HARAKEVET

הרכבת

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A Quarterly Journal on the Railways of the Middle East Edited and Published by Rabbi Walter Rothschild 9 Primley Gardens, Leeds LS17 7HT, England



13: 1

The Train to Jerusalem.

G12 Bo-Bo No. 114 heads coaches 606 and 641 (a "Karon Meyuchad" or "Special Coach", but non-airconditioned), both in brown/cream livery, forming the 1600 from Tel Aviv Darom station to Jerusalem. 24/4/91. The line curving off to the right in front of the trolley shed and losing itself in the grass was the original line through to Jaffa. (Photo: W.L. Rothschild).

13. 2. Editorial.

This issue reflects a very busy trip your Editor managed to make to Israel. With the help and hospitality of several subscribers - to whom my thanks -I was able to travel over almost the whole length and breadth of the I.R. system, much of the way in loco cabs (thanks to a Pass provided by Ilan Falkov, I. R. 's Chief Spokesman), andsee some of the developments taking place. Compared to only seven years ago, the railways seem to be expanding at a great rate, and the general air of optimism and Investment (even when mixed with traditional Israeli cynicism) is impressive. One can only hope that the pace is maintained.

The Railway Museum remains, alas, rather static — ostensibly for lack of a budget, though new road schemes in Haifa threaten the very site. There are still many fascinating old vehicles around, but a visit to the scrapyards at Kiryat HaPlada showed how quickly others have been reduced to hunks of steel. Any ideas?

Anyway, welcome to Issue 13. I have decided to extend the "current news" section for this issue, as so much is happening, and also concentrate on following up previous items, rather than starting on the many new topics regarding which I have been sent articles and materials. My thanks to all contributors.

Shalom. Rabbi Walter Rothschild.



13.3 Double-Tracking in Haifa.

A view south towards Haifa Bat Galim Station on 23/4/91.

The new second track is being laid towards the level

The new second track is being laid towards the level crossing/underpass; the existing line is to the left, with the crossing keeper's hut. A bay platform will be built by the car park to the right of the station. On the left is the Haifa Egged bus station. (Photo: W. Rothschild)

13:4 NEWS, FROM THE LINE.

. New Timetable

From 6th. March 1991 sweeping changes were made to the passenger services to Jerusalem. Trains 11 and 14 (6012 on FO) now only run between Akko/Haifa and Tel Aviv Merkaz. The Tel Aviv Darom station been reopened and there are now two return workings between here and Jerusalem - Trains 501 & 503, returning as 502 A 504. These run Sundays - Thursday Inclusive; on Fridays and Eves of Holidays, 503 A 504 are replaced by an earlier service, 6503 (& 6504).

Timings are as follows:

	501	503	(6503)
Tel Aviv Darom dep.	0700	1600	1200
Lod	0713	1613	1213
Ramle	0719	1619	1219
Bet Shemesh	0749	1649	1249
Jerusalemarr.	0835	1735	1335
	502	504	(6504)
Jerusalemdep.	0700	1600	1200
Bet Shemesh	0749	1649	1249
Ramle	0817	1717	1317
Lod	0823	1723	1323
Tel Aviv Darom arr.	0835	1735	1335

It may be noted from the above timings that all passenger trains on the Jerusalem line are scheduled to cross at Bet Shemesh, which provides opportunities for day trips through the highly scenic Judean Mountains section.

On the down side, it is now no longer possible to travel directly by rail to Jerusalem from points north of Tel Aviv; also, no passenger trains now traverse the section from Tel Barukh Junction to Lod, or stop at B'nei Barak and Rosh Ha'Ayin.

At the time of writing it is not known what reasoning lies behind these changes. Possibly they are of an experimental nature to help encourage passengers to use the train between Jerusalem and Tel Aviv In anticipation of opening the through line in Tel Aviv due for completion In 1992. It has been argued that not many passengers travelled through from Haifa, because the circuitous nature of the route (especially the reversal at Tel Aviv and again at Tel Barukh, since the south-to-east spur of the triangle was not restored there) made the Journey too long and uncompetitive. However, the drawbacks to the Tel Aviv Darom (South) station, situated right on the edge of town, are too well known to raise hopes of massive traffic growth at all. The leaflet announcing the changes advises that bus routes 41, 73 & 74 serve the station. Only the 41 actually has a stop In the forecourt - the others use the main road, a good walk away. It is also clear that two locos and sets of coaching stock are now needed for this service, and that e. c. s. workings would be necessary to transfer stock to Haifa for maintenance, since the service works in Isolation from the Northern Division.

2. Yoni Haatzmaut. Extra trains were laid on for the Independence Day holiday this year. On 17/4 (the holiday eve) train 6426/8055 left Nahariyya at 1723 calling at

most stations to Tel Aviv where arrival was scheduled for 1950. Train 6057 left Haifa East at 23-48 arriving Tel Aviv at 0118; and train 8058 left Tel Aviv at 2400 (!) arriving Haifa East at 0130. On 18/4 (Independence Day) train 8426/8055 was repeated from Nahariyya to Tel Aviv running to the sane schedule; and train 8056 departed Tel Aviv at 2100 arriving Haifa East at 2228. Also on the same day two extra trains ran between Tel Aviv Darom and Jerusalem; 8501 leaving Tel Aviv at 1000 and 8503 following at 1800. In the reverse direction train 8502 left Jerusalem at 1000 and 8504 departed at 1800.

- 1. Crane Chopped. The remains of Cowans Sheldon steam crane 3856/1918 at Lod, mentioned in 10:4 (b), were being cut up for scrap on 1/5/91.
- 2. <u>Cut-Away</u>. G12 126 was outshopped from Qishon Works at the end of April with the cut-away side panelling (see previous reports on 124 and 161; 606 also has cut-away valancing). It would appear that this is a new standard style. A Sutrack air-conditioning unit has been fitted to the cab.
- 3. <u>Jerusalem Freight</u>. There is the possibility of more freight traffic to Jerusalem, following the decision to reduce from three to one the number of barrier vehicles on the morning freight train (which is used to check the line) and raise the permitted speed to 50 kph. This would allow more containers to be hauled.
- 4. Station Improvements. Following the demolition of Binyamina Goods Shed, work is scheduled to start in mid- May to move Track 3 some 5 m. to the west, thus making space for the construction of a platform on Track 2, with an overall arched roof, and a subway connection to Platform 1. Another loop track will also be added, as freight traffic is increasing. Work is scheduled to last six months.

Also planned is a second platform at Hadera Maarav, and a proper single platform at Zichron Yaakov. Surprisingly, considering the amount of traffic, Netanya is not yet due a platform on the second track.

- 5. Salt Trains. There is some discussion about the possible introduction of salt traffic between Dlmona and Atlit.
- 6. Liveries. The last IR coaches in the two-tone blue livery were 685 and 640; by May 1991 coaches in the replacement brown/cream livery were themselves in a distinct minority. Those coaches not .provided with air—conditioning after refurbishment and repainting in the new blue/pale blue colours are labelled "2" a distinct reference to 2nd. Class. Alas, some of the newly-overhauled coaches are losing part of their new livery already, for the stripes are applied not as paint, but as stickers, and these are beginning to peel off the result looks most unsatisfactory. Incidentally, the brown/cream livery originally incorporated brown stripe under the windows; someone decided this looked dull, so it was replaced with a yellow stripe.

It is anticipated that the new Danish d. m. u.'s will be in the blue/pale blue livery.

- 7. Negev line. The line from Naan to Kiryat Gat is expected to close for three months in July or thereabouts, for reconstruction and refurbishment. At the moment little traffic uses this line apart from a few freights, but there are plans to reintroduce passenger services to Beer Sheba and Dimona, which would have to use this route to serve Kiryat Gat and to avoid the heavy freight traffic that uses the Ashdod Ashkelon line.
- 8. Haifa Bay Plans. In mid-May 1991 Work at Haifa Bat Galim was at an advanced $\overline{}$ stage to lay a second track over the level crossing, which is Itself being duplicated by a dual-carriageway road underpass. A bay platform for terminating dmu's Is planned for the west side. Double track between there and Haifa East will involve some demolition of property on the west side of the existing line, and the automation (and possible Installation of CCTV) at the level crossings. Two new tracks will extend under the bridge at Zomet Zebulun, so the existing signal box will be demolished to make way, and a new single storey signal cabin is under construction. The Nesher branch will leave the new doubletrack by a single lead only, and all semaphores in the area are to be replaced by colour-light signals within a year or 80. At Klshon two new loops, well-ballasted, are already complete just north of the signal box, and the eventual intention is to provide double track to a point some 1 km. north of Kiryat Motzkin, where a new station will also be built. A depot for the dmu's will be built at Haifa, and another at Lod - presumably for those serving the Tel Aviv suburban area.
- The Ayalon Link. In mid-May there was evidence of a lot of work having been done, in the construction of retaining walls between the western (i.e. southbound) lane of the road and the river. At several work-sites along the route heavy earth-moving or pile-driving equipment was in use, but It was still hard to envisage the exact final heights and alignments In places, and there was no sign of work having commenced at any of the planned stations. At the southern end of the site a large pile of earth towered over the road and the adjacent Tel Aviv Darom station, but It was hard to see where and how the new line would link with the existing one. Incidentally, the southern head- shunt at Tel Aviv Darom was shortened to enable work to begin. A fifth track Is planned to provide a freight route by-passing the four platforms of the new Tel Aviv Merkaz station (which can each hold only eight coaches - a problem when longer trains ore run at peak periods such as Sunday mornings). The Ayalon link will be double track
- 10. Netanya Suburban. Four extra trains have been introduced on the Tel Aviv Netanya section of the route, thus providing the beginnings of a real suburban service. Departures from Netanya are at 0832, 1544, 1604 and 1812, the first of these serving Bet Yehoshua and Herzliyya as well; returns from Tel Aviv are at 0/46. 1434. 1515 and 1718, the latter three serving the intermediate stations.

To provide stock, one train set is split at Tel Aviv on arrival from Haifa, part being stabled for the day In the carriage siding, and two coaches being used for these extra trips. addition all main line trains, even the expresses, now stop at Netanya, giving it 19 weekday southbound departures.

North of Tel Aviv the new concrete footings of Ganei Taarukhah Platform are visible; this will be an island platform when the track is doubled. The northbound road was not fully open yet past Tel Barukh, but it sweeps over a new double-track overbridge provided for the eventual extension of suburban trains to Petach Tikvah etc.; Tel Barukh signal box, formerly in a cutting, now stands exposed in the median strip of the motorway, which straddles the line as far as Gelilot Junction

(the southbound lane crossing the branch to the Pazgaz depot.)

A second track was being laid between km. 82 and 84, just north of Herzliyya, on the west side of the existing track. At various points on the system new level-crossing barriers are in process of being installed, in some cases with a solar panel nearby to provide power.

11. Doublings. Current plans are to double the following sections of line:

Tel Aviv Darom to Merkaz - 4½ km.

Tel Aviv Merkaz to Shefayim loop, about 15 km.

Bet Yehoshua to Netanya - about 6 km.

Hadera to Binyamina - about 101/2 km.

Haifa Bat Gallm - Haifa East - Kiryat Motzkin.

When the Zomet Remez - Tel Aviv line was constructed between the autumn of 1948 and the spring of 1953, provision was made in places for eventual doubling, and some under- and overbridges constructed wide enough for a second track. Until now, however, the only double track there has ever been in the area was for a brief period on the Sinai Military Railway from Kantara to Rafah, seventy five years ago!

12. Coaching sets. The four-coach refurbished sets are always marshalled, from the North end:

Generator coach (with generator installed in the north- end saloon, windows blanked off from inside, door-handles removed); ex-BR Mark 2 in the 68X series; air-conditioned coach; Buffet Car. All have been fitted with smart tables with fold-down edging flaps, and refurbished seating, and are labelled "Karon Meyuchad". A NIS 2 supplement is charged for travel in these vehicles, with orange tickets of that denomination, plus space for coach and seat details, being provided.

The air-conditioning units are roof-mounted, as on buses; there are two per coach, made by Dongwhang,

13. New Tickets. No sooner had Paul written his note for 12:21 than a new design of ticket was introduced; of the same size, it has a pale-blue background with a design of white parallel the logos of both Israel Railways and the Ports Authority, the large flowing words "Rakevet Yisrael" as well as, in smaller script, "Reshut Hanamelim veHarakavot", and has been seen so far in two values - 4 NIS (small overprint) and 7.50 NIS (large overprint).

A further, fuller article on tickets will follow in a future issue.

14. Nahariyya line As well as the works as far as Kiryat Motzkin mentioned above, on 9/5/91 work was in hand installing long-welded rail on concrete sleepers at km. 25. 1 from Akko towards Shavei Zion. Contrary to earlier reports, Shavei Zion halt remains open, served by one train in each direction daily; new automated level-crossing barriers are being installed at several crossings along the route - e. g. at km. 23.7 and 25.1. Akko still has semaphore signals of WW2 vintage; the only signal at Nahariyya is a ground-disc at the south end of the loop. The bus-shelter at Nahariyya Halt (the site of the original HBT Nahariyya station) has been removed, leaving only the concrete base visible by the roadside.

It would appear that there could be reasonable demand for a new halt at the level crossing at Nahariyya South, and possibly even for extension of trains to serve new development around km. 32, near the Itanit plant.

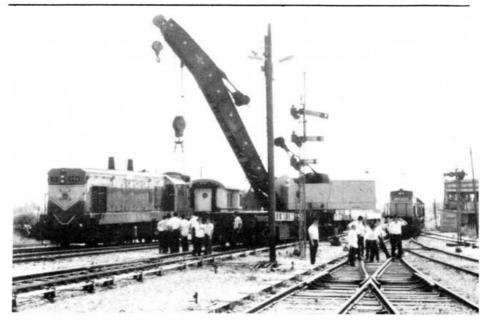
15. Yom Yerushalayim. On 12/5/91 "Jerusalem Day" was marked by special trains to Jerusalem conveying new Russian Immigrants to a tour and ceremonies. Although one was planned from Haifa, it did not run. On the day, Train 8501 left Tel Aviv Darom at 0900, formed of 117 on 608/630/616/604/603. (The loco and 604/603 had formed the 0700 Jerusalem - Tel Aviv). It arrived Lod 0916, and stopped for 6 minutes whilst speeches were made. On Lod station quite a large civic party had assembled, with flags, bunting, p.a. equipment playing Israeli music, a dais etc. This train arrived Jerusalem 1050, and was due to leave (as 8504) at 1900, arr. TA. 2030.

Train 8802 deported Beer Sheba 0800 and, although scheduled to call at Kiryat Gat 0850, travelled via the Heletz line and Ashkelon, arriving at Lod 1000 for reversal and departure at 1025, Jerusalem arrive 11.50. Departure (as 8801) was due at 1800, with arrival at Beer Sheba at 2135. During the reversal all passengers disembarked on Lod platform for speeches (with Russian translations), and were presented with stickers by Lod Municipality; at Jerusalem they were greeted with flowers, and given booklets (in Hebrew) about Yom Yerushalayim, before being marshalled onto buses.

16. <u>Unilok Problems</u>. During a visit to the Haifa Chemicals plant, the Unilok (Model E125, chassis 3049) was observed parked off the rails, whilst shunting was carried out by a tractor fitted with a front-loader attachment. Apparently problems were experienced with low adhesion on the rail wheels; rubber tyres didn't help, so polyurethane tyres were tried; however, the abrasive dust on the tracks led to wheel spin, which caused the polyurethane itself to shed. Eventually it was discovered that the balance was amiss, and only half of the designed 10 tons; adhesive weight was being transferred from wagons being shunted, so slight modifications were intended.

19. <u>More Investment</u>. According to the Israel Commercial Economic Newsletter, Vol. IV, No. 228, (24/5/91) p. 15, "The inter-ministerial economic committee has approved a development budget of NIS 451 million for the Ports and Railways Authority. The budget for the 1991 fiscal year (April-December) has been fixed at NIS 232 million. In addition, a further NIS 219 million was approved for the three-year development program for the railways."

In addition a NIS 5 Billion scheme has been approved to create jobs for new immigrants by improving the country's infrastructure. This includes NIS 75 M. for roads (to create 660 jobs) and NIS 170 M for the railways (to create 700 jobs). This item really startled me - more for rail than for road!



13:5 Derailment at Lod.

On Wednesday 8/5/91 loco 114 derailed on points at Lod South Junction whilst returning the e.c.s. of a special train to Jerusalem. This is the scene at 12.30; 126 was in attendance; Crane 113 is lifting the cab end of 114 to rerail the bogie; the coaches (618/76/83/73/607/53) stand, undamaged, on the line from Ramie; opposite the South Signal Box stand Co-Cos 615 and 605, which have arrived Light from Ashdod and cannot pass the crane to get to the depot.

By 1508 all was cleared, and 126 took the loco and stock away and the crane was returned to the adjacent depot. Visible in the photo is a crowd of pupils from the Lubavitch Yeshiva at Lod, for whom this must have been the most exciting event since the last derailment!

According to an Item In "The Israel Commercial Economic Newsletter", Vol. IV No. 208, Jan. 4 1991, A. Amit has signed a contract with Haifa Municipality's Department of Economic Development to restore the Carmelit tunnel subway system. The company submitted the lowest bid on two tender offers, together worth NIS 6.5M. A. Amit will both renovate the tunnel passageway and rebuild the subway stations. Chanan Nitzan, head of the economic development department, estimated that the renovation project should be completed within a year.

At least one of the old Carmelit cars, No. 2, was lying in the scrapyard at Kiryat HaPlada in May 1991. Apparently it had been offered to the Railway Museum, which declined it as it had no budget to cover the transport costs. It is a pity that even the Haifa Municipality couldn't find space for a relic of a distinctive feature of Haifa life, or at least provide a free lorry!





Following on from Frank Adam's query in 12: 17, I have received an informative letter from Benno Bickel, who had extracted some information from "The Locomotive", Vol. XL I (July 15th. 1935), p. 211. He also referred me to "Railway Gazette", Vol. 1935 - II, p. 232f, which was also sent to me by Geoffrey Horsman. This includes a description also of the Nasmyth Wilson O-6-OT's, and on p. 281 of the Aug. 16th. 1935 issue are two photos, one showing a loco on a low-loader hauled by a heavy traction engine through the streets of Glasgow, the other showing 5 locos and a tender being loaded onto "one of Christen Smith's "Belships" " on the Clyde.

The text reads, in part:

"New locomotives recently constructed in this country for service in Palestine comprise six 4-6-0-type passenger locomotives, with double bogie tenders, built by the North British Loco. Co. Ltd., and three 0-6-0 type side-tank shunting engines built by Nasmyth, Wilson & Co. Ltd. Manchester. Both classes of engines have been built to the requirements of Major H. A. Cotchlng, Chief Mechanical Engineer of the Palestine Railways and to the specifications and under the supervision of the Crown Agents for the Colonies.

The passenger engines are intended for main line working between Haifa and El Kantara where traffic demands necessitate heavier trains than the existing locomotives can haul at scheduled speeds. Owing to bridge limitations the maximum axle load is restricted to 17 tons....

The cylinders have 10 in. diameter piston valves of the narrow ring built-up type, combined bypass and anti-vacuum valves, and U. S. type all-cooled metallic packing. Cylinder lubrication is effected by means of Detroit hydrostatic sight feed lubricators. Walschaerts valve gear with a $6\frac{1}{2}$ in. travel and screw reversing are employed.

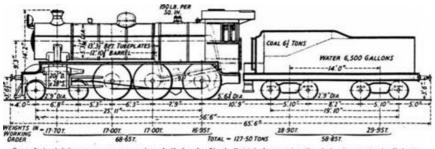
The boiler is equipped with a top feed arrangement fed by two British made Sellers No. 9 non-lifting type injectors, and other fittings comprise M. L. S. superheater, two 2½ in. diameter Ross type muffled pop safety valves. Everlasting type blow-off cock. Hosier speed recorder and Stone's electric lighting equipment. Alfol insulation covers the boiler and cylinders. The ashpans are of the hopper type and the smokeboxes are fitted with spark arresters of Draftac netting. The coupled axleboxes are lubricated by means of Wakefield mechanical sight feed lubricators located in the cab. Armstrong oilers ore fitted in the keeps of all engine and tender axleboxes for oiling the underside of the Journals.

The tenders carry 6, 500 gallons of water and 6K tons of cool. This large capacity is necessary to enable the locomotives to cross the Sinai desert from Gaza to El Kantara, a distance of 147 miles, without taking water; the original locomotives had to take water at an intermediate point to which it was carried in tank wagons. "There follows a list of dimensions, most of which agree with "The Locomotive"s text.

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The specifications listed in "The Locomotive" are laid out a
little differently:
    Engine weight, working order:
                                                   68.65 tons.
    Tender weight, working order:
                                                   58.65 tons.
    Weight, combined total:
                                                   127.3 tons.
                                                    50.95 tons.
    Adhesion weight:
                                                    20% in.
    Cylinders. (2). diameter:
    Piston stroke:
                                                    28 in.
                                                    5 ft. 6 3/4
    Wheels: Coupled: diameter:
in.
            bogie, diameter:
                                                 2 ft. 9 in.
    Wheel base,
               rigid:
                                                 14 ft. 0 in.
                total (engine):
                                                 25 ft. 11in.
                                                    190 lb. per
    Boiler working pressure:
sq. in.
                                                 1,423 sq. ft.
    Heating Surface:
                      Tubes:
                      Firebox:
                                                   176 sq. ft.
                                                 1,599 sq. ft.
                      Total:
                                                   350 sq. ft.
                      Superheater:
                                                 1,949 sq. ft.
                      Combined total:
   Grate Area:
                                                    29 sq. ft.
So - the superheater surface is less than 400 sq. ft., as
supposed by Frank Adam. Clearly when the tenders
converted from coal to oil, this had no impact on the water
capacity.
      There is a diagram, from which the following can be
extracted:
Height, rail to top of chimney:
                                     14ft. 2 in.
         rail to middle of smokebox: 9 ft. 3 in.
         rail to middle of buffer:
                                     3 ft. 0%in.
Boiler: Length of barrel:
                                    12 ft. 10 3/8 in.
        Between tubeplates:
                                    13 ft. 3% in.
        Diameter:
                                     5 ft. 3 1/16 in.
Length of ashpan:
                                     9 ft. 7 in.
Bogie wheelbase:
                                     6 ft. 8 in.
Coupled wheel centres:
                                     6 ft. 3 in. & 7 ft. 9 in.
Tender: bogie wheels diameter:
                                     2 ft. 9 in.
        bogie wheelbase:
                                     5 ft. 10 in.
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Strangely, the overall length of the tender 16 not given, though the overall length of engine and tender combined 16 65 ft. 6in. They were certainly very handsome engines.

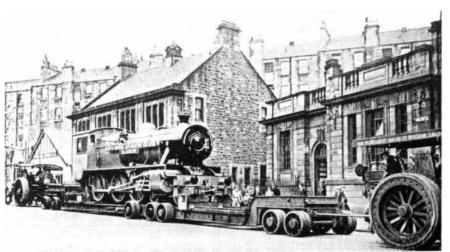
distance between bogie centres: 14 ft. 0 in.



One of six 4-6-0 type passenger engines built by the North British Locomotive Co. Ltd., for service in Palestine



Completely assembled 4-6-0 locomotive built by the North British Locomotive Co. Ltd.. for the Palestine, Railways bring shipped from the Clyde on one of Christen Smith's "Belships"



Road haulage of 4-6-0 locomotive from North British Locomotive Co. Lid. works to the riverside for shipment to Palestine

(See editorial note on page 262)

Or "The Train in Spain stays Plainly on the Brain'".

In 9:6 and 12:15 I described railway aspects of this film, and asked for more details. They come in plenty from Roy Ellis of Chermside, Queensland!

The film was shot in 1960-1, and released by Columbia Pictures in 1962. (It opened in London in December that year). Some information that follows comes from "Railway Magazine" for January 1963, p. 65, and some from film magazines.

The on-location shooting for this film, including the railway sequences, were shot in Spain. The area selected by the directors to film the railway sequences was many miles from the nearest railway line, and a mile and a half of 5' 3" gauge track was laid specially for filming purposes, though the cost of transporting the two locos and rolling stock to the site must have been quite substantial.

The first train in the film is partially derailed, and it is understood that after filming was completed, that it was just left where it was, the cost of recovering the remains and transporting them out of the area not being worth the expense for the scrap value it would have returned. (Ed.: One wonders whether the rarity value of the loco would not outweigh these costs now, assuming it is still there thirty years on, in the dry desert atmosphere!)

Parts of the desert scenery were shot in Jordan and Morocco, and in fact the narrow-gauge track seen about one hour into the film (see 9:6, para.2) is, actually part of the Hedjaz. Presumably the Jordanians weren't keen on a film company blowing up one of their locos and a train - a bit too authentic for some tastes - hence these parts were shot in Spain. Purely desert scenes were filmed in Morocco.

Two locos were acquired, though only one was used. These were RENFE ex-Andaluces Railway 2-6-0s, of the series 130-2034 to 2045 (built by Cockerill in 1885) and 2051 to 2070 (built SACM in 1890). "Steam on the RENFE", p. 97, shows a photo of these locos and technical details; they were originally built as $0-6-0^{\circ}$ s, and rebuilt at Malaga between 1920 and 1927. Since the loco derailed in the film appears only as "130-203", the assumption is that the last digit has been painted out, but that it is from the first batch.

The rolling stock is very German in appearance, which presumably made it more attractive to film makers seeking to represent the German-built Hedjaz stock. 28 items were acquired, all of which came from the Almedla, Alhame and Santa Fe Railway in southern Spain via the RENFE. This line, approx. 20 miles long and originally privately-owned, ran from the main line at Santafe (sic) just west of Granada, to Alhama or Alhame, and eventually became part of the Andaluces Railway. The stock bought comprised two trains:

- a). The train to be derailed. Eight 4-wheel end-loading clerestory coaches, a 4-wheel van, two 4-wheel open wagons and a 4-wheel brake van.
- b). 4-wheel open wagon pushed ahead of the loco; fourteen 4-wheel open wagons fitted with side extensions for carrying horses, and a 4-wheel brake van. The leading wagon and last van were set up with sandbags for soldiers travelling as train escort.

Interestingly, the "R.M." article specifies: 8 passenger coaches, 14 horse wagons, two luggage vans and one guards van - which doesn't quite tally with the above; at least three of the open wagons must have been used twice.

The "horse train" was filmed first, then the derailment scene.

This area of Spain is frequently used for filming — not only a large number of "spaghetti Westerns", but also "Dr. Zhivago"; the RENFE keeps a stock of old locos and coaches for filming work at Guadix, near Granada, and the companies have a habit of leaving their film sets behind when they move on.

As a footnote: "Rail" Magazine No. 148, p. 46, mentions that Wickhams of Ware built a special tyred trolley and trailer, together with lengths of specially prepared track, for Horizon Pictures to use filming desert scenes at Agaba for this film.

13: 9

GREAT WESTERN WAGONS.

A little more information has come to light concerning the Great Western Railway wagons that were shipped to the Middle East, the frame of 88965 now carrying a water tank at Lod. (See 10:4 (e))

Thanks to David Hyde, a specialist in G. W. Wagonry, I can confirm that GW 88965 was indeed built by the Metropolitan R.C.& W.Co (actually nominally by the finance company owned by them) for the GWR when that company needed many thousands of new 5-plank open wagons to replace the many life-expired and older-braked vehicles. Swindon Works could not supply in that large numbers, and Gloucester CAW and Metropolitan CAW built large numbers, in addition to hiring their own vehicles to the GW. 88965 was one of 1000 ordered on 20/11/1911 to Lot 696, completed by 10/8/1912, serial nos. 88001-89000, cost each £112, to Diagram 0.11 (which the GW were also building themselves). These wagons had wheelbase, to carry 10 tons, tare 5t. 17c. 3q.; they had self-contained buffers, Dean/Churchward either-side brake, and a sheet supporter bar. The accompanying photo shows an identical wagon built to Lot 727 in March 1913, also part of an order for 1000.

Many Diagram 0.11 wagons went abroad, carrying howitzers and horse-drawn vehicles constructed at Swindon Works for the War Dept. The body woodwork was cut off for easy loading.

ISRAEL RAILWAYS AND OPERATION DESERT STORM. By Paul Cotterell.

The following is an account of how the Gulf War affected I. R. It is, in large part, a personal view of events reflecting the information which came my way at the time, and is based on scribbled notes jotted down during the war.

17/1/91: I'm working night-shift at Tel Aviv Central when word comes through at about 0200 that the war has started. Switch on the radio - the first reaction of any Israeli to a crisis. Stay glued. Emergency regulations are declared but nobody seems too clear as to what these mean. The trains keep running though very few people use them. The conductor for train 52 (0600 to Nahariyya) falls to turn up so I get press-ganged into replacing him as far as Haifa Bat-Galim. Three people aboard (including me) as we leave Tel Aviv. Not many more by the time we get to Bat Galim. During the day only a few freight workings operate as factories etc. (e.g) the Dagon grain silo, the Binyamina quarry) are closed until the situation clarifies. Israel Railways are considered an essential industry so keeps on running. Nice to feel wanted for a change.

18/1/91: First Scud missile attack on Haifa and Tel Aviv about 0230 hours. Night freights along main line had been reduced from five to two in each direction. These are held up during the missile attack before proceeding. Only three passenger trains are worked in each direction during the day, of which just one continues to and from Nahariyya.

19/1/91: (Saturday). Baghdad Radio claims that Tel Aviv has been reduced to a crematorium. IR takes the opportunity to carry out engineering work along the main line.

20/1/91:Only freight 331 worked to Lod (return light engine). Scuds don't arrive that night, but the first Patriot missile batteries do. During the day all passenger trains except 8023 and 8036 are run, but with 4-coach rakes only as customers are still few. (Normal rakes are eight coaches).

22/1/91: Full passenger and freight timetable in force. Then, at 2037, a Scud lands in Ramat Gan quite close to Tel Aviv Central, causing extensive local damage. Train 55 (Nahariyya - Tel Aviv) is held at Bet Yehoshua for 214 hours as a permanent way trolley is called out to check the track ahead for any debris. Through the communications network (control to engine driver, driver to guard), passengers were informed of the situation, and arrangements made to have them conveyed to their destinations by bus. Following freight trains also held up and these return to Haifa very late next morning.

23/1/91: Full timetable working despite last night's missile attack. Passenger trains now back to full sets of coaches as Tel Avivians begin to feel paranoid. Many suddenly discover long-lost relatives and friends living in quiet and previously despised villages in country areas, and take nightly shelter under their roofs. Morning and evening trains to and from Tel Aviv become positively overcrowded. Several stations register 300% increase in

passenger numbers. First successes for Patriots as two of them intercept a Scud, at about 2205, on its way to Haifa. No disruption to traffic either, but a pw trolley is again despatched to check that nothing nasty has fallen on to the Nahariyya line.

By now we are beginning to get well into the swing of things. The Scud attacks continue, some getting through, others being shot down by the Patriots. Israel Railways is little troubled by these attacks other than having to cope with muchincreased commuter traffic to and from Tel Aviv. Printed notices begin to appear in trains and stations instructing passengers what to do when the sirens wail.

On 27/1/91 a light engine is slightly damaged by rocks on the line at Bittir (on the Jerusalem line). A show of support for Saddam or a natural rockfall? Nobody seems too sure.

From 17/2/91 trains 51 and 8036/6022 call at Kfar Vitkin, a station which has been closed to passengers for many years. Obviously at least one refugee from Tel Aviv has found sanctuary there.

On 28/2/91 President Bush orders a halt to the ground war following the destruction of much of the Iraqi military machine. It is Purim - the Jewish holiday commemorating the destruction some 4,000 years ago of another would-be destroyer of the Jews.

As can be seen from the above, Israel Railways were little affected apart from the first week or so of the war. For a while trains continued to call at Kfar Vitkin, though with the lifting of emergency regulations it was unlikely that they would do 80 for much longer. Currently one train in each direction calls - see separate article. It also remains to be seen how many of those people who suddenly rediscovered the pleasures of train travel will continue to be faithful to IR.

For the record, there were a total of 39 Scuds fired at Israel, most aimed at Tel Aviv. One person was directly killed in these attacks with 12 additional related deaths (e.g. asphyxiation, heart attacks). Nearly 200 were injured. Just over 4,000 buildings were destroyed or damaged, the great majority residential dwellings. Nearly 1700 families were evacuated in the Tel Aviv area.

13:11 "A TOURIST'S COMPANION TO ISRAEL."

This little booklet was published by the State of Israel Tourist Centre; the 3rd. edition is dated 1956.

The sole reference to railways is on p.39:

J'lem - Haifa: 2 per day;	IL 1.450 single,	2,500 return.
J'lem - Tel Aviv: 3 per day;	0.700.	1,200.
J'lem - Nathanya (sic).2 per day	1.000.	1.800.
T. A Nathanya: 7 per day.	0.250.	0.450.
T. A Haifa: 7 per day.	0.800.	1.400.

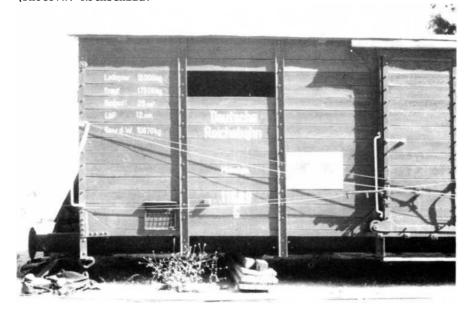
"Timetable for all train and bus services can be obtained at all Government Tourist Information Offices as well as at your hotel, travel agent, railroad, bus and inter—urban taxi station."

station."



13: 12 VAD VASHEM WAGON

Further to the note in 12:20, this wagon was photographed on 28/4/91 at its temporary position behind the main office building. It is eventually to be put on display elsewhere on the site. (Photo:W. Rothschild!



The 4.8 km. link between Tel Aviv Merkaz (Arlosoroff) and Tel Aviv Darom (Kibbutz Galuyot), photographed on 24/4/91.

Picture 1 shows the trackbed looking south from just south of the headshunt at Merkaz; on the right, the southbound road lane with the exit for Hashalom signposted; on the left, a concrete retaining wall, behind which is a drop to the river, and just visible beyond that is the northbound road lane.

Picture 2: A little further south, still looking south, with the Hashalom exit in the right distance. A road-roller flattens a layer of sand on the trackbed.

Picture 3. Looking northwards from the top of a mound of sand at the southern end of the Ayalon project. Tel Aviv Darom station lies to the left of the photographer; in the middle distance is the bridge carrying Kibbutz Galuyot road across the Ayalon; a spur on the left brings traffic southbound to the Ayalon road, direction Jerusalem. Beneath and before it are the site offices of "Reved B. M.", whose head office is at Rehov Pat HaShulchan 4, Tel Aviv. The Ayalon can be seen on the right, with a weir at the edge of the picture.



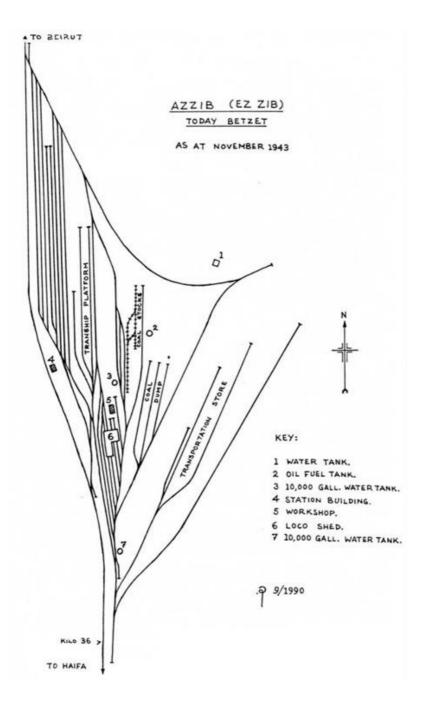




No sooner had Harakevet 8 appeared than a couple of old maps turned up which gave a much better idea of the full layout at Azzib yard. (See 8:8). The two maps in question were given to Harel Even by a recently-retired railwayman, and Harel has kindly allowed me to make the accompanying composite sketch based on them. It is a composite because one of the maps shows only the south end of the yard, and thi6 shows certain detail differences from the other, much larger map showing the whole of the site. Nevertheless, I believe my sketch to be reasonably accurate.

What particularly caught my eye is the narrow (alomost certainly 60cm.) gauge isolated line leading from the coal stocks area to end up opposite one of the two 10,000 gallon water tanks. This is shown on both the original maps and in my sketch with cross-hatching. The narrow-gauge is short - just a couple of hundred metres or so from end to end - and I've no doubt that the skip6 for transporting coal would have been hand-powered. It is just within the realm of possibility that mechanical power could have been used. Geoffrey Horsman has sent me copies of extracts from the Hunslet Engine Books, one page of which shows two 60cm. gauge diesels as being purchased by Palestine Railways through the Crown Agents (per Robert Hudson). These were works number 1836, a 10/12hp. 0-4-0 diesel delivered on 11 November 1936; and wks. no. 1864, a 20hp.0-4-0 diesel delivered on 29 November 1937. If, indeed, these two small locos were bought by PR, then I can only say that I cannot recall them being included in any subsequent official lists of PR locomotive stock. Nor can I think of any suitable PR site where they would have been needed unless the ballast and stone quarry at Nur Esh Shams on the dual gauge (standard and 1.05m) section between Tulkarm and Massoudieh which I have not visited - was larger than I had previously supposed. [Ed. : I have visited the remains of this site , and it was pretty extensive. I However, in the absence of more conclusive evidence, I am very much of the opinion that the two abovementioned diesels were not purchased by PR, and that the entry in the Hunslet records 16 in error. I believe it more likely that they were sent out to Palestine (but not to Palestine Railways) for work at an industrial site. My guess, for what it is worth, is that they went to the Dead Sea Potash Works which did receive other similar Hunslet diesels about the same time.

But getting back to the map: I have not strolled around the Azzib (now Betzet) site. A daily trip working still gets here from Haifa. Tal Dekel and Harel Even, who have visited Betzet recently, tell me that the 'main line' now stops short of the loco shed site and that there is a siding leading off to what was once the transportation store area. Bits and pieces of track and remains of concrete foundations can still be discerned among the weeds to the north of the present end-of- track. Beyond are the remains of the HBT line up to Rosh Hanikra and into Lebanon



Following are extracts from "A Brief Record of the Advance of the Egyptian Expeditionary Force (EEF) Under The Command of General Sir Edmund Allenby, July 1917 - October 1918." Published by the Government Press 4 Suvey of Egypt, Cairo, 1919.

- p. 74 refers to Armoured Trains Nos. 14 3 on "Palestine Lines of Communication", 1. e. East of Kantara; p. 77: Train No. 2 on "Forces in Egypt", 1. e. West of the Suez Canal.
- p. 75: On the Palestine LoC were British Travelling Post Offices.

 1. e. trains, coded: DAL, KAL, LAD, LAK, LAP, PAL, RAB, BAR, JAP, PAJj on p. 76: Two more, coded CAT, TAC.
- (Ed. Clearly these are 6 pairs, with the initials reversed, possibly for the reverse direction). There were ten divisions in the EEF could this provide a clue to the first ten trains ?).

On p.93: The Postal Load through 140 post offices, with 919 officers and men, would average 7261 bags per week; the weekly record was 24, 810 mall bags; there were an average of 565,000 letters home a week.

The Royal Engineers deployed 5 Railway Transportation Sections on the Lines of Communication; in use were Railway Operating Division (ROD) Sections: 71, 72, 73, 74, 75, 76, 77, 94, 95, 99, 100, 101, 102, 103, 104, 105.

p. 80: Hospital Trains in use were (former numbers in brockets): 40, 44 (1),45 (2),46 (3),47 (5),48 (43), 50 (45), 51 (46), 56 (47), 49 (44), 57 (11). (This last was "Egyptian").

The implication is that the EEF originally numbered their own trains early in the war, and then had to go through a thorough renumbering when London wanted a clearer indication of what was where.

p. 83: The water trains supplying the track, pipe and road-laying gangs had a special siding at the railhead that could take and handle 20 trucks simultaneously. They emptied into a row of canvas reservoirs by the rails, from which the 10-gallon camel tanks ("fantasses") were filled for distribution.

From El Arish Egyptian troops could use local water in part but railway engines were still limited to the piped water as far as Khan Yunis. All visitors to Israel know that the local water is very "hard".

p. 90. "Previous to the operations against the Gaza position in 1917, the main line had been laid to kilometre 226.2 and was operated as far as Belah Station.

From Rafa (kilometre 200), a branch line had been laid in the direction of Beersheba as far as kilometre 28 from Rafa, and was operated as far as Shellal Junction from which point a short line of about seven kilometres in length ran southwards to Gamli.

During the same period the double tracking of the main line

from Kantara East to Rafa had advanced as far as kilometre 137.5, that is to say, to Maadan Station. This length of double line enabled considerable economies to be effected in time, engines, trucks, and operating staff. In order to economise transport immediately in front of Belah, for the purpose of increasing the amount available in the Beersheba area, a two-foot six-inch railway was run from Belah Station to various points but little west of the Wadi Ghuzze. Before operations commenced this line had attained a length of nineteen kilometres and was eventually extended another four kilometres. A large part of this line was in direct view from the Turkish position, but no material damage resulted. This line enabled large reserves of supplies and ammunition to be placed before—hand well up towards the front line and proved to be of considerable value.

In connection with the Gaza operations the following programme was arranged. The Beersheba branch was to be extended to Karin Station at kilometre 36.8. This necessitated track being laid at a rate approaching two miles per day. At the same time it was arranged to extend the main line in front of Gaza, across the Wadi Ghuzze, and then construct a dummy station on the west side of the Wadi. In spite of heavy rain both parts of the programme were carried out successfully; Karm station being opened for traffic one day ahead of the scheduled date, viz Oct. 28. During the operations the Beersheba line was extended to about kilometre 39.

In view of the successful development of the attack, work was stopped on the Beersheba line, and the construction of the main line towards Gaza was recommenced on Nov. 10.

Up to this date the light railways were constructed and operated by the Railway Operating Division of the standard gauge. Owing to the rapid advance after the capture of Gaza and the necessity for operating the captured Turkish railways (at this time isolated from the standard gauge system), a Light Railway Organization was formed which moved up to Deir Sineid to take over and operate the three-foot six-inch lines taken from the Turks. The useful part of this line extended from Belt Hanun to Jerusalem (89 kilometres), with a branch from Junction Station (Wadi Surar Junction) to Ludd (19 km.) At first the line was only available for use as far as Artuf on the Jerusalem line on account of the destruction of bridges. On the branch towards Ludd the bridge over the Wadi Surar had been destroyed, but a temporary deviation was soon constructed which made this line available for traffic.

On the line between Artuf and Jerusalem four steel bridges had been destroyed, viz: two of thirty metres span, one of ten metres span, and one of sixteen metres span. The work of reconstruction was immediately commenced.

Further advances by our troops and the possibility of unloading stores at Jaffa rendered the construction of railway communication with that port necessary. The light railway staff was therefore transferred to Jaffa about the middle of December and construction commenced on lines north of Jaffa and towards

Ludd to connect with the existing 3'6" line. To enable this to be done the 3'6" lines were taken over by the Railway Operating Division.

The reconstruction of the bridges on the Jerusalem line was much hampered by the narrowness and rocky nature of the gorge which prevented much material being taken forward to any bridge until those in rear were completed.

The four bridges were finally completed and the whole of the line to Jerusalem opened to traffic on Jan. 27 1918.

During this period the narrow gauge suffered severely from rains. The line from Deir Sineid to Tineh was constructed on new earthworks with inadequate drainage. Numerous washouts occurred, and the line was closed on this account on several occasions for periods varying from three to ten days. Meanwhile, the standard gauge was progressing through Gaza, and Deir Sineid Station, with ample facilities for transhipment to the 3'6" line, was opened for traffic on Nov. 28, 1917. The opening of this station enabled additional rolling stock for the narrow gauge to be brought up with consequent increase of capacity.

North of Deir Sineid the standard gauge line runs through long stretches of brown cotton soil which caused endless trouble during the winter. The heavy rains caused subsidences of the new earthwork and washouts were frequent. The unfavourable nature of the soil not only caused trouble on the railway but greatly hampered the camel transport during wet weather. Indeed movement of any sort of transport was at times impossible. Considerable relief was afforded when the railway reached the sandy hills which stretched from south of Jaffa towards Wadi Surar Junction. To effect this a temporary supply railhead was opened at Delran (km. 293) on Jan. 8, 1918. Besides taking supplies for troops to the north, this station was used for supplies to the Jerusalem region, as Ramleh (about seven miles distant) was connected to Jerusalem by a fairly good metalled road and by the older portion of the 3'6" line, which was made available for through traffic by the completion of the bridges on Jan. 27, 1918.

Ludd Station, with extensive railway facilities, and unloading sidings for all departments, was opened for traffic on Feb. 4, 1918. Ample transhipment facilities to the 3"6" line were soon available for all services, which reduced the handling of goods destined for Jerusalem to a minimum.

Construction of the line north of Ludd was continued as far as kilo 315, just beyond Rantieh Station, which was as far as the military situation then permitted.

It soon become evident that traffic demands to Jerusalem could not be met by the narrow gauge line. The first stage of relief was the laying of the standard from Ludd to Artuf and the construction of transhipment sidings at the latter place. This portion of the line was laid with three rails, so as to allow the narrow gauge trains to run at night while construction work was not in progress. This work was commenced on Feb. 27, 1918, and finished on March 31. It was then possible to concentrate all the narrow

gauge rolling stock on the Artuf-Jerusalem section, thus increasing the capacity of the line.

Shortly after this. it was decided to push the standard gauge on to Jerusalem and, as the amount of rockwork necessary to permit the passage of the larger rolling stock was not excessive, the work was put in hand on April 22. Except for eight hours per day, while construction work was in progress, the narrow gauge line was open for traffic, and was worked to its maximum capacity. The dally programme of work consisted of taking up a length of narrow gauge, levelling and removing the ballast, laying the standard gauge, laying the narrow gauge lines inside the new ones and finally joining up the narrow gauge to permit traffic to continue. This is probably the best laid and most permanent section of the whole system. During the alteration of this section the average dally tonnage taken into Jerusalem by rail exceeded 740 tons, and as a maximum reached 1,051 tons on May 24. Jerusalem was reached on June 9, and the station opened for standard-gauge traffic on June 15.

The construction of the standard gauge line to Beersheba had been going on intermittently during the spring and was finished on May 3, 1918.

In accordance with the demands of the military situation the standard gauge was laid on the old Turkish formation between Irgeig, on the Beersheba line, and Wadi Surar Junction, thus giving an alternative line north of Rafa to Ludd, Wadi Surar, and Jerusalem. This was carried out between May 14 and July 8.

The construction of the double line, which was temporarily stopped near Maadan, was recommenced by a small construction party on Nov. 1, 1917, and was completed through to Rafa on April 17, 1918.

Following up the successful operations of Sept. 1918, railway construction was again commenced on the 20th. On Sept. 28 the standard gauge alignment swung on to the old Turkish formation north of Ras el Ain, thus enabling construction to be carried out an increased rate (2 km. per day).

Tul Keram station was reached on Oct. 15, enabling direct transhipment to take place between the standard gauge and the narrow gauge running towards Haifa and Damascus. Continuing northwards from Tul Keram, by way of Tanturah and the western end of Mount Carmel, the line reached Haifa, and was opened for traffic early in Jan. 1919.

From Dec. 1917 light railways were constructed and operated for the supply of our more advanced lines:-

Jaffa to Ludd.

Ludd to Ras el Ain. Kafr Jinnis to Lubban.

Sarona to Jelil.

Sheikh Muannis to Carrick Hill. Jerusalem to Bireh.

A total of some 115 km. , exclusive of sidings.

The following figures are of interest in connection with the standard gauge lines:

Total length of track laid: 1,009 km. (inc. Haifa station)

Number of turnouts laid : 748.

Number of stations : 86.

Number of Locomotives : 169.

Number of wagons : 2,573.

Number of passenger vehicles : 50.

Number of hospital coaches : 98

The Units which have taken part in the construction and operation of military railways of all gauges ore:

Railway Operating Division, R. E. (18 sections, about 5,500 all ranks.)

96th. Light Railway Operating Company, R. E.

98th. Light Railway Train Crew Company, R. E.

115th. Railway Construction Company, R. E.

116th. Railway Construction Company, R. E.

265th. Railway Construction Company. R. E.

266th. Railway Construction Company. R.E.

272nd. Light Railway Construction Company, R. E.

1st. Bridging Company, Canadian Railway Troops.

299th. (Indian) Railway Construction Company.

1/23rd. Sikh Pioneers.

2/23rd. Sikh Pioneers.

2/32nd. Sikh Pioneers.

121st. Sikh Pioneers.

Egyptian Army Reserve, (about 2,800).

Egyptian Labour Corps, eventually about 26,000).

The average dally tonnage of supplies despatched by rail via Kantara to Palestine were:

June, 1615 tons; July 2,026 tons; Aug. 2,317 tons; Sept. 1,732 tons; Oct. 806 tons."

Dally supplies had included 8,000 galls, of aviation Petrol and 15,000 galls. of petrol for transport, plus 5,000 galls, of kerosene.

The Egyptian Labour Corps. was a vast operation; it was organised in Gangs of 50 (one "Reiz", Foreman, and 49 men); 4 Gangs formed a Section of 200, three sections a Company of 600. There would be one officer per 200 men. The text describes them: (p. 109):

"Those who have seen many thousands of Egyptian labour Corps labourers on task work, either driving a cutting or with pick and fasse through Palestine clay, or in their thousands carrying baskets of earth to pile up some railway embankment, will long remember such examples of intensive labour

It stands to the lasting credit of the officers of the E.L.C. that certain companies, under selected Egyptian Labour Corps officers, reached such a high standard in connection with work on roads, railways, pipe-lines and other services, that they were able to make satisfactory progress without constant expert supervision."

Whenever Max Seidenberg and I sit down for a chat you can be sure that the conversation will get around to Steam Days sooner or later. And so it was quite recently, when Max reminisced about his time on the footplate and provided what I think to be the answer to a question that had been at the back of my mind for a long time. Why was it exactly that a couple of the PR Kitson 2-8-4T's came to be fitted with a boiler-top sand dome from Baldwin locomotives?

Max remembers the Kitson tanks as being fine strong engines. Sometimes he would be standing in Deir Esh Sheikh (Bar Giyora) station with a train from Jerusalem waiting for a freight to clear the section from Artuf (Beth Shemesh), and he would know that a Kitson was heading the freight long before it hove into view. The steady machine—gun roar of its exhaust reverberating around the hills was quite unmistakable. it sounded as though it must be travelling at express speed, but those small driving—wheels deceived and, when it appeared at last, the Kitson was doing no more than 20 kph.

One drawback of the Kitsons was their sanding gear. The sand boxes were located under the running plate in typical British fashion; and what with the water, steam and oil to be found in the loco's nether regions, the sand pipes clogged up easily. This, of course. led to bad bouts of slipping. Many was the time that Max had to take a hammer to the pipes in order to get a trickle of sand down beneath the wheels — sometimes while on the run. Certainly those small diameter driving wheels of the Kitsons would reduce the slipping, but with these locos doing much of their work up grades of 1 in 50 and worse, it was eventually considered necessary to improve the sanding arrangements. Putting the sand atop the boiler kept it warm and dry.

So far as I know only two of the Kitsons received the boilertop sand domes. These were No. 2 (so illustrated on p. 48 of "The Railways of Palestine and Israel") and No. 4 (of which I have a photo taken at Jaffa in WWII showing it with the sand dome). It is possible that others of the class also received the new sanding arrangement, but I have no photographic evidence to support the suggestion.

As already stated, the domes came from the Baldwin locos which originally had two sand domes as standard but lost one of them over the years as the locos went through workshops for overhaul. The last time I poked around Qishon Works one of these Baldwin sand domes was still lying in the grass at the top of the north yard. It was very rusty, but I was able to open and close the filler —lid easily enough.

And the pig's fat?- Max tells me that the British introduced this for loco cleaning purposes. Apparently it put a lovely shine on the brass and paintwork, but nearly led to a repetition of the Indian Mutiny. The Jewish workers among the cleaning gangs seem not to have objected too strongly - after all, they were not being forced to eat the stuff. Not so with the Moslems. They threatened to stop work. The rebellion was short-lived however - just as long as it took the management to inform the offended workers that they'd lose all pay until they got back on the job.

Noted in reading by Paul Cotterell. This is the second instalment from Baruch Katinke's book "Me'az V'Ad Henah" (see 11:22), and is the chapter entitled 'A Dreadful Dream in Damascus', on pp. 151-2 of that book.

"One day in the spring of 1913 I was informed by the head of the mechanical department, Kurtz, that I would be accompanying the General Manager on his way to Damascus, and that I would be staying there under his authority in order to conclude the investigation into a railway accident which had occurred previously in the Wadi Rachmuk(מאַדי רְּחַמוֹן).

The General Manager had his own special coach and he invited me to join him in it, but I chose to travel on the locomotive alongside the engineer (מתכונן). There were two reasons for this: firstly to exempt myself from the company of Dieckmann, and secondly because I wanted to be closer to the engineer.

We left Haifa about 2pm. The General Manager was late and when he arrived he apologized for his lateness and asked the engine driver to travel at the fullest possible speed allowed so that we would arrive at Damascus in the early hours of the night. The best loco and the most expert driver were assigned to the train.

At kilometre 13, close to Jalamo (117'1), where the railway parallels and then crosses the road to Nazareth, we saw a wagon hitched to a horse travelling on the road towards the level crossing. The engine driver, in accordance with the traffic regulations, blew the whistle in a long series of warnings, but did not reduce speed and continued on his journey.

And here occurred a disaster. The horse was scared by the engine whistle and the waggoner lost control of the rearing animal. The wagon mounted the rails in front of the engine.

The veteran and experienced loco driver stopped the train immediately, but was too late. The engine and front coaches passed over the wagon and also over the horse and waggoner.

We got down onto the track and saw the horse crushed beneath the coaches. We found the waggoner, a dark-skinned Arab, headless and armless. The engine driver reversed the train and we removed the splintered cart, the horse's carcase, and the body of the waggoner.

We continued to Afula, where the General Manager arranged for detailing of the incident (מרך..פרטיקל על המקרה), it being his opinion that the engine driver was not to blame, the body of the waggoner was handed over to the railway police.

We were shocked by the incident and on arrival in Damascus we went first to book into an hotel, for myself and the engine driver. Neither I nor the driver, influenced by the disaster, wanted to sleep alone. We went from hotel to hotel and found no room available. It was the time of the pilgrimage to Mecca and all the hotels were occupied by pilgrims. Eventually we found an empty room with three beds in it. We rented the room on the strict condition that the hotel-keeper would not allow a third person to sleep in it. Afterwards we went to eat an evening meal and drink some Arak in order to lessen the tension we were feeling.

I drank two glasses and the driver, who knew how to drink, also took a decent mouthful, and when we returned to the hotel and lay down to sleep the third bed was empty. Because of our tiredness we quickly dropped off to sleep.

It was a moonlit night and its white rays cut through (דקעומבעד) the large windowand lit up the room. I saw the driver sitting up in his bed, shaking with fear. He pointed to the third bed. I saw a white sheet, a black head and a black hand. The dead waggoner.....

At first I was dumb. When I recovered and plucked up courage I got out of bed and went to examine the dreadful sight. In the bed lay a live person covered by a white sheet, with his head and hand prominent by reason of their black colour on the background of the white sheet.

Only with difficulty did I succeed in calming the driver and in proving to him that the hotel manager had not kept his word but had put a third person in the room."

13: 18 MEMOIRS OF JAFFA AMD 199 RAILWAY WORKSHOPS, By John Blyth.

John Blyth, now the Editor of the S. L. S. Journal, spent some time at 199 Railway Workshops at Jaffa during and after the war, and has sent me a few memories, stimulated by the large-scale map of the station area in "Harakevet" 3:5.

The 199 Railway Workshops Company's quarters and workshops occupied the area of the goods yard and along the perimeter wall south of the station area. The "Tile Factory" marked on the map was owned by a man called Wieland - thought to be still alive at the time - and was turned into accommodation for Officers and Men with very little alteration and addition, and the part to the east of this was the workshops, the access to P. R. being just east of the "Palestine Cotton Mill", which itself became our machine shop. Right in the bottom right-hand corner of the map is a main road which was actually the Jaffa-Tel Aviv Road, on which the Guards set up a road block outside the Palestine Police Headquarters right opposite the entrance to "199". The whole area to the north surrounding the station yard and approaches was most disreputable, being in the main the brothel area and 'strictly' out-of-bounds to troops - though regrettably some did go down there, and duly suffered certain diseases as a result !

In those days the station master at Jaffa was an Arab and that at Tel Aviv a Jew, and when we wanted the token for a trial run for a W. D. engine it was a long and argumentative process to get it!

13: 19 MORE ON THE ROSH HANIQRA TUNNELS. by Paul Cotterell & Others

"These tunnels have been widely featured in the pages of Harakevet recently. They have been well and truly photographed over the years, but Uri's photos in 12: 11 were the first I've seen showing the tunnel interiors. Visitors to the site should beware of an inscription on the parapet in the foreground of Uri's

first photo. The inscription reads:

10 NZ RAILWAY CONSTN COY NZE

As has been recounted already, it was the South African Railway Engineers who were responsible for the majority of the work carried out on the Haifa-Beirut line. However, they were transferred elsewhere shortly before completion of the HBT, and the 10th. New Zealand Railway Construction Company of the New Zealand Engineers moved in to put the finishing touches to the line and the Rosh Haniqra tunnels. The inscription implies that they also tried to grab all the glory."

(In May 1991 I noted that "1943" is moulded in the concrete by the first (southernmost) tunnel, and an inscription is just discernible over the second. Two lengths of rail are missing in the middle of the first tunnel, and the Nahariyya end is blocked off. Ed.)

Uri Ben-Rehav has also sent me some additional notes:

On 26th. Sept. 1941 a cable was sent from General Auchinleck to Field-Marshal Smuts: "It has been decided to connect standard-gauge railways in Palestine and Syria by the construction of a new section Haifa — Tripoli. Construction entails one tunnel 2000 yards long. Grateful if you could recommend tunnelling contractor who could undertake this work, providing his own equipment and staff."

A survey was made by the 47th. Railway Survey Co. under command of Capt. Jackson, who later received an M.B.E. for his part in this and in other similar projects as O. C. of this unit. Construction of the line was divided into sections, all being undertaken by South Africans with the exception of the Haifa — Rosh Haniqra one, including the two tunnels, where N. Z. troops were also involved."

(Incidentally, the visitor to the grottoes at Rosh Haniqra will find no clue as to the history of this line, which of course will mark its 50-year Jubilee in 1992. Maybe a little booklet or exhibition could be produced 7 Ed.)

13: 20

FRIENDLY ARCHIVES

Continuing this series on sources of interesting information:

3. Lancaster City Museum.

This Museum holds the King's Own Royal Regimental Museum and associated archive. The "King's Own" were based in Palestine for a couple of years — 1938/9 —and after that in the Sudan, and there are several albums of photographs and a box of loose prints — KO 1255, KO 638/1, KO 1021/1, KO 1524 and on unnumbered album. Prints can be made, but at a price, since copy negatives have to be made professionally first: subjects include a great deal of general, personal and military matters, but also some of armoured trolleys and incidents of rail sabotage.

Senior Keeper is Stuart Eastwood, and the address is Lancaster City Museum, Market Square, Lancaster LAI 1HT, tel 0524-64637. It's advisable to ring first: space is limited, but the staff ore extremely helpful and friendly. It's ten minutes' walk from Lancaster Station.

13: 21 A TEL AVIV PLAN OF THIRTY YEARS AGO

Sybil Ehrlich has sent this item from the "Jerusalem Post" "30 Years Ago" column; the story first appeared on 5/2/60:

"Tel Aviv is suffering from an acute hardening of its traffic arteries. The streets are too narrow, there is too little space for parking; yet the population and the movement of men and goods keep growing every year.

All manner of solutions have been offered. A proposed tube railway a la Paris or London has been rejected as far too expensive to be economic. Not long ago, however, a Haifa engineer and architect, Mr. Theodor Menkes, submitted a scheme that attempts to keep investment within reasonable bounds.

Mr. Menkes proposes that shallow shafts, no deeper than 2.50 metres, should be excavated below the sidewalks, a technically simple affair. In the shafts, an electrically- driven trolley system of short trains would operate, each consisting of only a few tiny coaches to ensure a short horizontal and vertical turning radius

The coaches would be open, only 2.25m. wide, would seat six passengers each, two abreast, and would have a luggage compartment. Thus each train would carry only 30 to 40 passengers, but they would run at intervals of only a few minutes, varying with the intensity of traffic. Coaches would also be added on or taken off to meet hourly changing needs.

At the more scenic points, Mr. Menkes, an architect with a sense for aesthetic values, would like his underground shaft to rise overhead above the streets. The trains would run on transparent bridges through which the passenger's eyes could rove and view the city's beauty spots.

The scheme calls for stops at intervals of 400 metres so that no passenger would have to walk further than 200 metres. The network of tracks is to take the form of an outer ring (not strictly circular) and four parallel lines."

Has anyone heard any more of this scheme, or of Mr. Menkes?

13:22 RAILWAYS IN THE UNITED ARAB EMIRATES.

I was unaware that such creatures existed, but the Spring 1991 Issue (No. 85) of "Continental Railway Journal" has, on p.493, the following references:

"Costain International Ltd" Bayadat Quarry; - The two Baguley-Drewry diesel locomotives and all other dumped plant (ref. to CRJ No. 53, p. 114) have been removed, and no trace of them can be found in the quarry area. They may have been buried or exported as scrap to Pakistan. They were last noted in March 1987, with 3657 being more or less recognisable.

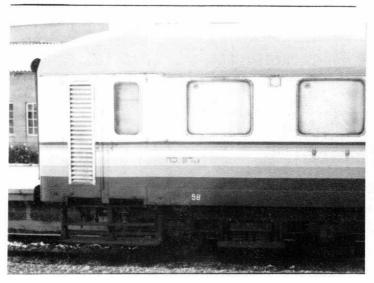
"Mushrif National Park near Dubai:, Baguley-Drewry 3655, minus works plate but with radiator plate intact, stands alongside a platform near a picnic area, together with two passenger coaches based on Butterley chassis. No sign of the line, which was seen operational in 1979, is now visible. Extensive landscaping, portly for a segregated roadway for a tractor—based "road-train" of no known prototype, has obliterated the original terminal station and platform. An admission fee is now charged for access to the park.

"Dubai: A European businessman is reported to have bought a Britlsh-bullt narrow-gauge locomotive from the Western Railway of India with the intention of shipping it to Dubai for some form of promotional activity."

WORK IN THE WADI: AN EGYPTIAN WAGON.

In 8: 9 I asked for more information on the 4-wheeled wagon between the two tank locomotives engaged on bridge repair work. Bill Atkin of Kendal has sent a copy of a page from an official Egyptian State Railways Diagram Book, showing a very similar vehicle (though with end stanchions as well as the four along the sides). It is described as Type C2, running numbers 6001 - 6140 with wooden sides and ends, built 1919, and 6141 - 6300 with steel sides and ends, built 1920, in each case erected at Gabbary from sets of metal parts sent from Metropolitan Carriage, Wagon & Finance Co. Tare 8T, capacity 10T, an overall length over buffers of 26',23' inside, and a wheelbase of 12'. He adds: "The frame of the tank wagon could well be Egyptian because it was a characteristic of ESR stock to have the springs behind the Wirons. The two open wagons with stanchions look like standard ESR types, the older- wooden-bodied version with low ends."

On another note, the set of Krikorian 1692 photos in the P. E. F. collection shows this bridge shortly after it was originally built, confirming that the girders on the ground - and the abutments - are in fact the original ones. It is described there os "Wady Isman: bridge in valley of Ismail". The metal bridges were apparently designed by M. Eiffel, of Tower fame.



13: 24

The northern end of Generator Coach 58. showing blanked-off windows, blocked off door. and ventilator grille. The inscription reads "Karon Koach", "Power Car".

