



FIREFLASH

FEBRUARY, 1965

No. 7



Farewell Presentation to Stn.O. A. Forse
(See "Retirements," page 5)

EDITORIAL

Since the previous edition of "Fireflash" came into your possession early in October last, we have seen the retirement of a number of our long-standing associates, notice of which appears on another page of this issue.

Whilst it is not expedient to differentiate in any way in so far as rank is concerned under such circumstances, I make no apology whatever for highlighting one of the recent retirements, namely Stn.O. "Bert" Forse.

It would be absolutely safe to say that the name of "Forse" and "Transport" have been synonymous within the Brigade for almost a quarter of a century, and extends throughout the A.F.S., N.F.S., and local authority eras. Personnel are only too aware of Bert's operational versatility in these directions, and of his every possible assistance and guidance when sought, on questions relating to appliances, vehicles and—as was quite often the case—individuals' own personal transport technicalities.

From every one of us who have been deeply privileged to serve with you, Bert—Our very, very best wishes for a long and happy retirement, coupled with many thanks for your help and guidance over the years.

It may be said that the Editorial column is not one in which it is appropriate to mention such an item, but it is considered that the foregoing instance more than warrants such a tribute!

Back to business again. Arrangements have been made with the Chief Constable for copies of the "Fireflash" to be circulated throughout all Stations and Departments of the Bristol Constabulary. This measure, it is hoped, will serve to effectively enhance the already truly admirable liaison which exists between the two organisations. With the further consideration of the Chief Constable, it is hoped to include articles relating to the various activities of Police work, such as the Road Traffic Department, C.I.D., Firearms, etc.—all of which should prove of immense interest to our readers.

Finally I would like to express my appreciation to the Station Superintendent, Portishead Power Station, for his willingness, kindness and co-operation in furnishing the "Fireflash" with such an interesting "down to earth" article (if he will pardon such an expression!), the first part of which appears in this edition.

To every one of our readers I would send most hearty New Year wishes. Let the spirit which reigned throughout Christmas continue during the whole of 1965. **Don't switch it all off and forget to be considerate to each other until December 24th, 1965!!!**

ROY GAPPER, Editor.

3rd January, 1965.

OFF THE RUN DEFECTIVE!!

Readers, particularly those who have liaised in any way with Brigade Headquarters Typing Pool, will no doubt remember Mrs. Joan Williams.

Joan, it will be remembered, left the employ of the Brigade on the occasion of the birth of a son during May, 1963.

As a sequel to this extremely happy event, on the morning of Tuesday, 22nd December, 1964, Joan was happily trundling her son along the city streets, obviously doing a spot of last-minute shopping, when a serious structural defect developed on the pram. With typical Fire Brigade presence of mind, she managed to navigate it into Silver Street, and finally, limping into the Station yard at Bridewell, she handed over to Reg. James, who, with his deft manipulation of the welding plant, effectively remedied the defect, and Joan and Philip thereupon resumed their shopping spree. It would appear from this that Philip is now slightly heavier than his initial 7lb. 4ozs.!

BRIGADE FIRST AID TEAM

Congratulations are once again due to the Brigade First Aid Team on the occasions of their recent successes as follows:

CYRIL LAVINGTON COMPETITION

The team obtained second place in this competition with a final marking of 119 points, Bristol Constabulary 'A' Team being the winners with 130 points.

MATHER CUP COMPETITION

Third place was gained in this instance by the team, with 160 points, South Western Gas Board being the winners with 177 points, and the Port of Bristol Authority Police second with 173 points.

The team comprised: Stn.O. I. J. Taylor, L.Fm. John Hedges, L.Fm. Peter Thorpe, Fm. R. C. Bean, with Fm. P. Haskins as reserve.

No small measure of gratitude is due to the expert supervision and guidance of the late Mr. W. H. Hobbs for the continued success of our Brigade First Aid team. As contained elsewhere in this publication, the news of Mr. Hobbs' passing will be a severe blow to first aid circles within the City. He was a former superintendent of the William Butler's Works Ambulance Division, and a Serving Brother of the Order of St. John.

For his part in rescue operations during enemy air attacks during the late war, Mr. Hobbs was awarded the B.E.M.

JUNIOR FIREMAN SECTION

(Junior Fm. IAN JEFFERIES)

Since the last edition of "Fireflash," the Junior Firemen of the Brigade have completed their six-week Induction Course and are now at their Training School at the new Bedminster Fire Station for one day, at the Central Institute for Further Education for two days, and dispersed around all Stations and Departments of the Brigade for the remaining two days per week.

During the day at the Training School, lectures, drills, etc., and physical activities are pursued, and the time spent at the Institute devoted to a planned syllabus which includes the study of building construction, general science, mathematics, English, drawing and electronics.

The Junior Firemen have also volunteered to take typing lessons which it is hoped will prove to be an asset later on.

On Thursday and Friday of each week, members of the Scheme are posted to all Stations and Departments, where they receive individual instruction on the various complexities of the work carried on throughout the Brigade, and in fact materially assist in order to gain a first-hand appreciation of the prevailing circumstances in each Department. Each member spends the Thursday and Friday of three consecutive weeks in a Station or Department, then there is a general "change round" and personnel then move to another location.

By this means all the Junior Firemen will be enabled to gain knowledge on a progressive basis of every aspect of the constitution of the Brigade.

Unfortunately however, the number has now dropped to eleven, by virtue of the resignation on medical grounds of Junior Fireman Patrick Healey. He has our most sincere best wishes for every success in his new career.

This extremely interesting article is very much appreciated, Ian, and no doubt all our readers look forward to hearing from you regarding the activities of the Junior Fireman Scheme, in subsequent publications.

(Ed.)

THE F. W. CHANDLER INTER-SQUAD COMPETITION SHIELD

As a medium to enhance the Inter-Squad Efficiency Competitions which will from time to time be held between 'A' and 'B' Squads of the Junior Fireman Scheme, appreciation is due to F. W. Chandler, Esq., of Messrs. Hughes Engineering Ltd., of Leicester, for the presentation of a shield to the Brigade for this purpose.

RETIREMENTS

Stn.O. A. Forse, Brigade Headquarters, 8th November, 1964.
Sub.O. E. W. Parsons, Stn. No. 4 Brislington, 14th November, 1964.
Fm. H. J. Robertson, Stn. No. 6 Speedwell, 6th November, 1964.
Fm. Wm. J. Cooksley, Stn. No. 3 Avonmouth, 7th November, 1964.
Stn.O. S. D. Hall, Stn. No. 6 Speedwell, 1st December, 1964.
Fm. A. E. J. (Bert) Smith, Stn. No. 1 Central, 14th December, 1964.

A very special note is perhaps opportune in all these instances. Stn.O. FORSE, as already mentioned in the Editorial, has been the Brigade Transport Officer for nearly 25 years. Various functions were arranged to mark his retirement, one of which was attended by all Senior Brigade Officers at the Assize Courts Hotel, Small Street, Bristol, where he was presented with a table lighter and an illuminated address from all members of the Brigade. Other presentations made to him were: Wall clock and barometer (Brigade Headquarters Staff) and a table lamp (Stn. No. 4 Brislington).

Stn.O. S. D. HALL, a former member of the Bristol Police Fire Brigade, was, during the N.F.S. era, responsible for Training within No. 17 Area (Bristol). Until the cessation of the National Fire Service he was attached to Fire Force Headquarters for some considerable time subsequent to his Training reference, as a member of the Fire Staff. Since the return of the Brigade to local authority he has served at the Speedwell Station, during which time his personal idiosyncrasy in so far as fairness to those privileged to serve with him has been a "Hallmark" which will always be remembered. The very best of good luck in your new venture, Stan, whatever it may be!

Sub.O. PARSONS, whose retirement celebration at Station No. 4 was coupled with that of Stn.O. Forse, was presented with a set of tools from all members of the Station by Sub.O. J. Fearnough. Many of our "out of town" readers will remember Ted as an Instructor at the then No. 7 Regional Training Establishment, Barton Hall nr. Torquay, during 1946/47.

"Slim" ROBERTSON has for many years served at the Speedwell Station, during which time he has quietly, but nevertheless very determinedly, followed the never-ending pursuit of Station Clerk. F.B.U. activities, too, have been the source of many worries to him, and he has done valuable work in this direction.

Bill ("Bumbly") COOKSLEY has not hit the headlines like many of his contemporaries. He has, nevertheless, carried out his duties diligently and efficiently at the Avonmouth Station, and reached the zenith of his career three years ago when he became a Fireboat "Admiral" attached to the "Endres Gane." Bill never learned to drive a motor vehicle. He was, however, the most efficient back-seat driver I have ever had the misfortune to accompany on the road! (Sorry about that, Bill!—Ed.)

BERT SMITH—another of the old stalwarts who has served with distinction throughout the N.F.S. and local authority eras. During the war years he was attached to the No. 7 Regional Fire Headquarters, and was for some considerable time chauffeur to Mr. A. H. Johnstone, the then Chief Regional Fire Officer. Until his secondment to the Brigade Fire Prevention Branch earlier this year. Bert was attached to the Central Fire Station. When he again became a civilian, subsequent to the date of his retirement, he continued to serve in the Brigade F.P. Department. Best wishes for the future, Bert!

THE VERY BEST OF GOOD LUCK TO EACH AND EVERY ONE OF YOU, YOUR WIVES AND FAMILIES.

BRAIN — OR BRAWN ?

PETER ADDIE (Avonmouth)

What would you do with sulphur going well,
The sides of a grain ship beginning to swell?
How would you deal with a roof-void on fire,
With petrol galore—or a cow in a mire?
Phosphates and sulphates and ammonia risks,
Radio-active cobalt, and isotope discs,
Ethylene and aircraft—gas in the street;
Acetylene cylinders: Advance or retreat?

Escapes and ladders are heavy to shift,
Fat children and women get trapped in a lift.
Searching a building in smoke isn't mirth!
Here, strength and stamina will soon prove their worth.
Breaking through doors, running hose up the stairs,
Moving "featherweight" pumps when working in pairs.
Hot, waterlogged sacks, or an awkward fireplace . . .
Brain or brawn? — better both, but each has its place !

BENEVOLENT FUND — SOCIAL ACTIVITIES

A dance was held at Stn. No. 2 Southmead on Saturday, 5th December, in order to raise funds in respect of the Fire Services National Benevolent Fund (Bristol Area).

The support, although appreciably good, was not what it might have been.

This is, in fact the first of a cycle of such dances to be held throughout the Bristol Stations as part of a programme devised to enhance the financial stability of the Fund.

It would therefore perhaps be worth remembering that in addition to an extremely enjoyable evening's dancing (even though contemporary dance steps appear to be reminiscent of a sort of inebriated contortionism), one is substantially assisting to maintain the finances of a worth-while organisation, and as such, should be given first preference should there be a choice of venue for a particular evening's entertainment.

PROMOTIONS

Recent promotions within the Brigade are as follows:—A.D.O. F. C. Ponsford to D.O.; Stn.O. L. T. Silman to A.D.O.; Sub.O.'s R. V. Andrews, B.E.M., I. J. Taylor and I. A. Tasker to Stn.O.

L.Fm. R. C. Dring to Sub.O. (Fire Prevention Dept.).

Fm. I. Astle and R. McInnes (Stn. 1 and 3 respectively) to L.Fm. (Fire Prevention Dept.).

Stn.O. G. E. Rolls, of the Brigade Fire Prevention Dept., has been successful in obtaining an appointment with the Gloucestershire Fire Authority as Fire Prevention Officer (Staff) responsible for South Gloucestershire.

Sub.O. John Barnes, also of the Fire Prevention Department, has been successful in obtaining a secondment to an Army Training Depot at Devizes, Wilts, commencing during March. The post will carry the rank of Stn.O., and Mr. Barnes will be responsible for co-ordinating training relative to Fire Service matters. In short, it would appear that very appropriately, he "devizes" syllabi (Sorry, John!—Ed.).

Stn.O. T. H. Base, of the Fire Prevention Department, has been successful in obtaining an appointment with the Kent Fire Brigade, as Operational Station Officer.

It is understood that he will serve at Maidstone.

To each and every one of you we all wish the very best of good luck and success.

"WHAT A STUPID TIME TO BRING THE PAY!"

ROY GAPPER (Headquarters)

This phrase is one which is only too often heard during pay-distributing visits to Stations. Quite understandably, every Officer in Charge considers that his particular Station should have been visited "earlier."

There are, of course, no less than five out-stations to be called upon, two of which (Stn. 6 and Stn. 5) have additional issues (in respect of Trainees, and Junior Firemen respectively), and the overall journey, mostly through rather dense traffic, is within the region of 38 miles.

The total amount of money required for pay is collected sharp at 10.00 hours from one of the local banks, and is taken to Headquarters where it is meticulously checked—right down to the last sickening halfpenny. It is then disbursed into the appropriate amounts required by each Station and Department. Quite often the continuity of this task is interrupted by telephonic queries and personal encroachment by individuals who of course have no connection with the job in hand!

With luck, it is possible for the Pay Clerk to leave Headquarters between 11.15 and 11.30 hours. Quite often communications, quite apart from the job in hand, have to be "dropped into so and so as you pass." Upon arrival at each Station, the amount payable has to be counter-checked by the Officer in Charge. Again, having received his pay, he quite often delays progress by indulging in discussion which could quite easily keep until later.

Often progress of the Pay Clerk is impeded by a severe traffic hold-up at Cumberland Basin. Sometimes upon arrival at a Station, the appliances have responded to a call of fire, the latter of course having the effect of violently throwing out any predetermined pattern of distribution, and necessitating a second visit.

As the time approaches 13.00 hours, with perhaps two more calls to make at Stations, the Pay Clerk realises that any chance he had initially of having his lunch at a sensible time has now completely vanished, if he is to see the job through before returning to Headquarters. But what shall he do? Carry on, and receive abuse for "interfering with my . . . lunch hour" from Officers in Charge or return to Headquarters for lunch himself and merit even stronger language when making a call to Stations during the afternoon? In the latter case of course, off-duty personnel who have called for and are waiting for their pay, join in the wailings to such an extent that it is a pleasure to leave the Station.

Believe it or not, an instance occurred very recently where the Pay Clerk was told by a cook that he would have to wait before she accepted her pay because six of "the chaps" were clamouring for their "afters." The time?—13.20 hours. No consideration towards the Pay Clerk's own lunch being late, and him having to travel through the central area of the City to return to Headquarters!

So you see, chaps, the poor old Pay Clerk—whether it is Gladys Mann or Barry Hook—just CANNOT win! The only sane solution to the present long-winded, out-moded method of dispensation of pay is by the voucher system. No delay—quite smooth and efficient delivery without protracted and repetitive checking and counter-checking! No waiting for an hour at the Station when off duty—yet you all obviously prefer the present method. WHY?

Vehicle Body Repairs

Re-spraying

SCOTT

REAR OF 209 AVONMOUTH ROAD, AVONMOUTH

SPECIAL RATES FOR FIRE BRIGADE PERSONNEL

RECENT MARRIAGES

On Saturday, October 15th last, Brenda, the eldest daughter of Mr. and Mrs. Walter A. Russ, of 19 Little Stoke Road, Stoke Bishop, was married to Mr. Michael Curtis, of Gloucester.

The ceremony took place at St. Mary Magdalene Church, Stoke Bishop, and was followed by a reception at Blaise Mansion, Blaise Castle Estate.

"Wally," a former member of the Bristol Police Fire Brigade, served as an operational fireman through the various eras of the Service from 1935 until his retirement in 1961, whereupon he obtained an appointment in the Supplies Department at Brigade Headquarters, as a civilian.

Those readers who served at the Avonmouth Fire Station when it was based in Green Lane might well look in amazement at the accompanying photograph, which includes both of Wally's daughters—one of whom was a bridesmaid at the wedding. Those two "little 'uns" have most certainly grown up!



Coincidentally, on the same day as the wedding reported above, the youngest daughter of Sub.O. "Pat" Delaney, of Station No. 1 Central, was married to Mr. Brian Jacobs at St. Paul's Church, Coronation Road, Southville, Bristol. The reception was held at the Co-operative Hall, Canon Street, Bedminster.

Readers will need no introduction to "Pat"—he is a very familiar figure in the Service, and for a number of years was Senior Instructor at the Regional Training Establishment, and later at the Bristol Fire Brigade Training Establishment, Stoke Hill, Bristol. Many of the firemen serving in the South West have passed through his hands!



ANNUAL INSPECTION OF BRIGADE

The Annual Inspection of the Brigade was carried out by Her Majesty's Inspector of Fire Brigades, Mr. A. V. Thomas, G.M., on Monday, Tuesday, and Wednesday, September 28th-30th of last year.

In common with normal procedure, H.M. Inspector visited all six Bristol Stations and the Brigade Fire Prevention Department at the Old Council House, Corn Street.

On the afternoon of the second day of his visit, Mr. Thomas initiated a Test Call of Fire which was to formulate the basis of an extensive exercise at Barton Hill Flats. The object was to test the arrangement in being within the Brigade to deal with such an emergency, and appliances from Central and Speedwell were brought into use, and an appliance from the Bedminster Station moved into Central in order to afford unbroken continuity of cover for the Central Area of the City in accordance with normal procedure under such circumstances.

The actual inspection of personnel and drill demonstration was held on the afternoon of Wednesday, September 30th at the Speedwell Station.

In addition to the distinguished gathering of civic officials, the proceedings were watched by His Grace the Duke of Beaufort, K.G., P.C., G.C.V.O.

The address of welcome to distinguished guests was given by the Chairman of the Fire Brigade Committee, Councillor R. R. Willmott, and was followed by the presentation of the Queen's Fire Service Medal for Distinguished Service to Divisional Officer Ernest Wookey by His Grace the Duke of Beaufort.

Mr. A. V. Thomas then gave a brief outline of his observations on his three-day inspection, and said that he was in every way extremely pleased with what he had seen. He mentioned too, how impressed he was with the arrangements maintained in the Brigade for the effective dealing with fires in multi-storeyed buildings, which was revealed on the occasion of the previous day's exercise at Barton Hill.

At this stage H.M. Inspector paid great tribute to the work carried out over the years by Divisional Officer E. Wookey.

There then followed the presentation of the Brigade Perpetual Challenge Trophy for Station Efficiency during 1964. This was accepted by Sub.O. E. W. Parsons on behalf of the Brislington Station, the presentation being made by the Rt. Hon. the Lord Mayor of Bristol, Councillor Kenelm A. P. Dalby, D.S.O., O.B.E.

The proposal of thanks to the Rt. Hon. the Lord Mayor was then made by Councillor J. B. Sprackling.

Following this, the parade (which for the first time was inclusive of twelve Junior Firemen) was dismissed, and the parade ground cleared in readiness for the drill demonstration.

This commenced with a Squad Drill display by Junior Firemen, and, bearing in mind the extremely short period during which they have been members of that organisation, their movements were in every way a great credit to the Brigade and their instructor, Sub.O. Howell.

Station No. 3 personnel (Avonmouth) then gave an Escape Drill demonstration consisting of a Line Rescue from the third floor of the drill tower.

The scene then changed to a hose-running competition by two teams of Junior Firemen—the amazing speed with which these lads covered the ground during the competition really had to be seen to be appreciated! The Junior Firemen certainly discount the generally accepted label of teenage indifference!

There then followed a composite fire drill, comprising a rescue from third floor window of the drill tower by carrying down, and rescue from the base of the tower by personnel using breathing apparatus. Concurrent with this, the extinguishment of an "oil fire" by water spray, and finally the provision of an additional four fire-fighting jets into windows of the drill tower was effected.

No demonstration would be complete without the Turntable Ladder demonstration, and on this occasion Line Rescues from the fourth floor using sling, and from the roof of the tower using sling and stretcher, were carried out.

The demonstration concluded with a parade of appliances and personnel who had participated.

Extremely tasty and ample refreshments were then partaken of by all present, then once again the Inspection of the Brigade for 1964 in so far as the Regular Section was concerned, had ended.

INSPECTION OF A.F.S. PERSONNEL BY H.M. INSPECTOR

On the evening of Wednesday, September 30th the Annual Inspection of the A.F.S. Contingent of the Brigade was made by Mr. A. V. Thomas, accompanied by the Chairman of the Fire Brigade Committee, Councillor R. R. Willmott, and the Chief Fire Officer.

As is usual, the members of the Auxiliary Fire Service were in every way a great credit to the Service, in their appearance and bearing.

After passing through the ranks and conversing with most of the members, H.M. Inspector joined the assembled guests for light refreshment.

A special note is perhaps expedient with regard to the catering arrangements undertaken by the personnel of Station No. 6 Speedwell on this day, both with regard to the inspection of Regular personnel and later the Auxiliary Fire Service. The high standard of the various delicacies provided had to be seen to be believed—and tasted for final confirmation. Delicious!

AS THE MOTORIST SAID . . .

These are genuine extracts from motor Claim Forms received by a large insurance office in the City.

1. The accident was due to the other man narrowly missing me
2. Lorry halted and worked for the Corporation.
3. I collided with a stationary tramcar coming in the opposite direction.
4. The occupants were staking dear on the hillside.
5. I left my Austin 7 outside, but when I came out later, to my amazement, there was an Austin 12.
6. To avoid collision I ran into the other car.
7. There were plenty of lookers-on but no witnesses.
8. The water in my radiator accidentally froze at 12 midnight.
9. Car had to turn sharper than was necessary owing to an invisible lorry.
10. I was scraping my nearside on the bank when the accident happened.
11. After the accident a working gentlemen offered to be a witness in my favour.
12. I collided with a stationary tree.
13. There was no damage done to the car as the gatepost will testify.
14. Accident was due to the road bending.
15. The witness gave his occupation as a gentleman, but it would be more correct to call him a garage proprietor.
16. The other man altered his mind and I had to run into him.
17. Ice on the road applied brakes causing skid.
18. I told the idiot what he was and went on.
19. One wheel went into the ditch. My foot jumped from brake to accelerator pedal, leapt across the road to the other side and jumped into the trunk of a tree.
20. I remember nothing after passing the Crown Hotel until I came to and saw P.C. Brown.
21. A cow wandered into my car, I was afterwards informed that the cow was half-witted.
22. A bull was standing near and a fly must have tickled him because he gored my car.
23. She suddenly saw me, lost her head and we met.
24. I was taking a friend home and keeping two yards from each lamp post which were in a straight line. Unfortunately there was a bend in the road bringing the right hand lampost in line with the other and of course I landed in a ditch.
25. If the other driver had stopped a few yards behind himself, it would not have happened.
26. I bumped into the lampost which was obscured by human beings.
27. I bumped into a shop window and sustained injuries to my wife.
28. I hear a horn blow and was struck violently in the back. Evidently a lady was trying to pass me.
29. I misjudged a lady crossing the street.

SPORTS SECTION

TABLE TENNIS FIXTURES

1964/65 Season

BRISTOL FIRE BRIGADE. Div. 6a

Oct. 6.	Broomhill	Home	Jan. 12.	Broomhill	Away
" 14.	Weston 'C'	Away	" 19.	Weston 'C'	Home
" 20.	Southmead 'C'	Home	" 27.	Southmead 'C'	Away
" 30.	Knowle Comm.	Away	Feb. 2.	Knowle Comm.	Home
Nov. 3.	Cabot 'C'	Home	" 12.	Cabot 'C'	Away
" 12.	Evening Post B	Away	" 16.	Evening Post B	Home
" 17.	Glenside Hosp.	Home	" 22.	Glenside Hosp.	Away
" 24.	Failand	Away	Mar. 2.	Failand	Home
Dec. 1.	Reg. Pools	Home	" 9.	Reg. Pools	Away
" 8.	Thornbury 'A'	Home	" 15.	Thornbury	Away
" 15.	Knowle Y.C.	Away	" 23.	Knowle Y.C.	Home
" 29.	Badminton Meth.	Home	" 31.	Badminton Meth.	Away
Jan. 4.	Long Ashton B	Away	Apr. 6.	Long Ashton B	Home

WHICH ?

The October 1964 issue of "Which?", the journal of the Consumers' Association, contains interesting reports on tests carried out on various flame-resistant materials and garments—those made from flame-resistant fibres and those made from naturally flammable fibres treated with a flame-resistant finish. They were tested when new and after being washed 25, 50 and 100 times in three different ways in a washing machine.

The testing panel found that the fabrics were still flame-resistant after washing, with the exception of some treated fabrics which lost their flame-resistant properties to some extent after repeated washing with soap in hard water and thorough rinsing, though they were still better than untreated fabrics. They also found that rubbing away the surface of treated fabrics did not affect their flame-resistance. They recommend buying flame-resistant women's nightdresses and flame-resistant fabric for making-up and confirm the manufacturers' current instructions that flame-resistant treated fabrics should be washed with a **soapless detergent** and not soap.

The same issue of "Which?" contains a report of tests carried out on oil convactor heaters for safety and efficiency. Out of 12 heaters tested none was considered entirely satisfactory. One heater caused a fire within two minutes of being tipped over and spilt over one-third of a pint of paraffin within 15 seconds when tipped over unlit. All but three heaters spilt more than one-tenth of a pint of paraffin in 15 seconds when tipped over unlit, but, says the panel, all would pass the B.S. because they did not cause a fire within 15 seconds when tipped over when lit.

BIRTHS

BRADSHAW.—Congratulations to Mr. and Mrs. Henry Bradshaw on the occasion of the birth of a son on 8th December. Henry, as most readers will know, is a civilian mechanic attached to Brigade Workshops.

SILVER WEDDING ANNIVERSARY

WHEATLEY.—Hearty congratulations to Mr. and Mrs. G. P. Wheatley on the occasion of their silver wedding anniversary which was celebrated by them on 24th November last.

SPOTLIGHT ON LOCAL INDUSTRY (2)

POWER GENERATION

The generation of electrical power is one of our major industries and its uses play a predominant role in our everyday lives. This article describes in simple terms the process of converting the heat energy derived from coal, oil or nuclear fuel into electrical energy. The conversion process is very much the same in most power stations, but the details herein apply particularly to the Portishead Power Station.

In 1962 the output from Britain's power stations amounted to 127,732 million units and in the process 58.1 million tons of coal and 5.4 million tons of heavy fuel oil were burnt. Table 1 shows the percentage of the total power output derived from each of these sources in 1963. Also shown are some estimated figures for the year 1975. The table disregards a small amount of hydro-electric and gas turbine generation.

			Percentage of Total Units		
			Coal	Oil	Nuclear
Actual 1962	83	15	2
Estimated 1975	73	12	15

TABLE 1.

Basically, the process of power generation can be illustrated by a simple block diagram (Fig. 1).

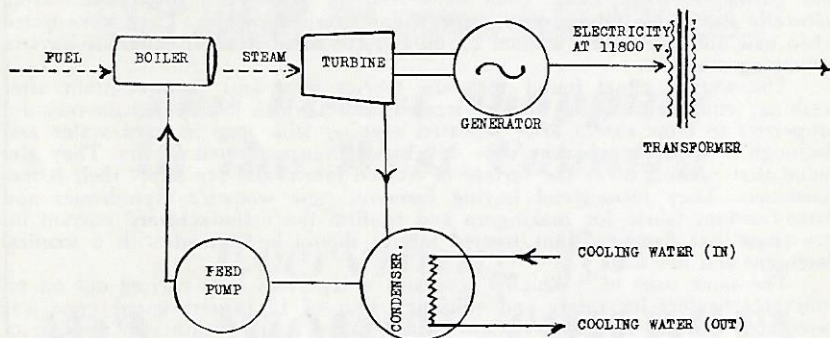


FIG. 1.

The operational process can be broken down into the following steps:

- (1) The burning of coal, oil or nuclear fuel to generate steam.
- (2) The steam is used to drive a turbine which is coupled to a generator, this unit is known as a turbo-alternator. The output from the generator has to be "stepped up" in voltage to either 132,000 or 275,000 volts for distribution over the national grid system.
- (3) The steam, after doing its work in the turbine, exhausts into a condenser which uses water from the river or sea to condense the exhaust steam.
- (4) The condensate is pumped back to the boiler by the boiler feed pump.

Fuel Supplies

The fuels used at Portishead are coal from Wales, Somerset and Yorkshire and heavy oil residue from the Milford Haven refinery. Welsh coals are sea-borne by colliers of 500 to 700 ton capacity and are discharged at Portishead by the dock-side cranes. The Somerset coals are rail-borne and are off-loaded by waggon tipplers, which as the name implies, tips the waggons and empties their contents into a hopper. Both sea-borne and rail-borne coals are transported by a belt conveyer system to either the boiler bunkers or the reserve stock.

The heavy fuel oil is delivered by sea tankers of 5,000 ton capacity and is pumped from the tanker into storage tanks.

Boiler Plant

The steam raising plant consists of 12 boilers manufactured by Mitchell Engineering Ltd., each boiler being capable of an output of 300,000 pounds of steam per hour at a pressure of 950 pounds per square inch and at a temperature of 925 degrees Fahrenheit.

The first eight of these boilers are fired with pulverised coal, that is, coal ground to a very fine powder in pulverising mills. The mills are continually swept by hot air which not only acts as a drying agent but also serves as the carrier for the fuel, which, when ground, is borne by the air stream to the burners. The coal and air mixture is blown into the furnace chamber via burners at each corner of the chamber and ignition is initiated by means of an oil burner. After the initial light-up, the coal stream continues to burn spontaneously, similar to a gas flame. The advantages of this method of burning coal are:

- (1) It is possible to design boilers for very high steam outputs.
- (2) The boiler efficiency is higher, this being mainly due to more intimate mixing of fuel and air which improves combustion efficiency.
- (3) Greater flexibility in meeting changing loads.

The remaining four boilers are fired with a very heavy fuel oil (oil refinery residue) which, in order to burn successfully, has to be preheated to 290 degrees Fahrenheit and pumped to the burners at a pressure of 480 pounds per square inch.

In the interests of boiler efficiency it is necessary that the temperature of the flue gases leaving the boiler should be reduced to a minimum. This objective is achieved by the installation of:

- (1) An economiser in which the heat of the high temperature boiler gases is utilized to preheat the feed water before its admission to the boiler drum.
- (2) An air preheater in which some of the heat remaining in the gases after its passage through the economiser is transferred to the boiler air supply.

By means of these two items of plant the boiler gases, which have a temperature of 970 degrees Fahrenheit at the boiler exit, are cooled to 270 degrees Fahrenheit.

Ash and Dust Removal

The coal boilers burn in the region of 15,000 tons of coal per week and in doing so produce about 4,200 tons of ash and dust. The ash collects in a hopper below the furnace chamber and is removed by a high pressure water sluicing system. The dust which passes out of the boiler with the flue gases is collected in the hoppers of the economiser, the mechanical grit arrester and the electrostatic precipitator from which it is removed under a vacuum created by high pressure hydraulic ejectors. Both ash and dust on removal from the various hoppers is pumped to settling ponds and after draining is transported by lorry to nearby disposal grounds.

Pulverised fuel ash has been used quite extensively for land reclamation, and the fine dust from the precipitator hoppers at Portishead is currently being used on several major contracts in concrete mixes for civil projects or as a filling material for embankments and roads, etc.

The Turbine House

In the Portishead "B" Station, the building of which was completed in June, 1960, there are six turbo-alternators manufactured by Metropolitan Vickers Co. Ltd., and they are each capable of an output of 65,000 K.W. at 11,800 volts giving the Station a total capacity of 390,000 K.W. (equivalent to 520,000 H.P.). The full load current of these machines is 3,670 amps and this current flowing in the machine windings causes considerable heating of the winding. In order to maintain the windings at a safe temperature, they are cooled by passing a continuous flow of cooled hydrogen over them. The advantages of using hydrogen as a cooling medium are:

- (1) It has a much better capacity for heat transfer than air which, incidentally, is the cooling medium employed in older machines.
- (2) There is an increase in alternator efficiency which results from the fact that hydrogen is less dense than air, and the machines are quieter in operation.
- (3) Hydrogen does not support combustion, hence the risk of fire is eliminated.

The output from each of these machines is fed to a transformer which steps up the voltage from 11,800 to 132,000 volts for transmission over the national grid system.

A photograph of one of the turbo-alternators appears as Fig. 2.

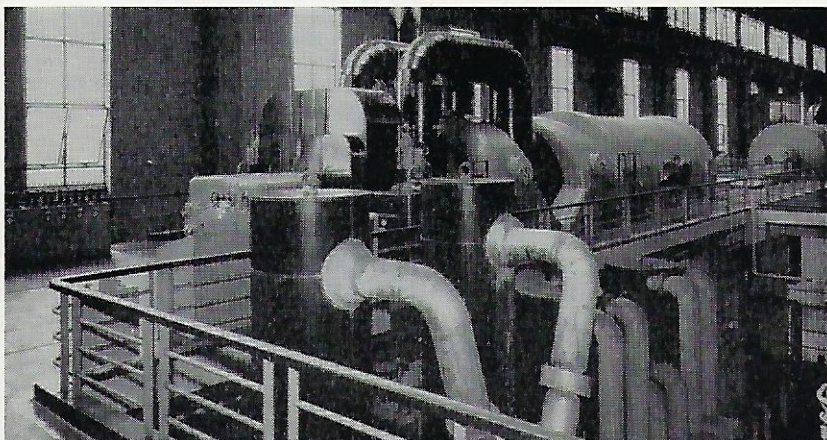


Fig. 2.

(To be concluded in next issue)

BAILEY.—The death of Mrs. Rubie Bailey is announced with very deep regret. Rubie, who was formerly a member of the National Fire Service, served at the war-time North Road Station. Since the war she has been a stalwart of the highest possible calibre, serving in the Auxiliary Fire Service and attending most, if not all, of the exercises held from time to time.

HOBBS.—The death of Mr. William H. Hobbs, the Brigade First Aid Team trainer, is announced with sincere regret. He will be sadly missed in particular by members of the Brigade First Aid Team, who, but for his painstaking interest over the years, may not have been favoured with the great successes which are no doubt attributable to him as the result of his extremely keen and efficient direction.

THE INSTITUTION OF FIRE ENGINEERS

Sub.O. T. JACKSON (Bristol and Bath Group Publicity Officer)

The Bristol and Bath Group of the Institution of Fire Engineers had a very successful and interesting series of activities during 1964. Such activities included visits to industrial premises of varying types, lectures by visiting specialists, and of course the normal Group meetings.

During the year the Group Secretary, Stn.O. H. J. Smith, A.M.I.Fire E., having obtained an appointment with the Fire Service College, had, of necessity, to relinquish his task of Group Secretary. Stn.O. R. V. Andrews, B.E.M., Grad.I.Fire E., has, as the result, accepted the post of Secretary, and I am certain that we will all assist him in every way possible. I know he will do all in his power to continue to make our Group as successful as it has been hitherto.

In addition, this seems an appropriate time and place to publicly thank Assistant Divisional Officer H. J. Smith for his consideration and efforts with regard to the Group whilst he was Secretary and to wish him every possible success for the future.

Reverting back to the activities of the Group during 1964, those of outstanding interest so far as I personally was concerned, were talks relating to the petroleum industry by Mr. Thomas, and the Glasgow whisky fire by ex-Firemaster Martin Chadwick, who was in fact the senior officer present, and responsible for fire-fighting operations at that incident. Visits were also made to Wall & Son, Gloucester; Messrs. W. D. & H. O. Wills, Bedminster, Bristol; the British Aircraft Corporation, Filton; and the Esso Refinery at Fawley, Southampton. The B.A.C. visit incorporated a talk given by a technician, coupled with simulated fire incidents which could well be encountered during flight. A tour of the much publicised "Concord" project was also included.

On the occasion of the visit to the Esso Refinery at Fawley—a visit which proved extremely interesting and instructive—a talk was given on the procedure carried out throughout the plant and a demonstration of a new type of foam-making equipment. Personnel who were engaged on the Avonmouth oil fire of September 1951 will no doubt recall the difficulty regarding the effective transportation of foam compound to given points, and will be interested in the procedure adopted at Fawley. Here, where a comparable fire situation could well arise, the problem has been to a very great extent overcome by transporting compound in bulk to a predetermined point, then pumping it through lines to control points. Then, by means of a new type of valve it can be used by the foam-making branchpipes as and when required. I can envisage this type of layout for foam-making purposes being used by many of the large oil and petrol installations.

Members of the Group will no doubt be aware of the meetings which have been arranged to take place at Station No. 5 Bedminster, commencing on the 10th February, 1965, at 19.30 hours. During the course of these meetings, talks will be given on Fire Service Legislation, and should effectively assist to clear up many points.

The meetings are not specifically confined to members of the Institution of Fire Engineers—they are open to all members of the Service who may wish to attend.

It would perhaps be expedient to underline the arrangement in being with the Institution in so far as the reimbursement of cost incurred in respect of correspondence courses is concerned. One of our members who is taking such a course made use of the scheme available, and obtained a two-thirds reimbursement from the Institution. This should encourage any other member who desires to participate in the scheme to take one of the admirable courses at a greatly reduced cost to himself.

In closing, I would wish all members every success in the forthcoming examinations.

F I R E F L A S H

SUPPLEMENT TO PUBLICATION NO.7 - FEBRUARY 1965

At long last, No.7 edition of the Brigade Magazine is available. For some reason or another, this particular publication has caused quite an amount of trouble, and the result is late arrival.

However, to implement the rather threadbare phrase used so often these days "BETTER LATE THAN NEVER".

WELFARE NEWS :

Leading Fireman George Cooke (Stn.No.6) continues to make slow progress as the result of medical care and attention. It will be recalled that he was unfortunate enough to sustain injuries whilst engaged on a fire at the Alcove Lido Fishponds, Bristol on August Bank Holiday of last year.

Fireman W.J. Addison (Stn No.1) has had a rather rough time of it lately, as the result of injuries he received whilst riding his motor scooter. He has been in hospital on two occasions as the result of this unfortunate incident. Hope to see you back again very soon Bill, carefully watching that toast !

Mr. Arthur Leek, the former Deputy Chief Officer of the Brigade has, readers will be sorry to learn, been in hospital with his old complaint - Ulcers, but is now out and about again and is progressing very well, so it is understood from his son, ADO. C. Leek (F.P. Dept.) Keep up the good work Arthur, and we all hope that by the time you receive this issue you will be on top of the world.

QUESTIONNAIRE ON "FIREFLASH"

In conjunction with the authorisation of the Chief Fire Officer, a Questionnaire was forwarded to all whole-time members of the Brigade, both Uniformed and Civilian, early in January. The object of the exercise so to speak was to determine the sentiments of our readers on the whole framework of the Magazine.

Of the 380 such forms which were individually addressed to each member however, only 183 had the grace to complete and return their form.

The general impression gained from careful study of the returned Questionnaire Forms is that in general, the current presentation is favoured.....One rather bright individual went into a rather protracted tirade relating to the admirable presentation of the P.B.A. Publication "Tideway", and the Bristol Waterworks "Newsletter" - I was nevertheless in complete agreement, but would have been happier if he had confined his observations to the "Fireflash" ! Someone else suggested that there should be a Representative for "Fireflash" on each Station, so that items of domestic news could be forwarded for inclusion in each issue, from each Station ! But there ARE supposed to be such Station representatives, Old Chap ! The interest of certain Station Representatives appears to be so much on the top line too, that even they did not take the trouble to complete and return their own personal "Questionnaire" Forms !! To top the lot however, the suggestion from one of our readers that a page be devoted to items entitled "A FUNNY THING HAPPENED AT STN NO. ---" such items to be reported to the Editor by telephone (no writing).... In other words - "the ammunition will willingly be supplied, and the vendor then effectively retires to oblivion and safety !"

Many readers suggested a "Free Platform" should be included.....There have always been facilities for this, and readers' letters have been published from time to time, particularly in the first four issues.

In short however, I would emphasise that every endeavour will be made in future publications to include the items requested by our more interested readers.

BENEVOLENT FUND DANCES TO BE HELD ON STATIONS.

In pursuance of the arrangements made recently by Station Representatives, to hold Dances in aid of the Fire Services' National Benevolent Fund regularly, in order to increase the revenue of the Fund, a Dance is to be held at STATION NO.4 BRISLINGTON ON SATURDAY 20th MARCH next. In addition to the presence of serving, and retired members, their friends, and relatives, without question, the whole object is to make the evening thoroughly enjoyable, plus enhancing the Funds of a very worthy cause.

TO EACH AND EVERY ONE OF OUR READERS THEN - A VERY CORDIAL WELCOME IS EXTENDED FROM THE PERSONNEL OF STATION NO.4.

CONTACT SUB. OFFICER FRED BRYANT FOR ANY FURTHER PARTICULARS

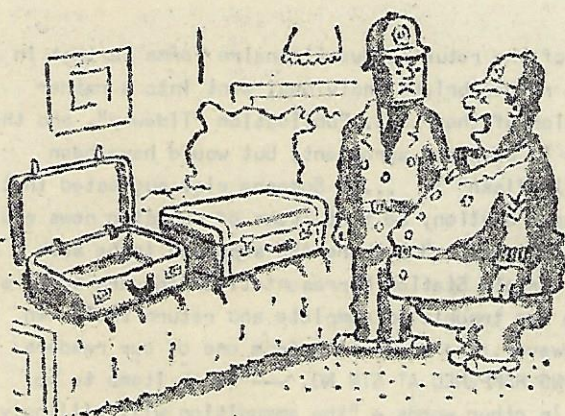
.... DON'T FORGET..... SATURDAY MARCH 20TH..... 7.30 P.M.

BRISTOL FIRE BRIGADE BAND.

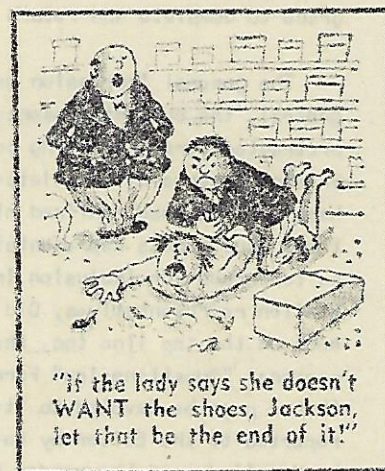
The Brigade Band has of late, been very successfully operating at various parts of the City, particular regard being made to the giving of Concerts to Old Age Pensioners' Organisations, Hospitals, and the like.

Under the Conductorship of Mr. John Foster, ably supported by the former Bandmaster, Mr. T.H. Miller (Brigade Headquarters Supplies Dept.,) many an enjoyable hour or so have been given to various audiences from time to time.

The fact that John Foster and Tom Miller were formerly colleagues in the Services, seems to enhance the very splendid spirit which is so apparent within the Band. Coupled with this, the untiring and very conscientious under-cover work of "Jim" Churchill, the Band Hon. Sec., is equally deserving of the highest order of praise. Sometimes, quiet individual effort tends either to be overlooked, taken for granted, or completely ignored. Many programmes have been arranged during the current year for the presentation of Concerts at various Institutions, Hospitals, etc., throughout the City.



★
"Looks like
an open and
shut case,
Sergeant."
★



"If the lady says she doesn't
WANT the shoes, Jackson,
let that be the end of it!"