train reaches a speed of 10 miles per hour and releases at a speed of 1.2 miles per hour. The magnet can be very small as it blocks a pivoted arm which, in turn, bolts the door.

Reproduction of Typing at Long Distance

The matter typewritten at a place is reproduced simultaneously on machine in the addressee's Office thousands of miles away by a special miracle machine known as Telex in use in thousands of

business houses in several countries of the world.

Telex combines the accuracy and clarity of the typewriter with the speeds of the telephone. The telephone offers an immediate means of personal communication, but has its own disadvantages like differences of accent, pronunciation, etc. Telex affords all the advantages of the telephone with none of its handicaps.

Telex is expected to be brought into use in India very shortly.

Life Preserver

A United States Business Firm and U.S. Army Research Engineers have jointly developed a new lightweight *life preserver*. This new life-saving equipment is made of an expandable collar assembly attached to a light-weight fixed pad preserver. When a wearer falls in the water, a hydrostatic pressure forces the trapped air to the upper torso thus providing support and buoyance. This Preserver does not rely on oral, mechanical or chemical means of inflation and hence it is helpful in protecting the wearer even if he is unconscious.

For your Special Attention Please

The April 1958 issue of the
RAILWAY ACCOUNTANT
will be a special Bumper Number
containing several special
articles written by Senior
Railway Officers and Experts
together with photos, charts, etc
REGULAR SUBSCRIBERS will not
be charged extra.
But individual copies are priced
at Rupee 1.50 nP.

Mg. Editor, R. A.

RENEWAL OF SUBSCRIPTION

The month of expiry of your current subscription is quoted on the wrapper enclosing the Journal. If your subscription expires with March 1958, please arrange immediate renewal by sending the remittance well in time to reach me not later than the 7th April 1958. Otherwise, you are not likely to have the benefit of the Special April 1958 issue.

Mg. Ed. R. A.

Books Review

'INDIAN RAILWAYS 1956-'57'—Published by the Ministry of Railways.

This annual publication gives in a nut-shell a report of the various aspects of Railway working in 1956-57. Indeed, it is a miniature report of the Railway Board. Comparative figures relating to the year's performance as against that of preceding years are furnished. The several charts and statistical tables given in the book would be of permanent value.

The working of the Railways during the year 1956-57 shows an all round improvement in operation, though, under 'wagon miles per wagon day', the performance has registered a slight deterioration in M.G. compared to the years 1948-49 to 1952-53. In 1952-53, the wagon miles per wagon day on the M.G. were 31.4, while in 1956-57, this was only 28.7. Though an increase was recorded in 'net-ton miles per wagon day', both under B.G. and M.G., the improvement in the former, compared to 1948-49 is of the order of about 60% while the M.G. shows an increase of only about 23%. This seems to indicate that greater efforts are required for the improvement of the operating efficiency under M.G. and it is to be hoped that special attention will be devoted to the Metre Gauge, which generally has the reputation of being given only step-motherly treatment.

As this book is generally intended for the use of the general public, who, in a sense, are the shareholders of the Indian Railway undertaking, it would be useful if financial results of the undertaking for the year are furnished in the form of Revenue Account, Profit & Loss Account, Appropriation Account and Balance Sheet, as in the case of regular commercial and industrial undertakings in the private sector.

The compensation claims paid during the year amounted to Rs. 3.33 crores against Rs. 2.56 crores during 1955-56. Though the increase in the amount paid is attributed as

due to the larger number of claims that were disposed of, coupled with the effect of increased prices, it is necessary that suitable steps are taken to reduce these losses to the minimum, as from a larger point of view, the property entrusted to the Railways for carriage is to be treated as on trust requiring a high degree of protection. In fact, the efficiency of successful operation is to be judged by the degree of safety with which the goods and passengers are carried, and if this test is to be applied, it is necessary that all steps should be taken to bring down losses on account of compensation claims, whether for goods lost or damaged, or through accidents.

On page 68, the number of quarters constructed during the year has been given. The figures are no doubt impressive, but the value of the information will be enhanced by giving the up to date figures also, instead of giving the figures for the year only.

The book will be useful not only to the general public and leaders of political thought, but also to the Railway Accountants, and staff preparing for Appendix III-A Examination.

It is stated that the publication is available from the Manager of Government Publications, Delhi, but the price is not stated.

B

HANDBOOK FOR RAILWAYMEN (PERSONNEL ADMINISTRATION AND LABOUR LAWS)—By N.G. Iyer Published by C. Balan, 22-B, Sardar Sankar Road, Calcutta-29. Price: Rs. 4/-.

This handbook is a collection of the lectures on 'Personnel administration and Labour Laws' delivered by the author at the Eastern Railway's Establishment Training Centre, Calcutta. The lectures embrace the details of Office routine, organisation of the Railways, recruitment and training of Railwaymen, general conditions of service etc., and though primarily intended for the trainee Establish-

ment Clerks of the Eastern Railway, would be found useful by other Railway employees also. The book deals broadly with the several aspects of the Establishment side of the Railways.

There are, however, certain inaccuracies here and there, which, it is hoped, will be corrected in the next edition. For instance, on page 111, it is stated that all amounts realised from fines imposed on Railway employees are credited to the Staff Benefit Fund, in addition to the per capita contribution of Rs. 2/- per year. According to the rules, the receipts of the Fund from fines, forfeited bonus, etc., are deducted from the per capita contribution. On page 38, it is stated that a certain number of posts in Class I is filled from subordinates, i.e., 25% of the vacancies from time to time. The position is not correctly stated. If this refers to promotion of Class II and Class III staff to Class I, then the percentage is 33%. On page 180, it is stated that "there is no more non-voted items, and therefore, all items are voted". This is not correct, as certain items such as amounts decreed by Court etc., are still treated as 'charged expenditure'. On page 181, it is stated that "details of sub-heads may be altered by the General Manager". The General Manager does not appear to have powers to alter the details of sub-heads of grants.

The pay limits for employees governed by the Wages Act have been revised recently, and this may be mentioned in the next edition.

The use of the term 'geometrical progression' for penalties on page 115, does not appear appropriate or clear. As a general policy, fines are not imposed on Railway servants at present, except perhaps those engaged in the Steamer Service.

GM's powers in regard to sanction of Gazetted posts for works etc., have not been mentioned.

The statement made on page 185 in regard to passes that "because of this special privilege, the scales of pay of Railwaymen are not identical with those of other Central Government employees—rather they are on a lesser scale" can hardly be said to be correct, as the Pay Commission scales of pay are applicable throughout the Central Government including the Railways.

On page 171, the preparation of pay sheets is dealt with; but the different wage periods for different categories of staff have not been mentioned.

The formula in regard to Court attachment has been incorrectly given at page 175.

Notwithstanding the minor mistakes mentioned above, there is no doubt that the Handbook would be useful to give a broad idea of the different aspects of work done in the Establishment Branch of the Railway Organisation.

B.G.B.

A GUIDE TO PRECIS WRITING AND DRAFTING—By J.L. Srivastava, Available from Sahitya Sansthan, 175, Muftipur, Gorakhpur. Rs. 2. 35nP (including Registration).

The book will be useful for those preparing for Appendix II-A Examination. The questions set in the previous years for the Appendix II-A Examinations have been incorporated for the benefit of the candidates. As stated by the author himself, several printing mistakes have crept in, and these would require to be corrected in the next edition.

The paper used is of poor variety, and the book deserves to be printed on better paper.

'KALAB'

OBITUARY

Sri B. K. T. Iyengar, F.A. & C.A.O., Eastern Railway, was found dead in his office on the 14th February 1958 under tragic circumstances. We offer our condolences to the members of the bereaved family.
Ed. R. A.



STUDENTS' CORNER

Summary of the Report of the Railway Freight Structure Enquiry Committee

The Committee recommends that a uniform surcharge on freight is not a satisfactory method of raising revenue. It has also recommended abolition of terminal charges, additional short distance, transshipment and ghat charges.

The Committee has briefly surveyed railway development and industrial growth since the beginning of railways and the evolution of the railway freight structure. It has dealt, in somewhat greater detail, with the changes in the freight structure introduced in 1922, the further refinements effected in 1935 and the major steps towards ultimate standardisation and rationalisation effected by the introduction in 1948 of the telescopic freight structure.

After dealing with the criticisms against some of the features of the present freight structure, it says a radical revision of the pattern of the legs of the structure is necessary.

It recommends adoption of the following pattern of legs for traffic both in smalls and in wagonloads:

The Committee considers it to be an equitable one and to a large extent, meeting our requirements:—

		pies per maund per mile.
1—	25 miles	3.60
plus 26—	75 "	1.40
plus 76—	150 "	1.20
plus 151—	300 "	1.05
plus 301—	500 "	0.85
plus 501—	800 "	0.70
plus 801—	1,200 "	0.60
plus distances beyond		0.50

It recommends that the rates should be introduced on a block mileage basis with blocks of 5 miles upto 500 miles and 10 miles beyond.

The Committee recommends a regular and progressive increase, through a percentage system of rates, from the lowest class to the highest class to form an integrated scale of rates covering both class rates and wagon-load scales. For this purpose, it recommends a norm or a standard rate, to be called the Class 100 Rate. The present class 9 is taken as the most convenient norm and all other classes above and below class 9 and also the wagon-load scales have been expressed as percentages of the new Class 100.

For all commodities there should be a wagon-load classification and a "smalls" classification. For a few commodities, for which separate "smalls" and wagon-load rates will have no special significance, the rate will apply on an "AQ" (any quantity) basis.

There should be a relativity between the rates for wagon-loads and "smalls"; an increase in the rates for "smalls" as compared with wagon-loads to the extent of some 15 to 36 per cent is allowed and on this basis the pattern of the classification for wagon-loads and "smalls" is shown.

The revised classification may be fixed for individual commodities for which at present there is no wagon-load classification, in the following manner: Where the commodity is reported to move largely in wagon-loads, the percentage class rate corresponding to the existing rate will apply for movement in wagon-loads and the corresponding higher percentage class rate for "smalls." Where the

commodity is reported to move largely as "smalls," the percentage class rate corresponding to the existing rate will apply for movement in "smalls" and a lower percentage class rate for wagon-loads corresponding to the percentage class rate for "smalls."

MINIMUM WEIGHT

On the subject of minimum weight conditions, the Committee is of opinion that the existing wagon-load conditions are on the low side and it recommends that the wagon-load conditions should be examined afresh. It has forwarded two recommendations on this subject; one from Mr. A. K. Basu with a schedule of minimum weight conditions for wagon-loads for all commodities, and the other from Mr. Puri and Mr. Bhandarkar for commodities for which, in their opinion, an upward revision is necessary.

Mr. Puri and Mr. Bhandarkar also recommended that for certain articles, for which the classification is subject to a minimum weight per consignment unrelated to the carrying capacity of the wagon, the minimum weights should be raised; also, for explosives, the rule that the minimum charge per consignment is for 54 maunds should be revised and the minimum charge should be for 62 maunds.

To meet the criticism made by some Chambers that the wagon-load conditions may prove to be too high for certain commodities for wagon-load movements to and from small centres, some of the Committee members recommended the policy of adopting intermediate wagon-load weights with corresponding higher rates.

The Committee recommends that loading and unloading in respect of wagon-loads should be done by consignors and consignees.

The wagon-load conditions of the forwarding railway should apply through to destination, irrespective of break-of-gauge, both in the case of general merchandise and livestock.

The minimum distance for charge should be raised to 25 miles and should apply only once

(in bookings) whether the movement is over one or more railways. The minimum weight for acceptance per package by goods train should be 20 seers and the charge should be based on 20 seers. The overall minimum charge of Rs. 1-12-0 per ton for wagon-load consignments should be abolished (Mr. Puri and Mr. Bhandarkar recommended that the minimum charge of Re. 1/- per consignment should be discontinued.)

The Committee considers that neither maxima nor minima rates should be prescribed in the new freight structure.

The committee recommends that, if the twin objectives, viz., that the Railways play the part they are expected to during the Second Plan period by carrying additional traffic that will be forthcoming, and secondly, that the financial stability of Railways is ensured, have to be achieved, it is essential that the existing scale of rates be revised to an upward direction.

GOODS CLASSIFICATION

The Committee recommends that practically for all commodities, rates should be quoted only at railway risk. Whilst this is its general recommendation, it recognises that there are a few commodities which may continue to be carried at owner's risk, but in regard to which railway risk rates may also be quoted. The owner's risk rates for these commodities should be at a level one class below the corresponding percentage class rate. These commodities have been listed.

The Committee recommends revised classification for some commodities with a view to removing the anomalies. A revised lower classification is recommended for those commodities for which special consideration should be shown in the interests of industry or more generally in public interest and for certain commodities from cost of living consideration.

A revised higher classification is recommended for certain commodities, some of which it has specifically mentioned.

While the committee is unanimously of opinion that the coal scale needs revision with

a view to make it more realistic, it has made two suggestions in regard to the manner of implementing it and forwards both the suggestions to Government. One suggestion is to assimilate into the freight structure and prescribe 25 per cent rate for coal, coke and patent fuel when moving in wagon-loads with a ceiling if necessary, at 800 miles or so. The other suggestion is to have a separate scale for coal as follows :—

In pies per maund per mile.	
Miles	Pies
1-25	1.10
26-75	0.36
76-150	0.32
151-300	0.24
301-500	0.15
501-800	0.10
801-1200	0.07
1201 & over	0.05

With a view to removing the disparity between freight costs for long-distance movement of coal by Railway and by coastal steamers, the committee recommends that the freight rates on the Railway portion of the rail-cum-sea route should be on the basis of the combined distance from the collieries to port and from port to destination point, and it also recommends that, if the gap needs to be further reduced, any subsidy that might be considered by Government should be met from general revenues and not from Railway revenues.

The committee feels that, in view of the standardisation of the rates structure, the scope for quoting station-to-station rates became limited. With the universal application of wagon-load scales recommended by the committee the occasion for quoting station-to-station rates will continue to be limited.

The committee examined the suggestion of the Estimates Committee to have a separate Directorate in the Railway Board's office for quoting station-to-station rates. It considers

that this may not be necessary and recommends that individual Railway administrations should have power to quote station-to-station rates and grant concessions at a percentage below the standard rate. This percentage should be laid down by the Railway Board. Concessions below this limit may be granted by the Railway Board after obtaining the advisory opinion of the Railway Rates Tribunal except in urgent cases where they may grant the concession and make a reference subsequently to the Railway Rates Tribunal.

The committee is unable to accept the suggestion of the Indian National Steamship Owners' Association in the matter of quoting reduced rates for traffic moving to and from ports when carried by ships on the Indian Register. It recommends, however, that Railways should assist generally in the export drive. This recommendation does not bear directly on Indian shipping, but embraces all shipping in the interest of enabling export of Indian products abroad. As Railways will only be one of the departments, which will be called upon to make such a concession, it recommends that there should be some authority who will be in a position to assess the situation and it recommends formation of a high level committee with representatives of Commerce and Industry Ministry and such Ministry, Railway Ministry and such other Ministries as may be concerned in promoting the export trade of the country. The committee will function with a small secretariat specially constituted for the purpose.

The committee suggests for consideration of the Tariff Commission that, in arriving at the protection or the quantum thereof, they may assume the existing level of rates and leave it to the parties to make representations to the Railway Board for concession in rates, if necessary.

(To be Continued)

"The April 1958 Issue will be published on the 16th April 1958"

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The following Journals and Magazines have been received since the last Issue :—

Central Railway Magazine	Feb. '58	Indian Railways	March '58
Eastern Railway Magazine	'58	Indian Railway Gazette	March '58
Northern Railway Magazine	Feb. '58	Indian Construction News	Feb. '58
Western Railway Magazine	Jan. '58	Chartered Accountant	Feb. '58
Southrailnews	Feb. '58	Careers & Courses	'58
Chittaranjan	Feb. '58	Educational Review	Feb. '58
Central Railway Newsletter	'58	Australian Accountant	Jan. '58
Eastern Railway (Lifeline)	1-2-'58	Accountants' Journal (New Zealand)	'58
" Newsletter	upto 27-2-'58	Wednesday Review	up to W. E. 19-2-'58
Southern Railway Newsletter	25-1-'58	Railway Herald	up to P. E. '58
Western Railway	'58	Railway Board's Monthly Statistics	'57
S. Rly. Accts. Soc. Madras, Bulletin	—		

THE RAILWAY ACCOUNTANT

MARCH 1958

BUDGET SUPPLEMENT**Speech of Shri Jagjivan Ram, introducing the Railway Budget for 1958-'59 on 17th February, 1958****Railway Budget at a Glance**

(Rupees in crores)

	Actuals 1956-57	Revised Estimate 1957-58	Budget Estimate 1958-59
Gross Traffic Receipts	347.57	384.40	407.48
Ordinary Working Expenses	233.94	259.16	268.35
Net Miscellaneous Expenditure	9.92	14.01	16.99
Appropriation to Depreciation Reserve Fund.	45.00	45.00	45.00
Payment to Worked Lines	33	33	22
Total	289.19	318.50	330.56
Net Railway Revenues	58.38	65.90	76.92
Dividend to General Revenues	38.16	44.24	49.58
Net Surplus	20.22	21.66	27.34

x x x
FINANCIAL RESULTS OF 1956-57.

2. As usual, I shall deal first with the completed accounts of the previous year. The actual gross traffic receipts were Rs. 347.57 crores against the Revised Estimate of Rs. 350 crores, the shortfall of Rs. 2.43 crores being mainly under the goods traffic. The Ordinary Working Expenses, on the other hand, showed an increase of Rs. 4.91 crores, over the Revised Estimate of Rs. 229.03 crores, due partly to heavier expenditure on repairs and maintenance, and partly to unforeseen miscellaneous expenses under the Suspense head. After allowing for other minor variations, the actual net surplus stood at Rs. 20.22 crores against

the Revised Estimate of Rs. 26.95 crores. The entire surplus of the year was credited to the Development Fund.

REVIEW OF 1957-58 — OPERATION

3. Before I come to the Revised Estimates of the current year, I would like to give the House a broad picture of the operating position on the Railways during the last twelve months. During 1956-57, the first year of the Second Five Year Plan, the total tonnage lifted was 124 million tons against 144 million tons in 1955-56, that is, an increase of 8.8 per cent. In the current year, there has been a further increase in traffic. The wagon loadings of originating traffic have risen by 5.3 per cent on

the Broad Gauge and 9.5 per cent on the Metre Gauge upto the end of December, 1957. The overall coal loading in the country has increased in the current year by 6 per cent compared to last year; in the Bengal and Bihar coalfields an average of 3,680 wagons are being loaded daily showing an increase of 6.5 per cent. Movement of goods traffic via break-of-gauge points has shown a substantial increase, being 13.8 per cent on the broad gauge and 14 per cent on the metre gauge. There has also been a similar increase in the movement of traffic over difficult routes; for example, an average of 2,050 wagons are moved daily via Moghalsarai compared to 1,835 wagons in 1956-57 and 1,700 in 1955-56. Vigorous measures continue to be taken by the Railways to increase the efficiency of operation and better utilisation of rolling stock which have given satisfactory results. This is reflected in the net ton-miles per wagon-day, which is universally accepted as a reliable index of operational efficiency. On the Broad Gauge, the net ton-miles per wagon-day increased from an average of 570 miles in 1956-57 to 630 miles for the period from April 1957 to November 1957, and on the Metre Gauge from 210 to 228 miles for the same period.

REVISED ESTIMATES FOR 1957-58

4. As a result of the increased traffic handled, it is now expected that the Goods earnings for the current year would go upto Rs. 231 crores, or an increase of Rs. 4.5 crores over the Budget. There has also been some improvement in passenger earnings which are now placed at Rs. 120.90 crores against Rs. 119 crores in the Budget. An increase of Rs. 35 lakhs is expected under Other Coaching Earnings, partly due to increase in the volume of parcels traffic and partly to increased rates for military traffic which became effective from 1st June, 1957. With an improvement of Rs. 15 lakhs under Sundry Earnings and other minor variations in Suspense, the gross traffic receipts for the current year are now estimated at Rs. 384.40 crores.

5. As against the the increase of Rs. 6.50 crores in Receipts, there is, however, an increase of Rs. 15.31 crores in the Ordinary Working Expenses. Out of this, Rs. 4.5 crores representing nearly 29 per cent of the total increase, is attributable to one factor alone, viz the interim increase in Dearness Allowance, at the rate of Rs. 5 per month recently sanctioned by the Government on the recommendation of the Pay Commission, payable with effect from 1st July, 1957. About Rs. 1½ crores is due to the enhancement of the price of coal since July, 1957. The balance is due chiefly to increases in the repairs and maintenance bill of the Railways, related particularly to track, bridges and safety works, as also, machinery and rolling stock, arising out of the higher level of prices, increased out-turn from the shops and increasing traffic. In the net, the surplus is now expected to be Rs. 21.66 crores only, against the Budget Estimate of Rs. 30.83 crores. This amount will be credited to the Development Fund as originally contemplated.

BUDGET ESTIMATES FOR 1958-59

6. I turn now to the Budget Estimates for the year 1958-59. On the basis of the present trend of passenger traffic the estimate under this head has been placed at Rs. 121.73 crores for the next year, an increase of Rs. 3.83 crores over this year's Revised Estimate of Rs. 120.90 crores. The estimate of Other Coaching Earnings has been fixed at Rs. 24.65 crores, involving a reduction of Rs. 60 lakhs over the Revised Estimate of the current year, attributable to the fact that the latter estimate included also the previous year's arrear recovery, at enhanced rates, of hire and haulage charges on postal vehicles. The estimate of Goods Earnings in the Budget year is placed at Rs. 250.50 crores on the basis of the present 12½ per cent surcharge and the anticipated increase in traffic. It is expected that in the coming year, Railways will be called upon to carry about 12 million tons of additional traffic, raising the total traffic to 145 million

tons, against the total Plan provision of 162 million tons. Most of the additional 12 million tons likely to materialise in 1958-59 will be on account of the expansion in the Steel Industry and the additional coal raisings. Sundry Other Earnings are expected to be 20 lakhs more than the Revised Estimate of the current year. Allowing for a decrease of Rs. 15 lakhs in the traffic suspense, the Gross Traffic Receipts are estimated to be Rs. 407.48 crores for the next year.

7. The Ordinary Working Expenses for the Budget year have been estimated at Rs. 268.35 crores, representing an increase of Rs. 9.19 crores over the Revised Estimates of the current year. This increase includes about Rs. 4.4 crores mainly on account of the effect of the interim increase in dearness allowance for the full year against nine months in the current year, annual increments to staff and also on account of the increase in staff required to handle the increases in traffic. There is also an increase of Rs. 2.5 crores in repair expenses in consequence of the increased movements and larger out-turn of Rolling Stock from the Workshops after periodical repairs and the balance represents the increase in the coal and other fuel bill.

8. Since the fuel bill constitutes a high proportion of our total operating expenses, and as the need for conservation of high grade coals is of great importance in the national economy, I have set up a small Committee including representatives of the Ministries of Railways and Steel, Mines & Fuel, and of the Council of Industrial and Scientific Research to go into the question of the factors responsible for the increase in expenditure on coal, as also the future requirements of railways for high grade coal, the prospects of adequate supplies and measures for meeting any anticipated shortage. The Committee is expected to submit its report towards the end of April this year.

9. It is proposed to spend about Rs. 3½ crores more on a larger programme of Open

Line Works chargeable to Revenue, and with the heavier Capital expenditure on Works, there is an increase of about Rs. 5 crores in the dividend payable to General Finance. Taking all these factors into account, the Revenue Surplus for the Budget year is expected to be Rs. 27.34 crores, which I propose to credit to the Development Fund.

10. The House will recollect, that in my speech introducing the Railway Budget in May last, I referred to the difficulty in the availability of critical materials, especially iron and steel, and mentioned that a serious situation had developed owing to a very big shortfall in the actual supply of these materials in 1956-57, the first year of the present Plan. I am glad to be able to report that the steps envisaged last year for improving the procurement of these materials were fully implemented and have yielded satisfactory results. The procurement of specialised Railway items of steel materials was taken over by the Railway Ministry from the Ministry of Steel with effect from 1st April, 1957, and a Railway Purchase Mission was sent abroad in the summer of last year with a view to locating dependable sources of supply, placing orders and finalising the contracts on the spot, so that the deliveries could commence in the shortest possible time. The Mission entered into contracts for the supply of 5.30 lakh tons of pig iron, steel track materials and wagon plates worth about Rs. 34 crores. Deliveries against these contracts commenced from September, 1957 onwards and are likely to be completed during 1958-59. As a result, it is expected that including indigenous production, 5 lakh tons of steel track materials will be received during the current year as against 3.5 lakh tons in the previous year. With the procurement arrangements already made and to be made, the expectation is, that the receipts of these materials in the Budget year will be even better than those of the current year. While this is no doubt a great improvement, the availability of fabricated bridge girders and signalling equipments is still not quite satisfactory.

However, all necessary measures are being taken to improve the supply position of these materials also.

11. I am glad to mention to the House that the improvement in the supply of materials is already reflected in the increased tempo of Works expenditure in the current year. Speaking generally, all the works included in the current year's programme have been in full swing, with nearly 1½ lakh labourers engaged on the various projects on all Railways during the year. I would mention particularly that the 52 mile long Bhilai-Dhalli-Rajhara line, which was undertaken to carry ore to the Bhilai Steel Plant, and which involved earth-work amounting to 11 crores cubic feet has been completed in one working season. 140 miles of new lines and 13 miles of doubling were opened to traffic during the year, including the Khandwa-Takkal and Hingoli-Kanhergaon sections of the Khandwa-Hingoli Project, the Kottayam-Quilon section of the Quilon-Ernakulam project and the Raniwara-Bhildi rail link. The construction of over 500 miles of new lines is in progress. Work is also proceeding on 800 miles of doubling, of which 385 miles are on the South-Eastern, 115 miles on the Southern 135 miles on the Western, 100 miles on the Northern and 45 miles on the Central Railways. The work on the Ganga Bridge at Mokameh is also proceeding according to schedule, all substructure work having been completed and two spans erected already. Some of the Rolling Stock items and Machinery have also been or are likely to be delivered earlier than anticipated at the time of the Budget. In consequence, the Revised Estimates of expenditure on Works, Machinery and Rolling Stock have now been placed at Rs. 235 crores, involving an increase of Rs. 17 crores over the Budget.

12. The estimate for the Works, Machinery and Rolling Stock Programme for the budget year has been placed at Rs. 260 crores. Of this, rolling stock accounts for Rs. 88 crores, plant and machinery for Rs. 5 crores, construction of new lines and restoration of dismantled lines for Rs. 29 crores, track renewals

for Rs. 33 crores and other Open Line Works etc., for about Rs. 105 crores. As the House is aware, the year 1958-59 is going to be an important landmark in the progress of implementation of the Second Five Year Plan. In that year, both the new steel plants at Rourkela and Bhilai are expected to go into production and the existing steel plants also will substantially increase their output. Coal raisings are expected to increase from 43 million tons in the current year to about 47 million tons next year. All the important line capacity works immediately required for steel works and for increased coal production had already been included in the Railways' Works Programmes for the current year and the previous year and are now under execution.

x x x

14. The track renewal programme has been considerably stepped up from Rs. 28 crores, provided in the Revised Estimate of the current year to Rs. 33 crores in the budget year. This has been possible in view of the improved availability of rails and sleepers.

15. As usual, a provision for about Rs. 3 crores has been made for amenities for Railway users and Rs. 11 crores for staff quarters and staff amenities.

x x x

18. As the House is aware, we succeeded in obtaining a loan of 90 million dollars equivalent to Rs. 42.84 crores from the World Bank last year. The loan became effective in September 1957. More than half of this amount has already been utilised and the balance is expected to be used up in the next few months as more payment obligations mature. Apart from this loan from the World Bank, assistance has also been received under the Indo-American Technical Co-operation Programme and the Colombo Plan. Realising, however, the seriousness of the country's foreign exchange position, the railways are making every effort to reduce the dependence on imports from abroad to the maximum extent possible.

19. Turning now to other aspects of Railway Administration and Operation, I would first invite the attention of the House to the decision announced some time back to bifurcate the North-Eastern Railway and to create a new Railway Administration with head-quarters at Pandu. The Northeast Frontier Railway with a mileage of about 2,000 was inaugurated on the 15th of last month. The creation of this new Zonal Railway Administration, though small in size compared to other units, has been necessitated by manifold considerations—strategic, administrative and operational. It is of vital importance that there should be a dependable, continuous and all-weather line of communication between the Eastern Frontier and the rest of India. Besides, there is also the urgent need to augment rail transport capacity for economic expansion and industrial development of this area. It was, therefore, considered imperative to set up at Pandu a full-fledged administrative machinery to be in close touch with the day-to-day railway operation and competent to deal with the immediate as well as long-term problems.

20. To improve the line of communication, measures are already on hand to strengthen all weak bridges and regrade steep sections on the Assam rail route under an experienced officer especially appointed for this purpose. As the House is aware, there was no serious breach in the link route and no hold-up of traffic during the monsoon of 1957. Works at site are going ahead and an allotment of Rs. 3.5 crores has been sanctioned for this purpose. Most of the major works will be completed before the next monsoon and the remaining works will be all completed during the working season of 1958-59. An engineering survey is being carried out for an alternative alignment from Domohari to Alipur Duar or Cooch Behar, reconnoitering at the same time the possibility of crossing over the Teesta river to join with the Siliguri Haldibari branch. The preliminary measures for the construction of a bridge over the Brahmapura near Pandu have

sufficiently advanced and the work is expected to commence in the next working season.

21. Regarding the question of indigenous production of railway equipment, I am happy to be able to say that capacity for production of rolling stock in the country has shown a further increase during the current year. 258 locos, 1,500 coaches and 16,800 wagons are expected to be produced in 1957-58 as compared to 234 locos, 1,236 coaches and 15,985 wagons in the previous year. The import of general service wagons was discontinued quite a long time ago and that of steam locomotives has also now been stopped, except for a few required for the Narrow Gauge lines. The Development Cell in the Board's office working in collaboration with the Development Wing of the Commerce and Industry Ministry is making continued progress towards development of further manufacturing capacity in the country, which will, in turn, conserve the much-needed foreign exchange. Out of the total provision of 87.95 crores for Rolling Stock in the Budget for 1958-59, Rs. 60.17 crores will be spent in the country and Rs. 27.78 crores only will be spent on imports from abroad, including customs, freight, handling charges, etc.

The Chittaranjan Locomotive Works produced 156 locos in 1956-57 and are expected to produce 168 locomotives in this year and an equal number in the next. Telco Works delivered 78 locomotives in the last year against which the number expected in the current year and the next year is 90 and 100 respectively. The output of the Integral Coach Factory at Perambur, which was 88 unfurnished coaches in 1956-57, is expected to rise to 180 this year and 295 next year. Full production of 350 coaches under single shift working is expected to be achieved in the year 1959-60. For intensive utilisation of the Plant and reducing the cost of production, it is proposed to introduce double shift working from 1st April, 1959, resulting in the production of 180 more coaches by the end of the Second Plan period. A tem-

porary furnishing unit is already functioning at the factory and work on a permanent furnishing unit at a cost of Rs. 3.69 crores has also been taken in hand.

x x x

24. The scheme for the introduction of departmental catering at selected stations has been implemented, and the process of its consolidation at these stations is continuing. I have no doubt that, by and large, departmental catering has been well received by the public.

25. The Railway Users' Consultative Committees constituted at different levels continued to render valuable co-operation and assistance to the Railway Administrations in their endeavour to improve the quality and efficiency of the service rendered. Auxiliary Committees like the Time Table Committee, the Catering Supervisory Committee and the Bookstall Committee have also contributed many valuable suggestions in their respective spheres. In order to extend the field of liaison with the Railway users, it has recently been decided to set up Divisional Railway Users' Consultative Committees on each Division of the Railways organised on the Divisional system, instead of one Committee for two or three Divisions together.

26. It is a matter of great regret that, in spite of educative propaganda against the misuse of the alarm chain apparatus as well as measures like the blanking off of the apparatus on certain trains, and intensive checks by selected staff in collaboration with the police, the number of cases of alarm chain pulling still continues to be very high. During the last twelve months, the number was as high as 40,000 of which only less than one tenth could be in circumstances in which the use of the apparatus was justified. I would request the co-operation of the House in awakening public conscience against this mal-practice, which aggravates the difficulties of limited capacity for moving traffic, not to mention the immediate inconvenience to other users of the Railway.

I must here again bring to notice that ticketless travelling is another evil which cannot be effectively checked without strong public support. In order to obtain an independent assessment of the extent of ticketless travelling in different areas, an intensive check on all Railways was carried out during the period January to August 1957 by a temporary organisation set up under the direct control of the Railway Board. On the results of this investigation, an intensification of check on badly affected sections has been ordered.

27. The problem of corruption on the Railways is being tackled vigorously. The Vigilance Organisation has been placed under a Director of the Railway Board and a Central Investigation Agency has also been organised for the investigation of important cases of corruption on the Railways. The Vigilance Organisations on the Railways have expanded their activities during the year, the emphasis being on prevention besides covering promptly all complaints of corruption. A total of 3,518 cases were examined on all the Railways and after due enquiry, appropriate disciplinary action was taken against the staff found at fault. All information is sifted and verified and specific complaints are followed up. This has gone a long way in improving public confidence and relations. Measures, like special watchers at important stations, raids for locating corrupt practices and watching of placement and delivery of wagons have been intensified.

It is heartening that the public are offering greater co-operation to the Administration in rooting out this evil. Here again, it is, in the ultimate analysis, the awakening of the social conscience of the Users as well as the Railway-men that can effectively liquidate corruption.

With the passing of the Railway Protection Force Act, statutory status has now been accorded to the Railway Protection Force, and armed with the powers conferred by the Act, it should enable them to be more effective.

28. Claims for compensation for goods lost or damaged, which during the past few years had been showing a persistent tendency to increase in numbers, appear to be now on the decline. In spite of the increase in the volume of traffic carried by the Railways under conditions of near saturation, there has been a reduction of nearly 13,500 in the number of fresh claims registered during the first eight months of this year, as compared to the corresponding period of the previous year. This change in the trend indicates that the activities of the Claims Prevention organisation created in 1955 and the re-organisation of the Railway Protection Force are bearing fruit. The balance of claims pending disposal, which stood at 73,162 at the end of March, 1956 came down to 56,891 at the end of March 1957, and was only 47,647 at the end of November, 1957.

29. In my last Budget Speech, I stated that a complete examination of the recommendations of the Railway Freight Structure Enquiry Committee and the preparatory work like the amendment of the Goods Tariff and the preparation of mileage tables etc., would be completed by the end of the year 1957.

Since then, the examination of the recommendations of the Committee in regard to the constitution, jurisdiction and rules of procedure of the Railway Rates Tribunal has been completed and necessary legislation passed to amend the Indian Railways Act. Based on the recommendations of the Committee, the important changes made in the Act are :—

(i) that the Tribunal, instead of consisting of three members, all of whom have been or are qualified to be High Court Judges, will consist of a Chairman who is or has been a High Court or Supreme Court Judge and two other members who have special knowledge of commercial, industrial or economic conditions of the country or of the commercial working of the railways; and

(ii) that in matters pertaining to classification or reclassification of any commodity, the Tribunal will have only advisory functions.

The examination of the Committee's recommendation for the amendment of the statutory provisions regarding the responsibility of railways as carriers is in hand, but it will take some time more to be completed. The Committee themselves had recommended that the changes in this regard be implemented one year after the introduction of the revised freight rates structure.

In regard to the Committee's recommendations pertaining to the revision of the rates structure, the examination is now in the final stages, and the decisions thereon are expected to be taken and implemented in the near future.

x x x

31. As the House is aware, the Government have appointed a Pay Commission in August 1957, the main terms of reference being to examine the principles which should govern the structure of emoluments and conditions of service of the Central Government employees. The Commission have been requested to make their recommendations to the Government as soon as practicable, but in the meanwhile they could consider demands for relief of an interim character and send reports thereon. The Pay Commission have already submitted their recommendations regarding interim relief which, as I have mentioned earlier, has been accepted by Government and implemented.

32. The House will be glad to know that a Pension Scheme has been introduced for all Railway servants. Those Railway servants who were in service on 15th November 1957 or demitted service between 1st April 1957 and 15th November 1957 have however, been given an option to be governed by the existing State Railway Provident Fund Rules or to come over to the Pension Rules. Even after the introduction of the Pension System, staff eligible for pension shall continue to subscribe to the State Railway Provident Fund at the existing rate on a compulsory basis. Such staff will, however, not be eligible for any Government Contribution to State Railway Provident Fund.

33. As mentioned by me during the budget speech in May last year, a committee with Sri Tapase as Chairman was appointed to review the channels of promotion of Class IV staff and connected matters. The Committee have completed their investigations and have recently submitted some of their recommendations, pending finalisation of their report which is due by the end of this month.

36. The House will recall that in his Budget speech for 1956-57 my predecessor referred to a proposal to award 1,000 scholarships of Rs. 15 to 50 per month for technical education being under consideration. The first lot of these scholarships was sanctioned in 1956-57. The scholarships will be awarded annually and will be available to children of certain categories of Class III employees and all categories of Class IV employees. Of these scholarships, 12½% and 5% have been reserved for children of employees belonging to the Scheduled Castes and Scheduled Tribes respectively.

37. The existing facilities for imparting training to the new recruits in the various Railway Services and arranging refresher and promotion courses for the existing staff have been considerably augmented. Basic training centres have been opened in a number of major workshops and Running sheds and further extension in this direction is under consideration. A Signal and Tele-communication school has been set up at Secunderabad

for training officers and staff of the Signal Engineering Department.

38. This was another year of fruitful co-operation between Labour and Management. Periodical meetings between the Railway Board and the National Federation of Indian Railwaymen which could not be held for some time past for various reasons, were resumed in July, 1957, and agreements reached on a number of points brought up by the Federation. The *Ad Hoc* Tribunal has also resumed its work and is dealing with two out of the five items originally referred to it, agreement between the Railway Board and the Federation having been reached in respect of other items. I expect that it will complete its work shortly.

40. Before I conclude I would like to record my appreciation of the assistance and co-operation I have received from all Railway men. The Second Five Year Plan is a gigantic experiment in national reconstruction and the Railways have to play a crucial role in bringing it to successful fruition. In spite of set-backs here and there the Railwaymen have as a rule responded well to the call of the nation and have made improvement in Railway operation. There is, however, no room for complacency and I am sure, that the Railwaymen will continue to keep before them the highest ideals of dedicated service to the country.

Points from Railway Budget 1958-'59

Works covered in the Railway Budget : Regional Break-up of schemes.

Two important new lines have been included in the next year's programme : the 100 mile Robertsganj — Garha Road line on the Northern Railway costing Rs. 17 crores and the 40 mile long Muri-Ranchi connection on the Eastern Railway costing Rs. 5.9 crores.

The Northern Railway line is required as an alternative route from the Barkakana coal fields to North India to reduce the ever-increasing pressure (via) Moghalsarai and also for opening up of Rihand Dam area in Uttar Pradesh.

The Eastern Railway line is part of the Chandrapura — Muri — Ranchi — Bondamunda project intended to serve the steel plants at Rourkela and Bhilai. The first phase of this

Mar. '58

BUDGET SUPPLEMENT

xxxi^x

project, the Chandrapura-Muri link is already in progress.

Other important schemes referred to in the budget speech are :

South Eastern Railway :

A Rs. 7.80 crore scheme doubling the 68 mile line between Drug and Kamptee ; doubling of Vizianagaram—Gopalapatnam section at a cost of Rs. 3.80 ; and doubling of the Anuppur-Katni section costing Rs. 6.7 crores.

The highest priority will be given during the year to the electrification in the sections from Aonsol to Tatanagar and Rourkela and Rajkharswan to Barajamda. It is expected that electrification of these important trunk routes will be completed before the end of the second plan period, well in time before the full load of traffic develops.

Eastern Railway :

Electrification of the line from Howrah to Moghalsarai.

In all, for all electrification projects on Indian Railways, the 1958-59 provision in the budget is Rs. 16.29 crores.

Southern Railway :

Conversion of the Gudivada-Bhimavaram section from metre gauge to broad gauge costing Rs. 2.25 crores. Work on electrification of Madras—Egmore—Tambaram—Villupuram section was slowed down as there were difficulties of foreign exchange required by the Madras Electricity Grid to run the transmission lines. The latest development is that electric power will be available and the work will now progress on the A.C. single phase 25 K.V. system. However, some technical studies will have to be undertaken.

From April 1, 1959, the Integral Coach Factory at Perambur will start double shift working in order to make more intensive use of the available plant and also to reduce the cost of production. This will result in the production of 150 more coaches per year by the end of the second Plan period, in addition to the existing target of 350 coaches per annum.

Bombay Area :

Extension of electrification on the Bombay—Delhi main line from Igatpuri to Bhusaval on the busy Ghat section has become an operating necessity but there are difficulties in regard to obtaining power supply immediately. In the meantime, the civil engineering portion of the work, which takes a long time to complete will be taken in hand.

The Railway Minister said in his budget speech that considerable improvement in the suburban passenger services in the Bombay area had taken place. During 1956-57 the railways introduced 65 new trains and extended the runs of 33 trains. During 1957-58 up to December 1, 1957, they had introduced 86 new trains and extended the runs of 16 trains.

North Eastern Region :

The budget makes provision for the doubling of Khagaria Katareah section between Katihar and Barauni at a cost of Rs. 1.88 crores. The Minister said that the creation of the eighth railway zone, the Northeast Frontier Railway, was necessitated by many considerations — strategic, administrative and operational. He said: "It is of vital importance that there should be a dependable, continuous and all weather line of communication between the eastern frontier and the rest of India. Besides, there is also the urgent need to augment rail transport capacity for economic expansion and industrial development of this area."

The Minister said that measures are in hand to strengthen the Assam Rail Link and there was no serious breach in the Link and no hold-up of traffic during the 1957 monsoon. Rs. 3.5 crores had been allotted for these works most of which will be completed before the next monsoon. The remaining works will also be completed during the working season of 1958-59. A preliminary engineering survey is being concurrently carried out for alternative alignment, taking off from the Mal-Domohani section and joining again at Alipurduar. The preliminary measures for the construction of the bridge across the Brahmaputra are sufficiently advanced and work is expected to

commence on the sub-structures in the next working season.

II

Large-Scale development works in hand.

There is at present a labour force of 150,000 working on a large number of railway projects throughout the country, but mainly concentrated in the eastern region.

The construction of over 500 miles of new lines is in progress. Work is also proceeding of 800 miles of doubling, of which 385 miles are on the South Eastern, 115 miles on the Southern, 135 miles on the Western, 100 miles on the Northern and 45 miles on the Central Railways.

The budget discloses that the total expenditure for the works, machinery and rolling stock programme has been placed at Rs. 260 crores, as against the revised estimate of Rs. 235 crores in current year's budget. The Major items of expenditure during the new year will be: rolling stock Rs. 88 crores (out of which Rs. 60.17 crores will be spent within the country and Rs. 27.78 crores on imports, including customs, freight, handling and other charges); construction of new lines and restoration of dismantled lines Rs. 29 crores; track renewals Rs. 33 crores; and other open line works about Rs. 100 crores.

III

RAILWAY EXPANSION PROGRAMME : SECOND PLAN TARGET

Foreign Exchange Needs

An optimistic picture of railway affairs was given by Members of the Railway Board at a Press Conference held to explain the railway budget presented in Parliament earlier.

The Chairman of the Board, Mr. P.C. Mukherjee, said: the railways would receive only Rs. 750 crores from General Revenues for its Rs. 1,125 crores plan. The balance would be met by railways from their own resources. He said the railways were planning to carry 181 million tons of traffic during the plan period. But if this target was to be reached, an addi-

tional Rs. 200 to 250 crores would have to be found. This had been brought to the notice of the Planning Commission.

Foreign Exchange

Mr. Mukherjee said that the railways would require foreign exchange of the order of Rs. 425 crores to implement the development plans so far sanctioned by the Planning Commission.

Answering questions, Mr. Mukherjee and Mr. K. B. Mathur, Member for Transportation, said that decisions on the recommendations of the Railway Rates Structure Committee would be taken in two or three months time. The Committee has suggested rationalisation of the rates structure. In some cases there would no doubt be some increase, but it was difficult to say at present what the quantum of increase would be.

No increase in accidents

Mr. Mathur said that the number of serious accidents in the railways as compared to the past had not gone up. But a reduction in the number of accidents due to the introduction of interlocking system had not been achieved. This was because, Mr. Mukerjee said, the volume of traffic on the railways had considerably increased. Naturally, the chances of human failures were now more than before. The human failures were also partly due to the 'large increase' in the number of less experienced staff. The railways had taken special measures for giving adequate training to their staff by arranging refresher courses.

The Member in charge of Engineering, Mr. Karnail Singh, said that the committee headed by Mr. A. N. Khosla which was going into the question of bridges had not completed its work. He said that the electrification of the Tambaram—Villupuram section of Southern Railway would be completed before the end of the Second Plan period. One of the difficulties in going forward with the scheme at present was the shortage of electric power in that section.

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