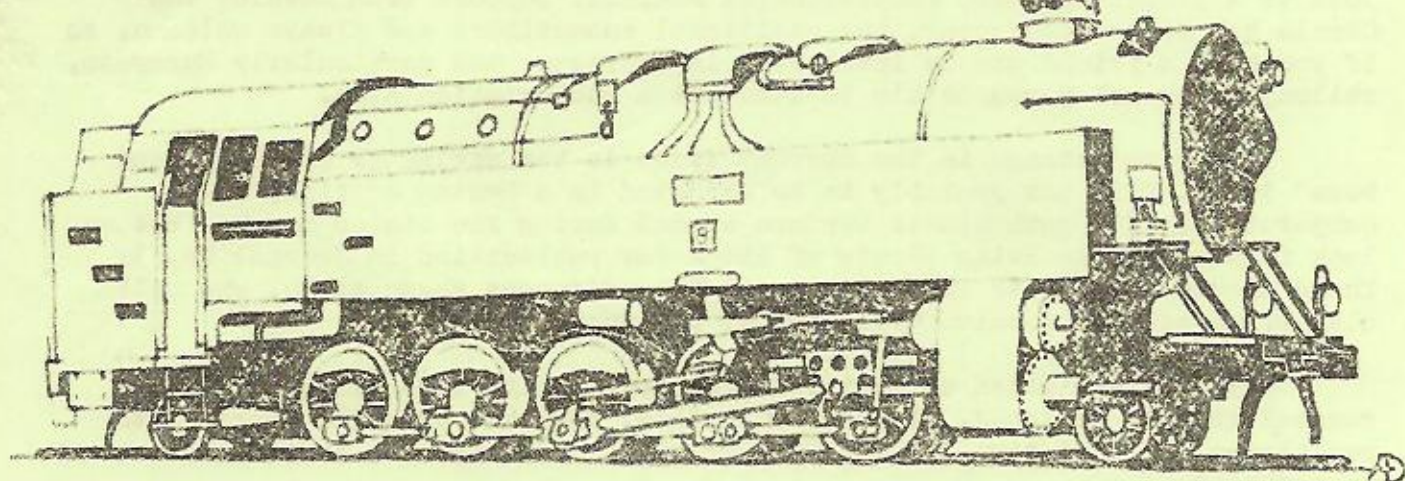


CONTINENTAL RAILWAY JOURNAL

SPRING 1963



EDITORS (MAIN LINE)
(MINOR RAILWAYS)

A.E. DURRANT
W.J.K. DAVIES.

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Readers will notice certain changes in this issue of the Journal as compared with No. 1, most obvious of these being the alteration to the cover. Whilst the cover style for our first issue may have given a rather better finish to the Journal, it involved serious production difficulties and restricted the number of copies which could conveniently be produced. The new arrangement will permit an increase in circulation which should, in turn, lead to a larger and more comprehensive Journal. Support from outside the Circle has been encouraging, but additional subscribers are always welcome, so if you have a friend who is interested in overseas, and particularly European, railways, why not persuade him to take out a subscription also.

A second change in the current issue is the shrinkage of "Notes and News" items. This was probably to be expected in a Spring edition, as comparatively few enthusiasts venture abroad during the winter months, but we look forward to receiving plenty of items for publication in Journal No. 3. These should be sent to the Editors, at the addresses shown above, who will also be pleased to receive articles for publication.

The subscription of most readers expires with this issue and a renewal form is enclosed. Please return this, together with the appropriate remittance, in good time, so that the printing order for the next issue can be assessed.

JUGOSLAVIAN STATE RAILWAYS (JDZ).STEAM LOCOMOTIVESPART II

<u>JDZ</u> <u>CLASS</u>	<u>TYPE</u>	<u>ORIGINATING</u> <u>RAILWAY</u>	<u>PREVIOUS</u> <u>CLASS</u>	<u>MAIN FEATURES</u>	<u>NOTES</u>
50.001-21	2-6-2T	MAV	376	2 CYL.SUP	
50.022-92	2-6-2T	MAV	376	2 CYL.COMP	
51.001-40	2-6-2T	MAV	375	2 CYL.SUP	
51.041-62	2-6-2T	MAV	375	2 CYL.SUP	Brotan boiler
51.063-128	2-6-2T	MAV	375	2 CYL.COMP	
51.129-131	2-6-2T	MAV	375	2 CYL.SUP	Ex 155.001-3
51.132-146	2-6-2T	MAV	375	2 CYL.SUP	Built Slavonski Brod, 1942
51.147-158?	2-6-2T	MAV	375	2 CYL.SUP	Ex CSD/MAV, 1945
52.001-07	0-8-0T	KK St.B	178	2 CYL.COMP	
52.008-13	0-8-0T	KK St.B	178	2 CYL.COMP	Ex D.R.
52.014-15	0-8-0T	KK St.B	178	2 CYL.COMP	Ex F.S.
53.001-29	2-8-2T	ÖBB	378	2 CYL.SUP	Ex D.R.
60.001-06	0-6-0T	CDZ	060	2 CYL.	Built Vulcan U.S.A.
61.001-50	0-6-0T	SHS	2001	2 CYL.	
61.051-64	0-6-0T	CDZ	203-16	2 CYL.	
62.001-101?	0-6-0T	USA	-	2 CYL.	
62.102-126?	0-6-0T	USA	-	2 CYL.	Built Slavonski Brod, 1958
70.001-03	0-6-0T	MAV	399	2 CYL.	
71.001-22	0-6-0T	SHS	11000	2 CYL.	
72.001-18	0-6-2T	SHS	11300	2 CYL.COMP	
73.001-23	2-6-2	BHLB	III b 5	2 CYL.SUP	
80.001-09	0-8-0T	CDZ	12021	2 CYL.	
81.001-05	0-8-0T	MAV	490	2 CYL.	
82.001-05	0-8-0T	CDZ	12001	2 CYL.	
83.001-68	0-8-2	BHLB	IV a 5	2 CYL.SUP	
83.069-152	0-8-2	BHLB	IV a 5	2 CYL.COMP	
83.153-182	0-8-2	BHLB	IV a 5'	2 CYL.SUP	New 1948-9

the EST built a further batch of thirty 2-10-2T in 1930 (S.N.C.F. 151TC), using 3 cylinders and conjugate valve gear as in the G.12's. Not to be outdone, the Alsace-Lorraine Railway rebuilt thirteen old compound 2-10-0 into 2-cylinder 2-10-0T, in 1933, retaining saturated boilers and slide valve cylinders and these were, by standards of design and actual age of component parts, the oldest of the 2-10-2T. As S.N.C.F. 151TB they survived into the early 1950's.

The Paris Ceinture, discarding its more exotic tendencies in the motive power line, took delivery of a dozen 2-cylinder 2-10-2T from Corpet Louvet in 1928 (S.N.C.F. 151TA), and with minor modifications a further 22 were built in 1941-47 as S.N.C.F. 151TQ.

Chronologically, after EST's original two engines, a private railway in Austria, the Buschthener Eisenbahn, had the next 2-10-2T, some six engines being built by Breitfeld, Danek of Prague in 1918. Typically Gölsdorf, with "Kobel" spark arrester, these, rather surprisingly, formed the basis for the world's most numerous 2-10-2T. Becoming C.S.D. 524.101-6, the class, with detail modifications, was multiplied by the C.S.D. until by 1931 there were 115 engines. A further 30 were built to the same dimensions, but with high pitched boiler, short chimney etc., by 1943, whilst 20 more (C.S.D. series 524.13) with "cleaned-up" dimensions appeared in 1944.

Another Austrian class was the State Railways' series 82, two dozen being built in 1922-4 using boilers and cylinders standard with the 0-10-0 tender engines. In recent years these were famous on the Semmering, banking westwards from Gloggnitz.

Thirdly, both chronologically and quantitatively, comes Germany. Borsig, in 1921, built four squat and massive looking engines for the Halberstadt-Blankenburger Eisenbahn, with 3ft. 7 $\frac{1}{2}$ ins. wheels, 6ft. 8ins. diameter boilers and weighing some 108 tons. Now in East Germany, these have been taken over by the D.R. as 95.6676-9.

The next two years, 1922-3, saw the building of 45 very large locomotives for the Prussian and German State Railways, classes T.20 and 95.0 respectively, though very few were delivered in K.P.E.V. colours. In West Germany these survived as bankers at Aschaffenburg until 1957-8, having replaced the Bavarian 0-8-8-0T Mallets on this duty, and some then went to Hof for similar turns. The most numerous of the German 2-10-2T, the T.20's were followed by three "standard" classes which, between them, only mustered half the T.20 total.

First of these were the ten massive 85 class 3-cylinder jobs, whose machinery was largely standard with the 44 class 2-10-0 and whose boiler was also used on the 62 class 4-6-4T. These spent most of their 30-year life on the Höllental line, working over gradients as steep as 1 in 18 (5 $\frac{1}{2}$ %), until replaced in 1960 by the complete electrification of this line.

Both other D.R. classes, grouped together as series 84, were special purpose locomotives, built mainly for passenger traffic on heavily graded lines through the Harz mountains in Saxony. These lines had been built to narrow gauge and subsequent conversion to standard was effected without greatly reducing the previous sharp curvature. Hence, special measures were taken to secure a flexible

wheelbase and 84.001-2 were 3-cylinder engines, similar to but lighter than the 85 class and with Schwartzkopf-Bekhardt bogies at each end. 84.003-4 were entirely different, being 2-cylinder locomotives whose outer coupled axles were driven by gear trains instead of coupling rods. It is hardly surprising that the further eight locomotives built, 84.005-12, were of the 3-cylinder rod-coupled design.

Standard 2-10-2T were also built for narrow gauge lines, 99.221-3 for metre and 99.731-62 for 750mm gauge. The former carried the same boiler as the standard gauge 81 class 0-8-OT, and were very massive and chunky engines. One of these metre gauge locomotives found its way to Norway during the war, and both classes have been multiplied since 1945, in East Germany.

From time to time a number of 2-10-2T have been built for industrial and private railways in Germany, culminating in the Ost Hannover's 84.201 as recently as 1952. Most outstanding of all, however, were the gigantic locomotives built for the Sandbahn of Hindenberg by Borsig in the 1930's. In a number of ways, these were even bigger and more powerful than the Bulgarian 2-12-4T, having 115 tons of adhesion (23 ton axle load) and 5.38 m² of grate area.

At least one narrow gauge private railway, the Korkerbacher Eisenbahn, had a 2-10-2T, rebuilt during or after World War II from a metre gauge 2-10-2 intended for Brazil.

With Franco, Austria/Czechoslovakia, and Germany, the majority of European 2-10-2T have been covered. The major other user was Poland, with a few industrial locomotives to Austria's 82 design, and their own OKz-32 class, a large 2-cylinder locomotive, virtually a tank version of the Ty-23 class 2-10-0, built, as were the D.R. 84's, for heavy passenger duties. Cegielsky built 25 of these in 1932-36.

Italy had 2-10-2T on the Ferrovie Val Seriana, rather light well-tank locomotives by Breda in 1924, of similar design to the North Milan Railways' 4-6-OT and 2-8-OT. The list of countries which did not have 2-10-2T is large - Belgium, Holland, Denmark, Norway, Sweden, Finland, Switzerland, Spain, Portugal, Hungary, Rumania, Yugoslavia and Greece. Bulgaria has 2-10-2T similar to the German 99.7xx locomotives on its 760mm lines, and there are two "semi-European" systems which boasted these locomotives. First of these is Algeria, whose P.L.M. lines had seven rather elderly looking locomotives by Crouzet of 1923-31 for banking, and second is Turkey, which had delivered for banking, four locomotives by Henschel and Jung in 1951-2, to the same design as the D.R. 85 class.

Although rather a specialised type, the 2-10-2T, of which only about 500-550 have been built (450-500 for Europe) were usually well balanced and good looking designs, and their eventual demise will leave a sad gap in locomotive ranks.

The cover drawing shows one of the 2-10-2T's of the Hindenberg Sandbahn.

NOTES AND NEWS

GERMANY

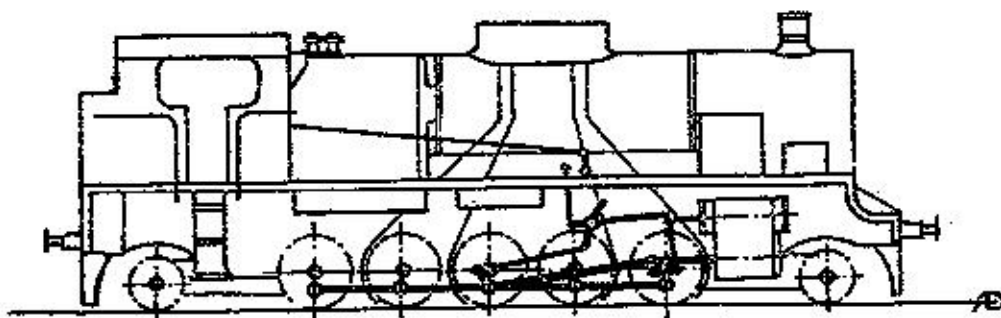
On the D.B., 515 steam locomotives were scrapped during 1962, leaving a total of 6,280 in stock. 178 electric and 312 diesel locomotives were added to stock giving totals of 1294 and 1380 respectively. Other totals, early 1963, were 1238 "tractors", 191 electric railcars, 132 diesel railcars, 916 railbuses, 20,657 coaches and 268,365 wagons.

One of the three pre-war 05 class 4-6-4 locomotives has been restored to its original streamlined condition and is preserved in the Nürnberg Museum.

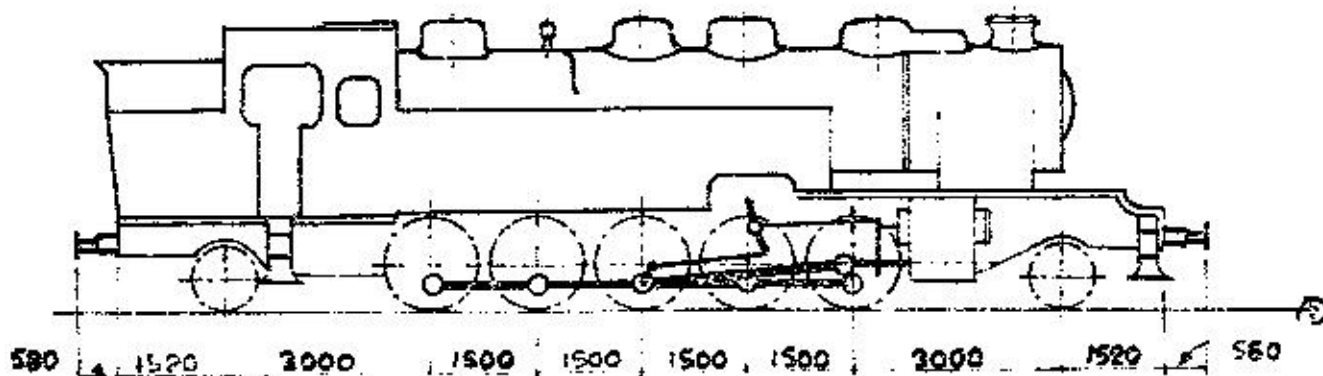
ITALY

The F.S. have put into service the first examples of the 141 class, 800 h.p. Bo-Bo diesel electrics, intended for heavy shunting duties. 29 are on order from Fiat. Two other new motive power types are also on order. Firstly, 18 Badoni diesel-hydrostatic 0-C-0 shunters that are also suitable for branch line work, with 600 h.p. engines. Secondly, 12 ALn873 railcars, similar in outward appearance to the ALn773 type, but with two 315 h.p. engines and S.R.M. transmission in place of two 200 h.p. engines.

FERROVIE DELLA VAL SERIANA 52-53.



SNCF (EST) 151TC.



ITALY (Continued)

Plans have been approved for a new railway to run from Grumo, near Bari, through Altamura and Matera to Metaponto near Taranto; just over 59 miles of standard gauge with 16 tunnels and 13 stations. Over half the route will be on the right-of-way or close to the existing 950mm gauge Bari-Montalbano line of the Calabria-Lucania. Should the F.S. ever get round to building the new line, it is likely that the whole narrow gauge route will close, except for the long branch to Lauretina from Altamura. On the other hand, the neighbouring Bari-Barletta railway was started in the 1920s and is still not open throughout, and what is open is freight only.

AUSTRIA

As at 31st December 1962, the Ö.B.B. still had 38 classes of standard gauge steam locomotives in stock. The classes and totals are listed below, and for the numerically small classes the principal depot at which they are allocated is given. An asterisk denotes that the whole class is at that depot.

<u>Class.</u>	<u>Qty.</u>	<u>Main Depot.</u>	<u>Class.</u>	<u>Qty.</u>	<u>Main Depot.</u>
33	13	Knittelfeld	77.2	25	Wien Nord
35	19	Knittelfeld	78	26	-
38	9	Arnstetten *	86	27	-
638	2	Wels *	88	1	St. Pölten *
42	15	Mürzzuschlag	989	10	Attnang-Puchheim
50	12	Linz *	91	9	Mürzzuschlag
52	195	-	91.1	6	Wiener Neustadt *
152	36	-	92	39	-
54	2	Knittelfeld	192	1	Linz *
55	3	Knittelfeld	292	5	Wien FJB
156	15	Wien Ost	392	42	-
57	29	Bruck a.d. Mur	692	4	Linz (Voest steelworks) *
257	3	Wien FJB	93	128	-
657	47	-	694	3	Wiener Neustadt *
258	3	Knittelfeld *	95	22	Bruck a.d. Leitha
658	2	Bludenz *	97	14	Vordernberg *
69	1	Wien FJB *	197	3	Vordernberg *
770	4	St. Pölten *	297	2	Vordernberg *
77	51	-	3071	17	Wien Nord *

SWITZERLAND

Similar information for S.B.B. steam locomotives as at 31st December 1962 was:-

<u>Class.</u>	<u>Qty.</u>	<u>Main Depots.</u>	<u>Class.</u>	<u>Qty.</u>	<u>Main Depots.</u>
A3/5	1	Biel *	Eb3/5	17	Biel, Rorschach, Basel
B3/4	1	Lausanne *	E3/3	40	Basel, Zürich, Luzern
C4/5	1	Bellinzona *	E4/4	7	Basel, Bellinzona (88XX)
C5/6	21	Basel, Erstfeld	E4/4	12	Basel (89XX)

BULGARIA

Two ex-Russian 2-10-0 (German 52) have been noted still carrying their C.C.C.P. numbers - TE 1941 and TE 3411.

Acknowledgements for information are due to Messrs. O. Baur, P.M. Kallabishop and H. Pearce.

MINOR RAILWAYS

SECTION



GERMANY

Schwarz Eisenbahn from Braunlage to Walkenried is now closed.

Härtsfeldbahn - This scenic line from Aalen to Dillingen, the subject of the recent book "Brücke zum Härtsfeld" by Dr. Kurt Seidel, is normally worked by diesel railcars. However, on Sundays, 16th and 23rd June steam hauled specials will run, hauled by one of the line's two remaining 0-4-0T locomotives.

Plottenberger Kleinbahn has been closed and lifted except for a short spur near the main line station, worked by diesel locomotive VT11, with 0-6-0 tram in reserve.

Kreis Altenaer Eisenbahn has also been closed and lifted, except for a short portion of the Werdohl branch at Ludenscheid, worked by 0-6-0T No. 22 with No. 20 in reserve.

Moselbahn - Only the section from Trier to Niederemmel now remains open, diesel railcars being used for passenger services and steam locomotives for freight. The section from Niederemmel to Traben-Trarbach closed on January 1st and lifting is proceeding from Niederemmel towards Aniel and also, apparently, at the Traben end. There are still four steam locomotives left at Aniel, two 2-6-0T for use on demolition trains and a 2-4-0T and a 2-6-0T derelict.

D.B. Narrow Gauge - The Nagold-Altensteig line has lost its passenger service, and the Walhallabahn, reported closed in Journal No. 1, also remains open to freight. Both these lines are operated by class V.29 diesel locomotives. Three diesel locomotives of type V.51 have been ordered for the Biberach-Ochsenhausen and Schussenried-Buchau lines and two of type V.52 for Mosbach-Mudau.

FRANCE

Boisieux-Cambrai - Closure of this line, conceded to C.G.E.F.R. but operated by R.D. du Pas de Calais, is expected during 1963.

Réseau Breton - The Carhaix-Guingamp line is expected to be standard-gauged by September.

SPAIN

Madrid-Aragon - 2-6-2T No. 22 was rebuilt as a 2-6-4T in 1962.

Reading Picture - One of the two 59-ton Garratt-type tram locomotives built by the S.N.C.V. for heavy freight traffic between the wars.

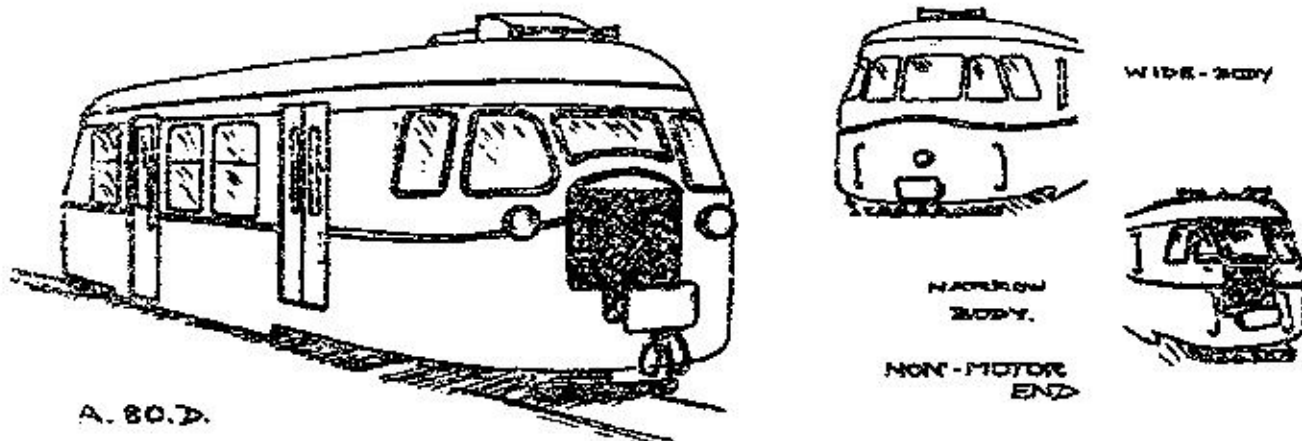
Acknowledgements for information are due to Messrs. Copson, Gregersen & Seidel.

*****ING DIESELS

"... One unidentified railcar...two diesel locos. as well... I went to see the last O-6-2T at Blank but all they had were *****ing diesels..."

Judging by the comments your Editor hears, this expresses the views of many enthusiasts, but surely, even if one doesn't like the things, diesels have come to stay and should therefore be accepted as items of motive power and their details taken for the records. After all, they have saved many lines from extinction! In addition, we are now getting to the stage where some diesels have as much history as the steam locomotives they replace. The odd thing is that although diesel locomotives get a fair share of attention (reflex actions on the part of number-takers?) the often more interesting railcars are largely ignored, perhaps because one railcar looks very much like another. To make their railcar rides more interesting for readers, I am hoping to run a series of short notes on various types - and to pacify the dishard steam enthusiasts let us give it an appropriate title; so here is:

Know Your Enemy. No. 1 - The Billard A 80 D Series 80-100 H.P. Railcars.



If you visit the French narrow gauge, you will not get very far before encountering one of these efficient, if rather lively, machines or their big brothers the A 150 D series, of which a typical example was illustrated in the last Journal. The design originated in 1937 at the request of the C.F.D. and all production models went to that concern. Thirty-three in all were built, mainly in 1937-9, but with a few post-war versions. They all seat 32 passengers with provision for a further 16 standing, and have a baggage compartment over the driving bogie. The car body is low-built in order to allow the high service speed of 70 km.p.h., and there are two body widths, depending on the loading gauge of the line for which the car was originally built. Wide-bodied cars can be recognised by the upswept waist beading at each end.

There are various other detail differences between sub-series. The Dordogne batch, for example, had radiators at each end when built, and still

show the blanked-off panel at the rear end; and some have roof radiators, while others do not; but basically they are all similar. Most surviving cars are equipped with the reliable Willème 100 h.p. 4-cylinder diesel engine, which leads some managements to class them as "Willème" railcars; but the Billard plate can usually be found beneath the passenger entrance door - Billard, unlike most manufacturers, built their own bodies. A list of cars built, and one of the survivors, are given below:

A.80.D Series cars built

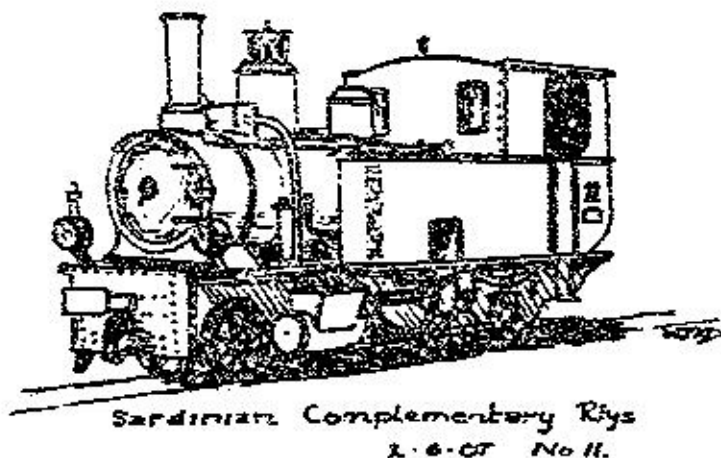
Series	C.F.D. No.	Date	Destination
A.80.D	312	1937	Joigny (Then to Montereau as 801)
A.80.D	31-2	1938	Charentes
A.80.D	311-6	1938	Charentes
A.80.D	511-3	1938-9	Indre et Loire (Sud)
A.80.D1	601-12	1939	Dordogne
A.80.D3	701-4	1939	Tramways de la Vendée
A.80.D2	705	1939	Vendée. Diverted to Montereau on completion
A.80.D4	514-5	1947	Indre et Loire (Sud)
A.80.D4	803	1948	Seine-et-Marne (Montereau-Egreville)

Surviving cars

C.F.D. No.	Present location	Comments
<u>(1) In service</u>		
31-2) 311-2)	Le Blanc-Argent (X241-4)	Via C.F.D. Chablis
313-6	C.F.D. Réseau du Vivarais	314 via Ligne de la Lozère
601-2) 607/9) 611-2)	P.O. Corrèze (X250, 245/7-9/51)	Also 603-5, now scrapped
514-5	R.T.M. (X2002 & trailer 2012)	
<u>(2) Still in existence but out of use</u>		
511-3	C.F.D. du Tarn at Castres	
801	C.F.D. du Tarn at Castres	Rebuilt as 510
705	C.F.D. du Tarn at Castres	
608/10	Tramways de la Corrèze (X1 & 2)	Stored at St. Bonnet
803	Departement of Seine-et-Marne	Stored at Montereau

ITALIAN
NARROW GAUGE RAILWAY
MOTIVE POWER, 1962

by
P.M.Kalla-Bishop.



Sardinian Complementary Rlys
2-6-OT No 12.

From the opening, in 1868, of Italy's first narrow gauge railway - the Mont Cenis Fell Railway - to the present day, the following stock has been used:- steam locomotives - 626; electric locomotives and vans - 67; electric motor coaches - 130; electric tramcars - 95; diesel locomotives - 29; and diesel railcars - 204. (Tramways are legally distinct, and are not included in these figures.) It should be noted that ten per cent of the steam locomotive total is known only from government returns year by year and that, allowing for locomotives sold from one line to another, the total possible would be more like 610. Similarly the tramcar figure may be slightly astray.

At the beginning of 1962 the following remained in stock (government statistics not yet to hand):- steam locomotives - 226; electric locomotives and vans - 29; electric motor coaches - 101; electric tramcars - 18; diesel locomotives - 26; and diesel railcars - 177. The steam locomotive figure is certainly inflated by many engines long laid aside as useless, and scrapping proceeded throughout the year; probably at the end of the year a fair estimate would be 100 usable and about 50 in actual use. During 1962 new 3,000 volt d.c. motor vans and articulated motor coaches were built by Brown Boveri and Stanga for the Trento-Male metre gauge line, to replace their present twelve 800 volt d.c. motor coaches and two motor vans built by AEG, Vienna, and the Graz Wagon Works in 1908-10. Stock distribution on lines still having steam locomotives was as follows:-

Naples-Capua-Piedimonte d'Alife Railway - A tramway-type electric line. 2-6-OT No. 12 is kept in the shed at Naples and steamed occasionally for maintenance duties.

Calabria-Lucania Railway - Nominally 75 steam locomotives in stock, and each of the railway's nine sections has its derelict representatives somewhere. Probably less than half the stock is usable, and comprises three 0-6-OT types, including one rack, four types of 2-6-OT and an 0-8-OT. There are steam passenger trains at Bari and Catanzaro, and usable steam is to be found at Cosenza, Gioia Tauro and Castrovillari. Otherwise a fleet of 85 railcars and one diesel locomotive, the latter built in 1924 and a relic in its own right, handle all the traffic.

Circumetnea Railway - No. 8, 0-6-OT, usable at Catania and three of the same type derelict and about to be scrapped. Otherwise, eleven diesel railcars, including three built by Brown Boveri in 1961.

F.S. Sicilian narrow gauge lines - 42 locomotives of the R301 and R302 2-6-OT classes, and R370 0-6-OT rack class. Not more than two or three are steamed daily, the rest being stored at Castelvetrore and Piazza Armerina sheds. The latter serves the rack sections but rack locomotives are also stored at the former. Otherwise 25 diesel railcars and two diesel locomotives.

Sardinian Railroads - Two types of 2-6-OT (one ex F.C.S.) totalling 18. All were displaced by diesels a year or so ago, and are probably scrapped by now. Otherwise there are five diesel locomotives and eleven diesel railcars. The shed is at Sassari.

Sardinian Complementary Railways (F.C.S.) - Nominally 54 steam locomotives but scrapping due to dieselisation is in full swing. Main shed and works are at Cagliari. Two types of 2-6-OT, and 2-6-2T, 2-8-OT and 0-4-4-OT types. Otherwise 18 diesel locomotives and 26 diesel railcars.

Sardinian Southern Railways - One part is still a steam-worked colliery line in full use. There are 32 locomotives, 0-6-OT, 2-6-OT, 0-4-4-OT and 2-6-6-OT. The Mallets have long been stored at Iglesias and the coal trains are worked by the 0-6-OT, ex F.S. R370 class with the rack mechanism removed. There are also ten diesel railcars.

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

An obituary for
the
C.F.D.T. Metre Gauge
Castres - Murat and
Le Bouissas - Brassac
lines.



As most readers will know, what was probably the most depressing closure of the year took place at the end of 1962, when the C.F.D. du Tarn, 55 miles of metre gauge track extending eastward from Castres, in S.W. France, closed to all traffic. It is depressing because the line was being run as economically as a railway can be, and with the most modern methods; because it was the longest system of "intérêt local" still surviving; and because the closure was almost entirely for political reasons.

The early history of the system is similar to that of many minor French concerns. It was built by a Départemental concessionary in 1903, to

serve a poor mountain area, taken over by the Voies Ferrées Départementales du Midi, one of the "Empires" that sprang up after the 1914-18 war, in 1923, and run by them until 1954 when it was in a shocking condition owing to lack of maintenance. Services were being run by eight ageing S.A.C.M. 2-6-OT's and a fleet of Verney single-ended railbuses, the latter built in 1934-5.

As was expected, the V.F.D.M. gave up at the expiry of their concession, but an energetic small concern, the "Société Auxiliaire pour l'Exploitation des Chemins de Fer Secondaires", decided, with the backing of the Département, to try and revive the railway. They completely relaid and reballasted the track, replaced the old 2-6-OT's with efficient diesel tractors, and brought in modern railcars, which they rebuilt themselves, to revolutionise the passenger service. At the same time they cut the staff by half (80 to 40); overhauled some 45 goods vehicles and scrapped or stored the rest; and introduced new operating methods whereby only three stations - Roquecourbe, Vabre and Lacauze - were staffed, and all passenger trains were one-man operated. The railcar drivers doubled as guards, ticket collectors and parcels agents, one of the old Verney railcars being turned into a motor goods van to run a daily "smalls" traffic service, mostly for the benefit of the textile mills. This was all accompanied by a considerable public relations effort and the railway became well patronised. Its eventual demise was unexpected and due to two major factors: the reconstruction of a Département road up the Agout and Gijou valleys; and the rise to power of a Council opposed to even the small subsidy needed to keep the line going. This resulted in a refusal to renew the Company's concession, which expired at the end of 1962, even though the Company wished to carry on and the Département must have a considerable capital investment in the railway, which it can now never hope to recoup.

The stock list for the S.A.E.C.S. regime is given below, to show how the line was modernised economically:-

LT1 & 2	0-6-OD rebuilt from steam by C.F.D., Montmirail.
A1/3/5	S.C.F. Verney 6-wheel railbuses ex V.F.D.M. A3 converted to motor goods van, others in reserve.
A12/3	S.C.F. Verney articulated bogie cars, ex V.F.D.M. In reserve.
510	Billard A.80.D, ex 801 C.F.D. Montereau-Egreville. Rebuilt and renumbered at Castres, 1959.
511-3	Billard A.80.D, ex 511-3 C.F.D. de Saône-et-Loire. Rebuilt Castres 1954.
705	Billard A.80.D, ex Montereau-Egreville. Not put in service.
524-5	Billard A.150.D3, ex AN27/6 of Tramways d'Ille et Vilaine. Bought via V.F.I.L. Réseau du Pas de Calais. Rebuilt Castres, 1956-7, with automatically operated entrance doors, for one-man operation.
211-3	Billard R.210 trailers, from various sources. 211-2 converted to goods trailers for Roquecourbe cloth traffic, which was handled by passenger train.

AUSTRIAN SURVEY

Compiled by G. Hoare

Austria is a popular country with British enthusiasts and it is hoped that this survey will prove of use to prospective visitors during the coming summer. All passenger carrying lines other than the Ö.B.B. standard gauge are included (together with certain lines which are now freight only) and though some, such as the Graz-Köflacher Bahn can hardly be classed as "Minor Railways", they have been included in this survey for the sake of completeness. Motive power particulars are as at 31st December 1962. All narrow gauge lines are of 760mm gauge except where otherwise stated.

A. Ö.B.B. NARROW GAUGE

<u>Kursbuch Table No.</u>	<u>Line</u>	<u>Details</u>
10d/e	Gaünd-Gross Gerungs & Litschau Alt Nagelberg-Heidenreichstein (Waldviertelbahn)	83km total. Diesel - 3 Steam - 11 (seven Engerth 0-8+4)
21c	Völkernmarkt-Riesenkappel	18km. Diesel - 1 Steam - 5 (four 0-8-OT, one 0-10-OT)
21e	Freibach-Klein Glödnitz (Gurktalbahn)	29km. Diesel - 1 Steam - 5 (three 0-6-2T, two 0-8-2T)
27b	Ober Grafendorf-Grosten (Arlaufthalbahn)	64km. Diesel - 6 Steam - 6 (one Engerth 0-8+4)
27d	Waidhofen-Kienberg Gmünd Gstadt-Ybbsitz (branch) (Ybbstalbahn)	77km total. Diesel - 8 Steam - 7 (five 0-6-2T, one 0-6-4T, one 0-4-OT)
28b	Garsten-Klaus Pergorn-Sierning (branch) (Steyrtalbahn)	46km total. Steam - 12 (all 0-6-2T)
40a	Zell an See-Krimml (Pinzgauer Lokalbahn)	54km. Diesel - 7 Steam - 4 (in reserve/ yard pilot)
45c	Bregenz-Beznau (Bregenzerwaldbahn)	35km. Diesel - 5 Steam - 1 (0-8-OT/T)

B. PRIVATE NARROW GAUGE

18d	Weiz-Ratten (St. L.)	42km. Steam - 7 (five 0-6-2T, one 0-6-0T/T, one 0-8-0T/T)
21d	Unzmarkt-Mauterndorf (St. L., Murtalbahn)	77km. Steam - 6 (four 0-6-2T, two 0-10-0T)
-	Kapfenberg-Au-Seewiesen (St. L., freight only)	23km. Diesel - 1 (0-8-0) Steam - 6 (in reserve or derelict)
-	Freding Wieseisdorf-Stainz (St. L., freight only)	11km. Diesel - 2 Steam - 2
40b	Jenbach-Mayrhofen (Zillertalbahn)	32km. Diesel - 2 (shunters) Steam - 5 (four 0-6-2T, one 0-10-0T/T)
		D. Railcar - 1

C. RACK NARROW GAUGE (Metre Gauge)

16c	Puchberg-Hochsneeberg (Ö.B.B.)	9km., rises 1218m. Steam - 5 (0-4-2T)
33b	St. Wolfgang-Schafbergspitze (Ö.B.B.)	6km., rises 1192m. Steam - 6 (0-4-2T)
40c	Jenbach-Achensee (Achenseebahn)	4km. rack, rises 440m, 3km level Steam - 3 (0-4-0T)

D. ELECTRIC NARROW GAUGE

16d	Payerbach-Windbrücke Raxbahn (Lokalbahn Payerbach- Hirschwang)	7km. Elec. locos. - 3 Elec. cars - 2
27b	St. Pölten-Gusswerk (Ö.B.B., Mariazellerbahn)	91km. Elec. locos. - 16
19a	Mixnitz-St. Erhard (St. L.)	11km. Elec. locos. - 3 Elec. cars - 2
34b	Vorchdorf-Gmunden (S.u.H.)	15km., metre gauge Elec. cars - 3
34d	Vöcklamarkt-Attersee (S.u.H.)	14km., metre gauge Elec. cars - 4 (four wheelers)
41a	Innsbruck-Pulpmes (Stubaitalbahn)	18km., metre gauge Elec. cars - 4

E. STANDARD GAUGE PRIVATE LINES

14a	Sopron-Ebenfurth Neusiedl-Parthagen (Raab-Ödenburg-Ebenfurter Eisenbahn)	70km in Austria, more in Hungary Diesel - 2 Steam - 11
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E. STANDARD GAUGE PRIVATE LINES (Continued)

18d	Gleisdorf-Weiz (St. L.)	15km. Steam - 3 (two 2-6-2T, one 0-8-OT)
19c	Graz-Wies Bibiswald Lieboch-Köflach (Graz-Köflacher Bahn)	92km. Diesel railcars - 7 Steam - 34 (0-6-OT, 2-6-2T, 4-4-0, 2-8-0 & four 102-year old 0-6-0)
19d	Leibnitz-Pöfing Brunn (Sulmtalbahn)	25km. Operated by G.K.B. Steam - 2 (2-6-2T)

F. ELECTRIC STANDARD GAUGE PRIVATE LINES

17b	Wien Oper-Baden Josefsplatz (Wiener Lokalbahnen)	30km. Steam - 3. Diesel - 1 Elec. locos. - 1 Elec. cars - 15
18c	Feldbach-Bad Gleichenberg (St. L.)	22km. Elec. locos. - 1 Elec. cars - 2
19b	Poggau-Übelbach (St. L.)	11km. Elec. cars - 2
31a	Linz-Pauerbach Niederspaching-Neumarkt (S.u.H.)	60km. total. Elec. locos. - 6 (W-L Section) Elec. cars - 7 (W-L Section) Elec. cars - 3 (W-N Section)
34b	Lambach-Vorchdorf (S.u.H.)	15km. Elec. cars - 3
34e	Lambach-Haag (S.u.H.)	27km. Elec. locos. - 1 Elec. cars - 2
34f	Salzburg-Bürmoos-Lamprechtshausen (Salzburger V.B.)	25km. Elec. locos. - 6 Elec. cars - 8
34f	Bürmoos-Trimmelkorn (S.u.H.)	9km. Elec. locos. - 2 Elec. cars - 2
45a	Bludenz-Schrüns (Montafonerbahn)	13km. Elec. locos. - 2 Elec. cars - 1 Diesel railcars - 2

<u>Key:</u>	St. L.	-	Steiermärkische Landesbahnen (Styria Govt. Railways)
	S.u.H.	-	Stern und Hafferl (private electric tramway and railway operator)
	0-8+4	-	0-8-0 with 4-wheel tender, Engerth type
	0-8-OT/T	-	0-8-0 tank with separate tender in addition
	W-L Section	-	Waisenkirchen-Linz Section
	W-N Section	-	Waisenkirchen-Neumarkt Section