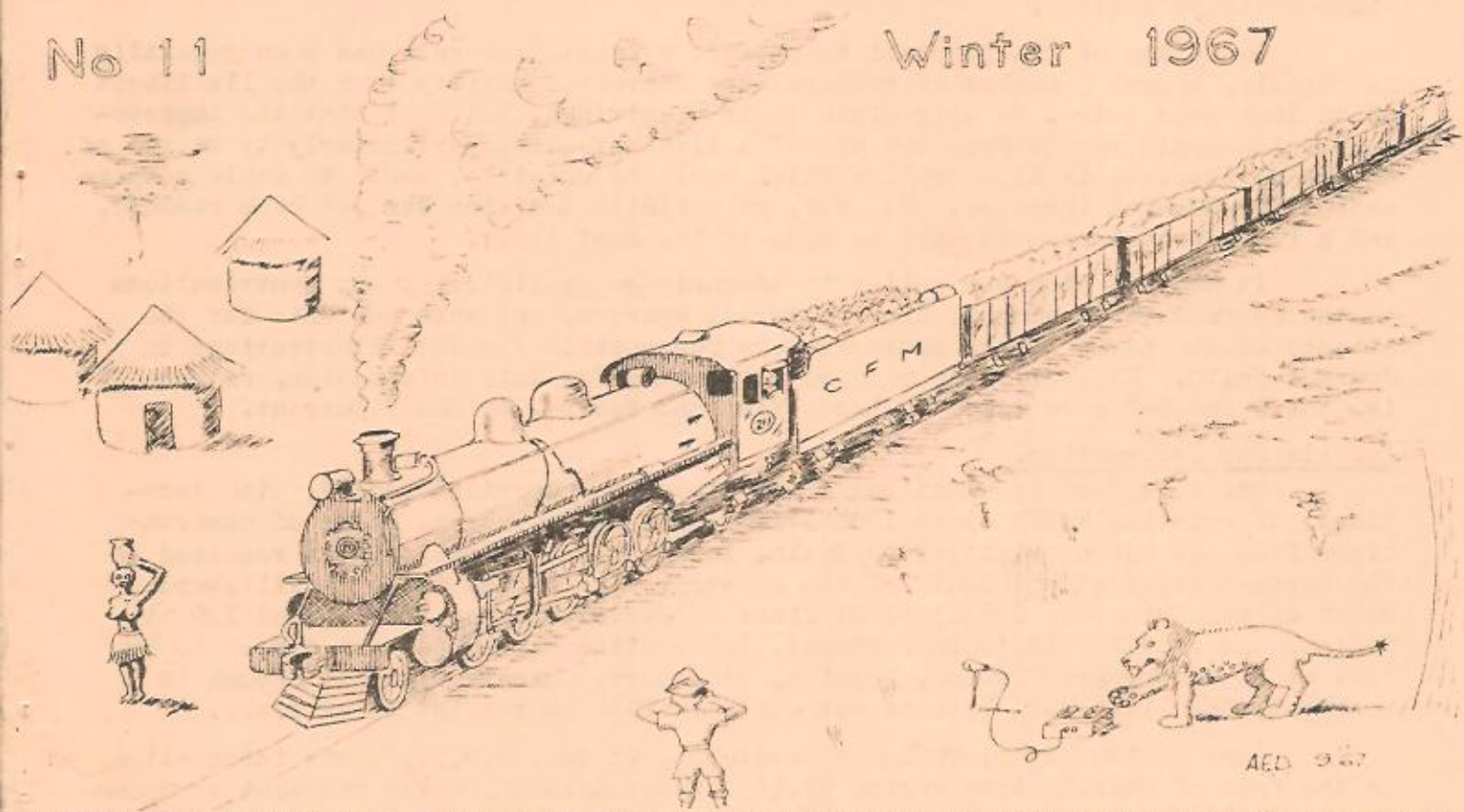


CONTINENTAL RAILWAY JOURNAL

No 11

Winter 1967



Published by the
Continental Railway Circle



EDITORS

Main Lines - A.E. Durrant, P.O. Box 349, Nigel, Transvaal, South Africa.
(For everything except European news items.)
J.B. Shell, 11 Grove Terrace, London N.W.5. (For European news items only.)

Minor Railways - W.J.K. Davies, "Lothlorien", 290 Lower Luton Road,
Wheatthampstead, Hertfordshire.

Distribution - L. King, 25 Woodcock Dell Avenue, Kenton, Harrow, Middlesex.

As many readers will already know, "Dusty" Durrant has left Britain's shores for the sunnier (and steamier) clime of South Africa, and one immediate result of his voyage is the account of Mozambique railways which appears in this issue. Another is the need to enlist additional assistance in London, and we are very pleased to welcome John Snell to the editorial fold. There has recently been an encouraging increase in the quantity of European main line news items submitted - so much so that we have unfortunately been compelled to curtail certain contributions intended for this issue - and John Snell is to take care of this department in future. Dusty Durrant will still deal with other main line items, i.e. all articles and non-European news, and Keith Davies will continue to handle the whole minor railways section.

Reception of the proposal to produce a printed Journal has been generally favourable, though a number of readers have expressed anxiety over the likelihood of an increased price. We appreciate their misgivings, but feel that the improvement which would result from the use of a litho process, particularly by virtue of the great increase in illustration which would be possible, would be ample compensation for such an increase. However, no definite decision has yet been reached, and a further announcement will be made in the next issue.

It has not been our policy to acknowledge specifically any contributions to the Journal which emanate from editorial sources, and this accounts for the absence of the names of the photographers responsible for the illustrations in Journal No.10. However, some readers have asked for this information, so here it is. Nos.1 and 5-8 were taken by Lance King and Nos.2-4 by Dusty Durrant.

Appeals for Information.

Mr. A.J. Hart is compiling a comprehensive numerical record, with locations, of existing RENFE steam locomotives, and would welcome lists of observations from all recent visitors to Spain. Information is particularly required on the north-west, west and south of the country; also on the dumps at Villaverde, Salas de los Infantes, Castojon, El Pinar and Vadollano, on the damaged 140 at Medina, and on RENFE 140's in Portugal. Information should be sent direct to Mr. Hart at 15 Cherry Tree Avenue, Poynton, Stockport, Cheshire and, if enough is received, the list could be sent out early in 1968 on receipt of an s.a.e.

Herr Günter Meyer, Thälmannstrasse 25, 94 Ave, D.D.R., wants information on the fate of Fairlie tram engine 99.163 ex-Reichenbach, which was sent to Greece during World War 2 and never returned.

PUBLICATIONS RECEIVED

LIGHT RAILWAYS OF THE FIRST WORLD WAR by W.J.K. Davies: 196 pages 5½" x 8½", 59 photographs, 35 maps and diagrams; published by David & Charles, price 35/-.

Little has been written, at any rate in recent years, on the military railways of the First World War, so that this book fills an obvious gap in rail-

way literature. Only lines serving British troops are dealt with, and in particular those of the Western Front, but the latter alone, at their maximum extent, had a length of 800 miles. Part 1 of the book describes the gradual development of these lines as the war progressed and, briefly, what happened to them afterwards. The final chapter in this part is devoted to the light railways serving other fronts - Italy, Gallipoli, Salonika, Egypt, Palestine and East Africa - and rather fuller treatment of these would have been welcome. Part 2 gives details of the motive power, stock and track which were used. The photographs are an extremely interesting collection and, with the numerous maps and diagrams, amply illustrate a book which should be on the shelves of every light railway enthusiast.

RAILWAY ENTHUSIASTS' HANDBOOK, 1968-9: 160 pages $5\frac{1}{2}$ " x $8\frac{1}{2}$ ", 35 photographs, 1 drawing; published by David & Charles, price 25/-.

This, the third edition of the Handbook and the first to be published by D. & C., covers a wide range of railway topics, and your reviewer first turned to those sections likely to be of interest to readers of this Journal. Surprisingly, the C.R.C. is not included in the Directory of Railway Societies, though it is referred to under Continental Railways, whilst the Journal is mentioned neither in the list of periodicals nor elsewhere. Section VI deals with continental railways, and after a brief preamble come some suggestions for general reading on the subject. Then follow notes on nine selected European countries, briefer references to the remainder, and finally three pages of statistics. Much useful information is included, but unfortunately this is not always accurate. For example, several countries produce timetables more than once or twice a year, Switzerland's Amazing Railways is published by Nelson, not Ian Allan, there is confusion between Norway's two preserved lines, and the 2,830 km of 5' 6" gauge in Portugal are route miles, whilst the 750 km electrified are track miles.

Other sections of the book not already mentioned deal with light railways, preserved British locomotives, railway museums, British Railways, industrial railways, railway photography, railway centenaries 1868-69 and B.R. shed codes. Space does not permit a detailed review of these, but several of them exhibit a similar lack of accuracy to the continental section. In short, this is a useful book, but its value as a work of reference is seriously impaired by the unreliability of its contents, and it is to be hoped that the publisher and contributors will do their homework considerably better before the next edition, promised in 1969.

RAILWAY HOLIDAY IN ITALY by P.M. Kalla-Bishop: 160 pages $5\frac{1}{2}$ " x $8\frac{1}{2}$ ", 40 photographs, 4 maps; published by David & Charles, price 30/-.

Mr. Kalla-Bishop is the acknowledged British expert on Italian railways, so it comes as no surprise that this, the eighth volume in the Railway Holiday series, is from his pen. The narrative follows the usual pattern, by describing a tour of the country, but is interspersed with details of almost every facet of railway development and operation, so that a comprehensive picture of the Italian railway system evolves. Private lines and museums receive their fair share of attention, and the author has also found room to include references to the Italian people and their way of life. Appendices provide useful lists of all forms of motive power, and the illustrations are well chosen and reproduced. Unfortunately, however, an otherwise near-perfect result has been spoiled by inadequate maps. Those reproduced omit all private lines, and there is a serious need for enlargements showing the complicated networks around the large cities, particularly Milan, Rome and Naples. However, it is to be hoped that this relatively small blemish will not discourage the purchase of what is otherwise an excellent book.

P.L.M. - AN INTERNATIONAL OUTPOST

by B.A. Stone

I had often wondered how many "browsers" ever even noticed, let alone contemplated using, the line of entries tucked away in Table 158 of Cooks Continental Timetable. It says "Le Locle (Ville) arr." in an inset grouped with Besançon, and in Chaix this is amplified into Service 517, with three through trains a day over the 80km. of route. I was to go with one of them.

It was the logical consequence of a rather childish whim which took me to Le Locle from Besançon, one January morning. I have been fascinated by Switzerland and its railways, and noticing the number and variety of points by which the rail passenger can enter that country, had sought (and still do) to use as many of these frontier crossings as possible. (There are, incidentally, 22 bona-fide crossings for international travellers, five defunct ones and four which I disqualify as "out-offs".) So instead, on a recent journey, of going to Basle, or Vallorbe, my wife and I took train No.53, the 12.25, from Paris Lyon, in the Besançon through coach. We were duly detached at Dijon and attached to an assortment of local stock on the 15.47 Dijon-Besançon. At Dôle, off came BB 25515 and on came 141R499; so far so good. There are not, of course, many Paris-Berne passengers using this route, and one must be prepared for the enthusiastic conductor who is convinced that one really ought to be on another train; but here we were, anyway, at Besançon, for a comfortable night at the Hotel de l'Europe et de la Poste and an early start the following morning.

At 7.35 we were on the platform at Besançon Viotte, in the deserted darkness. It was bitterly cold. An unlit, uninviting autorail proved to be X3012, the 7.50 to Le Locle, and we climbed in to find two or three lonely and cold looking workmen and soldiers sitting in the gloom. Suddenly a clanking outside introduced 141R654, on a local of six-wheelers from Dôle, and simultaneously X3012 was started up. On came the lights, and a couple of dozen more passengers climbed in. Punctually at 7.50 the doors were slammed shut and, with a nerve-jangling vibration (which continued, generally speaking for the next two hours), we set off for Switzerland, down a steeply curved single line away from the Belfort line, to stop at Besançon-Mouillère on the banks of the River Doubs. At once we were away and into a grinding climb as, outside, it got lighter and we had a view of the winding river retreating below us. It is 7km. to Saône, the next station, and 1 in 40 all the way; 11 minutes of low-g geared shuddering, and one can see why in steam days they took over 20 minutes to get up here. X3012 seems quite at home; she was built the PLM in 1935, with a 300hp. Renault engine to move her 31 tons, and has spent most of her life on these hills.

Beyond Saône, the climb continues somewhat abated, through Mamirolle, and at L'Hôpital du Gros Bois the line finally levels off, as we are joined by a freight branch from Lods, in the south. We are on a plateau, across the top of the Juras, and heather, pine and scrub-covered hills extend as far as one can see. There are a few scattered groups of houses, and here and there a road cutting across the heathland, and in front the gently curving, rising and falling single line towards the east. Surely the PLM never expected to make its fortune.

up here? Indeed no; the PLM found itself the unhappy constructor of this line following an international agreement between France and Switzerland, signed on June 14th., 1881, to establish an international route at this point with easy access to the industrial part of the Swiss Juras, and through Biel to Olten and Berne. The PLM might have hoped to compete with the Est for traffic from Paris to Northern and Central Switzerland, when the link was established in 1884; but it was always a forlorn hope, and one suspects that as the SNCF prepares for a new round of rationalisation this meandering single line might not last much longer.

While we ponder, the autorail trundles on, leaving stations where occasional passengers alight or board, where the Chef de Station rings the departure bell - more Swiss than French to our modern ears - and disappears to tend his accounts until the next train 4 hours later, and where all appears lonely and decaying. There is snow on the platforms at Longemaison, and fir trees drip on the roofs of the peeling lavatory and several small sheds. At Gilley, we are suddenly surprised to find the single line opening out into five parallel tracks, and we stop at an island platform. There is a barracks here, covered in snow but obviously the destination of the dozen or so soldiers on our train. One or two wagons of coal and timber stand in a siding, and there is an obviously frozen water-column. This at least reminds us that when there is no diesel at Besançon for the freight trip, a 141R may come up here. And Gilley is a junction; the freight-only remnant of a line to Pontarlier goes off here.

At the end of the yard the tracks dip; and we are away down a winding descent, rattling around cliffs and into the valley of the Doubs, in an abrupt change of scene, as we leave the plateau to rejoin the river and follow it towards the point where it forms the Swiss/French frontier. We are now almost in Switzerland, and at Morteau, 90 minutes and 67km (42 miles) from Besançon, we stop before a substantial station building. There is almost a complete exodus as the Gendarme and Douanier come aboard; only my wife and I, and one other, await the departure on this, the international part of the journey.

Ten minutes, however, are allowed for the formalities of leaving France at Morteau, and there is time to look around. Clearly this little town has status; the goods yard and private sidings justify a "locotracteur", Y6484. But there is no sign here now of the C.F. Rég. Franche-Comté, which used to leave the station yard here for 30 contorted miles to Trévillers. Although we have now technically left France, we are not yet in Switzerland, and we climb steeply to Villers le Lac, the last French station, where we have a sudden view over the lake at Les Brenets, some hundreds of feet below on the left. Finally we drop down to Le Locle (Col des Roches), and we are in Switzerland. Overhead wires, an Ae3/5 in a goods yard and the air of prosperity, strangely novel after our journey, leave us in no doubt as we halt briefly and then pull into Le Locle (Ville). All change; and we walk through the Swiss police and customs hall. Our passports are minutely examined and carefully stamped, a practice so unusual now that I comment, and the officials confer together on the last time they saw a British passport, before replying. They hope we enjoy our stay. Outside the red and cream Renault autorail looks quite out of place, among the SBB-CFF-FFS coaches in the station. People come and go; there are those beautiful bells, and in rolls Ae3/5 No.10220 on what will become our train to Neuchâtel. The Swiss train is spacious and warm, and familiar, and we almost ignore the little autorail as,

empty and silent, it waits to return home some hours later. Suddenly the heather and pine trees, and the unfenced single line winding across the roof of the Juras, seem very far away, but for us at least, Table 517 of our Chaix has come to life.

-0-0-0-0-0-0-0-0-0-0-

THE END OF STEAM IN BELGIUM

Belgium has had a long and interesting history in its steam locomotives, the first being placed in service as early as 1835, whilst such internationally famous names as Belpaire and Walschaert belonged to Belgian locomotive engineers. Belgian locomotives have always been distinctive in appearance, if hardly elegant, and in the 22½ years which elapsed from the end of the war until the demise of steam traction, all the main phases were represented in the locomotive stock.

Earliest were the old Belpaire designs, curious things with inside cylinders, outside frames and unique amongst locomotives in that they went through a period of having square chimneys. Some were very large for their day, a phenomenon which the Belgians continued to practice, and the 2-4-2 express and 2-6-0 mixed traffic locomotives were characterised by enormous fireboxes, Belpaire of course, with 70 sq.ft. of grate area - larger than anything in Europe today.- The last surviving Belpaire class was the little type 51 0-6-0PT, still to be found in the 1950's.

After the Belpaire regime came the Caledonian period, which started with five 4-4-0's to the Caledonian Railway's "Dunalastair" design, and built in Scotland by Neilson Reid. Using the same features and retaining the distinctive Caley appearance, came successive 4-4-0's, 0-6-0, 4-6-0 and 4-4-2T, the latter having no true Caledonian counterpart. Of these, only the 4-6-0 had disappeared by 1945, whilst the 4-4-0 were barely in service, but the 0-6-0's and the tanks lasted much longer, the latter well into the 1960's.

The Caley period was followed by the de Glehn reign, when typically French designs of atlantic and 4-6-0 were produced, with four compound cylinders. Of these, the latest locomotives, the class 7 4-6-0's, (actually built after the following period) were the last to survive, many having by then been brought up to date, as with so many French de Glehn's, by double chimneys.

M. Flamme then took over the reigns, and whilst retaining four cylinders, he went in for simple expansion and superheating, and also for weight. His 4-6-0 was reasonable looking, but the pacific express and 2-10-0 freight were cumbersome and lumbering great things that needed substantial rebuilding before giving effective service. There were also a pair of 4-6-4T, which had a very short life. Most of the Flamme locomotives went soon after the war, but the class 10 pacifics lingered on until the late 1950's, generally on express work right to the end.

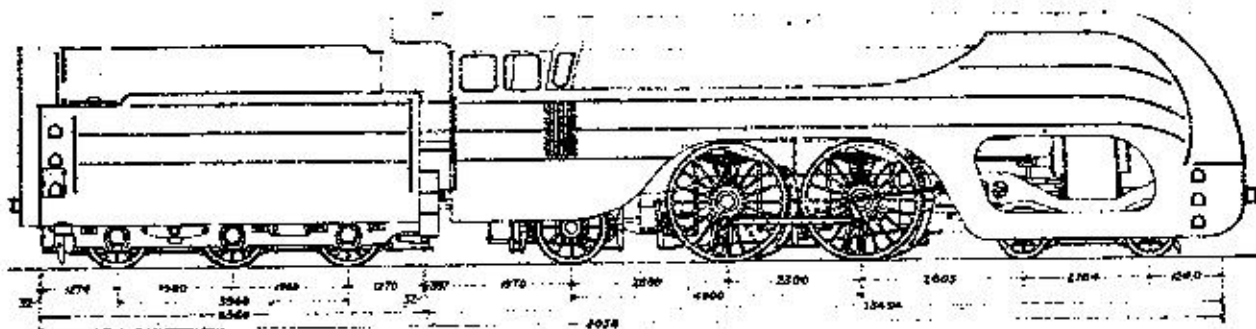
The first world war then interrupted things, and afterwards the Belgians found themselves with a large number of new classes including various American types - 0-4-0ST, 0-6-0T, 2-6-2ST and 4-6-0 - built for Belgium, plus hordes of German locomotives handed over as reparations after the armistice. Of these, the Prussian types, being the most numerous, became virtually standard Belgian

classes, especially as they were far better engines than the Belgians' own. The rest were a mixed bag, ranging from the superb Bavarian pacifics down to some Saxon oddities, and the only ones to survive more than a year or two were some Baden tanks. Conversely, of the five final classes to survive in Belgium, two were Prussian, the ubiquitous P8 4-6-0 and G8¹ 0-8-0.

The immediate post-war period saw Belgium investing in large quantities of mixed traffic 2-8-0 with 5'0" wheels, a basic type which was to provide the backbone of the motive power until the end. The 30 and 31 classes were of British appearance, many actually being built there, whilst a compound version was class 33. A further type was the 38 class, of American build, and all these survived the war, although the compounds were the first to disappear.

Next stage was in really big engines, and the 1930's saw the appearance of the type 1 four-cylinder pacifics, the heaviest in Europe and also possessing the heaviest axle load of any European steam locomotive. For light fast work were built six streamlined atlantics, again the largest of their type in Europe, and these possessed the unusual features of bar frames combined with inside cylinders. For the Luxembourg line a huge 2-8-2 design was produced, and for heavy freight a tubby 2-8-0, yet again the heaviest of their types in Europe. These latter two classes were of crude design, and unsuccessful, lasting little more than a dozen years, but the express classes were quite good, and lasted until the end of express steam workings. Based upon these designs were others which never saw the light of day owing to the war, and these all had the "Cock o' the North" type semi-streamlining as the class 1 pacifics. There was a general purpose passenger 4-6-0 with inside cylinders, based on the atlantics, a light (by Belgian standards) mixed traffic 2-8-0 with the same boiler but outside cylinders, and another 2-8-0 with four cylinders which, at an estimated weight of 107 tons, was larger than most European 2-10-0's. These designs represent the last flowerings of Belgian locomotive design, as all subsequent types were "foreigners".

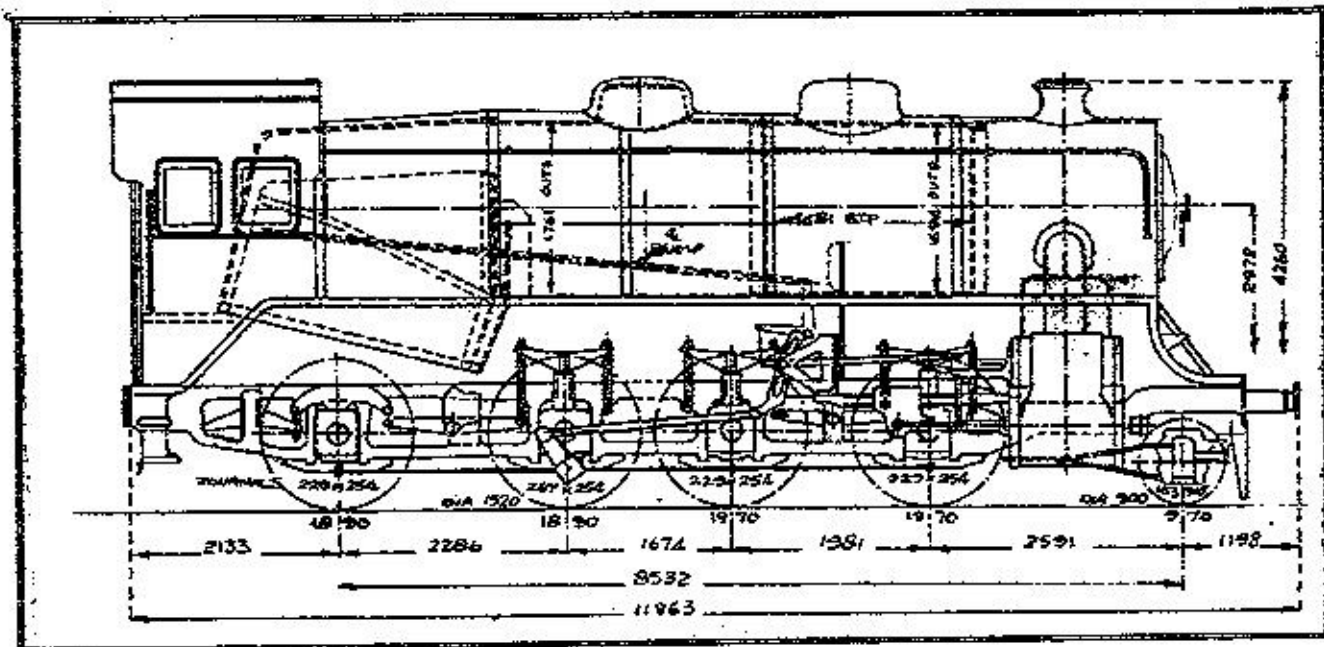
The taking over of the Belgian section of the Nord Belge railway brought an influx of French Nord types to the system, plus some 2-8-0's originally built for New South Wales, to their standard type, which somehow found their way to France in the first world war. There were the inevitable German wartime 2-10-0's, which took over duties from the earlier Flammé version until electrification of the Luxembourg main line, and, best known of all, the 300 mixed traffic 2-8-0's of class 29 which were a modernised version of the earlier 38 class. These American and Canadian locomotives were the last type in main line service, and one of them, No.29.013 hauled the last official steam train from Ath to Denderleeuw on 20th December 1966, thus bringing Belgian steam to a quiet end.



LIST OF S.N.C.B. CLASSES IN EXISTENCE SINCE 1945

<u>Nos. et 1945</u>	<u>Later Nos.</u>	<u>Type</u>	<u>Remarks</u>
101-35	1.001-35	4-6-2	4-cyl. semi-streamlined, 1935
500-03	5.001-04	2-8-2	2-cyl. For Luxembourg line, 1930
600-08	6.001-06	4-4-2	4-cyl. de Glehn compounds
700-74	7.001-74	4-6-0	" " " " 1921 type
800-42	8.001-42	4-6-0	" " " " 1905 type
900-42	9.001-42	4-6-0	4-cyl. Flamme type
1000-48	10.001-49	4-6-2	" " "
1101-46	11.001-46	0-6-0T	Branch line engines
1201-06	12.001-06	4-4-2	Streamlined type
1400-32	14.001-32	4-4-2T	Caledonian type
1500-47	15.001-47	4-4-2T	" " superheated, slide valves
1600-62	16.001-62	4-4-2T	" " " piston valves
1800-78	18.001-78	4-4-0	" " "
1901-03	19.001-03	4-4-0	" " superheated
2001-11	20.001-10	4-4-0	" " " piston valves
2221-34	22.001-	4-6-0	Ex-Nord Belge (SNCF 230A type)
2451-64	24.001-12	4-4-4T	" " " (SNCF 222TA type)
2500-03	25.001-23	2-10-0	DR 50 class, built Belgium
2600-99	26.001-100	2-10-0	DR 52 " " "
2800	-	2-10-0	DR 52 " (condensing)
-	29.001-300	2-8-0	USA/Canadian type, 1945-47
3000-91	30.001-91	2-8-0	1920 type, original
3101-298	31.001-200	2-8-0	" " rebuilt
3301-08	33.001-08	2-8-0	1918 type, compound
3401	-	2-10-0	Prussian G12 ex-DR
3501-04	35.001-04	2-8-0	1929 type (heavy)
3600-93	36.001-93	2-10-0	4-cyl. Flamme type
3801-150	38.001-150	2-8-0	1920 USA type
4001-69	40.001-69	4-6-0	1917 USA type
4101-320	41.001-320	0-6-0	Caledonian type
4401-727	44.001-327	0-6-0	" " superheated
4821-56	48.001-35	2-8-0	4-cyl. comp. Ex-Nord Belge (SNCF 140A type)
4981-85	-	2-6-2T	Baden Vib, ex-Nord Belge
5001-05	50.001-05	0-4-0ST	Baldwin 1916
5101-297	51.001-197	0-6-0PT	Last outside framed type operating
5301-675	53.001-375	0-8-0T	1904 design. Last Belgian design operating
5701-62	57.001-62	2-6-2ST	Baldwin 1917
5801-38	58.001-38	0-6-0T	" "
5900	-	0-6-0T	Ex-German, origin uncertain
6002-43	60.002-43	4-6-0	Ex-Prussian S10. 4-cyl. superheated
6110-27	-	4-6-0	" " S10 ¹ . " " compound
6201-17	62.001-17	4-6-0	" " S10 ² . 3-cyl. superheated
6401-567	64.001-167	4-6-0	" " P8. 2-cyl. superheated
6601-76	-	4-4-0	" " S6. " "
6904-47	-	4-4-2	" " S9. 4-cyl. compound
7101-92	-	0-8-0	" " G7 ¹ . 2-cyl.
7201-336	-	0-8-0	" " G7 ² . " compound
7481-85	-	0-8-0	" " G7 ¹ . " Ex-Nord Belge
7536	-	0-8-0	" " G7 ² . " comp. Ex-Nord Belge

<u>Nos. at 1945</u>	<u>Later Nos.</u>	<u>Type</u>	<u>Remarks</u>
7601-08	-	2-8-0	Built for N.S.W. (D50 Class) (Ex-Nord
7723-41	-	0-8-0	Ex-Nord Belge. French Nord type (Belge)
8001-96		0-8-0	Ex-Prussian G8
8101-575	81.001-575	0-8-0	" " G81
8728-31	-	0-6-0T	Ex-Nord Belge
8806-12	-	0-8-0T	" " " Petiet type
8931-36	-	0-8-0T	" " " (SNCF 040TE type)
9001-90	90.001-41	0-10-0	Ex-Prussian G10
9181-86	-	0-8-0T	Ex-Baden Kb. Ex-Nord Belge
9260-65	-	0-8-0T	Ex-Nord Belge (Nord 040TA type)
9301-99	93.001-91	2-6-0T	Ex-Prussian T93
9481-85	-	4-6-4T	Ex-Nord Belge (Nord 232TA type)
9591-93	-	2-6-0T	Ex-Prussian T12. Ex-Nord Belge
9601-79	96.001-30	2-6-0T	" " "
9702-93	97.001-56	2-8-2T	" " T14
9802-86	98.001-48	0-10-0T	" " T16 and T161
9901-20	99.001-20	0-10-0T	Ex-Nord Belge (SNCF 050TD type)



Above - S.N.C.B. Class 38 2-8-0

Page 7 - S.N.C.B. Class 12 4-4-2

RAILWAYS IN MOZAMBIQUE

A three day visit to Lorenzo Marques showed the CFM to be a busy system with a good variety of locomotives. The railway authorities are helpful, and instant permits can be obtained from the propaganda and publicity office on Lorenzo Marques station. On the other hand, the police are rather jumpy, and hence the acquisition of a permit is worth while.

Lorenzo Marques has extensive docks, wherein much shunting takes place with the 2-8-2F and 0-10-0T. Station pilot is a 2-6-2. The line as far as Machava is double, and at this junction a line comes in from a secondary port, Matola, forming a triangle with the main line. Inland, the line splits, to Swaziland left and Komatipoort (for South Africa) right. The Swaziland line is actually a separate railway - the Swaziland Railway - which was built to carry iron ore, and whilst possessing its own rolling stock, it is worked by the CFM, which provides the motive power. Standard load is about 40 bogie wagons hauled by two locomotives - an ex-Rhodesia Railways 4-8-2 plus a Henschel 2-10-2, or two 2-10-2's. Operating on this line is rather slack - Lorenzo Marques shed contains the wrecks of three 2-10-2's and a 2-6-2 involved in a head-on smash between two double-headers, whilst during July 1967 another similar episode was staged between a single and a double-header! As a result of the first crash, the line was short of power, and a garratt was on loan from the Beira section. Presumably another will now be required.

The CFM comprises six unconnected lines running inland from the coast, all but one being now of 3' 6" gauge. Two of these 'unconnected' lines are, in fact connected physically, but via someone else's railway. Starting from the north, and working southwards, the lines are:-

1. C.F. Mocambique from Nacala and Lombo to Catur, near Lake Nyasa.
2. C.F. Quelimane, inland from there to Mocuba. Originally metre gauge.
- 3A. C.F. Tete, to Tete from Dona Ana on the Trans-Zambesi Railway, connected via the TZR to the Beira system.
- 3B. C.F. Beira. From Beira to Machipanda, thence to Rhodesia.
4. C.F. Inhambane y Gaza (a) Inhambane to Inharrime (3' 6" gauge).
(b) João Belo to Mauêle and Chicomo (750mm gauge).
5. C.F. Lorenzo Marques. The longest not, from Lorenzo Marques to Malvernia (for Rhodesia), Ressano Garcia (for South Africa) and Goba (for Swaziland).

The cover drawing depicts a scene on the Lorenzo Marques section of the CFM, and illustrates the additional hazards faced by the enthusiast in "darkest Africa".

C.F.M. LOCOMOTIVE CLASSES, 1967

<u>Nos.</u>	<u>Type</u>	<u>Builder</u>	<u>Date</u>	<u>Origin</u>	<u>Operating Section</u>
9	4-6-0T	Dübs	1891	DBR	Preserved Lorenzo Marques shed
20-49	0-6-4T	Esslingen	1892-98	ZASM	Inhambane, Quelimane (few survive)
1	0-6-0T	O & K	1915	CFM	Nacala
3-5	2-8-0	Henschel	1930	CFM	Quelimane
6-8	2-8-0	SLM	1922	CFM	Inhambane

<u>Nos.</u>	<u>Type</u>	<u>Builder</u>	<u>Date</u>	<u>Origin</u>	<u>Operating Section</u>
10-12	4-8-0	NBL	1903	RR	Beira
20	2-8-0	O & K	1930	CFM	Inhambane
50-59	0-8-2T	Henschel	1950-55	CFM	Beira
61-69	0-10-0T	Henschel	1931-37	CFM	L.M.
71-72	0-6-0T	Henschel	1929	CFM	Nacala
81-84	2-8-2T	Henschel	1955	CFM	L.M.
91-96	2-8-2T	Baldwin	1949	CFM	L.M.
141-48	2-8-2	SACM	?	CO	Nacala
200-12	2-10-2	Baldwin	1915-44	CFM	L.M.
214-19	2-10-2	Henschel	1951	CFM	L.M.
251-72	2-10-2	Henschel	1955	CFM	L.M.
301-05	4-6-2	Baldwin	1919-23	CFM	L.M.
331-33	4-6-2	Henschel	1955	CFM	L.M.
401-14	2-8-2	Baldwin	1924-48	CFM	L.M.
415-16	2-8-2	Henschel	1955	CFM	?
441-46	4-8-2	?	?	RR	L.M.
451-60	4-8-2	Montreal L.W.	1947	RR	L.M.
471-80	4-8-2	?	?	RR	L.M.
501-06	2-6-2	Henschel	1935-38	CFM	L.M., Beira
511-12	2-6-2	Henschel	1935	CFM	?
571-72	2-6-2	HKP	1941	CFM	L.M.
601-02	2-8-2	Henschel	1925	CFM	Nacala
611-14	2-8-2	Henschel	1925	CFM	Nacala
701-08	4-8-2	Montreal L.W.	1948	CFM	L.M.
811-14	4-4-2	Henschel	1923	CFM	Nacala
901-08	2-6-2 + 2-6-2	BP	1928-29	RR	Beira
911-14	4-6-2 + 2-6-4	Henschel & Maffei	1927-30	SAR	Beira
921-30	4-6-4 + 4-6-4	BP	1937	SR	Beira
951-62	2-8-4	HSP	1952	CFM	Beira
971-75	2-8-4	Henschel	1956	CFM	Beira
981-92	2-8-2 + 2-8-2	BP	1943	RR	Beira

750mm Gauge

1	0-4-0T	AG	?	Preserved
05	0-6-2	Baldwin	1928	
06	2-8-0	Baldwin	1925	
012	2-6-0	ALCO	1919	
081-83	2-6-0	ALCO	1916	

Abbreviations

<u>Builders:-</u>		<u>Railways:-</u>	
O & K	Orenstein & Koppel	DBR	Delagoa Bay Railway
NBL	North British Loco. Co.	ZASM	Zuid Afrika Spoorweg Mij.
HKP	H.K. Porter	RR	Rhodesia Railways
BP	Beyer-Peacock	CO	Congo Ocean Railway
HSP	Haine St. Pierre	SAR	South African Railways
AG	Achille Grand	SR	Sudan Railways (via RR)
SACM	Societe Alsacienne de Constructions Mecaniques		

NOTES AND NEWS

CZECHOSLOVAKIA

Cheb-Plzen - Electrification masts have appeared since last year for the proposed Cheb-Praha scheme, at the Cheb end of the line. All loco-hauled trains seen were steam, and even though the line was travelled on a Sunday, a freight was passed in almost every loop. Classes noted were:- Passenger - 498.0, 475.1; Freight - 556.0, 534.0; Shunting at Cheb - 524.2; Plzen station - 365.0, 434.2, 555.3. The line is very scenic and it is a pity that the motive power appears so standard.

Plzen-Praha - All loco-hauled trains were again steam, with more variety. Classes observed on the Plzen-Zdice stretch included 498.0 and 475.1 on passenger and 555.3 on freight. Between Zdice and Praha, in addition to above, the following were noted:- Zdice - 423.0, 524.2, 556.0, 477.0; Beroun - 354.1, 524.2, 464.0, 534.0; Praha - 477.0 and 464.0 on locals towards Zdice. Best locations for photography and recording are probably a few miles out of Praha Smichov, and the steep gradient out of Zdice, where double-headed 555.3 class are common, and the deep throaty roar of a 498.0 can be heard to advantage.

Praha (Stred)-Kralupy - This section is extremely busy. During a 10-hour session of lineside photography in the Roztoky Zalov to Rez area, no less than 46 loco-hauled trains passed, comprising 43 steam and 3 diesel. Classes noted were:- Freight 556.0, 555.3, 555.0; Passenger - 475.1, 498.0, 387.0, 354.7, 456.0, 399.0, 365.0. The diesels were on freight, and there were also a number of railcars. Classes 354.1 and 423.0 were noted near Stred, and no doubt also work this line.

Praha (Tesnov)-Turnov - A varied selection of classes is to be found on this section, though except for a hilly and wooded stretch near Mladá Boleslav, it is very flat and uninteresting. Several classes not seen elsewhere were noted at Mladá Boleslav. Classes seen between Praha and Turnov were:- Passenger - 464.0, 464.1, 477.0, 354.7, 354.1; Freight - 524.1, 524.0, 524.2. Classes 423.0 and 434.2 were shunting at Mladá and 434.1 at Vsetaty.

Turnov-Liberec - This section is very scenic and has heavy grades. In particular the section between Sychrov and Liberec is magnificent, with forests, mountains, tight curves, and very steep and long grades. A day was spent in these surroundings near Rychnov, where the line performs a tremendous loop. After a train has passed, a good ten minutes later, it can again be heard and the smoke seen, a few hundred feet above. The first time this happened, there was a rush to the line to photograph 'another train'. Due to the echo, it was impossible to tell which way it was coming until, on looking up, a great pall of jet black smoke was seen, apparently coming from the forest itself. Classes noted were:- Passenger - 475.1, 464.0; Freight - 556.0, 555.0. Other good locations are to be found on the long climb out of Liberec to a summit just beyond Jermanice.

Liberec-Česka Lipa - This line, although not particularly busy, is well worth a visit, for it passes through some magnificent mountain scenery and abounds in gradients, whilst there are several spectacular viaducts. The best place noted was Novina, where classes 524.1 and 555.0 were seen on freight and 354.1 on passenger. The sight and sound of a pair of Giesl-fitted 354.1's blasting across Novina viaduct is not easily forgotten. 16 steam-hauled trains were noted in 15 hours, plus railcars.

Kolin-Bratislava-Štúrovo - This section was traversed in darkness, but since last year the Kolin to Brno section has been energised, and all trains passed were electrically hauled. The Brno to Bratislava section of this busy line was almost

ready for the switch-on, but in mid-June steam still reigned supreme. A class 498.0 hauled the night Budapest-bound train from Brno, and in the darkness plenty of steam activity was noted at Břeclav and Bratislava, plus a non-stop stream of freights on the line itself. Between Nové Zámky and Stúrovo classes 456.1, 475.1, 465.0, 556.0, 434.1 and 498.1 were noted.

General C.S.D. The above notes refer to June 1967. The Chief Engineer in the N.O.T. at Praha stated that steam traction would survive until 1982, and that a stud of about 200 locomotives would remain on certain lines even after that year.

HUNGARY

Szob-Budapest - The section from Szob to Nagymaros Visegrad is well worth a visit, although few classes will be found. 424's predominate, with a few 411, 324 and CSD 556.0.

Budapest-Lokoshaza - It had been intended to spend some time at suitable locations on this route, but the line was found to be unbelievably flat and uninteresting. On the main line 424 class again predominate, with the occasional 411 on freight. Steam classes noted at junctions were:- Szolnok - 275, 411, 424, 324; Tiszatenyő - 275, 411, 424; Gyoma - 275, 411, 424; Békéscsaba - 342, 324, 411, 424.

BULGARIA

Russe-Mezdra - This line is electrified, but there are a number of steam-worked branches, and classes were noted as follows:- Gorna - 03, 35, 28, 16, 19, 15; Mezdra - 15, 01, 49. Various places - 35, 49.

Mezdra-Sofia - This section is not electrified and is very scenic, but unfortunately most trains are diesel-hauled, though occasional locals and freights are still steam. During an 8-hour session near Svogne, 33 trains passed, but only 7 were steam and 3 of these were tender first. Class 01 were noted on several local passenger turns. The 'coaches' are converted goods vans, and it is quite amusing to see a rake of 20 of these with a conventional coach at each end.

Sofia-Pernik - This line was the main objective in Bulgaria, the locomotives making superb smoke and sound effects on the steep climb out of the capital. Tram route 5 takes one to a point on the line 11.7 km from Sofia for less than a penny. This particular point is not recommended for photography as there is an armed guard alongside a barbed-wire fence. The next 3-4 kms to the summit, however, are well worth visiting. In a 10-hour Sunday session, 14 trains were noted, as follows:-

	<u>Upgrade freight</u>		<u>Downgrade freight</u>
2	Diesel + 2-12-4T	1	Double headed 2-12-4T
3	Double headed 2-12-4T		
1	Double headed 2-12-4T + 2-12-4T banker		
2	Single 2-12-4T		
	<u>Upgrade passenger</u>		<u>Downgrade passenger</u>
2	Single 2-10-0 (Class 15)	1	2-12-4T + 2-10-0 (Class 15)
1	Diesel + 2-10-0	1	Diesel

A similar period of observation had been spent on this line the previous Friday, but on this occasion there were two less trains and less 100% steam combinations. The pièce de resistance was doubtless the Sunday train with three 2-12-4T's, two 3-cylinder ones at the front and a 2-cylinder variety at the back.

JUGOSLAVIA

Dimitrovgrad-Čačak - Classes 05, 20 and 38 were noted at Stalac, 01 and 33 at Kraljevo, and 01 and 62 at Čačak. Expresses to and from Bulgaria were diesel-hauled and branches mainly had railcars.

Prijedor-Zagreb - Express passengers had diesels, local passengers 22 class, and freight were diesel and 33 class, whilst 35 class were shunting at Prijedor and 51 class at Bosanski Novi. Whilst recording the latter, your correspondent was arrested and spent five hours in the local police station. This resulted from a report by one of the locals who, in the darkness, thought that an attempt was being made to blow up the overbridge near the station! Classes observed at Zagreb were 01, 03, 06, 10, 11, 22, 33, 35, 51 and 62. The 22 class 2-6-2's are kept in immaculate condition, and can be photographed to advantage near Svodna and on the gradients near Konstanijka.

Zagreb-Ljubljana - In June, most freights and local passengers were steam hauled, but Židani Most to Ljubljana was nearly ready for the juice to be switched on. The timetable, in fact, showed the line as electrified, but no electric locomotives were seen. Classes noted included the following:- Passenger - 03, 06, and diesel; Freight - 06, 25, 29, 62; Dumped at Zaprešić - 37; Ljubljana - 06, 10, 17, 25, 29, 30, 36, 53, 154, the last-named being dumped.

Divača-Pula - This is an excellent line and well worth a visit. The section from Divača to Buzet, in particular, is very mountainous, and with the many ups and downs the locomotives go flat out the whole way. Fantastic sound effects can be heard, and on a still day it is possible to record for anything up to 10 minutes. Double-heading and mixed trains are to be found. Classes observed were 28 and 29 on both passenger and freight, and 03 on passenger only. No.145.001 was noted arriving at Divača on a freight, but a little earlier in the year it had been observed two days running on passenger work.

Lašva-Sarajevo - Classes 11, 20, 33, 52 and 62 were noted on this line in the autumn. The new electric depot at Sarajevo was still under construction, but electric locomotives 441.001/2/4/5 were noted nearby. A new 1650 h.p. Co-Co diesel-electric 662.008 (Duro Dakovic 732/67) was noted on the 17.00 Sarajevo-Ploče.

Belgrade - Classes noted here were 01, 05, 06, 11, 17, 20, 33, 38 and 62.

Vinkovci - By the autumn, only four 37 class were still dumped, and two of the class were noted shunting in the large marshalling yard. Other classes seen were 01, 17, 20, 33, 38, 51 and 62.

ITALY

Railway Museums - The State Railways Museum at Rome Termini station is to be moved to the Leonardo da Vinci Museum of Science and Technology, Via San Vittore, Milan. The Milan museum will also house the collection of old railway signals now stored at Rome Prenestina station and the 24 old locomotives stored at Rome Smistamento. On October 15th and 16th last, the first two locomotives from Rome were moved through the streets of Milan to the Leonardo da Vinci Museum. They were the 691 class pacific and the Bo+Bo electric locomotive No.E430.1. The latter was the first three-phase electric locomotive to run in Italy, built by Ganz, Budapest in 1902. The 3,400 volt three-phase section Lecco-Sondrio and to Chiavenna, opened 1902, is claimed as the first high-voltage main line in the world. The Leonard da Vinci Museum already has a railway collection, including 1915-built 0-6-0WT, North Milan Railway No.250.05 and Milan-Magenta tram locomotive No.111, an 0-4-0 inside cylinder machine built in 1912, together with a four-wheel tramway coach.

GERMANY

Although, as reported in Journal No.10, both 66 class were dumped minus numberplates at Giessen in April 1967, 66.002 was observed on 1st September on a passenger working from Giessen to Fulda. At the end of August 10.001 was still on its regular working (Sundays excepted) of the 8.10 Kassel-Münster and 18.25 Münster-Kassel, and it is believed that subsequently it has been proceeding beyond Münster, to and from Rheine. Unfortunately the turn provides little opportunity for this fine machine to show its full capabilities.

At Paderborn on 28th August a striking contrast was provided by 10.001 on its usual morning turn and 18.323 - an ex Baden State pacific allocated to the Minden testing plant - which was standing in the shed yard. The latter was seen shortly afterwards climbing the bank towards Altenbeken with a test train, and with its driver obviously delighted at the photographic attention being directed toward his steed.

FRANCE

Chaumont - This was still an interesting centre for steam in July 1967, although about two-thirds of the traffic was diesel hauled. The interest lay in the types of locomotive seen - 130B, 140C, 141P, 241P and 150P - note the absence of 141R! The 130B worked daily (except Sundays?) westbound from Chaumont, leaving early morning about 6, and returning mid-afternoon, on a branch freight. The 241P worked east of Chaumont on passenger and fast freight trains, and could generally be found on two trains to and from Mulhouse which crossed at Chaumont in mid-afternoon, plus other evening and night turns. The other classes worked in both directions, the 150P being the last of their class active in France, and unlikely to last long. The viaduct immediately west of Chaumont can be recommended for photography, as can also the area west of Langres.

SPAIN

Tarragona - Most of the surviving Norte 4-6-0's seem to have gravitated to this area. The shed contained examples of the three types at the end of September 1967 (the date applicable to all these Spanish notes), together with active 2-8-2 Garratts, MZA 4-8-2's (used on the remaining steam turns on the Valencia line), MZA 4-8-4T's, and some Norte 0-8-0's shunting. The main steam activity seems to be on the Reus-Picamoixons line, where freights are worked out of Tarragona hauled and banked by 4-6-0's. Garratts and 4-8-4T's are also seen here.

Picamoixons-Lerida - This line is highly scenic at and west of Picamoixons. Norte 4-6-0's appear on passenger trains and Garratts on freight, together with 4-8-4T's on short distance passenger workings.

Lerida - The Barcelona-Zaragoza main line via Lerida is still all steam. Various 4-8-0's predominate, but standard 2-8-2's are also common and standard 4-8-2's still work the main express, although others are dumped. The Pobla de Segur branch appears to be standard 2-8-2 worked; 4-8-4T's run on the Huesca loop. The only active Norte 2-8-0 observed was working the shed staff train at Lerida.

Zaragoza - There is still steam on the Barcelona via Tarragona main line; the locals and Correos appear to have standard 4-8-2's, and most freight still has 4-8-0's. The 4000 hp diesels work principally towards Madrid, but also have the Madrid-Barcelona train right through to Mora la Nueva; this train has recently been considerably accelerated, and was observed leaving Zaragoza for Barcelona an hour early by the public timetable behind double-headed 4000 hp diesels; the southbound train with one diesel, had kept to the public bookings more or less

and was therefore about 35 minutes late. All the old locomotives that used to work in the station areas seem to have been swept away.

La Puebla-Tortosa - This line, contrary to reports of dieselisation, is still monopolized by the first series of MZA 4-8-0. Alcaniz shed had several active or in steam, together with 120.2131 dumped pending preservation.

La Encina - Diesels have begun to appear on the line from Valencia, but 2-8-2 Garratts and MZA 4-8-0's still work certain freights and locals. The Valencia-Madrid rapido was noted diesel-hauled daily from Valencia, but taken on from la Encina by the standard 4-8-2 or 4-8-0 which had brought up the Alicante portion. Only one 4-6-2 Garratt was observed, having apparently brought a freight from the Valencia direction.

Murcia - Standard 4-8-0's and 2-8-2's predominate in this area, especially on the line from Chinchilla, but Oeste 2-6-0's are still in evidence and the Great Southern of Spain 2-6-0's monopolize the line south of Alcantarilla (except for the Alicante-Granada Correo, now diesel-worked) and also have passenger workings right through to Alicante. Double-headed freights are reasonably common with GS 2-6-0's, at any rate on the first 15 miles south of Alcantarilla. The 0-6-6-0 Mallets are all dumped at Murcia-Caravaca together with older types, and seem unlikely to work again.

Cordoba - A surprising survival of steam in a largely diesel and electric area, this produced not only standard 4-8-0's on freight from the south, but half a dozen Andaluces 2-8-0's (140.2025 series) and one Andaluces 4-8-0 shunting, several coalburning MZA 4-8-2's, one in steam, and an ex Bilbao-Portugalete 2-4-OT as shed pilot.

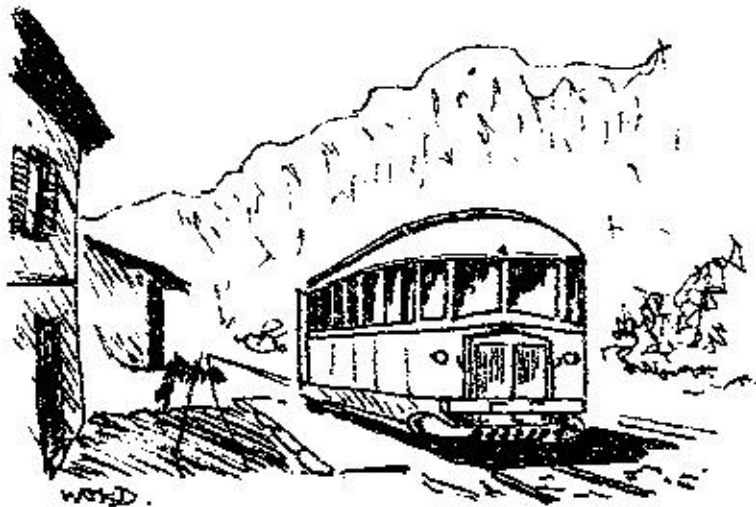
Miranda de Ebro - Electrification work between Miranda and Venta de Baños is progressing rapidly, and it is believed that energisation will take place about May 1968, thus providing electric traction throughout between Irun and Madrid. Meanwhile, although there are some diesels, and standard 2-8-2's are much in evidence, both standard and streamlined MZA 4-8-2's and the 4-8-4's are very active, the latter still normally working the Iberia express.

AUSTRALIA

Steam locomotive stocks as at 1st January 1967 were as follows:-

<u>Railway</u>	<u>No. of Locos.</u>	<u>No. of Classes</u>
Western Australian Govt. Railways	250	16
Queensland Govt. Railways	560	10
New South Wales Govt. Railways	330	18
Victorian Govt. Railways	58	2
" " " (2' 6" gauge)	3	
South Australian Govt. Railways	31	5
" " " " (3' 6" gauge)	31	2
Tasmania Govt. Railways	14	3
Commonwealth Govt. Railways	2	1
" " " (Northern Territory)	1	1

Acknowledgements for information are due to C.F. Firminger, B. Garvin, B. Harrison, A.J. Hart, P.N. Kalla-Bishop, C. Lewis and J.B. Toy.



Minor Railways Section

BELGIUM

T.T.A. has had another successful season, although trains have been running only as far as Doehamps. The extension to Lanormenil, the most scenic part of the route, should get opened next season. The note in Journal No.10 regarding the tram locomotive from Charbonnages d'Argenteau was premature, and this never arrived. Motive power at present comprises three railcars, but the line has acquired Corpet Louvet 0-6-0T SCARPE ex-Sucrerie de Lanchères Pendé, and proposes to swap a railcar for the type 18 from Wavre.

CORSICA

The new management of the C.F. de la Corse are making an excellent job of their concession, and using imaginative means to increase traffic and revenue. No less than 31 trains run daily in and out of Calvi station, for example, although a number of these are local 'trains-tramways', which act in much the same way as buses to carry bathers to and from the various beaches.

FRANCE

C.F.D.

Réseau du Morvan (Avallon-Autun: H.Q. at Autun: ligne affermée). CFD work not only line to Avallon, but also most local services around Autun, the latter with 900-series 4-wh. railcars. SNCF-worked trips are with 300 hp cars from Chalons. CFD work all local goods, using four diesel locomotives with a fifth coming at the end of November, when the last four 242TC tank engines will be withdrawn. They are also testing a 3000 hp diesel-mechanical (CC80001), aptly known as the "big big beast". Stock at 19.8.67 was:

'900' series: 904/9/11/3/5/6, with 907/10 used for p.w. work.

Locos: C113; BB207; BB433; BB603. 242TC: 22/8, 40/6.

C.F.T.A. (All standard gauge; notes of visit June 1967)

Doulevant le Château - St. Dizier (ex-CFS). Freight only. No.81 0-8-0T La Mouze 3394/32 in steam (noted 10/10 under repair at Gray). 130B329 in reserve.

Gué - Menancourt (ex C.F. de) - Freight only, as far as Dammarie. In service daily: 3062, 0-6-OT Couillet 1754/22.

Provins (Longueville - Esternay, ex C.F.S.) - A ligne affermée, with three passenger workings daily to Provins. Railcar BD62, Billard 150 hp; B-B diesel CPSTA BB 551D for most freight. Either 141TB 428 or 438 shunts Provins yard daily; 131TB29 and 31 are in reserve for occasional steam passenger turns.

Rambervillers (affermée) - Freight only. 131TB16 working, 130B439 spare.

Réseau du Franche-Comté (H.Q. Gray; affermée) - S.N.C.F. railcars for passenger, steam for freight: five 130B's and five 140C's. No.51 (0-6-OT La Meuse 2658/1A) under repair and due for Gué - Menancourt.

Robert-Espagne - Hairoville (ex S.E., formerly metre) - Freight only, with 3071/2 0-6-OT Corpet Louvet 1816/7 of 1932 in use alternately.

Other minor lines

C.F. d'Etival à Senones (31/5/67) - One daily freight. No.3 0-6-OWT Krupp 741 in steam; No.1 0-6-OT La Meuse 2992/21 spare; No.2 0-6-OWT Krupp scrapped c.1950.

C.F. d'Avricourt à Blamont et Cirey (31/5/67) - Occasional freight, worked by SNCF 040TX class. CIREY No.2 0-4-4-OT Henschel 10416/11 stored.

C.F. de l'Est de Lyon - Flourishing, with over 1 million tons of freight in 1967. All diesel with 304/5 0-6-OD for shunting; 1-6 Batignolles 0-6-OD normally used in multiple; 7-8 Fauvel-Giret BB DE for medium-sized trains.

Regie Départementale des Bouches du Rhone; Tarascon - St. Remy - Twice or three times daily freight. Line is well looked after, but all rotting stock at St. Remy is scrapped. Fauvel-Giret 0-4-ODE No.54 runs freight with E2, a most antique-looking Berliet 4-wh. railcar of 1924 in reserve. E1, a similar but even older machine is at Martigues, where oil trains make the Regie's money and keep the whole operation roughly solvent. The other main branch is from Barbentane through to Plan d'Orgon.

C.F. de St. Georges de Comiers à La Mure - Electric metre gauge, breathtakingly scenic and worked by the national 'Bridges and Highways Dept.' Freight only, and connects coal mines near La Mure to main Grenoble - Veynes line. Locomotives are T6-10 Secheron B-B of 1932. Railcar A1 is used as works shunter, A3 was for scrap.

C.F. de Provence - Running a make-and-mend operation but keeping fairly smart. Goods traffic seems to be falling off and the SNCF connection at Nice appears to be lifted. Some cars are still in brown and cream, others in patched blue and ivory. L71 (0-6-OD ex Tarn) is shunter at Digne.

C.F. du Monteviers - Flourishing and loving it. Sometimes six trains in service at once, but no working steam since they have acquired a rack diesel (SLM 4689/67) and built a special articulated set for it. Of the steam locomotives (not for scrapping), two of Nos.6, 7 and 8 are serviceable. No.3 has been converted to a fantastic diesel self-propelled snowplough, and one unnumbered frame to a mechanised shovel.

Tramway de Mont Blanc - Getting shabby and, in contrast to its neighbour, not getting much traffic. Single cars without trailers were running the service in August.

S.N.C.F. St. Gervais - Vallorcine - Closure rumours, but all in very good condition. Two trains of refurbished old stock help out at peak periods.

GERMANY

Vorwohle-Emerthaler Eisenbahn - This has now been returned to Provincial ownership under its own name. Freight traffic only, with the three diesels ex DEBG.

Wittlager Kreisbahn - Is still running one passenger daily from Oldendorf to Bohnte. Most of the railcars have been cut up.

Westfälische Landes-Eisenbahn - Has acquired a fourth Deutz 1600 hp diesel locomotive from a Dutch coal mine and has therefore retired two of its three 2-10-2T.

Bad Eilsener Kleinbahn - ET204 has been sold to the Montafenerbahn.

Brohltal Eisenbahn - Has received a third O & K diesel, No.3, similar to the other two (O & K 26623/67) on 4.9.67.

Delmenhorst-Harpstedter Eisenbahn - Closed to passengers from 23.9.67.

Kleinbahn Kassel-Neumburg - All trains now use Kassel DB.

Kreis Altonaer Eisenbahn - This finally closed to all traffic in June 1967.

O-6-OD V15 (ex Herforder Kleinbahn) awaits a buyer.

Mittelbadische Eisenbahn - Surprisingly, this declining concern has just acquired another diesel locomotive - ex DB V29.952 from Altensteig.

Kleinbahn Neckarbischofsheim-Hüffenhardt - Has acquired a standard MAF 4-wheel railcar V77, which also handles goods traffic.

Kleinbahn Voldaggen-Duingen-Delligsen - Caught in the final break-up of the DSBG empire, operation of this line has been transferred to DB, who operate it for goods only with a V60. The two VDD diesels 25.01/2 (Linke-Hofmann-Busch 3084/5 of 1961) are in store at Duingen.

D.B. Narrow Gauge - The note in the last Journal regarding Heilbronn - Marbach requires amplification. From 28.5.67 all narrow gauge traffic was stopped between Heilbronn and Schrozach (10.3 km), and goods will use the standard gauge link to Talheim. The n.g. will not be removed however, to allow of through agricultural traffic in season, and regular n.g. goods workings will be continued between Marbach and Ilsfeld. Nagold - Altensteig closed entirely from 28.5.67. No.99.193 (O-10-OT Esslingen 4183/27) will be scrapped. V29.952 has gone to Schwarzach.

EAST GERMANY

DR has closed four more narrow gauge lines:- Altcfähr - Putbus; Eisfeld - Schönbrunn; Straupitz - Lübben; Hetzdorf - Eppendorf.

FINLAND

The Hyvinkää-Karkkila Rautatie (750 mm gauge) closed completely on 1st September 1967. The line was built primarily to serve the Högfors works at Karkkila and was opened in 1911, passenger services being withdrawn in 1961. Latterly motive power consisted of three wood-burning 2-8-2T's Nos.3-5 (Tampella 158/10, 179/11 and 289/17 respectively) one of which is reported to be scheduled for preservation at Karkkila. There was also a O-8-OD (Valmet 63/48).

SWITZERLAND

The Rätische Bahn ran another of its regular steam specials on 8th October. The usual itinerary was followed from Landquart to Preda and back, but this time the outward journey was via Davos and the return via Thusis. The train was triple-headed by 2-6-OT 11 and 2-8-0's 107 and 108 between Landquart and Küblis. Demand was so great that the trip was due to be repeated three weeks later. It is probable that further steam specials will run in 1968, but no definite information is available at the moment.

JUGOSLAVIA

Čačak - Titovo Užice - Višegrad - Sarajevo - Passenger trains are hauled by 85 class, piloted by 83 class over steepest sections (e.g. ex Titovo Uzice, and between Ustiprača and Stambulčić). Freight are usually 83 class, and class 72 shunt at Čačak and Titovo Užice. The only other type noted was No.189.013 dumped at Višegrad. Locations for photography are too numerous to mention, as there are spectacular stretches all along the line, but especially around Titovo Uzice, Višegrad and Ustiprača.

Lašva - Goleš - Jajce - All traffic Lašva-Dolac is worked by 83 class, as is the short working to Goleš, but all trains going beyond Goleš and up the rack section are worked by 97 class (one at each end from Dolac to Donji Vakuf). Traffic between Donji Vakuf and Jajce is worked by 83 class and UNRRA 0-3-0's. Other types noted were 172.005 in a woodyard at Vitez and 90.006 (0-4-4-OT) as station pilot at Travnik. As the 83 class can be photographed on other lines, the section from Travnik to Donji Vakuf is the best, and just beyond Goleš, where the rack starts, excellent locations for photography and for recording the unusual exhaust of the 97 class can be found. The summit is in a long tunnel, and trains climbing up to this travel at walking pace. Photography is not recommended at Travnik, as there is a large army barracks next to the line shortly after leaving the station.

Jajce - Srnetica - Prijedor - The daily passenger trains on the Jajce-Srnetica-Drvar-Prijedor lines are worked by UNRRA 0-8-0's, whilst freights are worked by 1930 class 0-10-0's and UNRRA 0-8-0's. The following were also noted:- 26.40 at Jajce, 73 class on passenger and freight at Prijedor, and two tanks in a woodyard at Potoci station, No.2 Krauss 1259/22 and No.6 Jung 11930/53, the latter being an 0-8-OT. The UNRRA 0-8-0's appear to be very capable machines, and the noise they make climbing the never-ending gradients has to be heard to be believed. Some of the steeper grades and curves look impossible to negotiate, but with excellent driving the locomotives make it without trace of a slip. The main shed is at Srnetica, where a number of 0-8-0's are dumped (4 & 5) and 29 acts as a stationary boiler. Srnetica possesses, besides an engine shed, a staff hostel, a café and a few houses. Anyone visiting the place should make for the café, where the friendly railwaymen eat and drink. Your correspondent was given a meal, drinks and a night's sleep at the hostel for gratis, and he was not even allowed to buy a round of drinks. Not a single road vehicle was seen during a 24-hour stay, although a 'track' exists. The only means of communication appears to be the daily train on each line, unless one is prepared to travel down the 'track' behind a donkey!

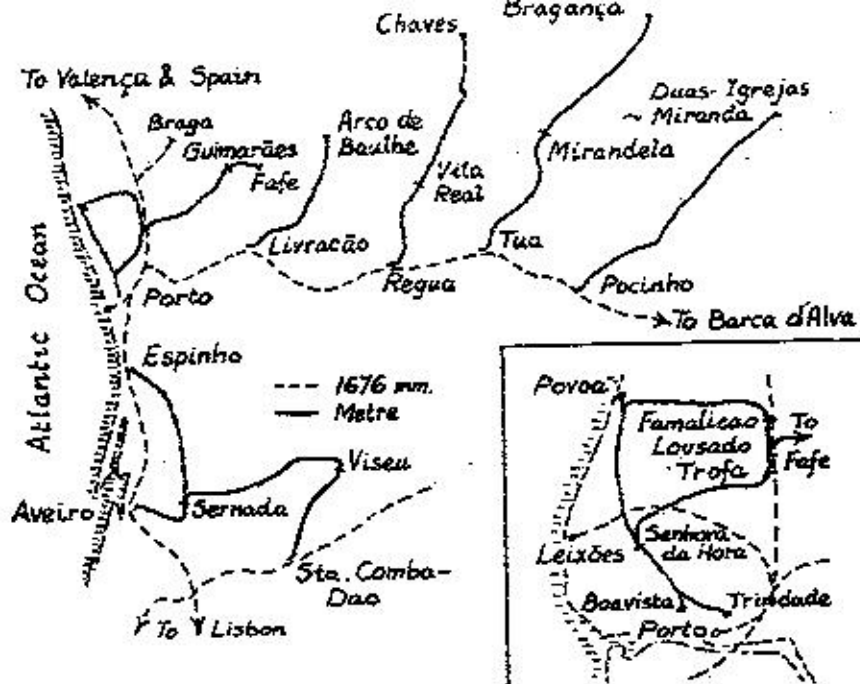
The above notes on Yugoslavia refer to a visit in June 1967. All trains observed, both passenger and freight, were steam hauled, with the solitary exception of one railcar seen near Sarajevo.

AUSTRIA

Weiz - Ratten - This 76 cm gauge line of the Steiermärkische Landesbahnen was entirely steam operated at the time of a visit in July 1967, but two diesels were due for delivery in October. The line appeared to be still open throughout, though threatened with closure above Birkfeld. 0-4-OT No.2 (Krauss 2774/92), usually spare engine on the Preding-Stainz line, was in the shed at Weiz undergoing major overhaul.

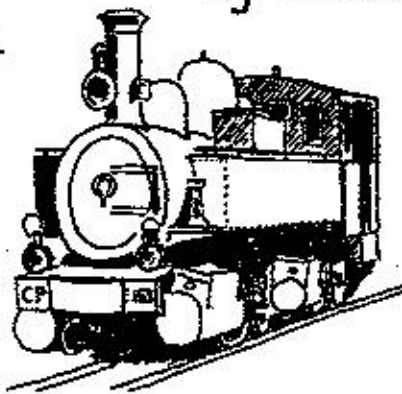
Erratum - The title of O&M was unfortunately mis-spelt in Journal No.10. It should be Österreichisch-Alpine Montangesellschaft.

Acknowledgements for information are due to J. Forshaw, B. Harrison, K. Plant and J.B. Toy.



Narrow Gauge Vintage in Portugal

by G. J. Hoare



The narrow gauge lines operated by the "Companhia dos Caminhos de Ferro Portugueses" (or C.P.) are all found in the northern part of Portugal. They all carry passengers, though to travel on some of them behind steam can be difficult, since railcars predominate. However, there are no diesel locomotives. In the following brief descriptions of the lines are my impressions gained during visits in 1966/67, together with details of workings, and points of interest to note in the locomotives.

- 1.) Linha do Dão (Santa Comba-Dão - Viséu)
- Linha do Vouga (Viséu - Sernada do Vouga - Espinho)
- Ramal de Aveiro (Sernada - Aveiro)

The above sections can be regarded as one system, the hub being Sernada, where the main works and shed are situated. There are sub-sheds at Santa Comba-Dão, Viséu, Espinho and Aveiro. Locomotives on this system consist of 2-6-0T by O & K, Esslingen and Decauville, 2-4-6-0T mallets by Henschel, 4-6-0T by Borsig (which work only on this system) and 2-8-2T by Henschel /24 (only observed on the Vouga/Dão lines).

The most scenic section is from the large town of Viséu to Sernada, continuing through undulating country consisting alternately of pine forests and well tended agricultural areas to the holiday resort of Espinho. The branch to Aveiro is similar in nature, terminating at the "Venice of Portugal", so called because of its one canal situated at the far end of the town.

Workings are as follows:-

Dão	3 steam + 2 railcar	
Vouga	2 " + 2 "	on through trains
	6 " + 1 "	on short workings
Aveiro	7 "	

- 2.) Porto System

Starting from the Trindade station in Porto, it is 3km out to Avenida da Franca station, which is adjacent to the main shed and works at Boavista, the

former terminus of the line. On shed can be seen an O-6-OT now derelict, 2-6-OT by Esslingen and Decauville, O-4-4-OT mallets by Henschel, and the magnificent 2-8-2T by Henschel in 1931 (the newest locomotives on the C.P. narrow gauge, and only to be found here). A further 3 km out through the suburbs brings us to the junction of Senhora da Hora. Here the single lines to Povoa de Varzim and Fafe run parallel for $\frac{1}{2}$ km before diverging, whilst the platforms formerly used by the Matosinhos trains (now withdrawn for over a year) are still used by some workings from Porto terminating here.

The section of line just described provides the enthusiast with a real n.g. rush hour service. In the morning near Francos (5km out) from 7.00 to 9.10 can be seen 10 steam plus 2 railcar arrivals and 5 steam plus 2 railcar departures. In the evening, Senhora da Hora from 16.39 to 19.48 will have 20 trains arriving and departing, of which only 5 are railcars. Further interest is caused by two of the steam workings terminating here before returning to Porto, and the arrival of a freight train which proceeds to shunt the yard. The buffet on the down platform is recommended for liquid refreshment during all this.

From Senhora da Hora the line to Povoa crosses the agricultural coastal plain. The 10 steam workings are operated mainly by the 2-8-2T; there are also 3 railcar workings. The line to Guimaraes and Fafe parallels the broad gauge main line from Trofa as far as Lousada before setting off into the hills. There are 2 steam and 5 railcar workings to Fafe, with 5 steam and 8 railcar short workings; O-4-4-OT and 2-8-2T operate.

From Trofa we parallel the main line to Famalicão, where turning toward Povoa and the coast, we form a vast loop. The service of 3 steam and 4 railcars is lightly loaded, the former usually consisting of a 2-6-OT with only one coach.

In addition to the main works at Boavista, there are sub-sheds at Lousada and Povoa. The whole system is highly recommended, rolling stock is clean and, in the rush hour, varied, when one can see within minutes a 1931 Henschel 2-8-2T with modern steel bogie coaches, then an O-4-4-OT mallet with balcony-ended clerestory coaches, and finally an 1886 Esslingen 2-6-OT on a line of 4-wheelers pressed into use for the short workings.

(To be continued.)

MARIBO - BANDHOLM MUSEUM RAILWAY, DENMARK

Since the article on the above line appeared in Journal No.10, a considerable amount of additional information has become available, and it is also necessary to make one or two corrections. This has been made possible as a result of members' observations, an article in the August 1967 Railway Magazine and subsequent correspondence with the author of the said article - Mr. Christiansen.

Referring to the table of locomotives and notes thereon, in the Journal:-

O-6-OT's "KJØGE" & "FAFE".

The position regarding these locomotives, as set out in Note 1, is a little clearer. Mr. Christiansen confirms that both had makers plates when obtained by the DJK (Danish Railway Club), but only No.3 had a number, and neither had

nameplates. (Presumably the makers plates were the ones now carried, but this does not mean they are the correct ones, necessarily). He also says that the information given in W. Bay's book on this subject is inaccurate. Apparently, in a new Danish edition of the book, No.3 is quoted as maker's number 760, and Nos. 1 and 2 are said to have been scrapped in 1929. This, of course, contradicts the information in the first edition.

Note (5)

The R.M. article confirms that the Esslingen 0-4-0T is maker's No. 2874/97, ex-Kalvehave Rly. No.1. Other information confirmed; also stated in correspondence that DSB classification and running number were retained on cab side at Valby, and are apparently still retained.

M1, "DEVA", Note (6)

Diesel-electric locomotive as stated (120 h.p.) but "DEVA" is not a name but the initials of the maker - Diesel Elektriska Vagn A.B., Västerås, Sweden. (Atlas, Stockholm - shown as maker in Journal No.10 - is incorrect.)

M1, Note (7)

The R.M. article shows this railcar as being 100 h.p. It gives the maker of this, and the two other railcars - see below - as Triangel, Odense. It appears that this is the trade name of De Forenede Automobilfabrikker, Odense.

"ELSE", 0-4-0T, Note (8)

The original owner of this was Dania Cement.

2, 0-6-0T, Note (9)

Original owner quoted as Store Vildmose (peat factory).

B2, B4 and 5, Note (10)

Confirmed that these were originally at the beet factories stated. B4 was at Gørlev, where it was No.6, until 1961, when it was transferred to the Saks-købing factory as B4.

ADDITIONAL MOTIVE POWER

The railway now has the following motive power, additional to that listed in the previous article:-

Steam Locomotives - All standard gauge.

<u>No.</u>	<u>Type</u>	<u>Built</u>	<u>Original Owner</u>
7	2-4-0T	Henschel 9482/09	Lemvig-Thyborøn Rly *
14	2-6-2T	" 10022/11	Odense-Kerteminde-Martofto Rly.
20	0-4-0T	" 17436/20	Lolland Rly.

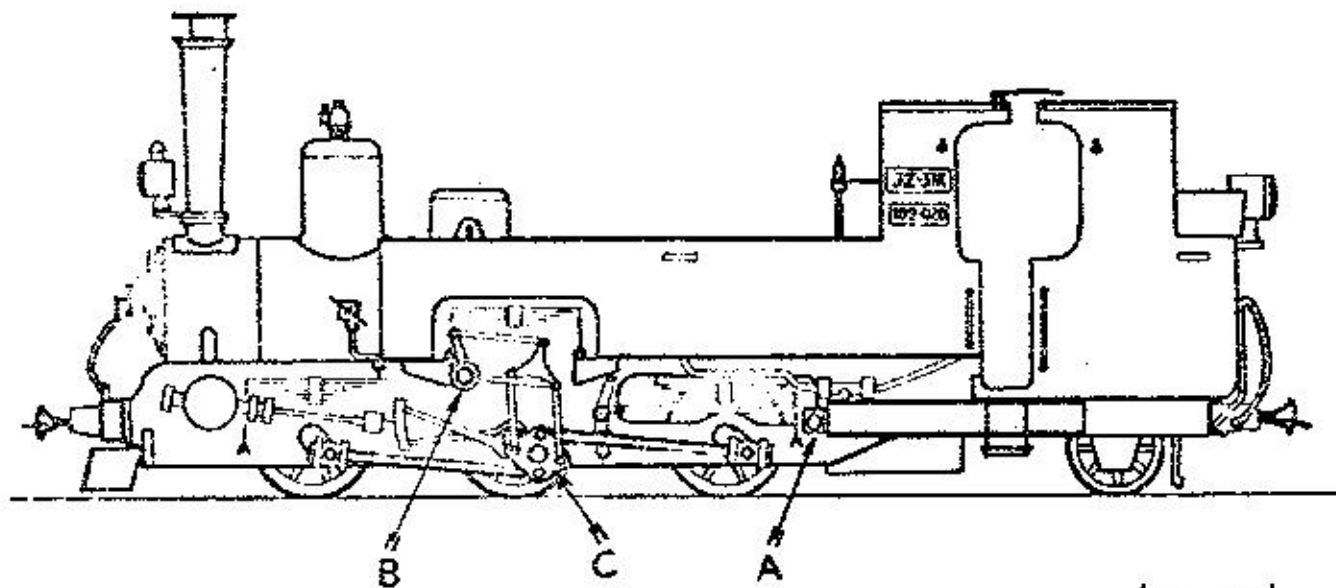
Petrol Railcars & Tractor

	<u>Type</u>	<u>H.P.</u>	<u>Built</u>	<u>Original Owner</u>
Railcar	1-A	120	Triangel, Odense /27	Stubbekøbing-Nykøbing-Mysted Rly.
"	1-A	100	" " /25	Vemb-Lemvig-Thyborøn Rly.
Tractor	B	50	Dieppe, France + /25	Odense-Kerteminde Rly.

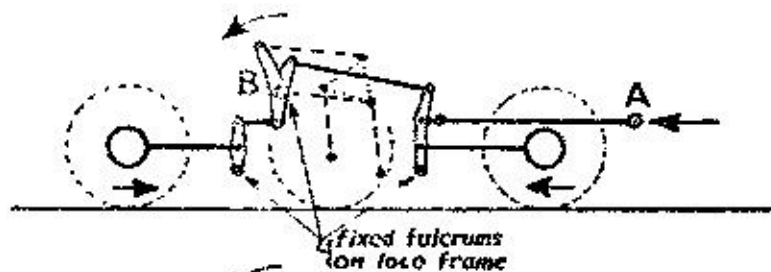
* Subsequently combined with Vemb-Lemvig Rly. to form the Vemb-Lemvig-Thyborøn Rly.

+ S.A. des Ateliers et Chantiers de la Manche, Dieppe.

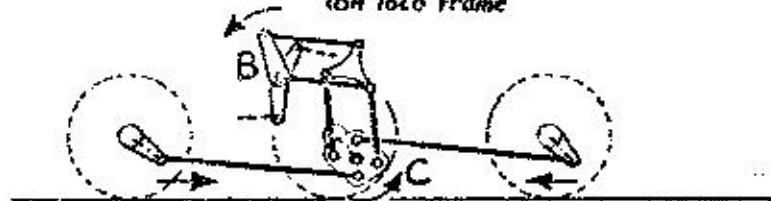
N.B. Locomotive No.7 (above) is wrongly quoted in the R.M. article as being an 0-4-0T



One metre



AXLE-BOX LINKAGE



COUPLING-ROD LINKAGE

Heavy arrows show movement on a left-hand curve

THE KLOSE LOCOMOTIVE: J.Z. 189 CLASS

by T.A. Wyatt

In the 'eighties and 'nineties, several attempts were made to develop more powerful locomotives for the sharply-curved 76 cm gauge lines of Bosnia. Some of these were exotic in the extreme in the complicated mechanisms used for articulation of the driving wheelbase, so that it seems incredible to find survivors today.

34 Klose 0-6-2T locomotives were built by Krauss between 1885 and 1886, several of which remain at work on remote parts of the Yugoslav narrow gauge as 189 class. They are only moderate in size, weighing 26 tons, with 900 mm (2'11 $\frac{1}{2}$ ") wheels and cylinders 290 x 450 (11 $\frac{1}{2}$ " x 17 $\frac{3}{4}$ ") *, but as mechanical curiosities they must now be unrivalled, and the Klose design seems worthy of attention and record while they can still be seen.

The whole bunker unit and rear half of the cab is carried on a pony truck pivoted in front of the firebox, and the Klose principle uses the movement of this truck to steer the driving axles in much the same way as a cart is steered by its shafts. The basis is thus fundamentally different from the various systems of controlled axle side-play; no side-play is intended in this design, but the centre drivers are flangeless. On a curve the rear truck side-frame (A on the diagram) on the inner rail side swings forward. This is linked to the driving axle-boxes, moving the rear driver axle-box on that side forward, and through several links and levers pulling the leading axle-box back. Thus, in theory the whole locomotive fits to a smooth curve, and there is no "rigid" wheelbase at all!

The difficulty, of course, is that side coupling rods would no longer fit, so a "differential" device has to be fitted. This is the plate (C) fitted to the crank-pin of the middle axle, and a double parallel-motion linkage permits it to follow the crank-pin, while preventing tilting, so that on straight track the coupling rod pins are kept vertically above and below the crank-pin. However, the upper anchorage of the parallel motions is the lever (B), which is part of the linkage controlled by the trailing truck. On a curve, as this is turned, the differential plate (C) tilts correspondingly, and the appropriate adjustment is made to the fit of the coupling rods.

The crew of 189.020 at Doboj (Usora) this year were most interested to talk about British experience of 25kV electrification, but nevertheless expressed admiration for their machine, and seemed not to be in the least disturbed by maintenance problems, so let us hope the Klose system still has some years' life!

* With acknowledgements to A.E. Durrant's "The Steam Locomotives of Eastern Europe".

MAQUINISTA METRE GAUGE 2-6-2T's

by John Korley

Part One

Although the first metre gauge railway locomotives built by La Maquinista Terrestre y Marítima (MTM) of Barcelona were two 2-6-2T's in 1898, twenty years were to pass before they built any more locomotives of this wheel arrangement. Then in the 1920's seventeen locomotives of this type were built for several different Spanish metre gauge railways. While of generally similar appearance, they were of three different designs, and their principal dimensions are given in the table.

The first two, MTM numbers 141 and 142 of 1921 were for the FC de Vitoria a los Martires. Although the first 18 kms of this line from Vitoria to Salinas had been opened in 1889, it was not until 1916 that the first extension northwards was opened, and the line was completed to a junction with the Zumarraga - Malzaga line of the FC Vascongados at Necolade, 2kms south of los Martires, in 1919.

These were followed by MTM 143-145 of 1922 for the FC de Oñate a San Prudencio. This was a branch, 6.7 kms in length, from the Vitoria - Necolade line, which was opened on 30th September, 1923. The original running numbers carried by these five locomotives are not known.

Next came a batch of four locomotives, MTM 280-283 of 1926, for the FC de Olot a Gerona (OG), carrying running numbers 21-24. These were the only locomotives built to the smallest of the three designs and they are the only batch of these 2-6-2T's which are still all working on their original line. In May 1967 they were still the principal motive power for locomotive-hauled trains, although as the OG was taken over by the Estado from 15th October 1963 it will not be surprising if, following Estado practice on most of their other lines, they are soon replaced by diesel locomotives.

The final eight locomotives were MTM 390-397, the first six being dated 1928 and the last two 1929. MTM 390 and 391 went to the FC de Vitoria a Necolade, while the third and fourth and the last two became FC de Astillero a Ontaneda (AO) Nos. 5-8. These last four locomotives were named VILLAESCUSA, PENAGOS, CAYON and FORANZO in number order, and were the only examples of these 2-6-2T's to be so distinguished. Unfortunately they became early victims of the diesel locomotives and railcars which arrived on the AO about 1960. No.8 was scrapped as early as 1959, and Nos.5 and 7 were withdrawn by 1962, although their remains were still at Astillero works in July 1966. No.6 remained in service until at least 1964 and was last noted as withdrawn at Santander shed in August 1967.

Very little is known about the other two locomotives of this series, MTM 394 and 395. As will be seen from the table of dimensions, they were the largest of the three varieties and were built for the FC de Utrillas where they were

numbered 91 and 92. Apart from a recently received photograph of No.91 in steam taken at an unknown date, no other records of them on this line or elsewhere are known. Although they were the newest locomotives on the line, they had certainly been disposed of by August 1960 and probably earlier.

The Estado organisation was formed to take over unprofitable railways which private companies could no longer operate, but which the Spanish Government wished to keep open. As one of the two narrow gauge lines which it acquired at the commencement of its operations on 3rd July 1926 was that from Vitoria to Mecolade, including the Onate branch, it became the owner of the first five of these locomotives, to which were added MFM 390 and 391 in 1928. From Vitoria another metre gauge line to Estella was opened in 1927 and this and the Mecolade line are operated by the Estado under the title of the FC Vasco Navarro (VN). The seven 2-6-2T's were numbered 11-17 in order of their construction and following the electrification of the VN which commenced in 1929, they have been transferred to other Estado operated lines retaining these numbers.

Nos.13-15 went to the Madrid a Almorox (MNV) to augment this line's original motive power of Krauss 0-6-0T's. From 1943 until about 1956, another metre gauge line, the FC Fuencarral a Colmenar Viejo, was operated to the north of Madrid, and motive power was supplied by the MNV. At least one of the 2-6-2T's was used on this line, and a picture on page 106 of the book "Steam on the Sierra" shows the method used to transfer locomotives between these two lines. Following the introduction of diesel locomotives and railcars, the 2-6-2T's were little used and Nos.13 and 15 are thought to have been scrapped with most of the other MNV steam locomotives early in 1967. However, No.14 was transferred to the Ferrocarriles Secundarios de Castilla (FSC) late in 1966. It was seen out of use at Palencia in September 1967 and reports of its use on the FSC and confirmation of the fate of Nos.13 and 15 would be welcome.

The Estado took over the operation of the FC Amorebieta a Guernica y Pedernales in 1932, and VN 11, 12, 16 and 17 were subsequently transferred to this line, which since the opening in 1956 of the final extension to Bermeo, has been known as the FC Amorebieta a Guernica y Bermeo (AGB). Nos.11 and 12 have remained on the AGB and were last noted out of use at Guernica in July 1966, steam workings on this line having finished during the previous year.

No.16 was under repair in the VN works at Vitoria Ciudad in 1958 and was then used on the FC de Castro-Urdiales a Traslaviña in 1960 and 1961 (see CRJ No. 8, page 14). In 1963 it was working on the AGB and was next reported as under repair at the Bilbao works of the FC de Santander a Bilbao (SB) in July 1966 and was last noted out of use at Amorebieta in July 1967.

No.17 remained on the AGB until 1963 when it was transferred to the SB, which had been taken over by the Estado in 1962. It was seen at Bilbao in August 1964 and at Santander in May 1965. In September 1965 it was under repair at Valmaseda works of the FC de la Robla, and it has since been returned to the AGB, where it was seen out of use in company with Nos.11 and 12 in July 1966.

Published by the Continental Railway Circle,
25 Woodcock Dell Avenue, Kerton, Harrow, Middlesex.
