

CONTINENTAL RAILWAY JOURNAL

AUTUMN 1962



EDITORS (MAIN LINE)
(MINOR RAILWAYS)

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ONE SHILLING.

AN INTRODUCTION

Since the Continental Railway Circle was founded two years ago, with the primary object of organising regular meetings in London devoted to overseas railways, there have been several suggestions that it should publish a magazine. Hitherto, various difficulties have stood in the way of such a scheme but, these having now been overcome, we now present this, the first issue of the Continental Railway Journal. Publication will be twice yearly, with Autumn and Spring issues, and each will be divided into approximately equal parts, devoted to main lines and to minor railways. The Circle has been fortunate in securing as Editors two of its members who are already well known for their writings in the railway press - A.E. Durrant and W.J.K. Davies - who will concentrate on the main line and minor railway sections respectively. Even more fortunate perhaps, is the fact that both these gentlemen are by no means unaccomplished artists, and it will thus be possible to illustrate the Journal, by drawings, whilst still keeping production costs to a reasonable level.

It will be seen from this first edition that each section of the Journal contains one or more articles, together with various notes and news items, and future issues will be on similar lines. So far as is possible, only material which has not appeared elsewhere will be published and, as the popular and technical railway press usually include full accounts of electrification, dieselisation and other signs of the progress of modernisation, the Journal will not normally feature items of this nature. Rather will it try to cover such topics as branch line closures and the disappearance of famous locomotive types. In particular, it is hoped to give advance news of such matters, to enable enthusiasts to make the necessary visits while there is still time.

Readers will appreciate that the Editors by themselves cannot possibly provide a comprehensive service of this nature and they are, therefore, asked to submit for publication any items likely to be of interest; only by co-operation of this nature will it be possible to achieve really worthwhile results. Although these remarks refer particularly to the submission of news items, articles for publication will also be most welcome. Contributions should be sent to the appropriate Editor, as follows:-

Main Lines - A.E. Durrant, 7 Spencer Road, Chiswick, London W.4.
Minor Railways - W.J.K. Davies, 126 Hughenden Road, St. Albans, Herts.

The Journal is being published in the first place for members of the Circle, i.e. those who hold season tickets for the meetings. However, a limited number of copies will be available to other interested persons, price one shilling each (at Circle meetings only) or for an annual subscription of three shillings, post free, for the two issues. Postal applications should be made to the Hon. Secretary at the address shown on the front cover, and should be accompanied by the appropriate remittance.

JUGOSLAVIAN STATE RAILWAYS (JDZ).

STEAM LOCOMOTIVES.

PART I

Due to the complicated build up of Yugoslavia, after the first World War, from many nations and fragments thereof, the JDZ locomotive stock was, and to a lesser extent is, of wonderful variety. General descriptions of both the JDZ and its motive power stock have appeared elsewhere, and the following is mainly a basic list from which enthusiasts can plan future trips, or catalogue the results of past ones. Details of all known classes, both past and present, are included, both for the sake of completeness and because odd examples of almost any class might be turned up, rotting away in some forgotten siding.

In 1933, the JDZ evolved a numbering and classification scheme based generally on that of the Austrian State Railways, who provided many of the original locomotives. The lowest numbers (01 to 11) were taken by passenger tender locomotives, then the next batch (15 to 18) by passenger tanks. 20 to 38 were freight tender, 50 to 53 freight tanks, and 60 upwards shunting engines. 70 onwards were narrow gauge locomotives. Obsolescent and numerically small classes followed the same scheme, but were classes above 100, so that passenger locomotives became 101 to 110 etc.

The following is a basic list of classes, together with origins and disposals if known.

<u>JDZ CLASS</u>	<u>TYPE</u>	<u>ORIGINATING RAILWAY</u>	<u>PREVIOUS CLASS</u>	<u>MAIN FEATURES</u>	<u>NOTES</u>
01.001-120	2-6-2	SHS	1001	4 CYL.SUP	
01.121-126	2-6-2	CDZ	101	4 CYL.SUP	
02.001-32	4-6-0	MAV	327	2 CYL.SUP	Returned to MAV
03.001-15	4-6-0	SUD	109	2 CYL.SUP	014/15 ex MAV
03.101-106	4-6-0	SUD	409	2 CYL.SUP	Ex DR
04.001-07	2-6-2	CDZ	151	4 CYL.COMP	
05.001-40	4-6-2	JDZ	389	2 CYL.SUP	
06.001-30	2-8-2	JDZ	486	2 CYL.SUP	
07.001-10	2-10-0	KK St.B.	380	4 CYL.COMP.SUP	
08.001-06	4-6-0	MAV	328	2 CYL.SUP	Brotan boiler
09.001-07	4-6-0	KPEV	P.8	2 CYL.SUP	Ex DR

<u>JDZ CLASS</u>	<u>TYPE</u>	<u>ORIGINATING RAILWAY</u>	<u>PREVIOUS CLASS</u>	<u>MAIN FEATURES</u>	<u>NOTES</u>
10.001-05	4-8-0	KK St.B.	113	2 CYL.SUP	Ex DR
11.001-13	4-8-0	MAV	424	2 CYL.SUP	
11.014-62	4-8-0	MAV	424	2 CYL.SUP	Built for JDZ
16.001-40?	2-4-2T	MAV	22	2 CYL.SUP	Built for JDZ
17.001-86	2-6-2T	MAV	342	2 CYL.SUP	Some Brotan
18.001-05	4-6-2T	KK St.B.	629	2 CYL.SUP	Ex DR
20.001-225	2-6-0	KKHB	860	2 CYL.SUP	Most new for SHS/CDZ
21.001-15	2-6-2	CDZ	01	2 CYL.SUP	Built Alco
22.001-25	2-6-2	MAV	324	2 CYL.COMP	
22.026-50	2-6-2	MAV	324	2 CYL.SUP	
22.051-87	2-6-2	MAV	324	2 CYL.SUP	Brotan boiler
22.088-101?	2-6-2	MAV	324	2 CYL.	Probably some of all 3 preceding types
23.001-37	0-8-0	KPEV	G.7	2 CYL.	Some compound
23.101-103	0-8-0	KPEV	G.8'	2 CYL.SUP	Ex DR
24.001-61	2-8-0	KK St.B./SUD	170	2 CYL.COMP	Some ex DR & FS
25.001-34	2-8-0	KK St.B.	270	2 CYL.SUP	Some ex DR & FS
26.001-100	2-8-0	SHS	7001	2 CYL.SUP	
27.001-15	2-4-4-0	MAV	401	4 CYL.COMP	Mallet
28.001-69	0-10-0	KK St.B.	80	2 CYL.SUP	Some compound. Ex various sources
29.001-27	2-10-0	KK St.B.	81	2 CYL.SUP	Some ex DR
29.028-42	2-10-0	KK St.B.	181	2 CYL.SUP.COMP	Ex DR
30.001-40	2-10-0	JDZ	583	3 CYL.SUP	
31.001-09	0-6-6-0	MAV	651	4 CYL.COMP	Mallet
32.001-36	2-6-6-0	MAV	601	4 CYL.SUP.COMP	Mallet
33.001-250 plus	2-10-0	DR	52	2 CYL.SUP	
34.	?	?	?	?	
35.001-160 plus	0-10-0	KPEV	G.10	2 CYL.SUP	Ex DR
36.001-49	2-10-0	KPEV	G.12	3 CYL.SUP	Ex DR
37.001-60 plus	2-8-0	USA	S.160	2 CYL.SUP	Some ex FS
38.001-65	2-8-0	UNRRA	"Liberation"	2 CYL.SUP	
38.066-	2-8-0	UNRRA	"Liberation"	2 CYL.SUP	Built Jugoslavia

ABBREVIATIONS.

CDZ	Serbian State Railways
COMP	Compound
CYL	Cylinders
DR	German State Railways
FS	Italian State Railways
JDZ	Jugoslavian State Railways
KKHB	Austrian Military Railways
KK St.B.	Austrian State Railways
KPEV	Prussian State Railways
MAV	Hungarian State Railways
SHS	Serbian-Croatian-Slovene Railways
SUD	Austrian Southern Railway
SUP	Superheated

(To be continued)

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THE 4-8-0 IN SPAIN.

Most popular of all recent Spanish locomotive types has been the 4-8-0, nearly 800 having been built, mostly two-cylinder simples. This formed the largest fleet of 4-8-0s in the World, and the type is well suited to Spanish conditions, having good adhesion characteristics, a leading bogie to give stability on the rough Spanish track, and room for a wide firebox over moderately sized coupled wheels.

First in the field were the Madrid, Zaragoza and Alicante who introduced, in 1912, a Henschel 4-8-0 with small wheels which positively reeked of Prussian practice. These extremely sound and straightforward locomotives were multiplied until 1922, by which time they numbered 120, RENFE 240.2081-2200.

On this basis was developed a sound, if not exciting, stud of two-cylinder 4-8-0s, which eventually made up a total of almost 700 locomotives. From 1920 the MZA developed a larger 4-8-0 having similar characteristics, but an overall increase in size, 17 instead of 15 ton axle load, 1600 mm instead of 1400 mm coupled wheels and 4.56 instead of 3.9 m² grate area. These larger engines proved very popular and 75 were built for the MZA to the original piston valve design, followed by 90 with Lentz poppet valves, and 38 for the Oeste. These were numbered 240.2201-2425 divided as follows:- 2201-38 (Oeste), 2241-2315 (MZA, piston valve), 2316-35 (MZA, poppet valves, final batch), 2336-2425 (MZA poppet valves).

In 1921-2 the Andalusian Railway bought fifty lightweight locomotives with a 13-ton axle load (RENFE 2001-50) whilst the Oeste, in 1922, built a dozen slightly heavier, but much more impressive locomotives, incorporating that railway's standard design characteristics. They became RENFE 2051-62.

Needing heavier power, particularly for freight work, the Andalusian had 35 locomotives built from 1926 to 1943, with the same boiler and cylinders as the large MZA locomotives, but with 1400 mm wheels. The following year, the Central of Aragon bought from Belgium, four lightweight (13-ton axle load) 4-8-0s for express work. These were very British in appearance, with rimmed chimney, narrow firebox, and splashers, and their 1750 mm wheels were the largest on any Spanish 4-8-0.

The final, most numerous and largest 4-8-0s were a sort of pre-nationalization standard and were based on the large MZA design, enlarged all round to include 5.25 m² of grate area and a 20-ton axle load. The MZA, Andalusian and Oeste all had machines of this class before nationalization, after which construction continued until there were about 240 locomotives, numbered 2471-2717 with gaps. A return to piston valves was made on these, although 2717 has Caprotti poppet valves. These rather splendid locomotives were the last 4-8-0 built for RENFE.

The next basic type to appear was the four-cylinder compound, and Norte's de Glehn class followed the MZA two-cylinder locomotives by only a year, in 1913. Some 45 of these were built, the design being a mixed traffic version of the earlier Pacifics. RENFE numbers were 4001-45.

The MZA also had a batch of four-cylinder compounds in 1913, contemporaneously with four Maffei Pacifics. Although similar in many ways, a useful degree of standardisation was not achieved, possibly because the eight 4-8-0s were built by Hanomag instead of Maffei. At first glance the two classes look almost identical, but the 4-8-0s have low pressure cylinders inside, whereas the 4-6-2s have theirs outside, and the 4-8-0s have a 2-bar crosshead as opposed to the single bar on the Pacifics. Boilers are almost identical on the two classes, apart from a longer barrel on the 4-8-0. Although the 4-6-2s were not multiplied, a further 25 4-8-0s were built by Alco in 1914, completely to European drawings with metric dimensions and plate frames. The two batches were numbered 4051-8 and 4061-85.

Odd men out amongst RENFE's 4-8-0s are the sixteen 3-cylinder locomotives built for the Norte in 1923-24. The Yorkshire Engine Co. was responsible for the design, which included divided drive, conjugated valve gear and a trapezoidal firebox, and the first locomotive was built in Sheffield, the remainder following from Babcock and Wilcox. These are the most elusive of RENFE's 4-8-0s, and any precise information as to their whereabouts and duties will be most welcome.

From the above it will be seen that there are no less than 10 basic classes of 4-8-0 on RENFE, 7 of them being 2-cylinder designs, and by the look of things, these will play a big part in Spanish transportation until the 20th Century is out.

NOTES AND NEWS

ITALIAN STATE RAILWAYS IN 1962

Electrification - Following on the 1961 conversion of the Modane-Alessandria (via Turin) route from 3700V a.c. three-phase to 3000V d.c., the triangle Alessandria-Ronco, Alessandria-Voghera and Voghera-Ronco with a few other lines in the area was converted from 8th October 1962. As a result the 1-C-1 E330.001-016 (1914), 2-C-2 E331.001-018 (1915-18) and 2-C-2 E332.001-006 (1915) three-phase passenger locomotives have been taken out of traffic for scrapping. The Genoa area conversion will be made shortly.

New Locomotives - Starting in 1961 and not yet completed, Fiat are delivering fifty-five B341 Bo-Bo diesel electrics of 1400 h.p. and Breda thirty similar 1600 h.p. locomotives. Steam workings on the lines south of Salerno and Bari on the mainland are to be replaced as well as Padua-Calalzo, Turin-Chivasso-Aosta and Rome-Caserta. A few have appeared in Sardinia. From 1960 the E646 class, the latest and most powerful Bo-Bo electric locomotive class, has been put into traffic, the first 37 in 1960-61. The first 20 of these were for express passenger work and the remainder, with a lower gear ratio, for freight work; Nos.E646.001-037. In 1961 the freight engines were renumbered E646.201-217, indeed the last few perhaps never carried the original numbers. In 1962 the same freight engines were renumbered yet again to E645.001-017. Also in 1962 further express engines appeared from E646.021 upwards, highest number noted so far E646.057; these have cab ends altered in appearance.

The earlier E636 class continues to be built and in 1962 the total of the class rose to over 450 and the title of the world's most numerous electric locomotive class was taken from the 448 examples of the earlier Bo-Bo-E626.

New Railway - At the beginning of the 1962 summer timetable a new line connecting Genoa Porta Principe station direct with the main lines north at Rivarolo and cutting out Sampierdarena was opened. Started before the war, this line is over three miles long and includes the two-mile Granarolo tunnel; the tunnel mouth has been a prominent feature of the north side of Porta Principe station for many years.

New Railcars - Thirty-five suburban ALe803 class electric motor coaches are being put in traffic; delivery commenced in 1961 and is almost complete. The colour scheme is canary yellow and carmine. Similar but slightly longer ALe601 class express motor coaches painted silver and dark green are also being built and 15 are now running. Nos.ALn773.3567-3572, 400 h.p. diesel-hydraulic railcars have been delivered from Fiat (O.M.) during 1962.

BULGARIA

The electrified section from Sofia to Plovdiv was officially opened early this year. However, a recent traveller over this section was hauled by steam throughout and saw no electrics in operation.

CZECHOSLOVAKIA

Electrification is now complete from Prague to the Russian frontier, together with the branch (main line) from Kolin to Usti, which is now being extended southwards to Teplice. The northern loop through Bohumin is also in course of electrification. Steam still hauls about 60% of the traffic and 1200 locomotives, in classes 354.1, 434.2, 464.0, 423.0, 433.0, 524.1 and 534.0, are being fitted with Giesl ejectors.

EAST GERMANY

Steam development continues, and following the rebuilding of 4-6-6T 61.002 into a Pacific, a drawing has recently been published showing a new (or rebuilt) disc-wheeled Pacific, Class 01⁵.

WEST GERMANY

There has been a considerable reduction in the number of non-standard locomotives in the south of the country. Scrapping has commenced of the rebuilt Bavarian Pacifics, series 18⁶, after only a decade of service in their rebuilt form. The survivors are now all allocated to Lindau shed, and still work many of the trains from there to Kempten, Munich and Ulm, though V160 diesels have taken over some of the workings. Shed pilot at Lindau is 0-8-2T 98.1025. A few Bavarian 2-6-2Ts work on the line from Friedrichshafen to Ulm, but many more are derelict at Aulendorf and Schussenried. Only one Württemberg 0-10-0T remains at Tübingen, dumped along with three of the 0-10-0 rack tanks from the Honau-Lichtenstein section, which is now worked by modified Ürdingen railcars.

HUNGARY

The majority of the 424 Class 4-8-0 now have double-multiple jet chimneys, while the 324 Class 2-6-2 have single-multiple jet arrangements. The latter has also appeared on one of the streamlined 4-4-4Ts.

NORWAY

One of the "Dovregubben" Class 2-8-4s, all of which were withdrawn in 1958, has been retained for preservation.

ROMANIA

The line over the Carpathians, from Ploeshti to Brasov, is now being electrified, and will be the first CFR electric main line. Combinations, in duplicate or triplicate, of 2-8-4s and 2-10-0s were the most common motive power on this line until very recently, but diesels have now invaded the territory.

FRANCE

S.N.C.F. steam locomotives have recently been appearing with secondary numbers for accountancy purposes. These numbers start at 01.001 with express locomotives, going up to a theoretical maximum of 99.999. Five-figure numbers are being used exclusively, with the result that the 141R class which has over a thousand members occupies two consecutive series.

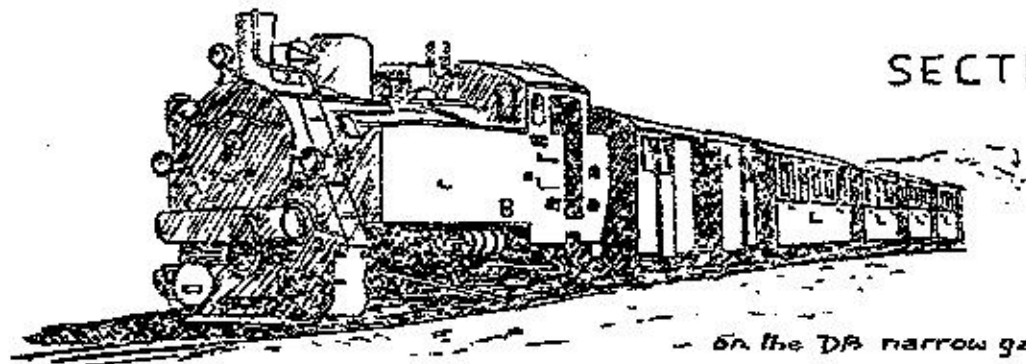
AUSTRIA

Most of the expresses on the unelectrified sections of the former Südbahn between Mürzzuschlag, Graz and Knittelfeld are now in the hands of Class 2050 diesels, and many of the Class 33 4-8-0s are in store. Only 33.128 and 133 were seen on passenger trains in July, the latter being a regular performer on the 16.45 Graz-Unzmarkt semi-fast. The Steiermarkische Express between Leoben and Graz was invariably steam hauled, usually by a Class 78 4-6-4T. The new blue 2200 h.p. diesel, No.2020.01, was also in evidence, often on the Rome-Vienna express from Knittelfeld to Mürzzuschlag, but on a run from Bruck to Knittelfeld lost time consistently.

Acknowledgements for information are due to Messrs. J. Carter and P.M. Kalla-Bishop.

MINOR RAILWAYS

SECTION



- On the D.B. narrow gauge. - W.D.

GERMANY - D.B. Narrow Gauge.

The D.B. narrow gauge lines in southern Germany, the last stronghold of narrow gauge steam working, are threatened with considerable changes and it may soon no longer be possible to travel on such interesting trains as that shown above. Not all these changes will mean closure, but the D.B. appears to be rationalising its services on the six remaining lines which will probably be affected as follows:-

Odenwaldkleinbahn. (Mosbach-Mudau) - The D.B. has decided that this metre gauge line should be retained both for its tourist value and for the heavy goods traffic. This at present needs two daily goods trains in addition to the three passenger trains each way, which run mixed when required. Two new diesel locomotives and new passenger stock are to be delivered in 1963, to replace the four Borsig 0-6-0Ts and the present antiquated four-wheeled coaches. The train crews are looking forward to the change as they claim the present stock is worn out.

Heilbronn-Marbach - The northern half of this 750mm line, down to Beilstein, may be closed shortly as it has only one mixed train daily in each direction; most intermediate stations can be served by standard gauge since mixed gauge track extends as far south as Talheim. Beilstein-Marbach has a good service, worked entirely by train, Beilstein depot having five 0-10-0Ts. A prototype steel-bodied bogie coach is now in service.

Leonbronn-Lauffen (750mm) - Most services are now worked by bus although a daily goods runs when required and is timetabled as a passenger train on Saturdays. Local sources say this information is unreliable as the train may not follow the times given, and a bus is often substituted.

Biberach-Ochsenhausen (750mm) - This is in an even worse state, with one passenger train daily in one direction only. And a little further south, Schussenreid-Riedlingen (750mm) has now been truncated to Buchau and only goods services are operated. The Mallet tanks are still working but should be replaced by 0-10-0Ts in the near future.

Nagold-Altensteig - This mainly roadside metre gauge line is in good health, most services being rail-worked, and is operated by a diesel locomotive of class V.29, and fairly modern bogie coaches. No change is expected for some time.

Walhallabahn. (Regensburg-Worth) - This line is now closed but 0-6-2T 99.253 has been preserved on a pedestal outside the station at Regensburg.

ITALY

Ora-Predazzo - This metre gauge line in the Dolomites will be closed shortly. It was electrified in 1929 (built by Austrian Army in 1917) and possesses 3 motor coaches, 2 motorized vans, and a small shunting locomotive. The remains of a 2-6-6-OT are barely visible at Ora.

Bolzano-Caldaro-S. Antonio - It is planned to withdraw the passenger service on this electric line, de-electrify it and work freight with a diesel locomotive; the 4-wheel motor coaches were built in 1908 by AEG and Graz Wagon Works.

Naples-Capua-Piedimonte d'Alife - This 950mm gauge line consisted of an electrified section from Naples to Capua with a long steam-worked branch from Biforcazione, which was destroyed in 1943. The branch is being replaced by a standard gauge line starting from Capua (F.S.) and five 88-seater, 400 h.p. diesel hydraulic railcars are being built by Fiat for the line.

Cumana Railway - This Naples electric suburban line running to Torregaveta is building a new line to the same place by a roundabout route. Delivery of stock started in 1961, comprising 13 two-coach articulated sets on 3000v d.c. These are temporarily wired for the 1200v d.c. at present in use (since electrification in 1927).

Milan Metropolitan - Two new motor coaches for this line were shown at the Milan Samples Fair, 1962

NORWAY

Setesdal Line - This last remnant of a once extensive network of N.S.B. 3ft. 6in. gauge lines was scheduled to close to all traffic on September 1st.

Latterly passenger services were worked mainly by diesel railcars, though there was a daily mixed train, hauled by one of the line's 2-6-2Ts, leaving Grovane in the morning and returning from Byglandsfjord later in the day.

Aurskog-Høland - It is reported that this 750mm gauge section of the N.S.B., which ran from Sørumsand to Skulerud and closed about two years ago, is the subject of a preservation scheme. However, whether this refers to the whole line (about 35 miles) or only a part of it is not clear, and further information would be welcome.

SPAIN

These locomotive notes are based on Allon & Wheeler's "Steam on the Sierra" and works numbers are only given where they differ from that book.

(S = in service; W = withdrawn; R = under repair).

San Feliu-Gerona - S: 1,4. On shed: 6. R: 3,5 (latter's boiler at Barcelona for major repairs). No.2 is stored.

Reus-Salou - Service is now operated by railcars, but locomotive No.5 is under repair for use at peak periods. Nos.3,4,6 are stored.

Tortosa-La Cava - S: 1. On shed was Hunslet 540/91, numbered 3. There was no sign of Hunslet 843/06 or of a No.2.

Onda-Castellon - Works numbers of Nos.1-3 are 1894-6; No.9 was built in 1905 not 1924. Additional locomotives are 18/9 (0-6-2T and 0-6-OT), built by Cia. Euskalduna in 1929 (Nos. 164/3) and rebuilt in 1961 and 1960 respectively. Nos.18 and 19 from the Palamos-Gerona line are still derelict.

Alcoy-Gandia - S: 1. R: 2. On shed at Gandia; 3,5,7.

Alicante-Denia - All railcar workings except one mixed train. On Alicante shed: 1-3,10. Denia shed: 6. S: 5. Cut up: 8. Works plates now mixed up.

Villena-Alcoy-Yecle - Works Nos: 4 (1296), 5 (1295), 6 (1297), 7 (1293), 8 (1292), 9 (1294). Railcars for passengers, steam for goods. S: 5,9. Scr: 7. Stored: 4,6,8. No trace of 2,3.

Carcagente-Denia - All railcars except one mixed train using 0-6-0D (Batignolles of 1959). At Carcagente were - shunting: 1,24; on shed: 2,4,6,26/7; stored: 3,5,22/3/5; out up: one NF saddle tank. At Denia shed: 21.

Guardiola-Castellar d'en Nuch - Additional locomotives (all 0-4-0ST) - 11 (Koppel, no details); 12 (no plates); 16 (Jungenthal 12079/54). No trace: 13/4.

SWITZERLAND

Sursee-Triengen - During recent years there have been various threats to modernise this line, the last Swiss adhesion line worked solely by steam, but none have come to anything so far. The latest report says that the metre-gauge Aarau-Schöftland line is to be extended to Triengen and the Sursee-Triengen narrowed (from standard gauge) and electrified so that through services can be run. Whether this scheme will prove any more successful than its predecessors remains to be seen. Meanwhile services continue to be operated by the railway's two 1911 Henschel-built 0-4-0Ts, assisted by motive power hired from other private lines or the S.B.B. as necessary. Until recently there was also a steam railcar, built by S.L.M. in 1918, but this is now reported to have disappeared.

AUSTRIA

Weiz-Ratten (Stmk. L.B.) - 0-6-0T 11.811 out of service; U38 likewise, damaged by an accident near Birkfeld, when a landslide deposited a train in the river, 25 feet below the track. S7, U7 and 699.01 under repair; S12 and U8 working.

Kapfenberg-An-Siedriesen (Stmk. L.B.) - Diesel VL 01 working, 11.805 and an 0-6-2T out of service.

Graz-Köflacher-Bahn - Three of the old 4-4-0s and one 0-6-0 are in use, but most goods trains are worked by ex-O.B.B. 56 class 2-8-0s. There are now only two steam passenger trains a day, the rest being railcar worked.

GREECE

Thessaly Railways (S.E.K.) - Of the metre gauge lines of the Hellenic State Railways, independent until May 1955, that from Larissa to Volos was converted to standard gauge a few years ago. It was the intention to similarly convert the line from Volos to Kalampaka, but it is understood from one of the employees that this proposal has now fallen through because of the light traffic carried, and that road transport will be substituted in due course. In the mean time, for anyone with the time to spare, the 100-mile, 9½ hour journey by the daily steam-hauled mixed train can be heartily recommended.

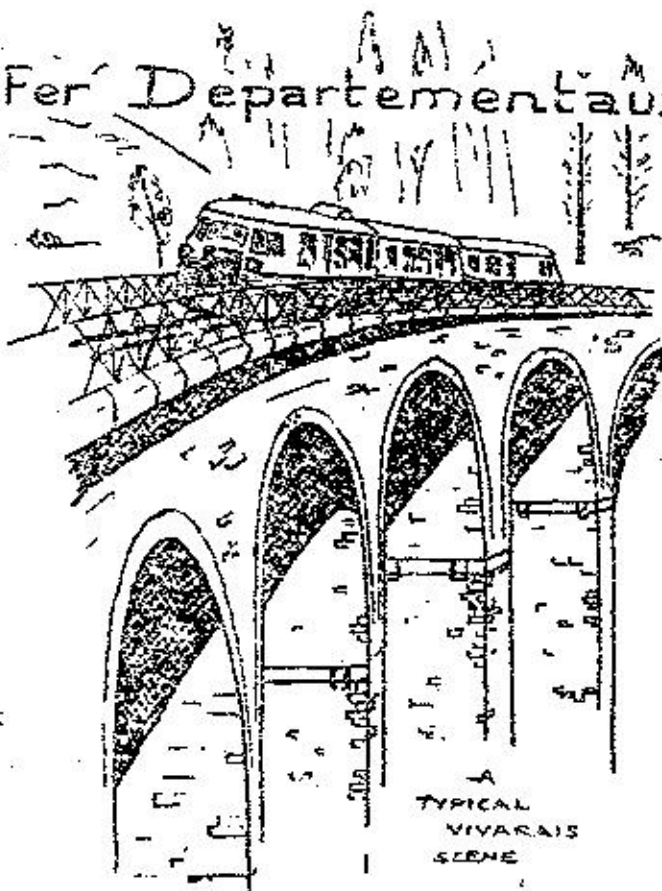
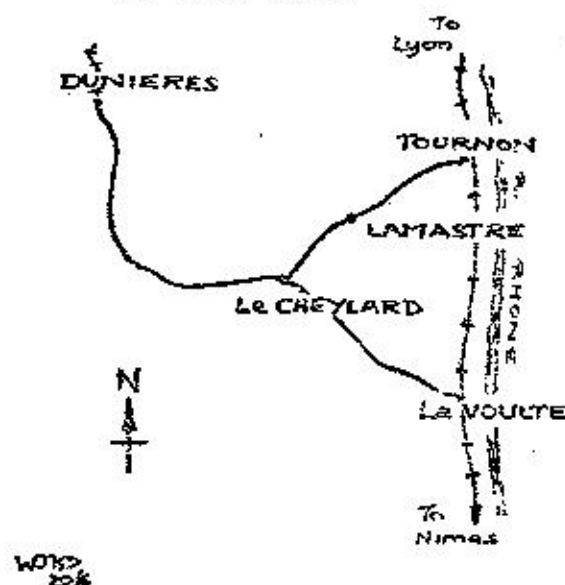
VICTORIA (AUSTRALIA)

Colac-Beech Forest - This narrow gauge line of the Victorian Government Railways was finally closed in July, and the two Garratts have been removed. G42 is intact at Newport, together with the motion units of G41. The cab and boiler of the latter have been scrapped at North Ballarat.

Thanks are due for information to Messrs. L. Dench, P.M. Kalla-Bishop and P. Page.

Cie de Chemins de Fer Départementaux

RESEAU du VIVARAIS



Probably the most fascinating of the remaining French light railways, and certainly one of the most scenic, is the 162 m. long Réseau du Vivarais of the C.F.D., running through the hilly Cevennes to the west of the Rhône valley. It started as three separate lines in 1866. Two ran west from the Rhône, from La Voulte-sur-Rhône to Le Cheylard (47.5 km.); and from Tournon south-west to Lamastre, the main market town of the area (32.6 km.); while the third ran east from La Voulte-sur-Rhône, over in the Bourbonnais, to Yssingeaux (22.2 km.). It was not until 1905, when the two latter branches converged on Le Cheylard, and a short branch was laid from Raucoules-Brossettes, on the La Voulte line, to a junction at Dunières, that the system assumed its final form. Since then it has suffered far less than most French systems. All of it is still open to traffic save for the western end from La Voulte up to Raucoules. This was closed to all traffic in 1952 and dismantled shortly afterwards except for a few hundred yards at Raucoules, which are used for storing derelict stock. The line's history has otherwise been fairly uneventful, although it has seen many changes in locomotives and rolling stock. This is because it is worked in common with the C.F.D.'s ligne de la Lozère, a good way off to the south-west, and items of stock are frequently interchanged. Indeed, the true title of the Réseau is "Réseau du Vivarais - Lozère".

The line today. At the present time, the railway can best be considered as a main line from La Voulte to Dunières, with a branch from Le Cheylard to Tournon. The latter line is very scenic, for the most part running near the

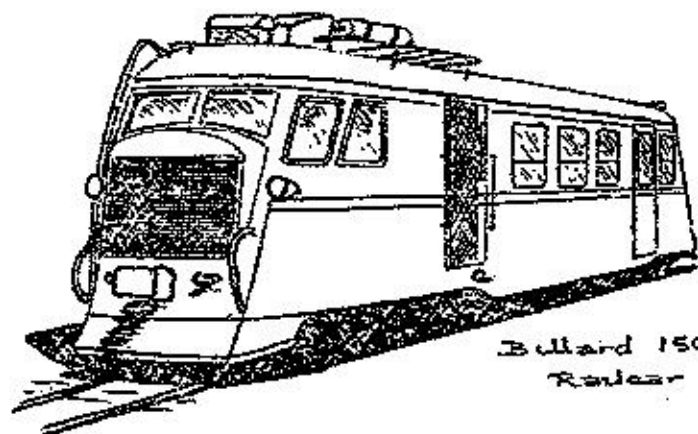
river Doux which, below Lamastre, runs through a considerable gorge, the railway occupying a ledge and having several large viaducts and tunnels. Lamastre, as the market town, provides much of the goods originating on the branch and a diesel locomotive is shedded there for short workings down to Tournon. It also has market trains on Tuesdays from both Le Cheylard and Tournon, the unbalanced working from Le Cheylard continuing to Tournon as a goods train. Lamastre, as the gastronomic centre of the region is also a popular tourist resort. In consequence, especially during the holiday season, it is an exchange point for railcar trailers, and passengers to Le Cheylard must watch what portion of the train they are in. Lamastre has an extensive station with a locomotive shed and turntable, and a big timber yard. Other intermediate stations are of normal French light railway pattern, but at Tournon the line runs into its own station along a mixed-gauge portion of the S.N.C.F. line, passing through a tunnel. The goods yard and engine shed at Tournon, incidentally, are about a hundred yards past the passenger station.

The main line up from La Voulte, also commencing over a short mixed-gauge section, is even more scenic since it follows the precipitous gorges of the Eyrieux for most of its route, climbing steeply to Le Cheylard. There are no particular centres of importance en route, and goods traffic is sufficiently light to be handled by 0-6-0 diesels. Le Cheylard itself is of considerable size, as befits the most important station on the Réseau. Besides a large station building, the Company's offices, and a big goods yard, it contains a three-road running shed, locomotive and wagon repair shops, and a railcar shed, complete with petrol pumps.

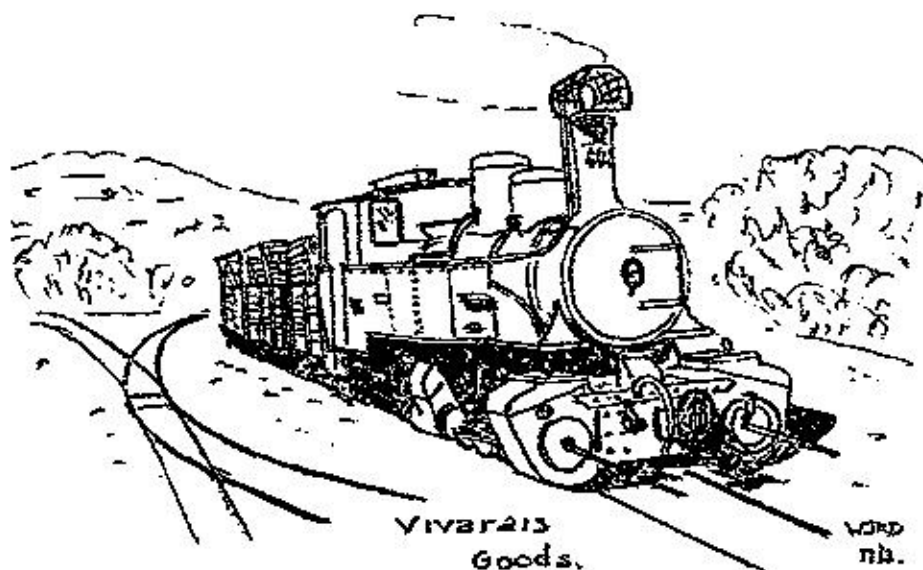
The line then continues climbing steeply in great curves up the valley side to St. Agrève. This section provides wonderful views over the country to the south and west, and the journey in steam days must have been quite an experience; even in a railcar it is very impressive. Half way up, at St. Julien-Boutières, is a dump of withdrawn steam locomotives. St. Agrève is an important holiday centre and a locomotive is normally kept here in reserve; the rare steam trains to Dunières are, however, hauled by a locomotive which has come from Le Cheylard.

From St. Agrève the line runs along ridges, the only town of importance being Tence, for which some market-day trains are run; it boasts a small 4-wheel tractor for shunting. Then we go onwards, via Raucoules, with another dump of condemned locomotives, to a branch line junction with the S.N.C.F. at Dunières. A locomotive is usually kept here, together with the De Dion railcar which runs the Montfaucon and Tence market trains. Goods trains over this section are at present run as required by steam, but dieselisation is expected soon.

Locomotives. Early locomotives comprised a collection of 0-6-OTs, 2-6-OTs and Mallets, including four 0-4-4-OTs Nos. 45-8 (S.A.C.M. 4206-9/90), all scrapped by 1949, and three 321 class 2-4-4-OTs, of which 322/3 went to the Lozère.

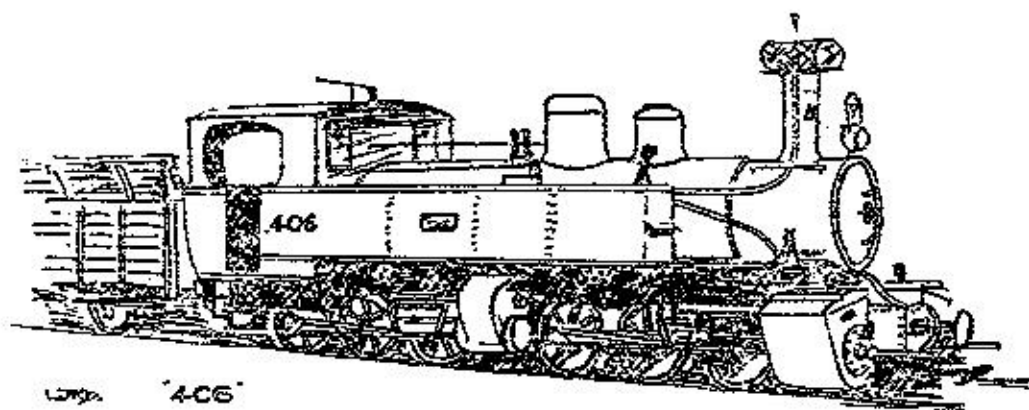


Bullard 150hp
Rondcar



Vivarais
Goods.

WORD
nla.



WORD "406"

Surviving locomotives are:-

61	2-6-OT		Derelict at St. Julien.
63	0-4-4-OT	S.A.C.M. 4274/91	Derelict at Raucoules. (64 ser./49)
321	2-4-4-OT	S.A.C.M. 5820/08	Derelict at Raucoules.
401-8	0-6-6-OT	S.L.M. 1666-73/02-6	405 derelict; 407/8 stored.
409/10	0-6-6-OT	S.A.C.M. 7445-6/27	Derelict.
411-4	0-6-6-OT	S.A.C.M. 7626-9/32	411 derelict.

Locomotives in service at present are 401/3/4/6/13/4. There are no signs of 402 and 412 and these are presumably scrapped. Also in service are three 0-6-0 diesels, X, Y and 13, together with the 4-wheel shunter PE5.

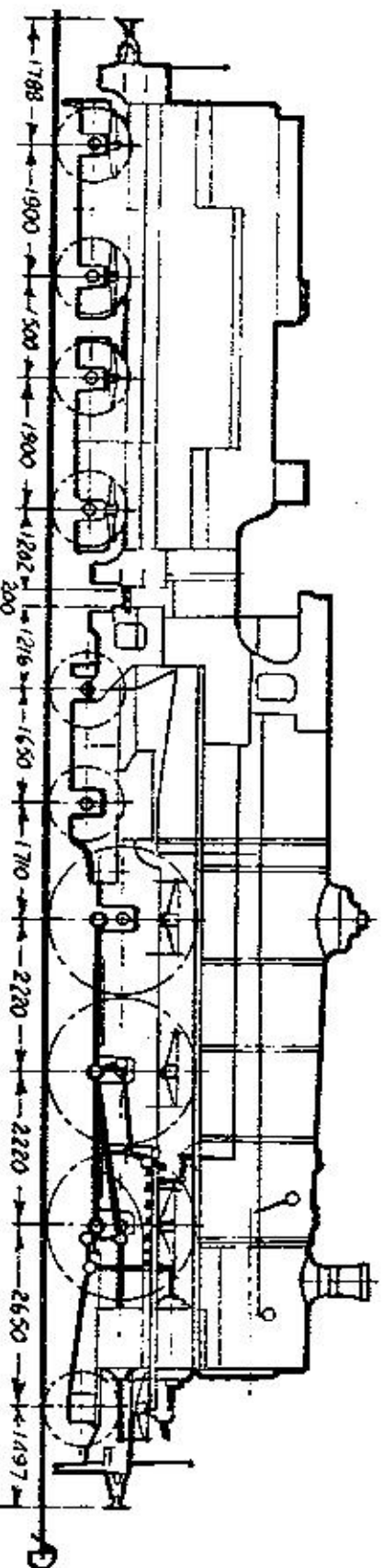
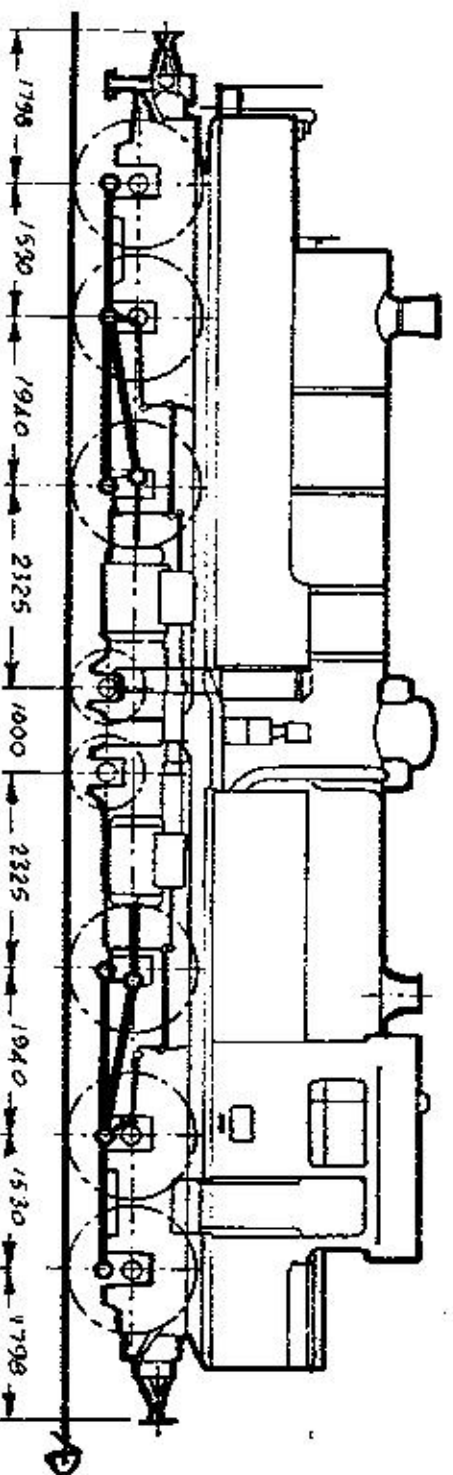
Railcars. All regular passenger services are run by Billard 100 h.p. and 150 h.p. diesel railcars, with bogie trailers. There are also two De Dion single-ended 6-wheelers of 1935 vintage, Nos. 206/7, in reserve. The Billard fleet comprises:-

211-3	150 h.p.	Delivered new in 1937/8 (Type A150D).
221-4	150 h.p.	Delivered new in 1937/8; articulated (Type A150D2). 221 is stored at La Voulte, following a smash some years ago.
313-6	100 h.p.	Brought in during 1951/2 from C.F.D. des Charentes.

Rolling Stock. There are still a few coaches of both saloon and - unusually for France - of compartment type in use for the Lamastre market trains and for holiday specials, but most have been stripped and the underframes converted to timber wagons. All other goods rolling stock is 4-wheeled and includes various types of wagons and vans. Former passenger luggage vans are used on steam-hauled goods trains. Note the dogboxes at one end with their external doors.

Dimensional Details of the 401 Class.

Length overall	.....	35ft. 1 $\frac{3}{4}$ ins.
Width overall	.....	8ft. 2ins.
Height overall	.....	11ft. 2ins.
Wheelbase (rigid)	.....	7ft. 2 $\frac{3}{4}$ ins.
Wheelbase (total)	.....	21ft. 2ins.
Wheel diameter	.....	3ft. 4ins.
Weight in working order	.....	44.2 tonnes.
Maximum axle load	.....	7.36 tonnes.
Cylinders - diameter	.....	12 $\frac{1}{2}$ ins. (h.p.); 19ins. (l.p.).
Cylinders - stroke	.....	21 $\frac{3}{4}$ ins.
Working pressure	.....	196 lbs. p.s.i.



NOTABLE LOCOMOTIVES

Above

du Bouspet 0-6-2+2-6-0T (Ceinture)

Below

Reihe "310" 2-6-4 (KKS+B)

Front Cover

Sorozatú "601" 2-6-6-0 (MÁV)