

LONG MARSTON MILITARY RAILWAY

S160 LOCOMOTIVE WD701

THE USATC S160 WAR LOCOS IN GERMANY.

In 'Eisenbahn Kurier' 4/2014 pp.38-46 is Part 1 of an article by Andreas Knipping on these American 2-8-0 locos and their wartime and post-war use in Germany.

"As is well known, the major battlefields and occupation areas of both World Wars were largely and for the majority of the period outside Germany itself. The First World War only affected the Reichsgebiete in the southern part of Alsace and briefly in 1914 in East Prussia; the Second World War (apart of course from the air war) was held outside the Reich's borders until October 1944. The history of the German military railways and the German locomotives between the Atlantic and Black Seas is therefore very extensive. The G3, G4, G5 and G7 in the First World War, the P8, G8, G8.1 and G10 in both World Wars as well as the 50, 52 and 56.20 in the Second War covered many millions of kilometres in Belgium and France, in Russia and in the Balkans. Thousands of examples of these classes remained in foreign countries, and influenced operations there for decades.

In Germany, in contrast, railway operations using foreign locomotives brought in remained the exception. It is true that the Soviet forces using the railway lines intensively as they fell into their hands from 1944 and indeed during their continuing presence in Germany until 1994, but the different gauges hindered a widespread use of Soviet locomotives during the periods of conquest and occupation and 'alliance'.

Only a very few classes of locomotive of foreign construction worked for a brief period in Germany in any significant numbers. These included the straightforward 2-8-0 freight locos of type 'S160' from the USA. Both the brief nature of their operation, and the terribly difficult circumstances of the time, which left little time for a regular observation of railway operations, means that almost no documentation on these engines can be found in recorded German railway history. This is remarkable for a locomotive class which reached a total of 2,120 examples and was active over four continents and for four decades. It is surely time to end this period of neglect.

In both World Wars it was a major principle of the US military leadership to employ as extensive and generous an amount of material equipment as possible, so as to reduce the personnel losses to a minimum and to reduce the resupply problems. Thanks to the economic resources of the United States this was possible. Such dangerous activities as the recovery of a few derailed Feldbahn wagons in September 1918 during a retreat and their rescue from a zone of enemy shelling, thus risking the lives of several soldiers, was something preferably left to the Germans and their approach to such wartime problems!

Also, because the logistical preparations for the war in Europe required a lot of time, it took two and a half years from Hitler's Declaration of War on the strongest military might of the world on 11th. December 1942 and the landing of the first American soldier in France on 6th. June 1944. The USA used this period to ensure its expeditionary forces were generously provided also with locomotives and rolling stock.

It seemed realistic to provide a lot of railway material, having cast a look at the different individual areas of conflict. During their landings in Africa in November 1942, the takeover of transit traffic through the occupied Iran, and the expulsion of the Japanese from South Asia, the Americans encountered only a very weakened railway infrastructure. One could perhaps hope for provision of a better and more extensive railway network for the attacks in Italy in autumn 1943 and for the advances in France after 6th. June 1944;

On the other hand, the Americans themselves had to rely upon a heavy destruction of the railway infrastructure in Sicily and South Italy before their landings in 1943 and in Normandy in 1944 and in August on the Mediterranean coast, employing extensive air raids to prevent enemy use of the lines; it was also clear that the Germans themselves could, during their long retreat, carry out a lot of destruction, of as much rolling stock as possible and of stations, lines and bridges.

In addition there was the consideration that it would not be easy for their own personnel to get used to very different operating techniques on foreign locomotives. Without knowledge of the route and affected by different and also partially destroyed signalling systems, it would be already difficult enough to drive a train, without having to worry in addition about a variety of alien controls and instruments and gauges, individualistic forms of motion and archaic forms of braking.

So in terms only of the new construction of steam locomotives for such purposes the following should be recalled:

–916 2-8-2 'MacArthur' for various narrow-gauge systems.

–200 heavy 2-8-2's of the 'Middle East' type.

–382 'S100' 0-6-0T shunting locos, and the

–2,120 universal 'S160' 2-8-0's.

–The various additional diesel locos should at least be mentioned, for these also belonged to the first classes of such engines that were built in large series.

A robust 2-8-0 for All Countries.

The model for the S160 could be seen in the locos of the same wheel arrangement that the USA had already won one world war with in Europe. 1,946 of the 'Pershings' had initially served the American troops landed in France and then several of the French railways – and this is not counting the further examples built later for Poland and Romania.

In 1941 heavy goods traffic in North America had of course long since moved on from reliance on relatively-small 2-8-0's ('Consolidations'). Nevertheless, for universal mixed-traffic duties on other continents and influenced by the presence of only short turntables, limited lengths of stalls in roundhouses and workshops as well as the weak permanent way, it made sense to concentrate on the design of a compact locomotive without any claim to enormously high tractive power.

Later, in Hungary, the S160 was defined as capable of hauling a train of 340 tons at 75km/h on the level, 1,100 tons at 50km/h and 2,245 tonnes at 30km/h. On a gradient of 1 in 70, 970 tons should be hauled at 22km/h. In comparison, the DB-'Merkbuch' for the Class 52 Kriegslok allowed for 960 tons at 70km/h on the level, and 1,090 tons at 30km/h on a gradient of 1 in 70!

The American loco had to fit the loading gauge profiles of all relevant areas of operation and was therefore – especially with a view to the small loading gauge in Great Britain – a very slim engine. In photographs which do not show another vehicle for comparison, the US loco, with its cab fitted so closely and narrowly round the boiler, seems mightier than it actually was. The robust construction had the bar frames, already used in the USA since the turn of the century, and a high-pitched boiler with a broad steel firebox. The 1:43 proportions between the firing and heating surfaces reveals the intention to employ lower-grade coal (in comparison, the Reichsbahn had a proportion of 1:52 for the Class 44 and reduced this to 1:46 for the class 50's and 52's, which were designed for wartime service.) The leading pony axle was fitted into a Bissel truck. In contrast to British and French custom the locos had right-hand drive, using a regulator handle as in America rather than the European winding screw. The pistons and cylinders operated independently. The forwards cover therefore had no box for a piston rod sticking out forwards. A door onto the running board on the fireman's side was so small that it was only really used to ventilate the cab. The steam brakes for the loco were an American standard as were the Westinghouse brakes for the train. The smokebox door, set slightly to one side off-centre, was small enough to allow space on the front of the smokebox to be used also for fitting an air pump. Steam and sand domes were arranged under a joint cover. The pony and tender wheels were cast as full discs. As full a use of steel castings as widely as possible created the same simplification effect as on the German Kriegslok class 52. However there were unfortunately several boiler explosions on the S160; this was due partly to the fact they were only fitted with one water gauge glass and otherwise only testing taps, and partly to a later-discovered weakness in the construction of the firebox foundation ring.

The locos were built by Alco, Baldwin and Lima. The following numbers were allocated from 1942 to 1945:-

1601 – 1926; 2032 – 2382; 2400 – 2459; 2500 – 2989; 3200 - 3749; 4402 – 4483; 5155 - 5199; 5700 - 5859; 6024 - 6078. The type 'S160' could perhaps be explained as the 'S' for 'Steam' or 'Standard' and '160' for the first three digits of the initial running numbers.

The first S160 arrived in Great Britain on 27th. November 1942. 498 of the locos were loaned for a while to the four large railway companies, and four to the British military. Further examples were immediately conserved for later use. On 14th. September 1943 104 machines were standing near Newport (South Wales); in March 1944 a further 119 of the engines stood at Treforest. Not all the engines made it across the ocean; at least eight, maybe eighteen locos went down with their transport ships; 135 were unloaded in North Africa, of which many later followed in the American victorious advance through Italy. Together with those engines delivered directly to Italy there was a total of 244 such engines employed there. Directly following the Allied landings in France on 6th. June 1944 the transfer of S160s stored in England began, and further hundreds were brought direct to 'the Continent.'

Locomotives Travel the World.

However, like so many other partial railway histories, the story of the S160 first becomes really interesting only when one gets beyond recounting the bare 'were built' and 'were used' topics and instead they are seen as actors in the world-wide efforts of those who came to liberate Europe, and the equipment they brought with them. The United States Army Transportation Corps Military Railway Service (USATC / MRS) was divided into Grand Railway Divisions (GRD) and the subordinate Railway Operation Battalions (ROB). From 1941 the GRD's were given the numbers 701 – 710 and the ROB the numbers 711 – 766 and 770. Due to the complexity of the conflict and railway operations between North Africa, Italy and the English Channel as well as in most different parts of Asia, these railway troops crossed all the oceans. The RGD 706 – 710 were active in Europe. Each ROB was 'sponsored' by one of the major railroad companies in terms of placing personnel at the army's disposal – these gaps in staffing at home were then wherever possible filled by women.

Texts relating to the work of several units were published in some memorial albums in small numbers after the war, and under 'US Army Railway Units in the Past') many texts are available on the Internet. From these memories comes an awareness of a mentality that I also – through my parents – experienced personally.

The author's mother was employed soon after the war's end in München as a secretary and translator for the US Military Administration; with my father, badly injured during the war and in consequence compelled to work also as a translator, they learned from their professional relationship with the American officers a relaxed, informal, unprejudiced and even comradely attitude and they valued greatly this system. which placed more stress on competence and success rather than on rigid hierarchies and orders.

In this respect let it not be forgotten that this second involvement of the USA in the world war was initially a source of much discussion and division in terms of internal politics. An isolationist position, that would let Europe and Asia just suffer under their German and Japanese tyrannies, had many supporters until Pearl Harbor and Hitler's hate-filled tirade in the Reichstag on 11th. December 1941. But then, through free elections and free discussion in parliament and the media, what had been seen as 'Roosevelt's war' became a true national conflict (and shortly afterwards a conflict for the newly-established United Nations.)

718th .: From Boston to Mainz.

The 718th. ROB was activated on 14th. December 1943, the men sponsored by the New York Central Railroad. Its strength was (typically for such a unit) ca. 30 officers and 680 men. On 23rd. July 1944 the 718th. was shipped from Boston on the 'Mount Vernon'. On 1st. August 1944 they arrived at Greenock in Scotland. On the same day the long rail journey to St. Mellons began, on the English-Welsh border. On 9th. August 1944 the journey continued on to Southampton, where on 13th. August the troops were loaded onto Landing Craft; on 15th. August they landed on the 'Utah' Beach in Normandy. The ROB established its headquarters at Foligny and was responsible for the line to Mayenne and Rennes. Its greatest problem was initially the provision of water for the locomotives, since the Germans had destroyed the relevant

infrastructure. Initially operations were 'permissive' and 'at sight.' On 15th. September 1944 the HQ was moved to Bar-le-Duc and the unit took over responsibility for the line Sommesous – Commercy – Revigny – St. Menehould – Verdun. French railwaymen worked here under 'GI Supervision' on this 400-mile stretch. On 12th. October 1944 the HQ was transferred to Sézanne, and now the railhead reached towards Metz. On 7th. October 1944 the troops had come under a seven-hours German artillery attack in Conflans. In Sézanne the unit suffered its first losses in Europe – six men died due to a collision.

On 15th. November 1944 the HQ was moved again to Conflans-Jarny within range of the German artillery still stationed at Metz. The radius of operations now reached from Athus (in Belgium) to Château-Salins. On 4th. December HQ moved on to Frouard near Nancy, and as a result the unit was affected by the German counter-offensive in the Ardennes. On 5th. January 1945 the HQ was transferred again to Longwy. On 10th. January 1945 the unit lost its locomotive engineer and best brakes expert Joseph Cushman, who was attempting to bring a munition train from the area of an anticipated and then actual explosion.

January 1945 is remembered for the transport of 3,624 trains with 29,217 loaded and 22,336 empty wagons; The line Ettelbrück – Gouvy had to be brought back into use, with great effort involving the repair of 27 bridges and the checking of 18 tunnels which, amazingly, had not been damaged.

On the Gouvy – Bleialf line on 3rd. March (not, as given elsewhere, the 30th. March) the first train of this unit entered Germany, with the small Diesel loco 7234. (Operations could not initially be extended any further here because of the widespread destructions.) Soon afterwards, on one day 18,000 and in one week 120,000 German prisoners had to be loaded and transported away. On 25th. March 42 trains had somehow to be negotiated through the single-track line Wasserbillig – Ehrang. On 1st. April 1945 712th. ROB left its then-area of activities and handed this over to the 718th. It established its new headquarters in Mainz, whereby this HQ and C Company moved into the building of the Reichsbahndirektion. The unit now operated the line Kreuznach – Mainz, which with its innumerable unloading points and sidings became known as the '30 Mile Yard', since shunting frequently had to take place using the main line – with all the obvious consequences for safe and smooth operations.

On 14th. April 1945 the bridge over the Rhine was opened, named after President Roosevelt who had just died. Following the special train with General Patton at 14.30 the first regular supply train was worked at 15.05 with the two powerful USATC Diesel locos 7968 and 7966. From 24th. April it was necessary to employ German personnel. The operational handover point in the east was now Hanau.

There is a Report on the Locomotive Allocation as at 12th. May 1945, dated 1st. June 1945. At this time the 718th. was working the link to the French border station of Hargarten-Falck with locos of the Bw Mainz-Bischofsheim.

There were sixty S160 locos on the roster, numbered: 1611, 1622, 1636, 1645, 1652, 1678, 1822, 1872, 1882, 1890, 1914, 2095, 2107, 2128, 2135, 2153, 2196, 2203, 2292, 2299, 2374, 2404, 2432, 2432 [sic], 2447, 2458, 2558, 2560, 2561, 2572, 2574, 2578, 2579, 2581, 2589, 2594, 2597, 2605, 2623, 2818, 2824, 2845, 2851, 2866, 2871, 2874, 2882, 2883, 2890, 2929, 3512, 3513, 3579, 3580, 3583, 3589, 5712, 5714, 5727 and 5776. In addition on 27th. April 1945 the German locos in stock comprised four class 42, ten class 44, twelve class 50, two class 52, one class 56.2, two Class 56.20, three class 58.10 and four class 78.

From 11th. June German personnel were allowed to work without American 'pilots'. The unit's activities in Germany ended on 15th. August 1945, just before news came of the capitulation of Japan, and on exactly the anniversary of the 718th's landing on the Continent.

732nd. ROB on the Maas and Rhine.

When describing traffic on the extremely important route from the Lorraine border station Hargarten – Falck towards Hessen and Thüringen, the work of the 732 ROB should also be mentioned. The 732nd.s men managed, through repair of a destroyed bridge over the Saar, to make the line useable from the border as far as Mainz already on 1st. April 1945.

On 7th. April 1945 alone they worked 21 trains eastwards from Saarbrücken and so began to reduce a traffic logjam which was reaching back all the way from Thionville to Paris. Between 3rd. and 30th. April 709 trains were brought to their destination and conveyed 107,840 soldiers forwards as well as bringing 89,760 liberated French forced labourers and 27,320 German prisoners of war on the return trips.

The Hauptamt Saarbrücken made the following report on the operability of the various lines in its District on 11th. May 1945:

"The 732nd. ROB with its base at Saarbrücken is responsible for the following lines:

Falk-Hargarten [*sic*] – Saarbrücken

Saarbrücken – Neunkirchen (Fischbachtal and Sulzbachtalbahn).*

Neunkirchen – Homburg (exclusive)

Homburg (exclusive) – Bad Kreuznach (inclusive)

Neunkirchen – Bad Kreuznach (inclusive)

Of these lines the following are in operation:-

Falk Hargarten – Saarbrücken-Schleifmühle

Saarbrücken-Schleifmühle – Neunkirchen (Fischbach line).

Neunkirchen – Homburg.

Homburg – Bad Kreuznach.*

On 14th. May 1945 the Nahe bridge was restored; the line Saarbrücken – Homburg was however, with more than twelve interruptions, still not useable as a through route.

732nd ROB also had an impressive roster of locos at Bw Mainz-Bischofsheim for use on the line Bischofsheim – Hargarten-Falck. On 12th. May 1945 there were fifty of the S160's available:-

1620, 1621, 1637, 1648, 1686, 1703, 1704, 1780, 1814, 1831, 1849, 1887, 1906, 1922, 2096, 2101, 2109, 2115, 2139, 2147, 2151, 2164, 2172, 2185, 2204, 2207, 2250, 2297, 2323, 2356, 2361, 2411, 2430, 2434, 2453, 2500, 2511, 2584, 2598, 2619, 2823, 2843, 2846, 2848, 2868, 3208, 3211, 3582, 3590, 3591.

For a period also allocated to 732nd. ROB were Nos. 1692, 1708, 1760, 1803, 1812, 1818, 1827, 1856, 2354, 2356 and 2645. In addition there was one USATC S100 0-6-0T. For 27th. April the following German locos were also listed: four class 42, eleven class 44, nine class 50, two class 56.2, two class 56.20.

735th. ROB – working as far as Oberösterreich.

For the 735th. ROB we mention here only briefly their way through Europe. It went from Scotland via London to Normandy and then via Paris, Belgium, into the Ruhrgebiet and to Niedersachsen (Lower Saxony). The unit then took over the link Hanau – Würzburg – Schweinfurt – Nürnberg – München – Salzburg – Linz.

759th. ROB Africa – Hanau.

The 759th. ROB had its men sponsored by the Missouri Pacific Railroad. It landed on 11th. May 1943 in Tangier in Algeria. After half a year's work in Algeria and Tunisia the first draft of troops landed on 17th. November 1943 in Naples. Following a further year's activities in Italy the Battalion was shipped to Toulon, landing there 15th. October 1944. Following the advance through Southern France, on 19th. April 1945 they reached German territory. It became responsible for the "650 Mile long double-track line from the Rhine to the Elbe with the side lines Flieden – Gemünden, Eisenach – Meiningen, Weimar – Jena – Gera and Leipzig – Zeitz – Gera." Work began in Hanau, where the headquarters was established in Klein-Auheim. On 29th. April the first test train was worked from Bebra to Gotha. On 2nd. May traffic could begin to Erfurt and on 4th. May, following construction of a bridge between Erfurt and Weimar also via Naumburg to Leipzig. On 4th. July the unit left its positions east of Eisenach. Two weeks after 'VE Day' No. 3211 was delivered from the workshops as the first loco to have been fully overhauled by German civilian workers. In October 1945 the unit departed from Germany. A photo shows No. 3211 painted with the insignia of the 706 RGD.

It was reported on 12th. May 1945 that the Bw Bebra, which came under the control of the 759 ROB, had thirty-one of the S160's allocated to work the line to Mainz-Bischofsheim; these were: 1613, 1681, 1712, 1728, 17-5 (one digit illegible), 1810, 1850, 1877, 1879, 1881, 1902, 1916, 2088, 2103, 2152, 2187, 2314, 2333, 2341, 2403, 2450, 2502, 2555, 2569, 2577, 2600, 2625, 2812, 2867, 2881, 3514. In addition six of the S100 0-6-0T's were in use.

As of 27th. April 1945 it was reported that 127 German locos were being used from Bebra to Bischofsheim and from Bebra to Erfurt, i.e. Seventeen class 42, thirty-eight class 44, forty class 50, ten class 52, five class 56.2, eleven class 56.10, six class 78.

It should be recalled that there was a complex situation between the meeting of American and Soviet troops at Torgau on the Elbe on 25th. April 1945 and the middle of 1945. In this period Thüringen and large sections of Sachsen-Anhalt were under American and British occupation. Only in the first days of July did the Western Powers pull back to the agreed Demarcation Lines and in return took up positions in

twelve of the twenty Districts of Berlin.

In France.

For 7th. June 1945 the allocation at the Depot Metz in Lorraine is recorded: 1619, 1631, 1682, 1683, 1713, 1721, 1768, 1769, 1828, 1871, 1878, 1924, 2071, 2093, 2119, 2127, 2173, 2183, 2230, 2271, 2318, 2322, 2369, 2437, 2506, 2644, 2850, 2852, 2858 (and for a period 1754.)

In Depot Mohon were: 1612, 1643, 1843, 2308, 2531, 2550, 2553, 2855, 3516 and 3584.

On Search Lists.

Search Lists also provide information on the allocations of locos:-

" The following 11 USA Steam Locos are allocated to the 706th. RGD, have however not yet been returned. All those responsible are requested to inform their Headquarters when one of these machines is located: 1623, 1698, 1705, 1797, 2105, 2140, 2252, 2326, 2442, 2601, 2634."

The ED (Eisenbahndirektion) Mainz reported: "As well as the lines from Lorraine to Hessen, just as important was the line from Antwerpen right through Belgium via Liège and Aachen to the Rhein. The 708th. GRD brought between July 1944 and April 1945 no fewer than 1,450 locomotives from England to France. They needed these vehicles urgently; for example, in the first major German city to be liberated by the Americans, Aachen, they found on the railway facilities a total of only seven locomotives (all of them actually French, including four Pershings). During the advance, with heavy losses, from 1st. February to 15th. April 1945 it was possible to establish rail links to Düsseldorf, Wesel and via Bonn to Urmitz (north of Koblenz)."

On 20th. June 1947 the ED Mainz prepared a further report, looking back:-

"When the ED Mainz took over the line Remagen – Mainz on 20th. August 1945 they found the following in service from Bw Koblenz-Lützel: 1884, 2240, 2406, 2449, 2856, 1903, 2352, 2415, 2552, 2900, 2202, 2354, 2444, 2617, 3401 (in this sequence!). On 17th. December 1945 still allocated were: 1884, 2202, 2240, 2352, 2354, 2415, 2444, 2449, 2522, 2617, 3401. Of these, Loco 2522 was at RAW Darmstadt for an L0 (light) overhaul, the others were all operational. By the end of 1946 there were no S160's any more."

Until 20th. August 1945 the Bw Bonn was also subordinated to the Reichsbahnmaschinenamt (RMA) Koblenz. This Office reported to the RMA Mainz on 12th. September 1945 the following on its locomotive stock:

Twenty-seven S160's - 2360, 2378, 2533, 2541, 2544, 2558, 2586, 2596, 2609, 2619, 2781, 2789, 2792, 2799, 2807, 2814, 2820, 2838, 2859, 2860, 2870, 2894, 2903, 2911, 3203, 3212, 3499. Plus three Class 38.10-40, seven Class 42, twenty-seven Class 50, one Class 56.2, three Class 56.20.

Hans-Jürgen Wenzel explains that Bw Bonn was at this time almost exclusively a depot for goods traffic, for the supply routes from the Belgian ports to Aachen – Düren – Euskirchen – Bonn – Koblenz. In this way it was possible to by-pass Köln, which had been almost totally destroyed; at this point only the Südbrücke – initially as a single-track SKB provisional bridge - was available – and this only from 3rd. May 1946.

The End in Germany.

The American railway troops could start reducing their activities already by summer 1945. The need for supplying an advancing front had gone, as also the need to evacuate the areas east of the new agreed Demarcation Line. Following a reorganisation, from 15th. August 1945 the following units were responsible:-
The 707th. GRD in Nürnberg with

- 712nd. ROB in Mannheim (active until 9th. December 1945).

- 750th. ROB in Nürnberg (active till 10th. February 1946)

- 746th. ROB in München (active till July 1946).

708th. GRD in Bremerhaven, with the

- 741 ROB in Hanover (active till 10th. February 1946.)

- 734th. ROB in Bebra (active till 10th. February 1946).

- 766th. ROB in Frankfurt (Main). (Date of ending activity unknown.)

The presence in Bremerhaven can be explained by the allocation of Bremen and Bremerhaven to the American Occupation Area. The USA desired its own North Sea port and therefore established its

enclave inside the British Occupation Zone which included the rest of the North Sea coastline. The port at Bremerhaven could commence operations on 12th. May 1945.

The positioning of the ROB's in the above list allows one to see once again the 'classic' orientation along the main supply routes to the American Zones in southern Germany and the new supply line from Bremerhaven.

The 'Census of Rolling Stock' of 23rd. March 1947 lists the following S160's at **Bw Bremen Vbf.**: 1673, 1704, 1882, 2203, 2264 (not operational); 2572, 2851, 2889, 4479, 5167, 5181, 5776, 6024, 6028 – 6035, 6037, 6040, 6045-6047, 6056, 6060, 6070, 6071, 6076, 6077; and in **Bw. Bremen Hbf.** the Nos. 1414, 4379 and 6179.

It is not known whether American railway organisations continued to work in Bremen following the withdrawal of the 734th. and 741st. ROB's in February 1946, or whether the Reichsbahn used the locos under military supervision.

Also in **RBD München** the following stock of USATC 2-8-0's were allocated in March and April 1947: 1644, 1651, 1654, 1714, 1897, 2110, 2129, 2220, 2344, 2367, 2862, 2891, 2901, 2910, 2924, 3497, 3502 and 0-6-OT 6005.

By this time the disposal of the locos to customers in Eastern and South-East Europe, following the fulfilment of their war-related tasks, had already begun. At this period there were still no restrictions on exporting to what became the 'Eastern Bloc'. Hans-Jürgen's archive reveals the following:-

On 30th. January 1947 the RBD Regensburg reported that USA 2-8-0 locos were to be sold to Poland according to orders from OMGUS (Office of the Military Government US), Detachment E 204 APO 403 US Army. (Following are the numbers of 21 locos standing in Regensburg Ost and 16 in Passau Hafenbahnhof.) They were driven off in seven locomotive convoys, four of the Regensburg and three of the Passau engines had therefore to be transported 'warm' [i.e. to be steamed to haul the others.]

In 1946 Heribert Schröpfer observed a large number of S160's standing at Schwandorf.

The swiftness of the extent to which American-operated railway traffic in Germany became unnecessary seemingly surprised the political and military authorities in the USA as well. In view of the very hard resistance following the landings in France in 1944 and the heavy resistance also following the crossing of the Rhine in March 1945, they had expected that any control over a defeated Germany would have to encounter substantial resistance and sabotage. Instead, all three Occupying Powers discovered to their amazement that the enemy soldiers, functionaries and officials all went straight to work for them following their defeat. Perhaps this was not so amazing after all, for the Germans had all been drilled into Obedience to the Leader and to obeying orders from above without question. In any case they had other, personal worries in the post-war chaos to deal with, rather than providing pointless resistance.

This smooth transition of leadership and power was functioning in those areas already occupied, even as Goebbels in the 'Grossdeutscher Rundfunk' was still continuing to fantasise of a final victory and there still lived in his bunker in Berlin 'that person', "who still dares to call himself Germany's leader" (Thomas Mann in a radio talk on 19th. April 1945.)

In view of the sovereign competence and excellent equipment of the Americans, all the Nazi propaganda caricatures of the US soldiers as 'spoiled slaves of the Jews' or primitive 'Niggers' were soon revealed as simple lies."

Photographic captions show:

- S160 1789 and a French 2-8-0 double-heading a freight through the bombed station of Laon. 1789 was eventually sold to the Hungarian railways.
- On 7th. April 1944 136 S160's stored in a yard at Penrhos Junction in South Wales, awaiting their future service in France after the invasion, and of course under military guard.
- A severely damaged 'Pershing' 2-8-0 that had been hit by American aircraft while hauling a train of German Panzers, on 8th. Septmeber 1944 near Braine (Aisne).
- In Morocco on 23rd. April 1943 three contrasting locos serving the Americans stand side by side; an S160, an ancient 0-6-0 that had been purchased from France in 1923 when standard-gauge operations in Morocco had commenced; and an S100 0-6-OT No. 1928.

- S160 2737 with a round Baldwin worksplate and still fitted with an American centre coupling before its transfer to Africa. It would later run in Italy as FS 736.046.
- The diamond-shaped worksplate of S160 Lima 8096, December 1942.
- On 18th. February 1944 S160 1740 stands at the head of an ambulance train formed of Italian carriages in Riardo station, west of Naples, The seldom-used door on the fireman's side of the cab stands open. This loco would later become FS 736.011.
- A works photo of 3443 demonstrating well the main construction principles and the high-pitched boiler.
- S160 2867 being unloaded at Cherbourg on 29th. July 1944. For lifting points a steam-dome top was screwed on. The ship is clearly tilting due to the weight of the loco on its gantries.
- Aachen was the first major German city freed in October 1944. An S160 stands on a train in front of the destroyed overall roof of the main station – this is one of few known pictures of an S160 in service in Germany.
- In March 1945 an S160 hauls the first train (including also bogie vans of American type) over a temporary bridge over the 'Roer' or Rur river – possibly near Düren, possibly between Mönchengladbach and Aachen.
- On 16th. February 1945 two S160's cross the provisionally-repaired Rüstenbachviaduct on the line Walheim – Stolberg in order to collect a fuel train. The retreating Wehrmacht had blown up two of the arches on 12th. September 1944. Nothing lasts longer than a temporary solution – in 2014 the bridge still looks almost identical!
- 4478 being unloaded by crane in Bremerhaven on 18th. July 1945. From 12th. May 1945 Bremerhaven became a US Enclave in the British occupation zone, serving as a North Sea port for the American occupiers.

THE USATC S 160's. PART 2. By Andreas Knipping. In 'Eisenbahn Kurier' 5/2014 pp. 64-70.
"POSTWAR SERVICE ALL OVER THE WORLD.

Polish Classes Tr 201 and Tr203.

From January 1946 to August 1947 the PKP received a total of 575 examples of this loco type – over a quarter of all the locos built. The first 75 came from UNRRA, the United Nations Relief and Rehabilitation Administration; and were numbered as Tr201-1 to 75. The remaining 500 came direct from the USATC and despite being identical in construction were numbered as Tr203-1 – 500.

A boiler pressure reduced to 13 atmospheres and a top speed reduced to 65km/h limited their operational opportunities. A rather individualistic attempt at rebuilding proved to be an irrelevance; the idea was that the Ok22 (the German P8 4-6-0 built later from 1922 onwards with a broader firebox) should be fitted with boilers from the Tr203, whilst the frames, wheels and motions of the Tr203 would be fitted with boilers derived from the Tkt48 (2-8-2T) and turned into 2-8-0T's. In the end there were only two Ok55 and one Tkr55 specimen. Substantial withdrawal of the S160's began in 1972 and ended on 28th. October 1980. Observations of their later service showed them from 1979 on at Zbaszynek (Neu Bentschen) and Bydgoszcz (Bromberg).

Hungarian Class 411.

In 1947 the MÁV received 510 examples, mainly from Western Germany. Between 2nd. May 1947 and 16th. March 1949 484 of them were activated as Class 411, numbered in the order they were put into operation; the rest served for spare parts.

These locos played a significant role, partly because the planned construction of a Class 524 2-10-0 based on the famous Class 424 4-8-0 never actually happened, and partly because the transfer of German Kriegsloks by the Soviet Union to the former allies of Germany did not happen until the 1960's. In consequence the 411's received numerous improvements. The boilers received moveable stays, new exhaust pipes and smokebox doors. The tender wheels were swapped for those of Hungarian manufacture and the reversing lever exchanged for a screw reverser. A new, much taller chimney improved the draughting substantially. In addition feedwater processing equipment was fitted. The S160's were known in Hungary as 'Trumans' after the US President who was in office 1945 – 1952.

Withdrawals began in 1965. In 1977-79 some locos were observed still in use, perhaps mainly for shunting, at the depots Vác, Dombóvár, Szolnok, Hatvan and Pécs.

The longest-serving examples were 411.155, 270, 315, 334, 397, 438, 453 withdrawn on 8th. December 1980, and finally 411.440 on 10th. March 1981 and 411.427 on 18th. December 1981. A few locos remained in use as Stationary Boilers for a while longer.

Italian Gruppe 736.

After the war ended the FS took over the 244 locos operated by the USATC in Italy together with six more which had been sunk in the harbour at Rimini and which were lifted out again. (One of these was cannibalised for parts.) They were numbered 736.001 – 248. The 2-8-0 wheel arrangement was already well-known and well-liked in Italy; With the Gr. 735 there was already an 'American', 400 of which had been built between 1917 and 1922 and which disappeared only in the 1960's. Many of the 736's remained working in the vicinity of the ports where they had been unloaded during the War. Until electrification they were used from Depot Catania as the main class working the Sicilian East Coast line between Messina and Syracus. In 1959 25 of the machines were sold to Greece.

Soviet Sch.A.

In 1943 the USA delivered 200 broad-gauge 2-8-0's to the USSR, which were classified there as Sch.A 1 to 200. (the 'A' stood for 'America'.) 50 locos belonged to the S162 variant and 60 to the S166 variant, the broad-gauge version of the S160. By Soviet standards these were quite small and light locos. Six locos were lost during their transport by ship and one remained in the USA for experimental purposes. They were used on the October Railway. In 1957 30 locos were converted to 3ft. 6in. gauge for use on the network on the island of Sakhalin and were reclassified as Sch.U.

In 1959-1962 most of the others were rebuilt to standard gauge and given to North Korea – although there were some S160's already there before or during the Korean War.

Czechoslovak Class 456.1

The CSD acquired a group of 80 S160's from May to August 1946, during the brief intermezzo between the Nazi Occupation (until May 1945) and the Communist takeover (from February 1948) and classified them as 456.1. They were stationed in Bratislava, Olomouc and Brno. Rebuilding measures included the fitting of larger smokebox doors and the normal turbo-generators used in this country, moving the air pump to the side of the smokebox and rebuild to piston levers which as is normal in larger locos then extended through the front cylinder covers. Withdrawals began in 1967 and was completed with 456.159 and 456.173 on 12th. October 1972. For this reason the 'embellishment' of the smokebox door in their latter years reflected the historical developments of the period.

Until the Soviet invasion on 21st. August 1968 the locos carried the red star. Because it was the Communist Party itself was the driving force behind the popular reform movement of the 'Prague Spring' there had been no reason to remove the star. This situation changed drastically with the violent end of the 'Prague Spring' due to decree from Moscow, which deprived Communism of any remaining sympathy. The administratively-enforced return of the red stars on the locomotives from 1971 could do little to alter this situation.

The Yugoslav Class 37.

From 1945 and due to the efforts of the UNRRA 65 examples of the S160 came to the newly-re-established Yugoslavia. They were classified by the JDZ (later JZ) as 37.001 – 065 and put to use on the lines Slavonski Brod – Beograd, Vrpolje – Sarajevo and Sisak – Split. The 37's were withdrawn at the end of the 1960's as the electrification of the main West-East axis Zagreb – Beograd reduced the need for steam motive power substantially.

Occasionally the 37's were confused with their rather younger 2-8-0 cousins of Class 38. The first 66 examples of this class had been built in Great Britain in 1945 and delivered as UNRRA aid; 38-066 – 085 were built 1957/58 in Yugoslavia itself. They were the 'Liberation' type and were much larger and stronger than the S160's, using to the full the Continental loading gauge. ('Liberations' also worked on the PKP as Class Tr202 and on the CSD as Class 459.0).

Greek Class Theta-Gamma.

In 1947 27 of the locos came to Greece. The coal-fired locos were classified by the SEK as Theta-Gamma nos. 521-537 and the oil-fired ones as 551-560. The 25 locos purchased from Italy in 1959 received running numbers 571-595. These 52 former American locos were used over the entire standard-gauge network between Athens/Piraeus and the border stations to Yugoslavia and Turkey.

No other steam locomotive class in Greece reached this number – the next-largest class was formed of the 51 Austrian 80.900 as class Kb. They were amongst the last steam locos in use in Greece. The last examples used in regular service were likely to have been 525 and 571 in October 1975, at Thessaloniki. In the large locomotive graveyard of the disused former old station at Thessaloniki I noted the numbers of 56 steam engines and 3 internal combustion ones in July 1977; the Theta-Gammas were represented by Nos. 522, 523, 524, 527, 529, 532, 533, 534, 537, 583, 584 and 593. Still in steam at Thessaloniki in July 1977 was 575, although it was unclear whether this was for reserve or perhaps even heating duty. At Athens-Ionanis 594 was observed in August 1977.

The Turkish 45.

The fifty examples of this class that came to Turkey in 1947 received the TCDD numbers 45 171 to 220 and were slightly modified. The air pump was placed on the side of the smokebox, which was also fitted with a new door. They remained in service until the end of the 1980's. Two locos were passed to the Military administration.

Austrian Class 956.

The ÖBB took over 30 examples of the S160. In the 1953 numbering plan they were listed as 956.01-16 and 117-130. The 956.1 remained unaltered and were barely used, whereas the 956.0 were fitted with larger driver's cabs matching Continental expectations.

Since the locos, nicknamed 'Klapperschlangen' (Rattlesnakes) due to the clanging noise of their rods, could not keep pace with the German class 52 Kriegslöks, they were withdrawn already in 1955/56. 956.14, converted to stationary boiler 0 1026, was not withdrawn until 1971.

The S160 at Home.

Seven S160's remained in the USA. Following the war twelve more came to Alaska, and then two more which were returned from Europe were added to them. In 1958 five locos from Alaska were sold to a private railway in Spain; this included one of the engines that had returned from Europe, making this the only S160 that crossed the Atlantic three times!

The S160 in the Whole World.

101 of the locos came to South Korea in connection with the Korean War and so experienced war service for a second time. Whilst the South Korean locos were used for transport of supplies against the Communist troops in the North, in North Korea – as an irony of history - sister locos were also active at the same time on the opposing side – presumably they had come via China. In addition S160's came to India – 60 were delivered as kits of parts in a broad-gauge version. Further locos managed to get to China (40), Algeria (25), Mexico (11), Tunisia (6), Morocco (4), Jamaica (2) and Peru (2).

In terms of geographic spread across countries and continents the S160 war loco therefore far exceeded that of the much better-known Class 52 German Kriegslöks, even though many fewer built – less than a third of the total of their German counterparts. They were indeed, with their active use in Great Britain, France, Belgium, the Netherlands, Luxemburg, Germany, Austria, Italy, Poland, Czechoslovakia, Yugoslavia, Greece, Turkey, the Soviet Union, as well as North America, North Africa and Asia, they were the locos which had the broadest geographic span of all steam locomotives through the entire history of railways.

Surviving S160's in Europe.

As far as is known there are still four examples in Great Britain, three in Hungary, two in Poland and two in Italy, and one each on Greece and Turkey."

Photos show:-

- "PKP Tr203-302 pn 26th. April 1976 in Poznan (Posen), still with white-rimmed front buffers, a relic of wartime blackout precautions.
- MAV 411-05 still in use as a stationary boiler in Komarom, 1st. Nov. 1988.
- MAV 411.221 – like all Hungarian 411's this had been fitted with a taller chimney with a broader rim and a larger cab. Former USATC 1814 had been renumbered on 30th. July 1947 and was withdrawn on 15th. June 1978.
- On 5th. January 1946 eleven S160's are lined up around the turntable at Rome depot for the formal handover to the FS.
- FS 736.008 of depot Roma San Lorenzo in 1953, showing the characteristic hook and eye welded to the smokebox top for affixing lifting gear for transport by ship.
- In the 1950's FS 736.059 hauls a Rome – Naples passenger train past the ruins of the 1,900-year old Claudius Aqueduct near Roma Casilina station.
- Yugoslav 37-056 stands at Knin on 14th. August 1959, hardly altered from its USATC form.
- On 19th. September 1966 CSD 456.143 (ex-USATC 3560, Lima 8473/1944) shunts a passenger coach at the Austrian border station of Marchegg.
- Greek Theta-Gamma 558 of the oil-fired S160's, standing at Oinoi on 2nd. August 1959.
- Greek Theta-Gamma 587 in September 1972 hauling a train of former DB rebuilt 6-wheel coaches (Type 3yg) – the DB sold 50 of these to Greece in 1966.
- In August 1972 an unknown S160 as a TCDD 45.1 hauls an Kayseri-Ulukisla express near Hüyük.
- On 10th. August 1972 a USATC loco and a German Kriegslok double-head a freight for Ulukisla near Eregli.
- ÖBB 64.311 – the only member of this DRG class of 2-6-2T which ended up in Austria – and - ÖBB 956.127 stand together on 18th. August 1955 in Wien-Hütteldorf – revealing clearly the difference in height and bulk of the two types.
- In Austria the 'Rattlesnakes' hauled freights of some appreciable length – illustrated is 956.09, formerly USATC 2536.
- ÖBB 956.12, formerly 3243, was withdrawn in 1955 but had already undergone some Austrian rebuilding measures.
- In Blumau-Neurisshof several withdrawn ÖBB S160's stand derelict on 17th. September 1955, at the head of the line 956.127."

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MORE ON THE USATC 2-8-0's.

A further follow-up: In 'Eisenbahn Kurier' 6/2014 p. 35 is a Reader's Letter from Romano Mölter of Milano:

"I had the good fortune in my youth to have been able to speak with engine drivers who had experienced these locos. Especially the simplification of the motion work made these engines quickly unloved. Instead of the usual slide bars of soft metal the Americans had simply let steel rub against steel and allowed for a bit of room for 'play'. In this way overheated bearings were indeed essentially avoided, but this space soon expanded and created hellish noise, so that the engine drivers believed the rods could fly past their ears at any time. This is why the FS gladly sold 25 of the engines to Greece. On the other hand, the free-steaming boiler and the oil firing made them greatly valued as stationary boilers, and so the Gruppe 736 soon became, after its relatively early withdrawal from normal service, the most popular mobile heating equipment of the nation. Every large DL (Deposito Locomotive, Italian for a loco depot) had at least one former USATC S160, and the last of these was scrapped as late as June 2009 at the DL Milano Smistamento.

Also interesting is the fact that locomotives in Greece were very seldom scrapped. So on 6th. July 29009 I encountered in a small wood near Tithorea an abandoned depot, in which several different wartime locos gradually decayed. These included Theta/Gamma 576, the former FS 736.090, formerly USATC 3299. The list of Mr. Knipping of surviving locos is therefore in itself correct but does not include some 'totally forgotten' examples. Perhaps there are still some other S160's slowly decaying elsewhere on

the planet, and we don't know about them...."

Attached are photos of PKP Tr 203-451 at the Museum Kolejnictwa in Warsaw; FS 736.113 as stationary boiler at Naples depot on 26th. Sept. 1987; and the above-mentioned OSE Theta/Gamma 576 near Tithorea..

Walter Rothschild.