

HARAKEVET

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51:1. Egyptian Railways loco 3093 departs Luxor on the 10.10 (Aswan)-Cairo. 8.8.1998. (Photo R. Hamoen.)

EDITORIAL.

The colour cover of issue 50 got a lot of positive comments, but will not alas necessarily be a regular feature for now. As for the contents - well, the text transfer didn't seem to like the "ö" (o+Umlaut) and missed it out in the word "Görlitz", likewise the capital U+umlaut for the Hannover tram operator; and one item appeared twice for reasons to do more with the printer's urgent desire to set off for a family celebration in America.... Pound Sterling signs and apostrophes and quotation marks were also obliterated..... oh dear. Some have noted that the colour photos were clearer than the black-and-white ones !

The Editor spent most of December clearing out his office and preparing for a new period of life (always looking forward!), and then half of January dealing with the aftermath of being punched on the U-Bahn one night, so this issue has alas also been a little delayed. The only comfort is that Israel Railways' Punctuality is now much better than Harakevet's. And that there is just so much good news of expansion plans and new construction all over the place!

The Editor.

NEWS FROM THE LINE.

a). Tel Aviv University Station Opens.

This station - known as "University-Exhibition Centre" - opened on 29/10/2000, and seemed to be a success from the outset. During the first day of operation it was used by 4,000 passengers. Amos Uzani, I.R. General Manager, estimates that 10,000 will use the station each month, more than 1M annually, thus making this one of the leading stations in terms of traffic figures; it functions also as interchange between the Haifa-Tel Aviv-Beer Sheva line and the suburban line to B'nei Berak and Rosh Ha'Ayin. In addition to students, the station will probably be used by visitors to the Exhibition Centre nearby.

Chen Melling reports on the opening:
The new University station:

"On October 26th 2000, a year and a quarter after the opening of Hof Carmel, I also had the pleasure to experience the opening for service of University Station in northern Tel Aviv. The station signs, in the standard new design, contain the sta-



51:3. Tel Aviv University Station on 14.12.2000, looking north. On track 1 a Push-Pull Beer Sheva to Haifa Central train. Note that the clocks on Plats. 1/2 and 3/4 do not agree, but that on Plats. 1/23 is correct. Tracks 2 and 3 are not yet laid. The University is on the hill to the left. (Photo: Hans Kohut.)

tion name in three languages, like in the new Be'er Sheva Central station. Strangely though, the Hebrew version says 'Universita (Mercaz Hyeridim)' - literally: University (Fairs Center), referring to the nearby Ganey Hataarucha, whereas the English / Arabic versions only state 'University' / 'Jamia'h' respectively.

Back to the opening day, though. As has become customary on such occasions, two hostesses presented passengers with roses, yellow this time. Also present was the top management of Israel Railways, headed by Mr. Amos Uzani, the General Manager, who came to survey the new station.

The station was only partially complete when opened. Only the two outer platform faces (out of four, arranged as two island platforms) have been pressed into use, and even those were not 100% finished. In a visit I made there about a week later I found that most of the work on the platforms themselves, including signs and floor tiling, has been done. What remained, therefore, was to activate the escalators from the underground station hall to the platforms and add the two middle tracks. This will probably be done only when the additional new bridge over the Yarkon will be built, as part of the triple-tracking of the Ayalon corridor.

As is standard in all new and refurbished I.R. stations these days, University has an adjacent parking lot, of considerable size, which is currently being built, and what appears to be quite a decent bus terminal with frequent service to many destinations.

The accompanying photographs, taken on the opening day, illustrate the unfinished condition of the station and the

modern and unusual design of the main roof. Incidentally, apart from the aforementioned roof, which covers only about a third of the platform's length, there is no other form of shelter provided along the platforms. I suppose this would be a rather easy mistake to correct, yet surely it was possible to think of it in advance."

Chen has also sent a copy of a green A5 handbill - a Protest Leaflet produced by the Tel Aviv University Student Association, and handed out at the entrance to University station in the last week of November 2000. He notes: "This protests against the fact that in order to get from University station to the actual campus, one has to catch a Route 112 Dan bus and pay the full fare for a very short ride. They claim that the station was supposed to help the students, not take away their money. In defiance of this situation, they announced that, starting Tuesday 28/11/2000, they will operate a free shuttle from the station to the campus at rush hours (07.30-10.30, 16.30-19.30). Whether they succeed in their struggle remains to be seen, but in my opinion it is a just cause. I recall promises made by the T.A. University management that a free shuttle would transfer students to and from the station until the promised western access underpass, direct to the university site, is built."

b). Beer Sheva and Other Progress.

Some of this is repeating items in issue 50, but it is so nice to have so much positive news..... From 'RGI' 11/2000, p. 696. Ceremonies were held in Beer Sheva on Sept. 26th. to mark the inaugu-

ration of Israel Railways' new city-centre station. With traffic on the Beer Sheva line up by 500% this year, IR is stepping up the daily service from 18 to 28 trains each way, and plans a further jump to 32 when new stock arrives in June 2001. IR General Manager Amos Uzani was joined by Prime Minister Ehud Barak, who cut the inaugural ribbon, Transport Minister Amnon Lipkin-Shahak and the local Mayor, Brigadier-General Yaakov Terner.

After the ceremony, Uzani outlined IR's development plans for the next year. The Finance Ministry has allocated US\$200M for operational and US\$225M for capital projects in 2000-2001. Last month was due to see the opening of University Station [see above] and another five stations are under construction on the lines to Haifa and Kfar Sava. The branch to Ben Gurion airport is expected to open by the end of 2002.

Uzani is awaiting final clearance to order a batch of tilting dmu's for the Tel Aviv - Beer Sheva service, which is expected to carry around 250,000 passengers a month. By the end of the first week, patronage of the new station had risen to over 2,000 passengers a day.

c). Electrification ?

IR has allocated US\$2.5M for detailed design of 25kV 50 Hz electrification, which would initially be installed on the Binyamina - Tel Aviv - Ashdod corridor, and then on the Tel Aviv - Kfar Sava suburban branch. (And maybe to Modi'in - see below.)

d). Further Plans.

Double-tracking between Lod and Rehovot and upgrading of Rehovot - Ashdod are to be completed by May 2001, cutting journey times by around 10 minutes. (See item (s).) Tenders have been called for rebuilding the line from Rosh Ha-Ayin to Kfar Sava, and bids will be invited next year for a new line from Beer Ya'akov to Rishon le-Zion.

e). Catering Tender.

Tender MS/RK/2000/S1 was issued in October, for a franchise to operate a Buffet and Cafe at the new Beer Sheva Central station. Tenders had to be in by 23/11/00, the franchise to run for 36 months.

f). Ben Gurion Airport Line.

Aharon Gazit has sent details of further tenders, reproduced here for the record (it is not assumed many readers of this magazine will rush to apply):

HN/KB/19/00. For Building the Link to Ben-Gurion Airport from the Tel Aviv - Lod Line. 1.55 km. Work includes

tunnel, infrastructures and various works - 800 m. of concrete channels, and 450 m. of concrete tunnels, including ventilation, fire-extinguishing, public-announcement and lighting systems.

HN/KB/20/00. For building the link to Ben-Gurion Airport. 1.55 km. Infrastructure works for track and road building. Work includes the following:

Structure No. 1. A new temporary alignment for the Northern track of the Lod-Tel Aviv line.

Structure 2: Infrastructure for the track at its final location.

Structure 4: An option for IR on behalf of their own decision for realignment of Road No. 1 (Tel Aviv - Jerusalem Highway.)

HN/KB/21/00. As above: For drilling and inserting Poles. [Electrification ? Ed.]

All these three tenders really are interconnected and form a package deal.

HN/KB/22/00, for construction of the line Tel Aviv to Ben-Gurion International Airport, Km. 2.250 - 3.200. Works include: infrastructure works for tracks, access areas to the tunnel; an overhead bridge for agricultural vehicles. Implementation: 12 months. Last date for bidding : 20/12/00.

Aharon notes there will probably be several other tenders soon for further airport line works.

g). Akko - Nahariyya Tenders.

HN/KB/29/00. (Note - some numbers seem to be duplicated. Ed.) For carrying out construction and infrastructure works at the stations of Akko and Nahariyya. Works include:

a). construction of a second platform and an underground pedestrian passage at Nahariyya station.

b). Building elevators at Nahariyya station.

c). Building a structure and elevators at Akko station.

d). Building a parking area, and demolishing a structure at Akko station.

Chen Melling adds some more 'meat' to these bones: "On the station improvement front, Akko station has been rebuilt in the second half of 1999 and now boasts three platform faces, two of them on an island platform connected by an underground passage to the third. The station building and the adjacent shelter (on the west side) have remained in place and in use, but a big new parking lot has been built immediately to the south of the station. This parking lot has been brought into use a few months after the renovation of the station was completed.

Another station undergoing re-building is that of Nahariyya, which is having a proper station building and platform erected. The old portable building used until now to house the ticket office, a small waiting room and the station master's office was removed by crane on March 22nd, 2000, initially being replaced by an even smaller shack placed on the platform. Earthworks for the new building started immediately afterwards, and a few months later a temporary platform, built to the east of the tracks, has been brought into use. A small 'portacabin' was placed near it to house the ticket office and thus enabling the original platform to be taken out of use and rebuilt."

h). More Station News: Petah Tikva-Sgula

From Chen Melling: "This new station, being built near a big retail center, is progressing well. The small portable hut and temporary asphalt platform (see 50:4:(l)) were still in use as of Oct. 2000 but signs of progress are readily apparent. The new station building, which appears to be of a rather elegant design, and the new single platform are in an advanced state of construction. It appears that the track near the station will have a new loop added, since the current alignment is a few meters away from the new platform's edge.

i). Pardes Hanna / Kaesaria

As of late Nov. 2000, the foundations for this new station have been laid, and I saw from the train the placing of several concrete platform face segments. The station is located on the site of the original, unfinished, station of Pardes Hanna, and the platform which was built for it at the time is still extant, though I don't think it was ever used.

i). Longer Platforms.

The stations of **Bet Yehoshua**, **Hadera** and **Netanya** have also seen improvements made in them, namely the lengthening of the platforms to avoid incidents of passengers falling from trains which are too long and also repainting and replacement of platform benches. By the way, the main colour of Hadera station has been changed from yellow to dark turquoise."

k). Lev HaMifratz.

On 12/12/00, in an unofficial ceremony, but with the participation of Mr. Uzani and other respected guests from the Haifa area, the corner-stone for the new

Lev HaMifratz suburban station was laid. Located adjacent to the Mall with the same name, it is fully financed by the mall, and will cost about \$1.5 Million. It will include platforms of 500m. length and will serve a population of about 400,000 from Eastern Haifa. It will also include a bus terminal. Opening is planned for June 2001, and estimates are for about 50,000 passengers daily. On this occasion Mr. Uzani announced that work on the stations of Hutzot Hamifratz, Custom House and extending double-track from Kiryat Motzkin to Nahariyya will also start soon. (Thanks to Aharaon Gazit for this last.)

l). Maintenance Contracts.

IR has also issued Tender HN/KB/18/00 for on-track rail grinding and reprofiling, to last 24 months with an optional additional 24 months - last date for bidding is 15/01/2001.

m). New Rail Cranes.

Regarding Tender HN/RS/02/00, for the Manufacture, Delivery and Sale of Rail Cranes. The submission date for bids, issued on 5/10/00 has been postponed to 13/12/00.

n). Other Interesting Tenders.

HN/KB/06/00. For building an infrastructure for a remote-controlled operational station at Sgula station (Petah-Tikva), and building a new bridge over Shilo River on the line between Rosh Ha-Ayin and Kfar-Sava, to be built soon. Time for implementation: Five Months. Last date for bidding: 04/12/2000. [This tender implies that works on the line to Kfar Sava will start very soon !]

HN/KB/20/00. For supply of ATM teleprocessing system, to be integrated into communications and relays system of Israel Railways. Time for supply and installation of system: 3 months; Contract for maintenance is for 7 years. Last date for bidding: 27/11/2000.

o). New Works Shunter ?

IR has issued a Tender for "purchase of a shunting tractor for Kishon Works at Haifa". Last date for bids was 20/12/2000. Presumably this means the home-made agricultural tractor conversions have now become life-expired.

p). Hi-Tech Waiting Room ?

IR has issued a tender for building and operating an Internet Kiosk at Tel Aviv Savidor station - for 12 months, with additional optional 24 months. Last date for bids was 18/12/2000.

q). The Line to Modi'in.

In time for Chanukah comes more news from Aharon Gazit:

After lengthy discussions over a variety of opinions, the following details have been published in a Master Plan giving two main options:

A-1. Part of the proposed fast link to Jerusalem.

B. A Link to Tel Aviv through Ramle.

and further: C. Line into Modi'in Centre.

Main details are:

Scheme A. Length between Ben-Gurion Airport and the outskirts of Modi'in: 14.2 km., with two stations. For a speed of 160 km/h. Travelling time to Tel Aviv would be 18 mins.

Estimated costs: Stage 1: Single track: \$66 M.
Stage 2: Double track & electrification: \$97M.

Scheme B. Length between Ramle and the outskirts of Modi'in: 9.5 km. Speed: 120 km/h. Travelling time to Tel Aviv: 24 mins.

Estimated costs: Stage 1: Single track: \$52M.

Stage 2: Double track & electrification: \$85M.

Option B, in addition to being more expensive and with longer travelling times, will require some land take and compulsory purchase at Ramle. (But will allow interchange at Lod with the southern lines.)

Scheme C. Length between outskirts of town and Modi'in central station: 4.7 km. Speed: 120 km/h. 1 station. Travelling time: 3 minutes. To Tel Aviv, 25 minutes. A short tunnel of 400m. is needed. Estimated cost including new central station: \$65M.

If everything goes well, the new line could be in operation in 2005. Israel Railways has agreed to fund 50% of the cost of detailed design, while the rest will come from the Ministry of Construction. Heavy pressure is being applied on the government by the citizens of Modi'in (led by Aharon Gazit himself !) and the Municipality has at last agreed to request construction of the main portion of the line independently of the Scheme C detail for the final section.

r). Ashdod Re-Opening.

On 20/12/00 passenger services between Rehovot, Yavne and Ashdod were to be re-introduced, two weeks before the planned date. Rebuilding the line cost about \$12.5M, and while the timetable will not be changed for the time being, it is planned that in June 2001, with the arrival of the first double-decker trains, that services will be improved signifi-

cantly, with hourly trains (half-hourly at rush hours). Travel time will also be cut by 10 minutes.

By June 2001 the doubling of the Lod - Rehovot line should also be completed.

Sybil Ehrlich went to inspect the line on 29/12, and writes: "Most of the track south of Rehovot is still single. The station at Yavne now has shelters and seats, which it didn't have before. Neither Yavne nor Ashdod had a name board. The pink lettering that used to grace the blue corrugated iron building at Ashdod has disappeared. Also disappeared is the British building at Yavne. I took the 10.36 from Lod and the same train back, and it was pretty full in both directions. A bus meets the arriving train at Ashdod, but no bus brings passengers for the departure. That means anyone wanting to take the 11.23 departure would have to come on the bus that meets the 10.45 arrival, or else get a taxi. It was just like a real station, with taxis arriving all the time !

The road at the level crossing between Ramle and Lod (on the Na'an branch) is being widened, which means the traffic signal and barrier will have to be moved."

s). Sign of the Times ?

Although there are as yet no trams in Israel, the Ministry of Transport has decided to prepare itself for the new reality and has designed or adopted the sign for a tram (LRV) as a potential hazard in bi-directional traffic.

t). Passenger Figures.

Two complementary reports:

From a press release of 20/12/00: Nearly 12 Million passengers carried by rail since 01.01.2000.

Mr. Uzani announced today that 11,649,00 passengers were carried from 01/01/2000 to 30/11/2000. This is new record, and 49% more compared with the same period in 1999. The total for whole 1999 was 9 million.

In details: In November 2000, 1,193,000 used rail, 28% more than in November 1999. Traffic growth per line is as follows:

Tel Aviv - Haifa:	389,000 :
+ 28%.	
Tel Aviv - Ashdod:	148,000 :
+ 12%.	
Tel Aviv - Netanya:	148,000 :
+ 14%.	
Tel Aviv - Beer Sheva:	104,000:
+ 335 %.	

The relatively small figures (except Beer Sheva) may mislead, since all the lines between Tel Aviv, Beer Sheva and Rehovot were closed for ten days in

November and December due to a sudden strike of the Southern Region workers, and the Rehovot - Ashdod line was closed for several months due to rebuilding, so the figures are quite impressive ! In any case, the opening of the new Tel Aviv University/Exhibition Centre station plays an important role in traffic growth. Mr. Uzani added that from June 2001, or even earlier, the new four-coach double-decker trains will add 8,600 seats (70% more). These will be built fully at Görlitz, and not at Ramta.

On 15/01/2001 a further press release indicated that the final total for passengers carried was almost 13 Million, a new record, 46% more than 1999; The aim is to reach 17M in 2001, plus a 20% increase in number of trains run, to 235. In the second half of 2000 the figures had stabilised at one million per month. All this means that passenger traffic has tripled within five years.

In this later press release the figures for the different lines were even more impressive:

Tel Aviv - Haifa: 4.3 million, 38% increase.

Tel Aviv - Ashdod : 1.8 Million, + 39%

Ashdod - Haifa - Nahariya: 666,000, + 36%.

Beer Sheva - Tel Aviv. 736,000, + 345% (!!)

Tel Aviv - Rosh haAyin (opened June 2000) : over 300,000.

u). Communications

Tenders.

From Aharaon Gazit - Tender TK/KB/01/01 is for laying communications and signalling cables along the Tel Aviv - Haifa main line; the work is to be divided into sections:

1. Tel Aviv Savidor (i.e. Merkaz) - Tel Baruch; B
2. Binyamina - Remez Junction.
3. (optional): Tel Aviv University - Herzliya.
4. Kfar Vitkin - Netanya.
5. (optional): Netanya - Bet Yehoshua.

Time for implementation for each section is three months, last date for bidding is 23/01/01.

Other tenders issued have been for installing, operating and maintaining automatic machines for sale of drinks and sandwiches at various railway stations, and also for automatic machines for selling telecards for cellular phones at T.A. Savidor; both these contracts are for 36 months, and bids were to be in by 04/01/01.

v). Market Survey.

A market survey prepared for Is-

rael Railways during Oct. 2000 by Prof. Avi Degani - head of the Geocartography Institute, and which involved 5000 passengers being questioned, revealed that an increasing number are using the railways as a preferred mode of transport. The questions asked are the same as in a previous survey in May 1999. The results were revealed by the ambitious Marketing Manager of IR, Avi Hefetz:

- 1. 43% of the passengers only began using the railways in the past year.

- 2. Railway services are used throughout the day, and not just at rush hours. 53% in 2000, compared with 46% in 1999, are using the services in off-peak hours. Better deployment of rail capacity and an improved load factor were noticeable in 2000, and it is intended to maintain this trend.

- 3. Passengers made 14% more journeys per week, from 3.96 in 1999 to 4.51 in 2000.

The two suburban lines Rehovot - Tel Aviv and Rosh HaAyin - Tel Aviv are increasingly becoming the normal mode of transportation for commuters - a particularly high average number of journeys can be seen, i.e. 5.74 and 6.64 respectively. Most passengers on these lines are commuters, who mentioned the need for increased frequencies. The veteran passengers are becoming heavy users, and new passengers are joining on learning of the advantages.

- 4. 96% of the passengers see rail as the transportation means of the future, and the State should give preference to developing it.

Passenger opinions and their characteristics have been found to be similar to those of the 1999 survey :

- 90% are satisfied with rail services.

- about the same percentage see rail as the safest means of transport.

- 88% see rail as the fastest inter-city service.

- Most - ca. 84% - agree that trains enable the utilization of travelling time with pleasure and efficiency, and that travel by rail is pleasant.

- 82% will recommend rail travel to their friends.

The survey checked the preferences of passengers regarding feeder services to and from the stations. 57% said that a frequent shuttle minibus and parking areas would increase rail use.

Mr. Hefetz mentioned that the public is increasingly aware of the ability to leave their cars at home and use combined bus/rail services, as has been successfully operated last year jointly with the Egged and Dan bus companies.

Cross-section characteristics of the passengers are the same as in 1999, mean-

ing that most are young (18-34), born in Israel, employees or soldiers, with academic qualifications, non-religious, and a higher than average income and owning more than one car, but preferring to go by rail.

Hefetz said that the railways have started a new marketing policy to target additional specific segments of the public, such as Youth, Immigrants and Orthodox Jews. For the Youth, emphasis will be on using afternoon trains for entertainment at Tel Aviv, using trains from Rehovot, Rosh HaAyin, Petah Tikvah, Netanya etc., and to Haifa from the Krayot. (i.e. using seats against the commuter flow.) For the Orthodox Jews, who are characterized by large families and low income, the emphasis will be on the benefits of using lines between Bnei Berak, Petah Tikva, Tel Aviv, Haifa and Ashdod at reduced group fares.

There is a promise to solve overcrowding from mid-2001 with the arrival of new IC3's and the first double-deckers. Within two years, 350 trains will operate daily.

w). Crossings Crossed Out.

Amnon Lipkin-Shahak, Transport Minister, announced on 15/1/2001 that all level crossings on the Haifa - Tel Aviv line are to be replaced by grade-separated crossings, thus eliminating the potential for repeating certain recent accidents.

x). One Mall Step for Man

IR has recently started a campaign, together with the Azrieli Mall in Tel Aviv (near Hashalom station) and the Negev Mall at Beersheba (near the new station), to encourage train travel for shoppers. Those who purchase a return ticket get a reduction of up to 30% at a variety of shops and entertainment areas, and soldiers also get special benefits. The first campaign (an initiative of Avi Hefetz) ended in December 2000 and was considered to be very successful.

y). More Maintenance

Tenders.

As I am at risk of running out of alphabet, I shall list here together several new tenders announced by IR:

HN/KB/01/01. Drillings at railway sites. Drillings are to be made at various railway lines, as well as stations, to take soil samples prior to infrastructure works. Contract is for 12 months, with additional optional extensions of 36 months.

HN/KB/01/03. Upgrading the Tel Aviv - Haifa line south of Poleg River. Km. 73.800 - 74.660. Time for implementation: 3 months. Last date for bidding 05/02/01.

HMH/SR/04/01. Maintenance services for electronic boards at various railway sites. Contract for 3 years, additional optional extension of 4 years. Last date: 08/02/01.

NOTES AND COMMENTS.

a). On 49:12 (b)(i). Chen Melling's note on the Fiat railcars.

Aharon Gazit has investigated this subject fairly thoroughly, both back in 1975 and in June 2000 when he was a guest of Fiat at Savigliano. He was also a friend of Mr. Bar-Ilan, the Chief Mechanical Engineer of IR at the time. The following facts should be noted in connection with this bizarre incident:

a). The railcars were to be of the FS Aln 668 type.

b). Only eight were built - Aharon has never heard of ten being at issue. (A reminder - Chen mentioned ten were ordered but only eight built, numbered 3001-3008.)

c). The reasons for cancellation reflect the indecisiveness which afflicted IR at the time. Aharon quotes a conversation between himself and Bar-Ilan:

AG: "Why did you decide suddenly to cancel the order, after the 8 trains were complete?"

B-I: Because the air-conditioning was too noisy.

AG: Is this a good enough reason? There are many ways to reduce noise; besides, these railcars are in use around Boston, and I cannot imagine that they would tolerate trains that were too noisy!

B-I: OK! I've another excuse for you: the brakes were not passed to Lloyds specifications.

AG: That's impossible, since one of these models is operating in Sweden under severe climatic conditions, with slippery rails!

B-I: OK! I'll tell you the real reason for cancelling. The loco drivers are against it, since they have a trauma from the Esslingen railcars. As you probably remember, there was a collision between one of these sets, and a truck, and the driver Krieg lost both his legs. Now, if this happened with the round-shaped front and high buffers (what we today would call energy-absorbing zones), what would be the case with the Fiat railcars which have only a flat thin front?

AG: This is really strange! The structure of the Fiat railcar was known to you from the first moment, so why bother the Fiat company? You should have rejected the specification immediately, and not ordered it at all!

B-I: What is done is done, most important of all is, we have most of our money back!"

Aharon adds: "In fact, I recall back in 1972, when the whole idea of ordering these railcars was first discussed, I asked for a meeting with the then-General Manager Mr. Reshef. It developed very quickly into a difficult discussion, in which I said it was pointless to order these railcars. At that time there was a serious decline in passenger traffic in favour of buses, which had begun to be air-conditioned, so there was in fact a large surplus of rolling-stock. I claimed that it would be better to upgrade the existing coaches and even re-engine the Esslingen sets, which were then only 15 years old. This was rejected at the time, however my idea for refurbishing and reconditioning was applied some 17 years later! The Fiat sets were in fact sold to Mexico, carrying Israel Railways livery! I have a picture."

b). The Esslingen railcar sets.

Aharon adds a couple more points on these diesel multiple units which acquired such a bad name in Israel:

"It is true that these sets were not exactly suitable for Israeli conditions, and it is also true that the Germans were not exactly "Tzaddikim" (saints); however, they were fair enough to ask Mr. Efrati, the Chief Mechanical Engineer at the beginning of the 1950's, for his opinion. He replied that he trusted them. Had he instead asked for one set and one shunter to be sent for trials - something the Germans even suggested - then the whole picture could have been different. Proof that the Esslingen/LHB coaches were good is indicated by the fact that seven of the intermediate trailer coaches are still in use today - refurbished - at the age of 45 years!"

c). On 49:6(j) & 50:15: Memorial Wagons.

Another addition - though this is NOT a wagon of the type used in World War 2. The Editor suddenly noticed a DB postwar four-wheel van, converted at some time to a Departmental Tool Van by the addition of two windows and painted Departmental blue, standing on a short length of track on

Unter den Linden in Berlin, opposite the Lustgarten!

It is numbered 40 80 DB 9450 476-3, and on the solebars etc. bears inscriptions "Gerätewagen 633", "Heimatbf. Hannover Herrenhausen, AW Potsdam, BNO Hannover-Leinhausen." So presumably it was available at the nearby Potsdam Wagon Works when someone was looking for an appropriate vehicle.

It bears two placards reading in German and English: "Güterzug. Eine Arbeit der Wiedergutmachung für die Ungerechtigkeit und der Schmerz den wir in diesen Jahrhundert erfahren haben und der Ausdruck findet im Widerstand, der Heilung und der Hoffnung für die Zukunft. Freight Train: A work of atonement for the injustice and pain we've experienced in this century, expressing resistance, healing and hope for the future. Autumn 1999. J.O."

"J.O." apparently refers to "Joko (or Yoko) Ono, the widow of John Lennon.

Both sides and both ends are riddled with bullet holes - which presumably means the plywood will rot even quicker in the open!

d). On 50:5(a). Turret Publishing Books.

From Rick Turret I have heard that he is indeed still retailing his own books from home to those who wish, (GBP18.90 for "Railways of Palestine & Israel", GBP19.95 for "Hedjaz Railway", GBP31.95 for "Allied Military Locomotives of the Second World War") but Platform 5 is acting as an additional retail outlet - and since they take credit cards, especially foreign purchasers may prefer to use Platform 5.

e). On 50:5(j) Sulbs etc.

Bert Dyke has written in response to Andy Wilson's comments:

"The term "Sulb" is not quite just local usage. In the Sudan Railways Timetable for 1941 is a list of "Locos and Stock, shown for the purpose of Ordering" - i.e. code-names for telegraphic purposes. A 30-ton covered wagon is named "SULB", and a 30-ton Open Wagon a "HADID". Both terms mean 'hard' or 'steel', as in "sie-el hadid" for the actual line - a "road of steel". Similar code names were used on the ESR. The nuances of Arabic are as varied as English - "BABOUR" for instance was used indiscriminately for steam loco or steam ship. I'm no expert, I just had to learn with all the different accents in the countries we struggled in! For me, the ultimate in poetic dialect was the term often used whenever a time was sought: A brief silence, then "BOKRA FIL MISH-MISH" - "Tomorrow when the peaches bloom". They don't, and so this is a polite colloquialism for "Never!"

f). On 50:6. the Khedive's Royal Saloons.

Also from Bert: The first one was built 1859 - an article on "Royal Trains" by C. Hamil-

ton Ellis in "Railway Magazine" Sept./Oct. 1945, pp. 249-250, adds a little more. "Egypt has seen some queer things in the way of royal trains, though the more recent coaches have been very admirable. In the sixties, the Viceroy Said wanted to enjoy some speed, and Benjamin Connor's Caledonian eight-footer at the 1862 exhibition in London struck him as providing the right means to this end. Three such engines were accordingly built and packed off to Egypt, a country for which they were singularly unsuited in the poor condition of the Egyptian permanent way then general. But for this, they ought to have done much better on the level Nile valley than their sisters could manage in the land of Beattock and Cobbinshaw. One of these, I believe, went no nearer to Egypt than the bottom of the sea, on the voyage out.

The Viceroy's peculiar tastes included a partiality for highly decorated locomotives. Several early Egyptian engines, to please him, shone in a more than oriental splendour of white and purple paint, polished bronze and gilding. The viceregal train in the sixties consisted of a 2-2-4 Stephenson tank engine with the royal compartment mounted over the bogie, followed by a saloon for the Viceroy's wives and another for his attendant gentlemen and servants. Two of these 2-2-4 tank locomotives were built, one in 1859 and the other in 1862. The special viceregal cars included vehicles with balconies or garden loggias in the middle. There is one on the present Egyptian royal train. The original car of the 'sixties ran on sixteen wheels, following early Pullman practice in this respect."

Incidentally, Hugh Hughes "*Middle East Railways*" Appendix A, p. 115 lists the two thus:

"Old No. 40, (new number 259 allotted but not carried), 2-2-4WT, 60" dia. wheels, 8x14" cylinders, Robert Stephenson 1181 of 1858, ref. Loco Magazine 1903 B/100." (i.e. July-Dec. 1903 volume.)

"Old No. 63, new no. 300, 2-2-4WT, 60" diameter wheels, 9x14" cylinders, Robert Stephenson 1295 of 1862, reference in Loco Magazine 1903 B/36, Decorated, with canopied saloon, renumbered 30 in 1893, preserved at the Railway Museum."

g). "Round the World on the Narrow Gauge"

This book by Whitehouse and Allen (1966) includes some excellent shots of relevance to this magazine - including two of the Lebanon, with an 0-8-2RT pulling a freight train uphill, and an 0-10-0RT pushing a skiers' special. p.129 has a good shot of Hedjaz Railway 2-8-2 258 approaching Amman on a passenger train

from Ma'an in October 1955 - the train comprises two bogie vans, four coaches and another van. Also two Esslingen metre-gauge 2-8-2's, Class Z of the Iraq State Railways, built in 1956/7, at Baghdad Shed. It is noticeable that the TENDER of one loco is dwarfing the Indian-type loco skulking in the shed behind it. (Hughes p. 93 lists these as Esslingen 5153-62, 5189-98, built 1955/6, ISR Nos. 81-100.) On p. 11 are rare shots of Mallet locos in Eritrea, also one at Benghazi.

h). The Opening of the Station at Hof HaCarmel.

Since this occurred over a year ago, it is hardly "News from the Line", but an eye-witness report by Chen Melling deserves to be preserved for posterity:

"Saturday July 10th. 1999 (a Sabbath!) saw the opening of the new Hof HaCarmel station (named after Shaul Raziel, former General Manager of I.R.) without any grand official ceremony. Quite surprisingly, there was a small group of passengers waiting for the first passenger train to stop there. Most people present were Israel Railways employees, their families, and a few railway enthusiasts. It had been planned to give red roses to travellers - but alas, the flowers arrived a few minutes after the first train left, so the Public Relations opportunity was lost, and the flowers were given by the specially-hired hostesses to anyone present.

A few more minutes elapsed before the Rabbi came to conduct the mandatory ceremony of attaching the Mezuzah to the doorpost. The ceremony itself had a few problems, since it was not clear at first where the Mezuzah is supposed to be when you have a big opening with several doors! Eventually all went well, and the building was dedicated.

Unlike the opening day, construction itself went quite smoothly and swiftly, and the station opened for business as scheduled. In terms of platform size this is one of the biggest stations in Israel (four platform faces - three on through tracks, the easternmost one is a terminal bay ending near the highway bridge south of the station, and used by all the Parvariot - suburban services.) Tel Aviv Merkaz has four platform faces, and the new University will also have four eventually.

The station is located opposite the Dado-Darom beach and about ten minutes' walking distance from the big "Kenyon Haifa" and "Kastrá" shopping Malls, and the Haifa Convention Centre. The entrance to the MATAM hi-tech area is even closer, but since this area is rather large, a shuttle would be a more sensible way of getting inside. Between the station and the malls/convention centre lies the site of the future southern Haifa Central bus station, on

which construction has finally begun.

The station is built in modern style. It comprises a big hall on the eastern side with several offices, the main ticket office and the lavatories, connected by a large concrete roof to the western part, which includes a smaller ticket office, automatic gates and the entrance to the twin subways. The need to have the subways divided down the middle came from the demand by the municipal council to have a subway open to the public. This conflicted with the railways' desire to have a gated area for ticket-holders only (a 'closed station'), so the underpass was built with a dividing wall along the middle and separate exits on both sides of the tracks.

Signs in the station are to the now standard IR standard style, which is clear and attractive. It is worth noting that the station name is displayed on at least twenty (!) large signs around the area, in Hebrew or English, including on a very large sign placed on the roof during August or September.

When travelling to the station, passengers can use the large parking lots at the nearby beach, plus gravel parking areas on the west side of the station. An asphalt parking lot was opened to the public on the east side of the building, with a roundabout in the station forecourt. This has about 100 parking places. Several Egged bus lines have been extended to the station. At first the co-ordination between buses and trains was somewhat poor, but after a few months things took a turn for the better and it is now quite easy to get to and from by bus. A large board was installed at the station, displaying details of bus times in relation to train arrival times.

As expected, the station is now well patronized, and probably draws more new passengers from the Carmel and Ahuza areas of Haifa. All passenger trains passing through stop here, and it forms the southern terminus of the Haifa suburban operation. This, of course, leaves us to wonder what will be done with the bay Platform 1a at Haifa Bat Galim, opened as recently as June 1997 for use by suburban trains and already out of use. I suppose that it is useful, however, as a back-up in case of a blockage on the line."

i). On 50:5 (f): Hannibal's Return.

Dror Allon telephoned from Israel to say that he recalls seeing a photograph of this incident (a plane loaded onto a wagon) and he is convinced that such a photo exists somewhere in the general balagan of the unsorted archives in Haifa. We can only hope that Paul and his team of merry helpers turn it up!

j). WD Stock to East Africa.

In "The British Overseas Railway Journal" No. 16 of Spring 1998, p. 61, is an article on the railways of Tanganyika by Julian Rainbow. He covers elements of the ill-fated Groundnut Scheme (a plan to increase production of nuts to produce edible oils, which were in short supply after World War 2).

"Heavy ex-military equipment began to arrive at Dar es Salaam, causing problems in landing it over the lighterage quays and moving it over the Central Line as much of it had to be treated as out of gauge loads. It was necessary to acquire new locomotives and rolling stock, which could not be obtained from the UK for 2-3 years. 430 four-wheeled wagons were obtained from dumps near Basra and Suez; although they required reconditioning on arrival, they did allow T.R. to move the normal traffic, construction traffic for Mpanda, and the groundnut traffic. 4 Garratt locomotives were acquired from Rangoon, 16 MacArthur locomotives from Malaya and 4 engines from the Bombay, Baroda and Central India Workshops at Ajmer, found at El Shatt near Suez, were imported. These purchases made it possible for T.R. to move record tonnages in 1947 and 1948. The cost of the work on the Central Line and the purchases of the locomotives and rolling stock were all met from T.R.'s own resources."

Notes add: There was criticism of the purchase of these wagons on the grounds of expense and an unsatisfactory way of meeting an urgent need, still 414 of these wagons were in service in 1957. The BBCI locos were BB 4-6-0's built at BBCI Ajmer shops in 1926, and became TR running nos. 270-3. Ajmer did not allocate builder's numbers, it is known that BBCI 219, 233, 247 and one other went to T.R." [These were among the metre-gauge locos imported in 1941 for the Qena-Safaga line. See Hughes p. 49. Ed.]

51:5.

NEWS FROM THE ISRAEL MODEL RAILWAY CLUB.

The club continues to meet regularly at Kibbutz Netzer Sereni (accessible from the new Beer Yaakov station and a lengthy walk!) and the small fairground loco perched above the bunker where they meet has now been repainted and is joined by a former PR semaphore signal!



51:5. Model Railway Club.

The plinthed non-powered fairground loco at Kibbutz Netzer Sereni.
(Photo Hans Kohut.)

Six members, including Uri Ben Rehav, attended a major international model exhibition and fair at Köln, Germany, 9-12/11/2000, to show the flag - their presence caused quite a stir, few people realised that Israel has any railway enthusiasts! The "N"-gauge layout is now working and landscaping has started. In addition work has continued on refurbishing the layouts of two members which are maintained at the Assaf HaRofeh and Schneider hospitals, mainly for the young cancer patients. Uri writes: "Poor kids - when playing, we get tears in our eyes" - clearly this is a magnificent combination of pleasure and Mitzvah.

51:6:

OTHER MIDDLE EAST RAILWAYS.

A). HEDJAZ.

(i). Plandampf. An article by Johannes Glöckner in "Eisenbahn Magazin" 11/2000 pp. 48-50 was considered not important enough to mention on the cover! Nevertheless the text accompanying the seven colour photos is intriguing enough to deliver here in full translation (by the Editor), since it raises several points not previously mentioned.

Entitled "Plandampf in Nahost", the article is clearly aimed at German enthusiasts:

"Surprisingly, German steam locos in Syria are making a comeback; more are being brought back from the scrapyards and refurbished. The railways have discovered a new field of activity with the "Plandampf" - (a German term for regular scheduled steam services.)

The Syrian Railways has, as well as its standard gauge lines, an extensive 1050 mm. gauge network. It includes the link from Damascus to Beirut - partly built as an Abt-system rack railway. The rack sections on the Lebanese side have been closed. In Syria however the Swiss-built steam locomotives, over a hundred years old and dating from the opening period of the line, still operate. The 68 km. line, with gradients as steep as 28 per thousand, is used by excursion trains daily from the beginning of May to the end of October. Especially in summer the inhabitants of Damascus find it a pleasure to escape the hot city at an altitude of 1400m. The Hartmann loco 91 is also used on this stretch.

The other section of the 1050mm network - around 300 km. in total - is the former Hedjaz Railway with its branches. Here also the regular traffic is modest: three times a week a passenger train leaves Damascus for the Jordanian capital Amman. From Deraa to Bosra there are only occasional special trains. The amphitheatre of Bosra with its popular events is well known throughout Syria. The remains of another stretch of line leads into the Yarmuk gorge. The old Haifa Railway to Israel is used only now and then for special trains to Muzeirib or Zeizoun. In Muzeirib a track leads to the entrance to an amusement park.

Further the stretch from Damascus to Qatana must be mentioned - opened in 1977. The first 24 km. of this new line are traversed once a day by a railcar. The total length however is 33 km. The continuation of the military railway built to

Russian principles leads into the Syrian positions near the Golan Heights, occupied by Israel.

Renaissance of German Steam

Locos.

When the entire Syrian steam loco fleet today consists of 22 German locos (and 8 Swiss-built ones for Lebanon) this can be explained on historical grounds. The Hedjaz Railway, planning for which began 100 years ago, was built by German engineers, and most of the railway materials were ordered from Germany. This is why we find today a good selection of German locomotive construction of that period still in service.

No. 66. 2-6-0 2cyl. saturated steam. Jung 987/1907. [NB: the German system of notation is brief but comprehensive - "1'Cn2t" = 1 front carrying axle, three coupled axles, no trailing axle, 2 cylinders, Nassdampf (wet steam, i.e. not superheated), t = "tender" or (confusingly) what in English we would call a Tank loco; a "Tender loco" in English would be a "Schleppenderlokomotive" in German. Ed.] This tank loco is coupled to a four-wheel tender (Borsig 1914. Repair/restoration of this former Deraa shunting loco was completed at the end of 1999. Its area of operation is mainly special trains on the Haifa line Deraa - Muzeirib.

No. 91. 2-8-0 2cyl. Superheated. [1'Dh2 - 'h' = heissdampf, hot steam. Ed.] Hartmann 3040/1907. The reconstruction of this loco was completed in Autumn 1998. This includes the remarkable rebuilding from saturated to superheated steam. The Cadem Works at Damascus used for this the boiler of a Mallet loco (0-6-6-0 4-cyl. compound tank - CCh4vt) Henschel 15165/1917. These machines were originally built for the Military Railway Direction of Bruxelles; after the end of the First World War six of these locos found their way from France to Syria.

No. 160. (2-8-0, Borsig 9009/1914.) This type with very short tender was originally planned for Greece. In Syria they were provided very quickly with more capacious bogie tenders. Of the original four locos, two still remain together with the short tenders - one of which is now attached to No. 66.

No. 260. (2-8-2, 2-cyl. superheated.) Hartmann 4029/1918. This is the youngest loco that has remained until now in regular operational service. A sister loco, No. 262, (Hartmann 4031/1918) was repaired in 1999 and has been serviceable once more since the beginning of 2000.

Two further engines should follow the two that were completed at the end of 1999. These are the Hartmann saturated-steam No. 90 (Hartmann 3039/1907), a sister to No. 91 which has been rebuilt to superheat; and a more complex job will see the reconstruction of a Mallet loco of the Lebanon railway, No. 02021-962. [The number here indicates the axle/wheel arrangement - in the Whyte scheme this would be an 0-4-4-2T. The Germans describe it as a B'B'1n4vt - i.e. "0-4-4-2 saturated 4-cylinder Compound (v = verbund) Tank." Ed.] This Hartmann loco (3001/1906) has a sister (3000/1906) which will act as provider of spare parts. The plans of a railway society in Chemnitz to reimport this loco 3000 to its city of construction are therefore doomed to failure. This loco should then be used in regular excursion service on the mountain line from Damascus to Serghaya - which means that soon it will be possible to see five operational examples of the Chemnitz firm's production !

Restaurant Trains.

The extensive scrapyards at the Cadem Works in Damascus has been thinned out for other reasons as well. The traditional links between Moslems and their almost-holy Hedjaz Railway has been exploited by several restaurateurs. Old steam locos placed before static restaurant trains have become almost a Syrian speciality. So - in the above-mentioned park at Muzeirib there is a train formed of a Jung loco of 1906 and a rake of Lebanese compartment carriages. In front of the terminal station in Damascus Kanawat stands loco 62 (2-6-0T, Jung 966/1906), indicating the way through the monumental station building to the platforms - and here stands 2-6-0T loco 130-751 (SLM 851/1894) on a restaurant train. The train is fitted out internally like the Orient Express, and reminds one that it was once possible to travel from Paris to Damascus. [Sic. Ed.]

A fourth loco, No. 35 (0-6-0T, Hohenzollern 2400/1908) stands at Zebedani, also before a restaurant train. The station lies 1200m. high, shortly before the summit of the Lebanon railway. The daily excursions in summer and the additional excursions can therefore mean that on busy days a Hohenzollern loco stands at this station next to a Hartmann loco with a Henschel boiler, awaiting a crossing with a Borsig loco.....

What would here count as a minor sensation is for the Syrians no more than a leisure experience, that in addition brings the State railways a reasonable income. The origin of the locos is totally unimportant in this respect. It is simply a historical coincidence, that so much and

such a variety of German railway equipment remains here in regular use."

[I had never heard of this scheme to reimport a Chemnitz-built loco to Germany Does anyone know more ? Ed.]

B). EGYPT.

(i). Dutch Infrastructure Aid.

From Marc Stegeman: "The Dutch government is encouraging Dutch companies to start involving themselves in transport or infrastructure-related projects in Egypt. Projects aiming at a long-term development of the local economy can be sponsored up to two-thirds of the total project cost. For the year 2000 a total of Hfl. 4.5 Million is available as development aid for emerging markets. The Egyptian government aims at improving infrastructure : e.g. Harbours at Damietta, El Arish, Alexandria, Port Said (East Bank) and Ain Sukhna; Airports at Marsa Alam, El Alamein, Ras Sudr and Cairo. Many of these projects are envisaged as "BOOT" (Build, Operate, Own, Transfer). Also Light Rail transport is being mentioned - a third line for the Cairo subway as well as modernisation of tram cars and tramway lines in Alexandria. Heavy Rail transport requires maintenance and improvement of existing railway lines and rolling stock. Plans for linking Cairo satellite city industrial centres with BOOT railway lines have been drawn up. Dutch business men are advised to adapt to local habits in order to avoid deceptions when trying to get in touch with their Egyptian counterparts."

(ii). Cairo Trams.

Jan Jaap Carels of Amsterdam published an article in "Op de Rails" issue 2000:4, pp. 143, entitled "A tram ride in Cairo." The visit took place in March 1999. Translation from the Dutch is by your Editor.

"After a wait of around 20 minutes at the Darassa terminus an empty tram appeared - one pantograph was broken and and other raised at rather an angle. The destination blinds are totally gone, and there is no indication of line number or destination. The waiting passengers clambered in - in itself quite a business through the folding doors which only half-opened - and discussed with the personnel which line this actually was. The result was that the majority disembarked again. Those who stayed could take their places on the hard wooden lengthwise benches and 'enjoy' the rather decrepit interior. As we reached the depot at Abassia after a few stops, the driver got out to walk towards the depot. After a while he returned with a board on which was written the number '37' - after placing this behind the wind-

screen the journey continued, and after ten minutes or so we reached Heliopolis. Because the speed here was clearly rather too high, the rather wonky pantograph collapsed here and the tram came to a stand. The crew are clearly used to such a situation, for the pantograph was soon replaced in contact with the wires through use of a wooden broom.

After lurching further forward for a quarter of an hour, there occurred at a major crossing point what seemed to be unavoidable - the tram took a direction in which a proportion of the passengers didn't want to go. Fortunately the trams travel very slowly with open doors over crossings, so that it is possible to embark or disembark while they are moving. After a further five minutes pottering - during which the entire crew seemed to be chatting away in the cab - we reached the main shopping street. Here we stopped - one conductor went off to buy cigarettes, the other purchased vegetables and fruit. After completing these chores, the tram moved a further two hundred metres in order that one of the conductors could honour a baker with a visit. The meal, by now quite extensive, was spread around the cab, while the tram moved at walking pace towards the terminus at the edge of the desert.

For the return ride to Cairo I travelled in a three-car set belonging to the Heliopolis concern. This tram travelled noticeably quicker, had upholstered seats and a functioning interior light."

The same issue has notes on tram operations:

The tram network of Cairo consists of only three remaining lines on the north of the city. The decline, which began shortly after the arrival of the Japanese units at the end of the 1970's, has led to the disappearance of trams from the old city. The permanent traffic chaos, made still worse by construction work for the metro, makes it almost impossible to run a fairly reliable tram service. Even the operations on the three surviving lines, which are largely situated on separated tracks, is depressing. At all crossings the trams arrive with major delays, so that frequently clusters of two or three gather. For this reason it can occur that no tram at all appears at a particular stop for a half hour. With the result that - owing especially to fierce competition from minibuses - the number of passengers using the trams has fallen to a low level.

Heliopolis. Here the situation is rather better- There are five lines and the stock used in service is well maintained. Since 1993 a part of the system is operated using redundant material from the urban system.

Helwan. In Helwan, a satellite city of Cairo, there are three routes. A branch in an easterly direction has been extended in recent years to a large housing development at the edge of the desert. The oldest Japanese two-car sets operate on this system, and they are in a poor state. The cars are dented and scratched; windows, destination blinds and lighting are broken, and the route indicator exists, if at all, of numbers written on a piece of paper or cardboard behind the windshield. The trams are - like everything else in this town - covered with a thin layer of sand, since dustclouds of desert sand regularly blow in.

Accompanying photos show "Port Said Road - the only urban terminus in Cairo" and "Two of the three tramlines in Helwan pass through a market which takes place partially on the tracks.

C. TURKEY.

(i). "TEFS" and onwards.

Further notes on Bill Alborough's planned tour - TCDD wanted in October 2000 to query and negotiate the agreed May 2001 dates for the tour; locos agreed include Kriegslok 2-10-0 56548, Robert Stephenson 2-8-2 46105, Prussian G8 type 0-8-0 44017 and 2-8-2 46052. Train formation was to comprise a Fourgon (baggage car) for locomotive department use, two sleeping cars, each with ten cabins with two berths each, a Pullman-style day carriage with reclining seats so that everyone gets a window, and a Restaurant Car to serve breakfasts and dinners daily, and optional lunch snacks. The Sleeping Cars have showers (not pressurised, limited water supply) and separate European-style toilets; the day carriage has Asian-style "squatters".

(1a.) LATE NEWS The End of Steam on TCDD? - This edition has been delayed by a number of factors - but at least this allows me to mention that Bill in Jan. 2001 cancelled the tour due to an inability of TCDD to guarantee the promised steam haulage. Their fax of 23/11/2000 advises: "You know Turkey is one of only a few countries in the world which has active steam locomotives; they are only used for tourist purposes, not for normal railway service any more. They have a high risk of breaking down, as they are kept cold for long periods between being run. Repair costs are extremely high. To protect them and keep them active in future years, TCDD has decided in principle to allow them only to run in the Regions where they are kept, and not send them to other regions for trips.

For these reasons, and in order to operate your tour itineraries without difficulty, we inform you that we will only pro-

vide currently-active steam locos 56517 and 56548." (These are both former DR Kriegslok 2-10-0's.)

Bill warns that any other tour advertised for Turkey will have been given the same information, whatever their publicity might say. A tour run in Sept. 2000 ran with a Kriegslok, and the 'Skyliner' appeared on the Zonguldak line where it is based; the G8 0-8-0 44071 was coupled up inside the Kriegslok, but not in steam and without coupling rods. He notes that the TCDD attitude is sensible in terms of conserving locos in the longer term - many people have expressed surprise and concern when watching the Jordanians steam locos within 2 hours from cold !

Further insight into these sad developments comes from "Lok Report" 2/01, Februari 2001, p.52f.

"During a ten-day tour in Sept./Oct. 2000, only three machines (56.009, 56.517 and 56.359) were operational. And even 56.517, the last representative of the German Class 52, had to be withdrawn at the end of October with serious boiler problems. Therefore only two locos are available for the coming "Turist-Tren" season. The swift decline of the TCDD steam fleet is mainly due to Personnel problems. It was realised too late that expert skilled fitters and drivers needed to be trained to replace those being pensioned off. The results of this neglect can be seen in the reasons for the withdrawals in recent times. Severe boiler damage has been frequent, and since the closure of the Sivas maintenance workshops in 1984 no further full boiler inspections with tube renewals have been carried out. The only exception is the 55.043, which was overhauled at Izmir-Halkapinar in 1995. Firebox, superheater or smokebox damage lead inevitably now to permanent withdrawal of locomotives. Even the know-how to repair and maintain simple air pumps has almost totally been lost. In Izmir and Usak the overhaul of steam locos was ended in 1998. Only the Depo Konya, with its oil-fired 56.009, which before its delivery to Turkey operated from Wustermark as 58.2824 for some years, and the Depo Cankiri with the Skyliner 56.359, still have at least enough skilled men to keep these two machines operational for this year. So it is only a question of time before the last puff of steam is heard in the land of the Star and Crescent."

This article is accompanied by five colour photos of locos in use in recent years, and an advert for a tour of Turkey from May 19th-25th. which promises a tour Samsun - Sivas - Dirvigi - Erzincan - Erzurum - Kars - Erzurum employing (believe it or not) 56.359, 56.009, 46.042 and 56.517 !!!

Dist. km	No. du Train Composition Circulation	22		No. du Train Composition Circulation	23	
		1 et 2 cl.	FIN		1 et 2 cl.	VEIL
0	AL-LADHIQIYA	dép.	23.30	DIMASHQ Kadem	dép.	16.00
	SHARBIET	dép.	23.38	DIMASHQ Jadid	dép.	16.15
	GABALE	dép.	23.54	AL TURKMANI	dép.	---
	AL SEN	dép.	---	BAHARI	dép.	---
	BANIYAS	dép.	00.13	AL DMEHR	dép.	15.50
	REKIA	dép.	00.27	QERUD	dép.	---
	RUMSA	dép.	00.38	AL KANAT	dép.	16.22
80	TARTOUS	dép.	00.48	MHELA	dép.	16.50
	SAMERIAN	dép.	---	NAMIA	dép.	---
120	AKKARI	dép.	01.25	KNEFIS	dép.	---
	TAL-KALAKH	dép.	01.37	BHINSHAR	dép.	---
	AUM GAME	dép.	---	HIMSH-2	dép.	17.37
	AL CHANBA	dép.	---	KM II	dép.	---
	KURBAT ALTIEN	dép.	---	KURBAT ALTIEN	dép.	---
	KM I	dép.	---	AL CHANBA	dép.	17.58
180	HIMSH-2	dép.	02.33	AUM GAME	dép.	18.18
	BHINSHAR	dép.	---	TAL-KALAKH	dép.	18.32
	KNEFIS	dép.	---	AKKARI	dép.	18.48
	NAMIA	dép.	---	SAMERIAN	dép.	---
	MHELA	dép.	03.28	TARTOUS	dép.	18.25
	AL KANAT	dép.	03.52	RUMSA	dép.	19.34
	QERUD	dép.	04.03	REKIA	dép.	19.45
	AL DMEHR	dép.	04.23	BANIYAS	dép.	19.59
	BAHARI	dép.	---	AL SEN	dép.	---
	AL TURKMANI	dép.	---	GABALE	dép.	20.18
	DIMASHQ Jadid	dép.	04.58	SHARBIET	dép.	20.33
348	DIMASHQ Kadem	arr.	05.12	AL-LADHIQIYA	arr.	20.40

CHEMINS DE FER DU HEJAZ HORAIRES DES TRAINS AU 1 AOÛT 2000

Dist. km	No. des Trains Composition Circulation	10		14 RES		No. des Trains Composition Circulation	13 RES		11
		2 cl.	Vendredi	1 et 2 cl.	Lundi, Jeudi Samedi		1 et 2 cl.	Lundi, Jeudi Samedi	
0	DIMASHQ Kanawet	dép.	07.00	08.00	---	AMMAN	dép.	08.00	---
40	AL-MISMIYA	dép.	08.25 F	09.30 F	---	AZ-ZARQA	dép.	08.30	---
56	AS-SANAMAIN (Habab)	dép.	09.00 F	10.05 F	---	AL-MAFRAQ	dép.	10.25	---
80	IZRA	dép.	09.50	11.10	---	DARA'A (Douane)	arr.	12.55	---
111	AL-GHAZALI	dép.	10.45 F	12.05 F	---	DARA'A	dép.	13.30	14.50
128	DARA'A	arr.	11.20	12.40	---	AL-GHAZALI	dép.	13.53 F	15.25 F
	DARA'A (Douane)	dép.	---	13.15	---	IZRA	dép.	14.40	16.20
158	AL-MAFRAQ	dép.	---	15.00	---	AS-SANAMAIN (Habab)	dép.	15.20 F	17.10 F
207	AZ-ZARQA	dép.	---	16.33	---	AL-MISMIYA	dép.	15.50 F	18.05 F
223	AMMAN	arr.	---	17.00	---	DIMASHQ Kanawet	arr.	18.55	19.45

Dist. km	No. des Trains Composition Circulation	6		8		No. des Trains Composition Circulation	7		9		RES = Réserve des places obligatoire/ Seats reservation obligatory F = Arrêt facultatif/ Calls on request Autorail = Railcar
		2 cl.	Autorail	2 cl.	Autorail		2 cl.	Autorail	2 cl.	Autorail	
0	DIMASHQ Kanawet	dép.	05.00	14.10	---	QATANA	dép.	06.05	15.15	---	---
30	QATANA	arr.	05.55	15.05	---	DIMASHQ Kanawet	arr.	07.00	16.10	---	---

Dist. km	No. des Trains Composition Circulation	104 ETE		109		No. des Trains Composition Circulation	106		108 ETE	
		2 cl.	Vendredi Samedi	2 cl.	tj		2 cl.	tj	2 cl.	Vendredi Samedi
0	DIMASHQ Kanawet	dép.	08.00	18.30	---	BERGHAYA	dép.	---	15.50	---
10	DOUMMAR	dép.	08.25	18.55	---	ZEBADANI	dép.	---	16.30	---
22	ACHRAFIYA	dép.	08.55	19.25	---	EL-TEQIYEH	dép.	---	17.10	---
24	AJN EL FLIEH	dép.	09.00	19.30	---	DEIR QANOUN	dép.	---	17.35	---
28	DEIR QANOUN	dép.	09.20	---	---	AJN EL FLIEH	dép.	09.00	18.05	---
38	EL-TEQIYEH	dép.	09.45	---	---	ACHRAFIYA	dép.	09.05	18.10	---
50	ZEBADANI	dép.	10.30	---	---	DOUMMAR	dép.	09.35	18.40	---
61	BERGHAYA	dép.	11.30	---	---	DIMASHQ Kanawet	arr.	10.00	19.10	---

(ii). New Service.

Passenger trains have been reintroduced - three times weekly - on the Elazig - Tatvan line. (see below.)

(iii). Link with Georgia.

The plans for a line linking Kars with Georgia is definitely to be built. The Turkish Transport Minister travelled to Tbilisi in October 2000, and now attempts will be made to raise the necessary finance internally, since no private firm has until now shown any interest.

D). SYRIA.

From Samuel Rachdi: Samuel runs "Fahrplancenter News" and, on reading in the press of the new Syria-Iraq service, immediately sent a fax to CFS in Aleppo in the hope of getting some information quickly. Six weeks later a registered letter arrived, written personally by the CFS Director General, with a lot of information but also some gaps - so he called Aleppo direct and got all the missing information! What follows is taken from his letter, supplemented by "Fahrplancenter News" No. 33, p. 8. .

a). Syria - Iraq International:

The Aleppo-Mosul train commenced running on 1st. August 2000. It runs weekly over the 748 km. route Al Qamishli - Al Yaroubieh - Al Mawsil (Mosul); it consists of two sleeping cars and one baggage car; the sleeping cars are from CFS, the baggage car from Iraqi railways. (The sleeping cars of both railways are very similar, having been built in the DDR.) CFS's Director was aware of their being a connection at Mosul to Baghdad, and thence to Basra, but through tickets are not available at Aleppo

or anywhere else in Syria. (Exchange of information between neighbouring Arab railways is very seldom - this can also be observed in North Africa.) This means that the legendary Bagdad Railway is now open again to passenger traffic for almost its complete length, only the 2km. between Nusaybin in Turkey and El Qamishli in Syria remains closed. There is no freight service between Syria and Iraq at present, (the trade boycott against Iraq means that there is little to transport at present) but both railways are planning to introduce one in 2001.

b). Taurus Express.

The new CFS timetable reveals that the "Toros Express" from Turkey to Aleppo is now extended and running through from Haydarpasa (Istanbul) to Damascus. Rather than 1st. and 2nd Class, the two coaches forming the train are a Sleeper and a 1st. Class, and they run through between the two countries.

(David Stiffelman came across a news item - "Al-Mustaqbal newspaper quotes from a statement released at the beginning of June 2000 by the Syrian Railway Authority in Aleppo - it announced the operation of the Damascus - Istanbul rail link under the terms of a treaty between Syria and Turkey signed in 1999. The newspaper notes that the line connects Damascus to Istanbul via Aleppo, which is the second largest town in Syria. The route length is 1500 km., and one journey per week is planned.") According to Samuel Rachdi the summer timetable will feature two trains a week.

c). Suburban Service ?

CFS is also intending to introduce some 'Trains de Banlieue' (suburban trains), so the Meydan Ekbez - Aleppo service has been renamed for this purpose. But CFS is looking to buy about 20 diesel multiple units for introduction on suburban lines around Aleppo and perhaps north of Damascus too; the latter is being discussed but is not yet decided. As the Director General mentioned, "they have been aware of the development of suburban services in neighbouring countries" (but I didn't ask him if he meant Israel, Turkey or Iran !)

E). IRAN.

Samuel notes:

(i). Railbus Imports.

Concerning the British Class 141 railbuses - Cotswold Rail has confirmed that they are being sold to Iran at \$100,000 each including refurbishment. The reason why IIRR has bought

them is apparently simple - the railway needs every vehicle it can get; passenger traffic is increasing in double-digit rates (as in Israel) and the Iranian industry isn't able to produce such quantities of rolling stock, so they are buying whatever can be pressed fairly immediately into service. It could even be that suburban services are being planned for a city other than Tehran, but at present this is unclear.

(ii). International services to Turkey, Khazakstan, Syria (and even China ?).

IIRR has reintroduced an international service to Turkey. Every Wednesday from July 2000 a passenger train crosses the border at Razi and goes down to Van to on Lake Van, to connect with the ferry from Tatvan, and then returns immediately (no exact timings yet available). It is therefore once again possible to travel by rail from Istanbul Haydarpasa via Ankara and Elazig to Tatvan and further to Tabriz and Tehran once a week. Interestingly, the TCDD have not assigned any passenger coaches to this service; there is just one baggage car running which runs together with the passenger train from Elazig to Tatvan, but at Tatvan only the baggage car is conveyed by the ferry to Van, and then continues its journey attached to the Iranian train to Tehran and back.

In "Fahrplancenter News" No. 33 p.9 Samuel Rachdi provides further news on extensions of this route - effectively the former "Silk Road". Talks have taken place between the Turkish and Kazakhstan railway administrations. This means a train link between Istanbul via Ankara, Tatvan (the ferry across Lake Van), Razi, Tabriz, Teheran, Mashhad, Sarakhs, Charyev and Tashkent - a total of 6,308 km. by rail plus 75 km. on the ferry. Plans even exist for this to start in January 2001 !

In addition the governments of Syria and Iran have decided to create a direct rail link between Damascus and Teheran, which should also act as a feeder to the above route. Since a route via Iraq is currently politically not possible, the concept envisages a line through the south-east of Turkey, though as yet the government in Ankara has taken no formal position on this idea.

(Kazakhstan is also interested in an extension of this route further eastwards into China, and to this end has signed a tentative agreement to acquire two Talgo train sets from Spain, after a test with one train in Kazakhstan. A trial journey over the route Almaty - Astana (1200km.) provided a journey time of 13 hours, as opposed to the current 21 hours journey time with the fastest train. The Talgo trains would then run between Almaty and Urumqi in China, for which service a gauge-conversion facility would be set up in the border station of Druzhba.)

(iii). Generators.

Mark Stegemann notes that "recently a Dutch company was requested to offer generator sets for Iran Railway equipment. As the initial request was for three generating sets of 300 KW at 1500V single-phase for mobile use, it is my guess that these sets are needed to provide auxiliary / air conditioning power to the turbo train sets....."

F. IRAQ.

According to "Fahrplancenter news" 33 p. 15, the Czech company CKD has been delivering spare parts to the Russian concern Energomaschexport, so that the diesel locos delivered to Iraq in 1979-1982 can be repaired.

G. PALESTINE.

"Fahrplancenter News" No. 33 p. 8f has a considerable article with map of plans and proposals for a new "Palestine Railways". Writing this in early January 2001, it is hard to see what the future really holds for this troubled area, but the article is translated and given in full:

"If Palestine really becomes a sovereign state in the coming months, the first trains could be calling at Gaza in 2002 !

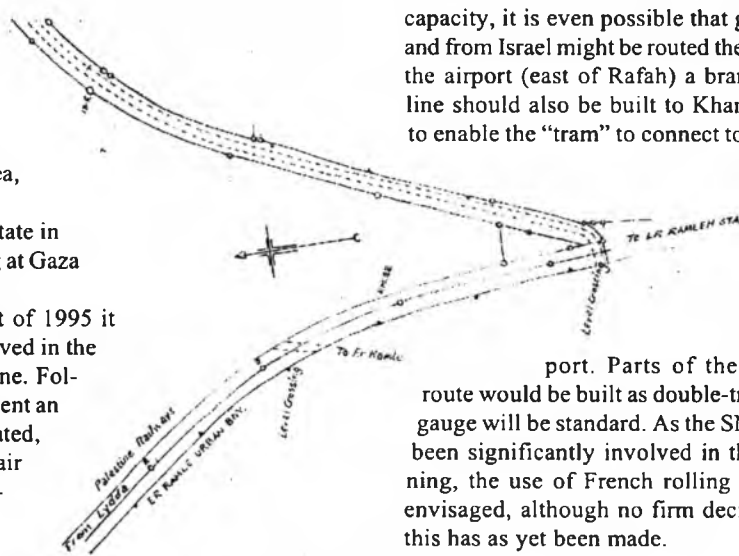
In the framework of the Paris Agreement of 1995 it was decided, with the approval of all parties involved in the Near East, to form a railway company for Palestine. Following this in the context of autonomous government an organisation for Transport Infrastructure was created, which would supervise the the road, rail, sea and air traffic, and this has already become active in recent years.

An inventory of the remaining railway infrastructure has already been carried out. From this it appears that the entire rail route is still in existence, albeit mostly without

rails, and the formation has not been built upon. At some points asphalt has been laid over the rails at road crossings. The bridges are also still present, and the largest, that over the Wadi Gaza, has already been overhauled. Since this structure was built from concrete, it had no noteworthy damage.

The Project envisages first the re-construction of the old railway line, which formerly linked Tel Aviv [sic] in Israel with Cairo. On this stretch of line there should be a form of "S-Bahn" urban railway within the Gaza Strip - initially with diesel railcars - this is referred to locally as "the Tram". With an area of only 47 square kilometres and a population of 1.2M. and growing, such a service is certainly justified. Great hopes are also placed in the connection with Israel, since many Palestinians work in Israel, but live in Gaza. The current bus links are slow, since thorough border controls interrupt the journey and the roads in both Israel and Gaza are almost continuously overcrowded. The most important places within the Gaza Strip are: Beit Hanun, (border with Israel); Gaza; Khan Yunis and Rafah.

In a second stage the construction of a special freight line is planned, which would also begin in Beit Hanun, but run east of the other line and parallel to the border. In El Montar (south of Gaza) a goods station is planned, from which a branch line would connect with Gaza Harbour. The main line would continue towards Rafah, where it would be connected to the Egyptian railway system (Sinai Railway). It is expected that there will be a large and growing transit freight traffic between Israel and Egypt, as well as imports to Gaza, especially construction materials, and in addition for example the transport of fuel from Gaza Harbour to the airport. Should the harbour at Gaza reach adequate capacity, it is even possible that goods to and from Israel might be routed there. Near the airport (east of Rafah) a branch link line should also be built to Khan Yunis, to enable the "tram" to connect to the air-



port. Parts of the "tram" route would be built as double-track, the gauge will be standard. As the SNCF has been significantly involved in the planning, the use of French rolling stock is envisaged, although no firm decision on this has as yet been made.

The scheme for a transit railway line from the Gaza Strip to the Palestinian areas West of the Jordan, discussed two years ago, have been dropped, and no link station exists at all in the current plans.

If everything flows smoothly politically (!!!) it might once more be possible after 54 years to climb into a regular passenger train in Gaza."

[Ed. adds - in fact there was a brief IR train service to Gaza in 1972 - see Cotterell p. 100 - though I can find no other details.]

H. SAUDI ARABIA.

Construction of a railway line from Riyadh to Jedda and from Riyadh to a phosphate mining area in the north-east of the country is once more on the programme. The investment is calculated at around 17 Billion Riyals.

I. ADEN.

Richard Bowen has sent a photocopy of p. 50 of the "Port of Aden Journal" 1961/2. It shows a photo - rather faint but I shall try to copy the copy for this magazine, simply due to its quaintness - of a camel apparently hauling four Decauville tipper trucks. The text reads:

"The great white-washed windmills, with their cloth-covered vanes revolving slowly in the sea breezes that sweep the coast, are well known. Many a visitor has stopped his car to try to capture with his camera the picturesque quality of this ancient method of producing power. But this is only the beginning, and the curious visitor will find much more beyond the windmills. The sea water, drawn up by pumps driven either by the windmills or by more modern methods, is channeled into the large shallow pans, where, only a few inches deep, it is dammed in and left under the relentless sun to evaporate. Giving itself up in vapour the sea water leaves behind a salt deposit on the floor of the pan. The pan is refilled with sea water and this process is repeated day after day for about two weeks until about six inches of salt sediment lies dry and crisp on the floor of the pan. Then, in the blinding glare of salt and sun, the workers, some wearing their protective issue of sun-gasses, shoes and gloves, but most spurning them, enter the salt pan armed with crowbars. Chanting as they work, they break up the hardened surface of the salt with their crowbars and load the giant crystalline lumps into buckets. The buckets of salt are then carried over narrow plank walks to the side of the pans and loaded into tipper trucks drawn along a narrow-gauge railway by camel or occasionally by a small diesel engine. Loaded with salt, the little train winds its tortuous course around the mounds of salt and in between the many pans...."

J. LEBANON.

Old News: I have received a copy of page 433 from "Modern Tramway" December 1970; it shows two former Beirut trams, a motor car and a trailer, "preserved to form a roadside cafe, duly known as 'Le Tramway', on the outskirts of the city." The photo indicates that there is sea in the background, and the cars are on short sections of track at almost right-angles to each other. The carrier bag provided for takeaway sales was actually more impressive, showing four cars!

One assumes this cafe did not survive the ravages that came later that decade.

51:7.

SOME MORE NOTES ON THE HEDJAZ RAILWAY.

a). The Forestry branch.

Several issues ago I mentioned that I had seen on an old wall map of Israel, pinned to the wall in a classroom at my daughter's then-school in Leeds, a depiction of the Hedjaz Railway (along the right-hand edge) and with a branch line heading west, south of Amman - a line of which I was totally unaware and of which I had heard nothing. Andy Wilson wrote quite a while ago (sorry, Andy!) with a few points:

From: Sir Alexander Kennedy: "Petra, Its History and Monuments", published by Country Life, 1925. p.5:

"....spring of Ain Najal (the Roman station of Negla), where there is ample water in a spring and running stream in a narrow valley trending eastward between low ridges, on which at several points traces of ancient habitations still exist, and flint im-

plements, generally of inferior type, may be found in plenty. Hence the *Limes* runs southwards to two springs called Jarba, beyond which, at no great distance, it reaches the important and imposing *Castrum* of Udhra. This must have been a very important point *d'appui* in the Roman scheme of political penetration towards the spice lands. Its ruins are of massive masonry, whose outline is easily traceable - the walls and gates, and bastions of an impregnable fortress of considerable extent. The buildings within the fortified circuit have suffered from the ravages of time more than the wall itself, but there are numerous remnants of barrel-vaulted structures, and the depredations of the Huweitat *Shaikhs*, who have built themselves houses here in the midst of a considerable tract of cultivation dependent on the copious water issuing from several springs, have made but little impression on the work of the Roman engineers.

From Udhra the Roman road runs southward, always along the base of the mountain, past the springs of Basta and Khirbat al Ail and several others, to Khirba Sadaka, an extensive but seldom-visited group of ruins of massive masonry with much broken pottery scattered about its surface - obviously another *Castrum*, though probably not so important as that of Udhra, or perhaps less kindly treated by time. Beyond to the southward a series of springs with traces of ancient ruins in their neighbourhood lead to the main road between Ma'an and Aqaba at the springs of Abal Lisan, whence the main ridge may be crossed by the pass of Naqb al Ishtar - practicable even now even for heavy motor-traffic.

Between the tract just described and the sandstone ridges which contain Petra lies the main range of al Shara (Mount Seir) rising from the *Limes* in a series of three ridges of progressively increasing height to its summit 5,000 feet (and in places more than that) above sea-level.

The northern part of this range within the district under consideration - namely, from Shaubak to Petra - is, or rather was, covered by an extensive forest of stunted oak and terebinth known as al Hisha. The trunks of these trees - and more particularly of the terebinth (*Butm*) - have grown to a goodly girth, often to a diameter of four and five feet, but their foliage, thanks to the attentions of countless generations of goats, is a mere parody of the term. A few trees happily survive to show what their fellows were like - a trunk of solid timber, three or four feet in diameter at the base and but little less at its top some fifteen or sixteen feet higher, surmounted by a mere bush of scantily-leaved tendrils.

The oaks (*Balut* or *Sindiyan*) are generally less well-grown than the terebinths and, for the most part, form mere thickets whose prickly leaves create the illusion of holly-bushes. Mistletoe with red berries grows upon them plentifully. During the War the Turks, being cut off from their ordinary sources of coal-supply, built a railway from Anaiza station to the edge of this forest (Ras al Hadid) - a distance of twenty-two miles - and, sawing off the massive trunks as near the ground as possible, carried them off to burn in the engines of the Hijaz Railway. This branch line may some day, if repaired, serve a useful purpose in carrying tourists to Petra, but it will carry them through no forest; the trunkless bases of the old giants, looking from a distance like great slabs of stone scattered about the hillsides, are all that remains with only a few accidental survivors to help one to picture the scene in its former glory.....”

Andy adds: “The line is also mentioned by T.E. Lawrence in “Seven Pillars of Wisdom”, pages 480/1, referring to events on 16th. January 1918 where he refers to “Railhead of the forest railway, with its temporary sheds.” A photograph by Lawrence has also been published in a book entitled “Oriental Assembly”, which is a collection of miscellaneous material by Lawrence, including photographs. The picture concerning the forest railway is Plate 31 entitled “El Nijl. Shobek railway and mill”. (‘El Nijl’ is presumably the same as ‘Ain Najal’, mentioned above.) It is not very informative to me - there is a curving embankment, apparently with track on it, and behind, a few buildings of uncertain function, but that is all which I can identify. The surroundings look rather bare, almost desertlike. It is not dated, so it could have been taken after the war, when Lawrence was a Colonial Office official in Transjordan for a few months in 1921.

As for when the track was removed (I assume it was), this would most likely have been done by PR so maybe there is some record waiting for Paul to spot? *In sha Allah.*”

Editor adds: The line from Aneiza to “Hisheh Forest” is of course shown on Map 4 on p. 11 of Turret’s “Hedjaz Railway”. On p. 20 Aneiza is station No. 28, at distance 422.7 and at a height of 1051.2 (though here there is no mention of it being a junction.) On p.67 in the chapter on the War he writes: “Also, a 40 km., branch line was built in 1915, starting from Aneiza... and sweeping in a wide semi-circle to the west, past Shaufek Castle and then south into the high (16000m.) mountains to end in the local Hisheh forests. This

was to transport wood cut in these forests for use as fuel for the trains to Medina.”

But none of this explains why a “Map of the State of Israel” published in the 1960’s should still show such a line !

b). A Jewish Railway Contractor ?

J.I.C. Boyd, in “The Schull and Skibbereen Railway” deals with the construction of that narrow-gauge line in Ireland in 1885-6. The contractors were McKeon, Robinson and D’Avigdor, of London, but D’Avigdor seems to have managed this project by himself and his business associates do not appear in the story. D’Avigdor was resident locally during the building of this railway, although he seems to have lived as a country gentleman and employed a manager to do the day-to-day running of the works. Elim Henry D’Avigdor was born in 1841, died in 1895, and was active in Jewish affairs. At some stage, date unspecified, he supervised railway construction “in Syria”.

So, where was this ? In view of his background, it seems reasonable to assume that Palestine was the part of Ottoman Syria where he was concerned with railways - is there any trace of his railway involvement on record ? Jaffa & Jerusalem ? The London-based “Syria-Ottoman” (“Valley Railway”) ? or what ? The French-sponsored lines at Damascus seem unlikely both for location and calendar reasons.

The “*Encyclopaedia Judaica*” (Vol. 5, col. 1367f.) has a brief entry on the D’Avigdor (later D’Avigdor-Goldsmid) family - “who became settled in England about the middle of the 19th. century and became united with the prominent Jewish family Goldsmid. Among its members was Elim D’Avigdor (1841-1895), engineer and author. He was the eldest son of Count Salomon Henry D’Avigdor (1815-1871) (whom Napoleon III created duke of Acquaviva) and grandson of Isaac Samuel d’Avigdor, member of the Great Sanhedrin. His mother Rachel (1816-1896) noted for her charitable activities, was the daughter of Isaac Lyon Goldsmid. D’Avigdor worked as an engineer in various parts of the world on construction projects, including railways in Syria and Transylvania.. he wrote hunting stories under the pseudonym “Wanderer” and was publisher of the ‘Examiner’ and ‘Yachting Gazette’. D’Avigdor was active in the ‘Hovevei Zion’ movement; as a member of the Executive of the Anglo-Jewish Association, he was responsible for the transference to its control of the Evelina de Rothschild school in Jerusalem, previously controlled by the Rothschild family. He married a Henrietta Jacobs. His son, Sir Osmond D’Avigdor-Goldsmid (1877-1940) added

the name Goldsmid on inheriting the estates of his cousin Sir Julian Goldsmid.....”

[Editor adds: Intriguing. In view of the French background and ennoblement, I find Andy’s dismissal of any involvement in the French companies not totally convincing. “Duke of Acquaviva” is a rather Gilbertian title - the word is the Latin for “Living Water”, in Hebrew “Mayim Chayim” and in Gaelic “Usquebagh” - i.e. Whiskey. I confess I was totally unaware of another English Jew with interests in railway construction, Zionism, publishing obscure magazines and with connections to a Rothschild family.....

As a Rabbi, I cannot help noting that he was born when his mother was 25, and died at the age of only 54; his son was born when he was 36, and his mother died (at the ripe age of 80) a year after her son.....]

Maybe someone with the right access can check the obituary in the ‘Jewish Chronicle’ of Feb. 15th. 1895?

Further Note and an Answer:

After preparing the above text the Editor did some searching in his files on the Syrian Ottoman Railway and “struck gold”. The Engineer in Chief of this abortive standard-gauge railway scheme was Sir Douglas Fox of 28, Victoria Street, Westminster. The main contractors were Paulings of London. In a copy of the printed “Specification of Works” for Contract No. 2 of the Syria Ottoman Railway Company Limited” (copy to be found in the papers of R. F. Scrivener at St. Antony’s College, Oxford) provision is made for the “Common Seal of the Syria Ottoman Railway Company Limited” and the “Common Seal of the Tyrian Construction Company Limited” to be affixed on “the 13th. day of March 1893, in the presence of:

H. H. BOLTON & O. ORMEROD WALKER, Directors of the Syrian Ottoman Rly.,
H. H. PHILLIPS, Secretary - and,
for the Tyrian Construction Co., E. H. d’ARIGDOR [sic.], T. SUTHERST (Directors) and
R. D. TYERS (Secretary.)

So this mystery is solved - our subject was a Director of a company presumably formed for the specific purpose of carrying out construction work in the “Phoenician” area. As is known, construction work petered out after a few miles and the Turkish Government exercised its right - laid down in the Concession - to pur-

chase the rights and the works thus far completed.

A Solicitor's Letter of 1929, in connection with a legal dispute regarding repurchase of Concession land (which is presumably how Scrivener came into contact with the whole matter) indicates that most papers connected with this scheme were destroyed in 1917.

c). Hedjaz Gauge.

The Hedjaz Railway was built to the unusual gauge of 1.05m. This is well known. The exact reasons seem to be lost in the mists of history. Or rather - the Beirut - Damascus line was built to 10.5, normally understood to mean "1 metre plus a bit extra in the middle" to allow for the Abt rack rail. This is strange, since metre-gauge rack railways are also common, so it is hard to see what the extra 5mm. does. The Damascus - Muzeirib "tramway" was built to the same gauge to facilitate, presumably, transfer of stock, and the Beirut - Mameltein tramway.

The whole issue of Gauges is complex. Whilst one understands that a narrower gauge provides for a cheaper and more flexible routeing, plus lighter rails and sleepers, the fact is that Austria went for 76cm., the Italians for 95cm., French and Germans mainly for 60cm. (Decauville, for very light lines) or 1 metre, the Portuguese for 1 metre..... The English in Africa for 3ft. 6 inches, in Ireland for 3 foot. It is not so much that one envisages through traffic ever being planned, and yet it would surely have been simpler and cheaper for manufacturers to have a standard range of axles, wheelsets, the ability to "run" an export loco in over some nearby line of similar gauge, and so forth. So why 1.05 m ?

Recently the Editor read through "Railways of North Africa" (E. D. Brant, pub. David & Charles, 1971), and here it transpires that several lines in Morocco (under French influence) were built to 1.055m. gauge. Is there a possible link ?

d). A Trip in May 2000.

In "Fahrplancenter News" No. 33 is an illustrated article (in German) by Frau Anke Röhl of St. Augustin in Germany - who travelled along a part of the Hedjaz route in May 2000. From her notes:

"From the starting point, the architecturally impressive "Hejaz Station" in the centre of the Syrian capital, there are at present only three direct trains to the Jordanian capital Amman (Mondays and Thursdays at 08.00, Fridays at 13.00). After eight to ten hours of travel the train arrives at the Hejaz station there, in the Mahatta district east of the city centre.

Trains in the opposite direction depart at the same times.

On 1st. May 2000 a BBC film team were working on railway and station scenes "as from 90 years ago" at the Amman station. Historic coaches were standing ready, and four steam locomotives were "in steam". The film scenes should be shown sometime in 2001 as part of a "Millennium Series". A Jordanian film crew were filming the regular Monday diesel-hauled departure to Damascus and its passengers.

Southwards from Amman there is no possibility to travel over the historic Hejaz Railway route in timetabled regular trains. Only freight trains use the line. [and there is mention of the phosphate trains to Aqaba.]

...On the Saudi side, one is impressed by the many renovated railway station buildings at Tabuk. Loco shed and water cranes are also still in existence. The station at Tabuk was one of the larger stations along the 1300-plus kilometre long route. If one follows the old line southwards, one passes several smaller stations before one reaches the station of Awjariya where, thanks to a second track, crossings were possible. Most of these stations in fact look more like forts, in which in fact 15 - 20 soldiers were stationed.

Near the next station, Mustabagah, is the only tunnel on this stretch, 130 metres long. A further worthwhile halt is the station of Qaal'at al Akhdar, 6 kilometres further. Near the station buildings various pieces of track and relics of wagons can be found scattered in the sand.

A further 66 km. southwards lays the station of Qaal'at al Muazzam; around 1 km. from the station building is one of the most interesting caravanserais (which was used by the pilgrims on their Haj to Mecca and Medina before the railway was built) with four corner towers and an impressive entrance gateway.

Also worth seeing is the station complex at Mada'in Salah, some 126 km. further south and in the middle of a Nabatean ruin. All the buildings have been recently renovated and in the shed one can wonder at a steam loco built by Jung in 1906.

Whoever wants to see a complete train should follow the railway formation a further 259 km. - at the station of Buwayr stands, next to the tall station building, a steam loco with ten goods wagons as well as a tender at the end of the train!

From here it is another 95 km. to the end-point of the Hedjaz Railway in Medina, however the station there lies in the city centre and so is not accessible to non-Muslims."

51:8.

ROLLING STOCK NOTES AND NEWS.

The items here are mainly thanks to Chen Melling, who is one of the few (the Editor is another!) to interest himself intensively in IR rolling stock, and who is hoping in due course to write a full survey of all PR / IR wagons. We wish him luck and look forward to publishing it !

a). The Former ESR G16's. (See 49:5(j) & 50:4(q).)

Loco IR 161 was taken by a G12 from the Qishon Works to the Tel Aviv Darom training centre on the night of July 7th. 1999, and was thus part of the second train to pass Hof HaCarmel station after its official opening. Several of the enthusiasts present were shocked by the 'dead' locomotive's appearance.

Since then, as has already been reported, all three G16's have been put back into service. The preparation for reinstatement also included a hasty repaint of all three, done by the Haifa Diesel Shops staff in their spare time, as with Nos. 227 and 102 a few years ago. On close inspection the results are rather poor, but when viewed from a distance they are acceptable, considering the short remaining life-expectancy of these machines. No. 162 was noted at the Shops on 15/9/2000, nearing the end of its overhaul. The overhaul focussed on the mechanical rather than the visual side - this is evidenced by the many dents in the body and frame of the loco, as well as the amateurishly applied painting. No. 162 followed the lines of its original green livery, but the green part was replaced with dark blue, similar to the style used on the G12's in the 1970's repaints. The only major physical alteration is the removal of the side sills below the solebar - though this does alter the physical appearance substantially. On this date No. 163 had already been in service a while.

b). The Former Italian 58-ton Ballast Wagons:

Wagon *Resh* 58 020, which was the only one to arrive in SNCF grey livery, has been repainted. The other wagons of the type arrived in SNCF brown, and so fitted quite easily into the Israeli scene. All of the wagons originally received IR-brown patches, used to hide their UIC numbers and as a background to their new IR numbers.

Apparently it was decided that bright grey No. 20 looked too much out

of place in the all-brown freight trains. In order to correct that, it was painted in standard IR freight livery of all-over brown, with reflective yellow stripes applied at waist height as stickers.

c). New Departmental Wagons, & The Bunker.

Two new additions to the Departmental wagon fleet are Nos. 1125 and 1126. Both are former *Shin* 50 type flat wagons that have been converted for wheelset carrying. 1125 entered service during May 1999 and 1126 is the former *Shin* 50 063. They were probably built to replace wagons 1123 and 1124, the latter currently being used as the 'bunker wagon' in the Museum.

On this - (and see 45:4(g)): a picture sent by Prof. Uri Yinon to the museum archives depicts the bunker, No. 0001 THE HILLMENS PRIDE, when in use, painted in camouflage. This picture also confirmed what I had thought, that the bunker was mounted on a PR 30-ton flat bogie wagon of their 37XX series. It is hoped that the museum will eventually use one of those wagons which remain in existence for mounting the bunker, instead of the WW2-vintage container-carrying flat currently used. (It was loaded onto this on 13/10/2000 - No. 1124 is probably the underframe of an *Aleph*-35 USATC box van.)

d). New Strengthened Type.

A new wagon type to appear in IR tracks is the *Shin* 61. These are former *Shin* 48 flat wagons which have had their frames reinforced. A similar conversion was being applied in mid-2000 to some of the frames of the *Bet* 55-type Paz-Gaz tank wagons. I understood that they too were supposed to be converted to container wagons of more than 60-ton capacity.

e). Former Merry-go-Round Coal Hoppers. (on 45:7):

The fact that the 60-ton coal hoppers are equipped with automatic couplers obviously makes it necessary for there to be locos similarly equipped. The GT26 No. 701 was bought specifically for this duty, and is equipped with such a coupler, and also with removable buffers and regular couplings. The new Spanish Co-Cos are also equipped with exchangeable couplers and have folding buffers.

In order to enable the movement of these hoppers in regular train consists, at least two 48-ton flat wagons (*Shin* 48 type) have been converted to 'translator wagons', with regular couplings on one side and automatic coupling on the other. One of these is *Shin* 48 115.

With the ending of the Ashkelon merry-go-round operation, the future use of this stock is unclear.

f). ESR coaches and IR Wagon Numberings. On 45:6:xiii.

The numbers 4907-4909 of the ex-ESR six-wheeled coaches are indeed PR/IR numbers., The 1945 PR Working Timetable lists Nos. 4901-4906 as Inspector Vans of 28'2" length, which would make them four-wheeled. The 1961 list of IR freight wagons lists Nos. 4912-4915 as 6-wheeled brake vans, but makes no mention of 4907-4909. They might have been renumbered by then to the 47XX or 36XX series, which include most of the six-wheeled wagons.

The first IR numbering scheme was a direct continuation of the PR system, using 3- and 4-digit numbers. Originally the number groups also represented the type of wagon, but like in GWR locomotive numbering, gaps were filled when the original number series for a particular wagon type ended.

g). Various Notes and Corrections to the Editor's Observations (3/99) in Issue 45:

On 45:13a:

The box-wagon body mounted on wagon *Tet* 40 188 was actually that of *Taf* 25 114.

The trolley marked 003 was built by Matisa (serial no. 653) as a track recording trolley, but after the purchase in 1995 of the Plasser & Theurer EM-80E type, was converted with ultra-sound equipment for rail fracture detection.

All wagons that have '*Kuf*' in their number are match wagons, as the *Kuf*-3656 and *Kuf*-007 mentioned.

On 45:13b(v): The converted generator coaches in stock today are:

1. half-generator: 53, 610 (NOT 601 !).
2. Full generator: 56, 616 (converted after fire damage), 623, 632, 633, 637, 640 and 641.

The coach with the Globes advertising was 342, not 642.

On 45:13b(vi):

Locomotives, railcars and passenger coaches are turned round once in a while, to even out wear. The Push-Pull ('MoDo') sets are all turned at the same time as the older stock.

Another O&K coach in service is No. 56. (see above.)

Regarding the numbers on coaches: Until several years ago all coaches had their numbers applied on the left end of the solebar on each side. At some time during the refurbishment programme done by 'Ha'Argaz' it was decided to apply the numbers on both ends of the solebar. This is also how all the GEC-Alsthom coaches were marked, except for No. 301, which has numbers only on the non-driving ends of the solebar.

On 45:13b(vii): IC3 sets are al-

lowed up to 150 km/h on some parts of the line.

Re: 45:13d - Wagons in Lod. Taf 45 001 / 1144 (not *Tet*), which came from Egypt, is used as a support wagon for the Orton crane. Wagon No. 1504 is not a match truck, it is a ramp wagon for loading military vehicles onto flat wagons.

Re: 45:13g. Wagon Numbering. Since Hebrew goes from right to left, the letters on wagons are prefixes, rather than suffixes. Thus a 35-ton flat wagon would be of the *Shin* 35 type, and not 35-*Shin*.

I believe that '*Bet*' never stood for '*Bilum*', since the brake vans were renumbered from the 4XXX series straight to the 14XX departmental series.

I only saw one picture of a tank wagon with a '*Heh*' prefix, which was also marked '*Hasaka*'.

'*Tet*' is for concentrated load, '*Shin*' is for a spread or distributed load.

'*Lamed*' might stand (somehow !) for '*Milobar*', a grain company from the Akko area.

All departmental stock is supposed to be marked in four-digit 1XXX numbers, though some wagons still retain their older numbers.

[For some readers unaware of this distinction - "Departmental Stock" is the term used for wagons etc. used for internal railway purposes rather than for earning revenue - thus wagons for use in workshops, on track repairs, for storage, staff accommodation, technical inspection and so forth. In terms of administration they are 'owned' on most railways by the Engineering rather than the Traffic Departments. It is interesting that Chen describes Brake Vans here as being classified as 'Departmental'; strictly speaking this is correct, but nevertheless they would be used on revenue-earning freight trains and so are usually given standard numbers on most railway systems, since their operation would be a matter for the Traffic Department. Ed.]

On 45:13i(i): The Matisa tamping machine serial no. 4543 is I.R. No. 10.

On 45:13i(iv): The P Class tender in the northern part of the Qishon complex is No. 62, the one in the south is No. 60, and that is the only one used as weight. The *Daled*-36 wagon noted is *Daled* 36 021, a former WD USA tank wagon (possibly WD 2474.)

On 45:13j: The Egyptian 3-axle wagon / frame in Tel Hanan sidings is No. 3605.

h). Clarification of the IC3 Numbering Scheme.

The IC3 numbering scheme had two phases:-

a). The first ten sets arrived with a 188 prefix to their coach numbers [Why? Ed.] and thus a typical set is numbered

Continued on page 18

MISCELLANEOUS MUSINGS.

Frank Adam raises a few personal observations which I think are worth sharing with the readership.

- a). Does anyone know whether the new German-built double-decker trains will operate in fixed sets and, if so, as 3, 4 or 5 coaches ?

- b). Military use of the north-south lines. The original PR main lines were of course laid for military purposes; the Acre-Beirut section of the HBT must have saved the Allied transportation authorities over 200 'Liberty ship' loads in Levant movements (between Syria and Egypt) 1942-45. But what about future use ? "I have sketched out that it would probably take four or five trains to move a Brigade from Beer Sheva to Haifa Bay - and save a lot of road traffic control in the process. This is not even a question of special platforms because each brigade has bridging tanks that could carry a couple of extra jacks to put under the last flat wagons end before placing its bridge on the end. The unit could then run up its own bridge onto and along the train and the bridge tank would retrieve the bridge and put it down again to detrain. It really is odd that IDF have not put some relatively minor funds into strengthening enough container flats for the tanks. If minerals go from the Negev to Ashdod in 4000-plus ton trains, spreading a brigade's tanks over four trains of 1500 - 2000 tons should not be difficult.

- c). I can understand that until the Haifa Bay - Tiberias line is relaid and the Eilat extension is finished, it might not be entirely far-reaching enough to switch brigades by train, but even now such extensions would pay for themselves by container traffic, taking lorries off the road. Imagine a container 'Liner Train' daily, Tiberias - Haifa - Tel Aviv - Lod - Ashdod, Beer Sheva - Eilat in each direction, and a minor feeder Lod - Jerusalem. BR Freightliners were 45 TEU containers on 15 flats, and are now extended. Given the figures and the doubling of the tracks it should be worth it.

- d). A fast morning and late afternoon train in each direction along the Emek would probably enliven the economy if nothing else by pushing the commuter belt wider. What are the current chances on relaying the Emek line or an Acre - Tiberias line so that there is a Galilee 'loop' ?

- e). Is it worth refurbishing the original Lod - Qalqilya - Tulkarm - Binyamina line forming a double-track loop in the central belt ? At least for freight ? I last rode it in 1966 & 1967.

- f). What are the chances of reaching Eilat by rail before the Balfour centenary ? (i.e. 2017)

Editor notes:

Maybe some well-informed readers in Israel can give more detailed answers. For myself:

On (a). I see the sets in Berlin formed of three or four, in the Frankfurt area of six - the coaches are largely self-contained, one needs simply one driving vehicle per set and, depending on local service provision, one with First Class or a Buffet section;

On (b) I suspect that the increased width of modern armoured fighting vehicles probably plays a part in deciding against rail transport (occasionally one sees such a tank on a road transporter, blocking half a road....) With distances so relatively short, even one avoidable transshipment would be avoided. But even the British Army uses rail transport for some exercises and for routine Stores traffic. Several IDF bases used to have rail connections, which are now disused or disconnected;

On (e) - I suspect the current political situation may militate against any substantial investment on a line that essentially goes very close to a potential border - most freight travels at night when the existing and expensively-refurbished lines are free of passenger traffic. But who knows what plans are even now being discussed ?

JERUSALEM TRAMS - PROGRESS.

(See 50:4(g).)

Thanks to Aharon Gazit for these:

From a Press Release of 22/11/2000 published by the Jerusalem Transportation Masterplan:

"The international Tender for the Jerusalem LRV is to be published at the beginning of January 2001. Simultaneously, the Transportation Ministry and the Municipality of Jerusalem are carrying out infrastructure works in excess of \$75 Million."

"The inter-ministerial Tenders Committee of the Jerusalem LRV Project decided on 22/11/00 that the documents of the concession agreement for building and operating the first line will be handed over at the beginning of January 2001, to the five groups which passed the pre-qualification stage, in order to consult with them and get their comments. Further on, the Committee will decide which of the comments will be included in the final draft of the Concession Contract.

The Committee has instructed the project management to simultaneously accelerate the public works of the first system, which includes the first LRV line, as well as a public transport lane from the south of Jerusalem to the City Centre.

Continued from page 17

188-7008 + 188-7408 + 188-7208. The 70XX and 72XX series are the two power coaches and the 74XX series is for the middle coaches.

b). Sets 11-24 came with the same numbering scheme, but without the 188 prefix. Some of the older sets also had their numbers changed, presumably following accidents which necessitated minor repairs.

Thus, it can be seen that it would be more correct to refer to the sets as "Set No. 01", "No. 02" etc., and not as 7001, 7002 etc., which describes coach numbers, rather than sets.

One example - following damage to units from sets 04 and 10, the undamaged parts from these sets were united as a hybrid 'set 04' - using coaches 188-7204, 188-7404 and 188-7010. This hybrid was noted in service in Sept. 2000.

Incidentally, the official top speed of these units is 180 km/h., although in Israel they are limited to 150 km/h.

i). IC3 set for repair.

Set 21, involved in the collision with a dump truck, has been sent back to Denmark for repairs. Chen's photo shows not only that the front cab has been seriously stove in, but the articulated joint with the centre coach appears to be out of alignment - since these sets are articulated into a homogenous whole, a severe bump will presumably affect all three coaches.

ii). Another PR coach survivor.

At the Pi Giliot tank farm on 30/9/2000 another PR steel-bodied coach (BRCW type) was noted on some apparently-disused land but with a large "No Trespassing" sign attached. No number was visible. Does anyone know more?

The works also include clearance of properties, changing of infrastructure at several locations, and building new lanes - at a cost of over \$75 Million.

Currently the plans - which will be carried out by the Transportation Ministry and the Jerusalem Municipality through the urban company "Moriya" are at the completion stage. It should be mentioned that the timing of all the above-mentioned activities has been co-ordinated with the companies involved from abroad, the employees of which are on holiday at the end of 2000, and with the need to complete the technical specifications of the concessions.

The first line will be about 14 km. long from Pisgat Ze'ev in the North through the City Centre up to Mount Herzl; to be completed in 2005, it will cost about \$400M, of which \$100M will be financed by the Transportation Ministry and the Jerusalem Municipality, while the rest will come from the international winning groups. This will be the first of eight LRV lines with an overall length of 54 km., to be built until 2020.

In addition to the LRV, the project (to solve transportation problems in Israel's capital city and to bring re-urbanisation to the city centre) involves park-and-ride facilities as well as new up-graded bus lanes and feeder lines to neighbourhoods, in addition to new traffic arrangements in the city centre.

It should be noted that, in parallel to the tender procedures and infrastructure works, the Jerusalem Regional Planning and Building Committee recently approved the introduction to the public of the first line alignment. This has been done with the completion of a survey into the environmental impact of the planned "motor vehicle tunnel" to be built at Tzahal Square (IDF Square) near the Municipality buildings, in order to leave the surface free for LRV at the city's historical area. This will probably bring all the construction plans for the first alignment before the public, in order to get their comments ready by February 2001.

The five competing groups were mentioned in issue 50 but there are some slight alterations or corrections, so the new version is here given in full:

(i). City Line Jerusalem. - comprising Daimler-Chrysler-Adtranz, Shikun-u-Binui Holdings, Etgal, P.B. Investments and the Belgian operator STIB.

(ii). City Pass. - comprising Alstom, ELCO, Ashtrom, Poalim Investments and French/International operator CGEA.

(iii). Adanim. - comprising Bombardier Transportation, Nechasim-u-Binyan, Clal Insurance and the Dutch operator HTM.

(iv). Ariel - comprising CAF Spain, Canadian engineering company SNC Lavalin, Delek, Baran, Dankner Investments, and the German operating company SSB of Stuttgart.

(v). Passim - comprising Siemens Transportation, Africa-Israel, Feuchtwanger, and the German operator Uestra of Hannover, in co-operation with DBAG (Deutsche Bahn.)

A week later another Press Release dated 28/11/2000 stated:

"The Jerusalem LRV Project has started ! Briefing meetings have started between the project management and the inhabitants living along the first LRV line, before the infrastructure works. These works include moving and upgrading of water, sewage, electricity and communication lines, as well as construction of public transport lanes costing \$75M. In December 2000 the construction company will start with the removal of demolished empty buildings located at Jaffa Road opposite the Machaneh Yehuda market.

The mass transit project management - headed by Mr. Eitan Meir - has started this week with the briefing meetings with inhabitants of the neighbourhoods "Shaarei Yerushalayim" (Abu Basd) and "Ohel Shlomo", which are near the "Machaneh Yehudah" market.

Mr. Shmuel Tzabari added that demolition of these empty buildings along the Jaffa Road axis will enable the beginning of infrastructure works and reduction of the public nuisances caused

by these empty buildings. He also said that, learning from world experience, the conclusion is that construction works can be carried out totally in consideration of the inhabitants' and merchants' needs, while keeping the city centre functioning reasonably.

"Building a new transportation system, of which the LRV is the main item, will improve the quality of life of the inhabitants. The project will not be finished in one day, and temporary difficulties like traffic arrangements and changes to routine life are expected - but we will do all we can to reduce any suffering of the inhabitants and prevent any damage to daily business", said Tzabari. The inhabitants had raised fears of collapsing sewage and water infrastructures during the works, since these have in any case deteriorated. They asked the municipality to take this opportunity also to rebuild the neighbourhoods. The Project's representatives said that the works will be carried out using strict precautions in order to secure the vital services. They added that beyond the LRV and the tremendous improvements to environment and the city centre, the people will also enjoy the upgraded infrastructure, sidewalks and new gardens on Jaffa Road.

The head of the Community Directorate at the city centre, Mr. Uri Amedi, said that representatives of the communities' directorates are full partners in the discussions regarding the building and operation of the LRV. He asked the neighbourhoods' residents to choose representatives in order to deepen mutual understanding and to represent them before the urban Boards. The works will last three years."

51:11.

SEJED STATION. LOST AND FOUND.

By Ron Shafir.

The railway from Jaffa to Jerusalem was officially inaugurated on 26th. September 1892. The building of this project lasted for some 30 months, and this was the first railway in the Middle East.

Initially there were only seven stations along the line:

Jaffa. 0 km. Still exists. Belongs to the Ministry of Defence as a part of the Bet Ha'Osef military museum collection centre.

Lod. 19.1 km. Still stands and is used by the Municipality of Lod as an Emergency Centre.

Ramleh. 21.6 km. Blown up by the underground movement after World War 2. A small station was erected by the Israeli railway authorities.

El Sejed. 39.5 km. Probably 2.5 km. East of Nahal Sorek (the 'Junction Station') station. Abandoned in 1915.

Dir Aban. 50.3 km. Rebuilt on the same spot as the current Beit Shemesh station. (old buildings still stand.)

Bittir. 75.9 km. Still standing, derelict and roofless.

Jerusalem. 86.6 km. Still standing.

Most of the stations were simple two-storey stone buildings. The stations in Jaffa and Jerusalem were a little bigger. Great changes occurred during World War I. In the year 1915 there came an order by the German engineer Heinrich August Meissner, to remove the tracks between Jaffa and Lod. This was done in order to face a possible penetration into the inland area by the British in

the event of a landing on the Coast. Meissner intended to use the tracks for a line from Tul-Karem, Lod, Beer-Sheva, Nizana. The original line Lod - Nahal Soreq was incorporated in the Sinai line and was widened from 1.000m to 1.050m., the same as the Hedjaz railway line.

Meissner's line branched off to the south just east of the bridge crossing the Wadi Surar. This branch led to the building of what came to be known by the British as the "Junction Station" (later Wadi Surar and today Nahal Sorek.) One branch heading south to the Sinai was the Turkish line and the eastern branch heading to Jerusalem was the French original line. With the building of the Junction Station, the stop at El-Sejed, some 2.5 km. down the line, became redundant and was abandoned.

There are now almost no proofs that El-Sejed station ever existed. This is the reason that Paul Cotterell suggested in Harakevet 16 that the stations of El-Sejed and the Junction station were one and the same. In this article I will try to shed light upon this question.

1. A Vale in his article in the Railway Magazine, vol. 10, April 1902, describes his journey on the Jaffa - Jerusalem line, mentions no village in the vicinity of El-Sejed - "... We pass the station of El-Sejed and Deir Abban without seeing the respective villages, or any villages at all..." I found an old British map (fig. 1) of the 7th. Field Survey Coy. RE EEF (Aug. 7th. 1918). In the map we can clearly see the village of Sejed, the "station" and the W. Surar Junction.

2. In my research in the Central Zionist Archives. I found with the help of Mr. Reuven Kopffler (Director of the Photographic Archive) a group photo. (fig. 2). One can see a group of people sitting on a station platform. This picture dates from 1913 - there is no other information. The angle does not permit deciphering the station's name, but the layout is similar to that of other stations on the Jaffa - Jerusalem line. Mr. Koffler recalled that in 1913 a

group of young Jewish German sportsmen called "The Gymnasts" toured the country, and one of the participants, a Mr. Emanuel Rar, wrote an extensive account of the tour in 1975. He wrote "...We continued our trip. We started from Hulda at 14.00 to a station (which today does not

a member of Kibbutz Sarig, and asked him to check whether his father had left an album and by chance there was a picture of a railway station in it. He was kind enough to send me a few days later a page from the album with a picture of the station. The picture is faint and blurred (not reproducible here) - but two facts are clear: This is the same picture I found in the Central Zionist Archives, and underneath it says in German "Auf der Station Sedjed vor der Abreise nach Jerusalem, 25. März." Thus the first confirmed picture of El Sedjed had been found!

3. On the basis of the map, at the estimated location of the station, I found a group of Eucalyptus trees, the only ones in the area. (fig. 4 left, below). They are situated exactly 2.4km. east of the Junction Station We know that on the

site of all the original stations from Jaffa to Jerusalem there are tall Eucalyptus trees.

4. In the left-centre of Fig. 4 you can see a heap of stones. I cleared away the thorn-bushes and found the foundations of a round building (Fig. 5, next page, top). This round building fits the description of those water tanks which served the steam locomotives of the period. See issue 29 of Harakevet (fig. 6) - "Passage d'un train a la station de Sejed".

5. The Annual Report of the "Societe du Chemin de Fer Ottoman Jaffa a Jerusalem" (the French company operating the line at this time) was issued on 28.3.1900 summing up the activities of the year 1899. (Fig. 7.) In the chapter "Travaux neufs" (New Works) I found an additional proof of the existence of a water tank at Sejed fig. 8). The report mentions the completion of work on the "Quai-citerne de la station de Sejed". The capacity of the tank was 15 cubic metres. It was intended to be

fed by the return trains from Jerusalem (they were usually less heavily loaded). The water was taken on at km. 73.9 after the Bittir station. This water was usually requested in the months of the dry season August - November when the wells of Sejed ran dry. This procedure enabled the trains running from Jaffa to Jerusalem to be filled with water at Sejed during all seasons of the year instead of having to

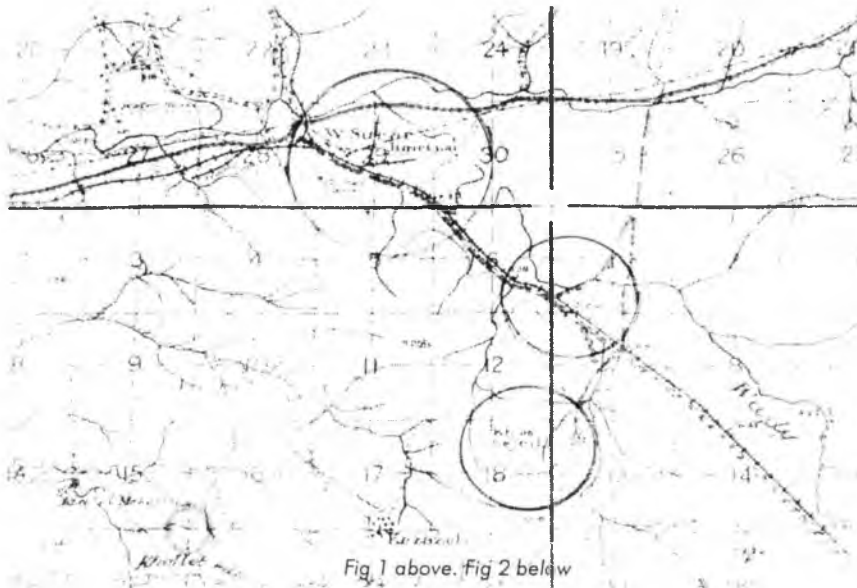


Fig 1 above. Fig 2 below



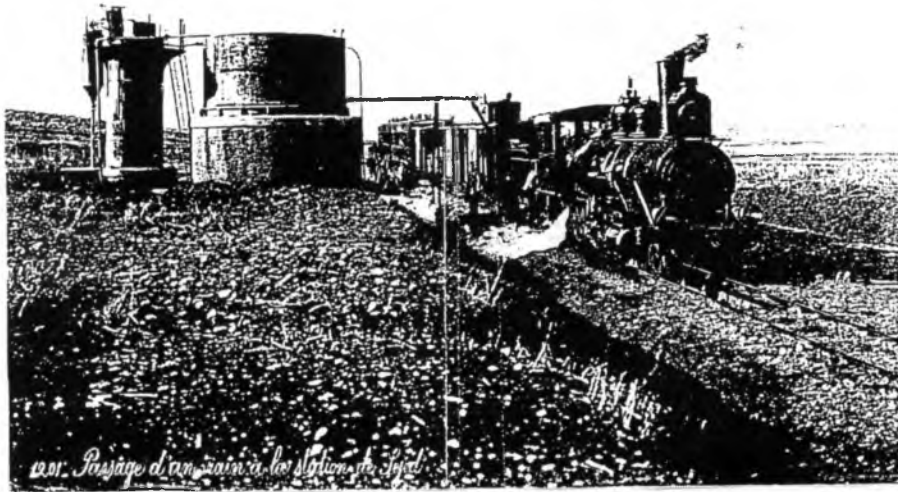
exist any longer), Sedjed. It took is only one hour. But as there was a heavy hamsin (heat wave) we arrived at the station terribly thirsty. There was nothing to drink. We boarded the train at 15.30 and arrived in Jerusalem at 18.00. We were so thirsty and tired that we failed to observe the beauty of the country..."

On the basis of this account I contacted the son of the writer, Mr. Eli Rar,



provide supplies for trains coming uphill is a remarkable comment on the state of the country's infrastructure and water supplies at the time (and since.) I knew of the need to transport water to Jerusalem to combat drought..... Those rusting water tanks at "Deir esh Sheikh" ought to be classed as historical monuments!

c). In the "Palestine Exploration Fund Quarterly" No. XIII of 1893, p. 20-23 is an account dated October 1892 of the railway from Baurath Conrad Schick. It includes: "From Ramleh it follows for some distance the Jerusalem road on its south side and then bends in a large curve south-eastwards to the village Naaneh, to the west of which it passes at 29 kilometres or 95,000 feet from Jaffa. Then it goes over many winter watercourses in a south-easterly direction comparatively in a straight line to the large Wady Surar, and crossing it in the neighbourhood of Cherbet Kefr' Ana about 7 kilometres or 23,000 feet from Naaneh goes on the south side of the stream 2½ kilometres further to a place called 'Ain Sejed, which is the third station, 39½ kilometres or 129,500 feet from Jaffa. On the south side, not far from the river bed, is a copious spring. The place is considered unhealthy and the workmen got fever when working there and in the neighbourhood. From here the line goes south-eastwards...."



From this we learn that the place name refers to a spring ('Ain) rather than a village.

carry an additional heavy water tank (i.e. an auxiliary tender) from Jaffa.

Conclusion.

This data demonstrates the existence of the station at Sejed, located originally in the vicinity of water springs. The Junction Station however became the main station for the southern route and the drying-up of the wells and springs at Sejed made the station redundant. Exact date of demolition is not known.

[The Editor comments: I have made a few slight editing changes to Ron's text, but wish to add a few points here:

a). Sejed station clearly consisted of a simple two-story building in the French minor railway style. it must have been a lonely existence for the station master and his family ! From the photo there seems to have been no loop or siding, just the through track with the substantial water tank on the south side of the track, east of the station building. And yet - the 1914 timetable, reprinted by Slezak, seems to imply that the morning trains (dep. Jerusalem 07.40, dep. Jaffa 08.05) crossed at Sejed (listed at Kilo 40.)

Fares from Jaffa to Sedjed were 32.20 (Piastres ?) First Class, and 12.00 2nd. Class. It is doubtful whether many were ever sold. The station was clearly built for operational rather than traffic purposes. Ron's task was not to establish whether it ever existed, but whether it existed separately from the Wadi Surar/Junction station, and this has been achieved.

b). The need to transport water downhill to

d). In "Scribner's Magazine" of March 1893 p. 298 Selah Merrill writes: "Still across the rich prairie-like country, we come after ten miles to Es Sejed, a place of no special interest, except that here is a spring and the engine is supplied with water. This question of water is after all one of vital importance, and was one of the serious difficulties to be considered and overcome in the construction of the road." An account of a trip in a special train in 1908 indicates a halt of 13 minutes at Sejed - Presumably to take water.

e). The World War I map shows a "Kh. es Sejed" - Khirbet, or ruin - but not a village. It also indicates a triangle of tracks at the Junction Station, which would have been logical considering the importance of the through traffic to the battlefronts in the south for which the southern line was built, thus obviating the need for reversals. But I have not seen a short distance south of it, though not near any of the small watercourses, and a "Trolley Line" this indicated before. There is also a short spur to the north-east of the Junction Station, and a water tank running a short distance south of and parallel to the line south to Beersheba. Maybe a siding for permanent way trolleys?

JAFFA A JÉRUSALEM

ET PROLONGEMENTS

Assemblée générale ordinaire du 28 mars 1900

RAPPORT DU DIRECTEUR D'ADMINISTRATION

BILAN

RAPPORT DU COMMISSAIRE DES COMPTES

SÉRIÉLITÉ

PARIS: LA MAISON

Fig 7 & 8

II. — TRAVAUX NEUFS

Reconstruction de la station de Ramleh. — Les travaux de cette construction, commencés au mois d'octobre 1898, ont été terminés au commencement de l'été 1900. Les dépenses ont été de 10,000 francs environ. Les travaux ont été exécutés par le service des Travaux publics, sous la direction de M. le Directeur, et les matériaux ont été fournis par les entrepreneurs. Les travaux ont été exécutés dans les délais prescrits et les dépenses ont été de 10,000 francs environ. Les travaux ont été exécutés dans les délais prescrits et les dépenses ont été de 10,000 francs environ.

Qui dit travaux de la station de Ramleh — Nous avons vu, dans le rapport du Directeur d'Administration, que les travaux de la station de Ramleh ont été terminés au commencement de l'été 1900. Les dépenses ont été de 10,000 francs environ. Les travaux ont été exécutés par le service des Travaux publics, sous la direction de M. le Directeur, et les matériaux ont été fournis par les entrepreneurs. Les travaux ont été exécutés dans les délais prescrits et les dépenses ont été de 10,000 francs environ.

Ateliers de réparation de Jaffa. — Les ateliers de réparation de Jaffa ont été terminés au commencement de l'été 1900. Les dépenses ont été de 10,000 francs environ. Les travaux ont été exécutés par le service des Travaux publics, sous la direction de M. le Directeur, et les matériaux ont été fournis par les entrepreneurs. Les travaux ont été exécutés dans les délais prescrits et les dépenses ont été de 10,000 francs environ.

A TURKISH-BRITISH JUNCTION.

By Paul Cotterell.



A couple of recent finds in the IRM Archives shed a little more light on the old J&J Railway in and around Lydda (Lod). Both refer back to Mandate times.

The first shows that PR leased the redundant and isolated J&J station building to the Department of Education for use as a government boys school, along with a parcel of railway-owned land. The sketch appears to be dated 5.4.1945. The north-south road occupies the old narrow-gauge track bed which was also the Lydda Urban Boundary at the time.

The second shows the actual junction between the J&J Railway (widened to 1.05 metre gauge by the Turks in 1915) and the standard gauge line of the British Army laid in the spring of 1918 (now, of course, the main line of IR to Be'er Sheva and the Negev and, once upon a time, to Jerusalem.) This sketch is undated. It is titled (*inter alia*) "Part of Parcel 30 and Parcel 22, Block 4344, containing approach road to War Cemetery, Er Ramle, claimed by Palest. Railways". Evidently PR were embroiled in a legal battle over who owned what. The double-dotted line heading off to the north-east shows the original J&J trackbed, then in use as a footpath. The standard gauge can be seen curving round to the left as it crosses the road on its way into Lydda station.

The site is approximately 300-400 metres north of Ramleh station and, as can be seen from the photograph taken in 1997, is still visible today. The standard gauge line curves round to the left, with the main road level crossing just out of sight. The J&J formation, on a slight embankment, can be made out to the right of the two poles. A white wall abruptly interrupts any further exploration, and the rest of the J&J formation north of this point has been lost under buildings and roads. The footpath (shown as Level Crossing in the Mandate period sketch) can be seen going across the middle of the photo. It no longer turns north-east to follow the J&J embankment into the wall, but continues straight on to serve a couple of dwellings just out of picture to the right.

For as short period from 27th. February to 31st. March 1918 (see 'The Railways of Palestine and Israel' p. 25) the British operated the section of line between this junction and Artuf (Bet Shemesh) as dual (standard and 1.05 metre) gauge, with the laying of a third rail for the standard gauge trains. An interesting, though not unique, procedure.

PERSIAN NOTES.

By coincidence three notes on railways in Persia have recently been published. In a way they all overlap, and it is fascinating to see how the same snippet of information is treated from different perspectives.

a). The famous incident of the derailment of a Stanier 8F.

From the "World War 2 Railway Study Group Bulletin" 10/6. p.166, some notes from Alan A. Jackson based on an account by Michael Robbins, who formerly served with 190 Rly. Optg. Coy. RE in Persia, 1941-3:

"The most interesting thing that [Stanier 8F 2-8-0, now preserved as LMS 8233 on the SVR] 41.109 was involved in operational life was its derailment by a camel in the desert near Nizamieh, followed by a period in which the running track was diverted clear of the derailment. This lasted from 4 August 1942 until the end of October. We used the incident for the drawing on our company's airgraph Christmas Card. Nobody knew of, or recalled the incident when the engine was picked from among a good many others awaiting scrapping - it was the one in best condition for further use."

An excerpt then follows from a paper he gave in 1996 to the Iran Society: "Perhaps the most curious accident we had was not far north of Ahwaz...An engine and three wagons went out as an engineer's special to do some minor maintenance to the track in the section. On its return, an empty wagon which had been left in the section was picked up and was leading, then the engine and several more wagons. Some way along, the British engine crew noticed three camels wandering unattended towards the line. The driver braked and the camels crossed about 30 yards ahead of the train. Just as the brake had been released, one of the stupid animals turned round and walked back between the rails; it was struck by the empty wagon in front of the engine. The wagon was derailed and plunged down the low embankment, followed by the engine and tender. If the engine had been in front, it would probably have demolished the camel and not been derailed."

Mr. Robbins "also recalled the initial problems of arranging facilities for the 46 coal-burning locomotives in the ex-LMS batch, and the difficulties the men had driving and firing these virtually unprotected from the sun in temperatures which reached 130deg.F in the shade. The coal varied in type and quality, and when

a consignment of soft Welsh coal arrived men from other British railway companies 'had to learn quickly from the Great Western men among us how to handle the tricky stuff'. Although generally satisfactory and standing up well to derailments, the brake-blocks of these locomotives offered problems, and the injectors gave much trouble with water which came from the tenders and an unavoidably high temperature. All locomotive water had to be brought into the southern terminus at Bandar Shahpur (now Bandar Khomeyni) by rail. Diesel locomotives were the obvious motive power for this operation. The RE had made futile requests for these almost from the first, but they did not begin to arrive until after the USATC took over from the British Army in 1943. From then on, much bigger tonnages were handled but the US steam 2-8-2's, which reached Iran from the end of 1942, were initially unsatisfactory for the job in hand, requiring much modification."

NB - also from 10.6 p. 160, a note by John Bushby: "200 of the Standard USATC 2-8-2's were ordered by the WD under Lend-Lease arrangements. A total of 91 went to Iran, the first being erected there in October 1942. All were oil-burners of course. They were renumbered into the Iranian State Railways list as 42.400-490, although they remained WD property."

b) Great Western Influence.

The next item comes from "Backtrack" Vol. 14 No. 11, Nov. 2000, p. 671, in one of Michael Rutherford classic thought-provoking and erudite essays - this one on (inter alia) the history of Oil-Firing.

"The next step in Swindon's oil-fired steam saga was an unusual one. During the late 1920's and 1930 Reza Shah, the ruler of Persia, decided that a railway was needed from Persian-owned ports on the Arabian Gulf to the Caspian Sea; Bandar Shahpur on the Gulf and Bandar Shah on the Caspian. The line involved vast engineering works, spectacular bridges, many tunnels, sharp curves and steep inclines and a combination of the lot in spiral tunnels !

The Shah became impatient with slow progress on the work and cancelled the original contract. A new one was agreed with a Scandinavian consortium in April 1933 in which work was to be completed by May 1939. There were many sub-contractors, including British ones and the line was completed ahead of schedule, resulting in extensions and branches being authorised. The railway became of great importance during the Second World War....

The first locomotive orders for the new (1933) contract, rather than being supervised by conventional consulting engineers, were put in the hands of the GWR and C.B. Collett's Outdoor Assistant (i.e. in charge of locomotive running), F.C. (Fred) Hall was sent out to Persia in 1933 as an adviser to the Persian government.

Locomotive specifications were drawn up by Hall firstly for five 2-8-0s (delivered in 1934) and then for four massive 4-8-2+2-8-4T Garratts (delivered in 1936). All were oil-fired and detail design and construction was carried out by Beyer, Peacock & Co. of Manchester.

How many members of the GWR staff were involved in this work is not known to this writer but oil-firing experience was gained and, perhaps more importantly, contacts were made with those knowledgeable about such matters in the Anglo-Iranian Oil Company." (NB. the 'Anglo-Persian Oil Co.' was renamed 'Anglo-Iranian' in 1935, and 'BP' in 1954.)

A reference is given to an article "Locomotives for Iran" in "Great Western Railway Magazine" Vol. XLVIII, May 1936, p. 225. A works photo on p. 669 shows one of the Garratts (incidentally, the cabs looked very German), for which the specifications were drawn up by Hall (they were NOT known as the Hall class !), and Swindon Works of the GWR acted as consulting engineers.

c). 191 / 153 Railway Operating Coy. RE.

A further article in the same issue of "Backtrack" comprises some memoirs of Vic Cripps, as told to and recounted by Paul Joyce, on pp. 643-646. Cripps was called up: "Like many young men during the autumn of 1939, Vic had volunteered to join the army... within a very short time of having signed on the dotted line...he found himself being sent back to Reading, as he was deemed to be in a reserved occupation. Within three months of being back at reading, the call had gone out to certain Great Western sheds for footplate volunteers for the Royal Engineers. Reading was required to send six single men and one volunteer who readily answered the call was Vic Cripps...."

He reported at Longmoor and became a member of 191 Railway Operating Coy., RE. Following 3 weeks basic training and 3 weeks technical (mainly on the Westinghouse brake) the men were set to work on the main line railways - first at Crewe then in Scotland, then Yorkshire.

"With the threat of a German invasion having finally receded, a posting to the railways of Malaya beckoned. The 191st. Company set sail for Durban....from

Liverpool Docks, aboard a liner which was still painted in its pre-war colours. Within 24 hours of landing on South African soil, the division was put on board another ex-liner, this time for the long crossing of the Indian Ocean to the Far East.... It was the second week of February 1942 when Vic's unit neared the coast of Singapore; it was also the day before the island fell to the Japanese. All on board could see the constant enemy bombardment of the colony, Malaya having already fallen, and landing was out of the question. A transfer to the USS 'Westpoint' ensued; this ship had formerly been the Atlantic 'Blue Ribbon' holder, SS 'United States'. their next destination was westwards to Ceylon... here they were to stay until the authorities could plan their next move.

From Ceylon the unit embarked for a move to Persia (Iran). The Trans-Persian system was constructed between 1927 and 1938 and the main line ran from Bandar Shah on the coast of the Caspian Sea, southwards through the Elburz mountains by a very heavily-engineered line to Teheran, which is in the central plateau. Continuing southwards through two mountain ranges the line reached the summit at Noor Abad, which was 7,000 ft. above sea level, then descended towards the Persian Gulf at Bandar Shahpur, in all totalling 860 miles. Also from Qum eastwards ran the very long, unfinished line towards northern India (now Pakistan.).

In 1941 the Allies had promised to supply Russia with aid and therefore agreed to jointly assist the Persian system to enable it to cope with the resultant vast increase of traffic. The British Transportation Directorate therefore took responsibility for the southern section from Tehran to the Gulf, whilst the Russians did likewise from Tehran northwards. Two new Gulf ports were constructed - Khorramshahr, with a 75-mile connecting line running northwards to the main system at Ahwaz (opened 1942), and Tanuma, with a 30-mile line northwards to Hosseinich which was also on the former line (opened 1943.) The Persian system was worked by the Royal Engineers, who were autonomous, and the local staff. The latter would frequently cause problems, in that the native staff were unable to read the English signalling instructions ! As all the main line from the Gulf to Tehran was constructed as single line, the ubiquitous RE 'telephone and ticket' control system as used.

The Persian system was operated by two Railway Operating Companies; the northern section from Derood [sic. - also known as Dorud or Dow Rood. Ed.] to Tehran was in the hands of Vic's, now the 153rd., whilst southwards to the Gulf was by the 190th. Both their respective lines

were then broken down into four working sections. A Sergeant Major was based at each of the latter, whilst the Staff Sergeant would oversee the whole of the areas. Most of the sergeants and all the officers had been in the pre-war reserves and so with the outbreak of hostilities were automatically given promotion in recognition of their army experience. Vic was based at Qum, where fortunately he had a very fine commanding officer, Colonel Brash, who had been a railway controller in pre-war times. As all the sergeants were ex-railwaymen, familiarity was always the norm, first names, not titles of rank, being used when solving a problem.

The ground troops were the 10th. Indian Division, which had a mixture of Sikhs and Gurkhas within its ranks. This was to be one of the first Colonial Divisions to have Indian officers in command. Most trains would have eight of these Indian soldiers with their rifles riding on them as guards, mainly to keep the Kurds at bay.

The accommodation at Qum was purpose-built in the local traditional way. A large hole was dug into which soil, straw and water were added, then thoroughly mixed. The 'gunge' was then slopped between wooden planks and left to dry, before being cut into blocks. The roofs were of wooden slats covered in mud and when the snow came, natives had the job of sweeping them before the weight became too great for the structure to stand. Qum had a locomotive depot and so when working trains forward a new locomotive would come onto the train. Most workings were to Ahwaz, which necessitated staying overnight in a primitive shack-like building provided for that purpose. There were no canteens, so crews took 24 hours-worth of rations with them. Their only help would be a friendly call to awaken, one hour before they were due to go back on duty.

The Trans-Persian locomotives consisted of some powerful 54,400lb. Beyer Garratt 4-8-2+2-8-4s for working the northern section from Tehran to the Caspian Sea. Also supplied by Beyer, Peacock were some 2-8-0's, while added to these were 77 Swedish and German 2-8-0, 2-10-0 and 2-8-2 locomotives. Unfortunately by the time the British Army arrived most were unserviceable, having been thrashed to pieces. With no engineering background, so to speak, the Persians had never been able to maintain and overhaul them properly. The British troops at Tehran came into contact with one serviceable Beyer-Garratt; based at Tehran shed it was, for most of the unit, their first experience with one of these large complicated engines. Just like a Midland Compound, to the uninitiated, a driver was

never too sure whether it was in forward or reverse gear when he opened the regulator. At least once, Vic recalled, rumours of part of this long locomotive with some of its wheels hanging over a wrongly-set turntable!

The steep tortuous line climbed around the mountain sides and through hewn, window-like, cut-outs in the rock sides. Vast panoramic views were to be had and within sight, blasting away with exhausts violently shooting ever skywards, up to three trains at one time could be seen toiling away along the single line track. The ruling gradient on the southern (British) section for the most part was 1 in 67. Between Ahwaz and Bahrain was the toughest section as the line traversed the Khuzistan and Luristan mountains. High mountain ranges, no more than 30 feet apart, would be split by ravines and gorges, dropping down vertically anything up to 300 feet with invariably very deep fast-moving rivers below. Every one required its own viaduct, made of concrete or large elegant steel structures. To give a couple of examples of the severity of this route, there were two sections both of ten miles; the first had eighteen tunnels, constituting 41% of its length, whilst the second had twenty, equalling 50%. At one point the line was lifted 157 feet by a spiral with two loops, both 2½ miles in length, which at one point were 328 yards apart in a straight line but in railway terms were ten times that distance.

Water for the engines was never a problem, fortunately. Most of the mountains towering high above the line were permanently covered in snow and everywhere were streams descending with pure water, as there was no vegetation this high up. At frequent intervals some streams were culverted with concrete sides and diverted to pass adjacent to the track. Alongside were stationed Merryweather pumps; it was just a case of putting the basket (the large filter at the end of the hose) into the water, inserting the output hose into the tender tank, then firing the pump and just waiting while a couple of thousand gallons were taken on. With oil firing, all of these strenuous climbs did not have the same effect upon the fireman and even easier still for Vic and his compatriots were the very long descents. With the 'Staniers' it was always a good practice when free running downhill to keep a little steam in the cylinders, for without it their knocking could, seemingly, be heard echoing for miles around.

Vast quantities of munitions and supplies went northwards for the Russian forces. Within fifteen months of arriving the RE were handling 143,000 tons a quarter. In the opposite direction for a period of time were brought trainloads of Polish

troops, who had evaded capture by the advancing German Army during the invasion of their homeland (having in turn been held captive by the Russians). When these Poles arrived in the hands of the British they were in quite a sorry state. As well as being ragged and undernourished, all had their heads shaved for de-lousing purposes. It was only when they were de-trained for toilet purposes that the British crews would see them segregated and would thus be able to tell the sexes apart. Eventually they were to rejoin their fellow countrymen serving in the Polish units that were already fighting with the British 8th. Army in the North African campaign.

The War Department freight wagons, although of a fine design, were not continuously braked which, with a line of this magnitude, required quite some time before the crews were masters of the situation. At one time there was a requirement for a large traffic of cable, for which traditional British four-wheeled open wagons were used. With such mileage over mountainous terrain, they soon succumbed to the harsh treatment and were never to re-appear onto the main line again.

The mainstay of the locomotives used by the Royal Engineers were the War Department Stanier 8F 2-8-0's. For the first three years of the war these were the standard freight locomotives. Introduced onto the LMS in 1935, 50 WD examples came from that company. The remainder were manufactured and supplied from new by the North British Loco. Co., and Beyer, Peacock & Co. At one time or another there were 259 of these on the WD lists. The Persian series were nos. 41.100 to 41.145 and 41.150 to 41.246, making a total of 143. Later, examples were transferred to other theatres of war.... Delivery to Persia commenced in 1941, with the bulk arriving in 1942. Although officially the first batch was coal-fired, Vic only remembers firing oil-burners.

At first any running examples of the Trans-Persian Railway's locomotives were only fit for light duties, but gradually more were returned to traffic. As well as some of the Beyer, Peacock 2-8-0's, a number of the fine German engines were worked by Vic. These were very smooth-riding machines with the luxury for their crew of cushioned seats. There was only a single water gauge glass which, ironically, was British made, complete with diagonal black and white 'sight' backgrounds.

All the engines in Persia were fitted with the air brake, mainly of Westinghouse construction, although the German examples were made in their own country. The latter were better engineered, although they could fail from time to time. Their main problem was that they were

constructed with three rings on the piston, which was a thorough piece of designing, but in practice the rings could, in time, move around the piston, resulting in their all being in the same alignment, leaving the pressurised air a through route past the ring ends. The cure was for one of the crew to go onto the front of the engine, where they were situated, and with a spanner partially dismantle it and realign the rings. In practice it was not quite the mammoth task that it sounds.

At this time Vic was firing to Aron Harrison, a very good driver, with an equally fine personality. Aron was a fellow volunteer, formerly an LNER driver from Immingham shed, who lived in nearby Cleethorpes.....

There were numerous problems encountered with the Kurds, such as sabotage caused by splitting the air brake pipes. One memorable occasion took place at Bandishar, when Kurds partially slit the train air pipes. All seemed well to the crew as they departed northwards. Unfortunately the line entered a series of sharp curves very soon afterwards and as the train started to snake around the bends, so the pipes opened up, causing the train to block the single running line. Another Kurdish trick was to place oil on the rails and as the "Black 8's" (the unit's name for the Stanier 8F's) were prone to slipping at the best of times, chaos invariably resulted. As a trained First Aid man, Vic had to endure a rather unusual local Kurd speciality. It transpired that the local tribesmen found that binding a victim to the track for decapitation etc., was a suitable punishment - one not covered in the average St. John's course in First Aid!

It was at this time that Vic changed sides of the cab, having been passed as a driver. His income was unaffected, as the army pay was two shillings (10p) a day. Fortunately the Great Western directors had decided at an early stage of the war to pay all their employees on active service their full wages, unlike their colleagues from the other three large companies.

There was a daily Baghdad to Tehran passenger train, known as the Trans-Persian Express, [is this correct? Ed.] on which were carried many troops. The first coach as a dining car, under which were cages of live chickens. At certain stops one of the catering staff would frequently be seen removing an unfortunate terrified creature and then wringing its neck! 1942 saw the introduction of American-built 2-8-2's and an influx of US Army Transportation men, prior to their taking over the system. There was one memorable incident when Vic, whilst shunting, was pushing a loaded molasses wagon; unfortunately as they closed up on an advancing US locomotive in front, at the crucial moment the air brakes would not respond!

Fortunately the 153rd. Railway Operating Company did not lose a single man to enemy action, disease being the real threat. One unfortunate colleague was to succumb to this and was given a military funeral. Such were the dangers of infections that Vic's pay book recorded 30 preventative injections having been administered to him!

The US replaced the British on the southern section on 15th. January 1943, which involved a transfer for Vic's unit to Basra in Iraq. A delay there was caused by indecision as to whether they were to join the desert forces in North Africa. From Basra the next stop was Beirut in the Lebanon. Here they were billeted in a French camp with very good food (provided you liked French cooking) and best of all, for the first time in quite a while, fresh bread. With the British 8th. Army having defeated the German Afrika Korps, the invasion of 'the soft underbelly of Europe' beckoned, which meant that the Railway Operating Unit's sappers would need toughening up for the forthcoming campaign. The end result was to be three weeks of hard physical training, including such delights as lifting and running with very heavy wooden poles etc. All too soon it was another journey, this time via Haifa in Palestine to Alexandria, for embarkation to Valetta Harbour in Malta....."

51:14.

DANISH COACHES SOLD TO IRAN.

There has been some previous mention of this trade; thanks to Tomas Meyer-Eppler and a Danish friend of his I have received the following listing:

In the middle of the 1990's DSB sold two Prototype-trains (10-coach rakes including driving trailer) to Iran.

In March 1998 the following were also sold to Iran and despatched:

B
002,005,009,023,036,037,038,039,043,044,047,048,051,052,054,057,058,060,061,070,071,077,
078,079,083,089,093,097,100,105,112,113,115,127,128,131,132,138,146,147,150,307,309,312,
316,319,320,321,322,324,325,326,328,329,333,334,335,337,338,339,514,521,524,535,537,539,
541,543. (i.e. 68 vehicles.)

Ba 003,004,005,006,007,008,009,010,011,012,013. (i.e. 11 vehicles.)

Bab 001,002,003,006,007,008,009,010,011,012,013,015,016,019. (i.e. 14 vehicles.)

Bax 015,016,017,018,020,023,024. (i.e. 7 vehicles.) (i.e. Total 100 vehicles)

In July 1998 the following were sold and despatched to Iran:

ADns 501,503,505,507,508,513,514,516. (i.e. 8 vehicles.)

B
001,003,004,006,007,035,042,046,053,055,056,059,068,069,075,084,086,090,091,092,094,095,
096,098,099,104,106,111,133,136,142,145,153,310,311,313,323,330,507,517,518,522.
(i.e. 42 vehicles.)

Ba 001,002,014. (i.e. 3 vehicles.)

Bab 004 (i.e. 1 vehicle.)

BDan 600,601,602,603,604,606,607,608,610,611,612,613. (i.e. 12 vehicles.)

BDn 703,710,714,727,734,736,739,741. (i.e. 8 vehicles.)

Bk-x 042,043. (i.e. 2 vehicles.)

B-t 162,164,170,189. (i.e. 4 vehicles.) (Total: 72 vehicles.)

In March 2000 the following were sold and despatched to Iran:

B-t 155,156,157,158,161,163,165,167,171,175,176,178,182,187. (14 vehicles.)

I make this a grand total of 206 coaches sold within three or four years by DSB to the Iran State Railways.

A Note on the Coaching Stock codes:

A = 1st. Class. B = 2nd. Class. D = Luggage compartment.

k = Kiosk compartment. n = Suburban coach. t = speaking compartment/telephone fitted ?

x = Improved/refurbished interior.

הרכבת

51:15.

EARLY ISRAEL RAILWAYS MEMORIES:

Aharon Gazit of Modi'in has prepared some memoirs of his childhood:

"Although I remember the day when we arrived in Israel, one day in July 1949, my first memories are a little bit later, when we lived in Kiryat-Shmuel and where, with an older friend, we went to the station of Kiryat Motzkin, where we put coins and nails on the rails, and so got them flattened into new shapes. In those years, the IDF used every British-built siding to their camps, and the one at Kiryat Motzkin was no exception - so I had the opportunity to become acquainted for the first time with the various types of locos, mainly Baldwin 4-6-0S and LMS 8F 2-8-0's.

But the real change for me occurred in 1951, when we moved to Haifa. There, for a reason which will never be clear to me, my father used to take me to Haifa Central in the afternoon, and there I could watch every day the afternoon train to Kiryat Motzkin and Akko. As far as I can remember, it was around 16.00. A Baldwin led the train, consisting mainly of the oldest rolling stock, generally three coaches. It entered the station, stopped, and whilst passengers were boarding it, the locomotive left the train, went forward then backwards and back, coupled on again, this time with the tender leading. For some reason the loco always stood with its chimney under the footbridge, so it remained black for years! The signalmen had pity on my father, so they gave him a chair, which enabled me to see the whole station from above. This chair remained there for years - maybe waiting for the father of an enthusiast of the next generation. Sometimes I was lucky enough also to see freight trains headed by an 8F. This happened mainly in summer. Because there were few passenger trains running in the beginning of the

1950's, freight trains could be despatched as early as 17.00, but sometimes also at midday. As far as I remember, the afternoon train to Akko remained in service in its original formation - and with steam locos - until 1957.

An interesting fact is that, although the distance between Haifa Central and Akko (about 23 km.) isn't much longer than that between Tel Aviv South and Lod, the Baldwin tank locos were never used as they were between Tel Aviv and Lod - with very similar loads. I remember that one day when a Baldwin loco was out of order, in 1952, a Baldwin tank pulled the whole train towards Haifa East. Many people gathered at Palmor's Gate to see the "big wonder"!

A cynical use of the train occurred during the seamen's strike, which Almogi (a leader of the Haifa workers and chief of the "Hapoel Executors") decided to break in an original way. Their house is just on the track crossing the gate near Custom's House, so when they gathered there, an 8F was moving backwards and forwards, whistling and puffing, thus making it impossible to hear each other! When I saw it, I could not imagine what was really happening, but more than forty years later I saw a programme on Channel 1, in which a documentary report of Geva Herzliyya was shown with this locomotive - and then I understood!

In 1952 I travelled by train in Israel for the first time - to Kiryat Motzkin. I clearly remember the two saloon coaches 97 & 98 standing for years at Haifa East batteries depot. An interesting fact is that these coaches (the rebuilt Sentinel railcars?) were never repainted in light grey but in light white, with a red strip under the windows, until 1961 when all ex-PR stock was repainted in dark blue to match the newer stock. From that journey I also remember the ex-Hedjaz rolling stock and locos still active at Haifa East, as well as rusting old locos.

The next experience belongs to August 1954. It was a journey to Jerusalem which left memories that are still fresh today! Firstly, because it was a long journey for a 7-year-old - about 4 hours. The loco was new - SAFB No. 101, about two years old.

On the way, at Hadera East, we received reinforcement in the shape of a Second World War US boxcar converted to carry soldiers, and an escort of soldiers and border guards. At that time, incidents at sensitive points like Tul-Keram, Kalkilya and Bittir happened daily, and Israel Railways wanted to take no risks. The interesting part started at Lod which was full of steam activity, and where most types of locos could be seen. We said goodbye to the diesel locomotive and the train continued from here with two Baldwins doubleheading. This was done for two reasons - firstly there were still only three diesels on the system, and also extra coaches from Tel Aviv South had been coupled onto the train. It should be noted that the mountainous line to Jerusalem was much less green at this time, since most of the forests along the route were still very young at the time. We took water at Beit-Shemesh (still called Hartuv at the time) and when we arrived at Jerusalem it seemed to be like a holiday to the people living beside the track - we even received applause!

One of the converted Baldwin tank engines was usually to be seen at Jerusalem, busy shunting.

On the way back we had - maybe surprisingly - a diesel, No. 103. Before entering Na'an junction we stood for a while, and saw the works being carried out on the line to Beer-Sheba.

On another journey in 1956, when the Negev line was already open, we also stopped at Na'an. (On that occasion we were headed both ways by a G12.) A train arrived from Beer-Sheba headed by the later-famous 8F 70414. It uncoupled, we moved on, then reversed and coupled onto the the coaches from Beer-Sheba, continued to Lod and there these Beer-Sheba coaches were uncoupled again, continuing to Tel Aviv South, whilst we continued on our way to Haifa.

Other Memories:

- 1). - Around 1955 8F's were used to haul cement trains from Neshet.
- 2). - The P-Class 4-6-0's were used on the Tel Aviv - Haifa line until 1954, occasionally also in 1956. In 1956

when the Independence Day parade was held in Haifa a Baldwin was used for a Tel Aviv-bound train.

3). - In 1955 I saw an 8F with a freight train at Binyamina station.

4). - In the same year, some of the trains went from Haifa to Jerusalem through Tel Aviv Tzafon (later B'nei Beraq), where Baldwins were used both for shunting and for working freight trains.

5). - Also in 1955, when the first Orenstein & Koppel coaches arrived, they were introduced to the public coupled to ex-PR coaches and headed by a P-Class loco.

6). - In the 1950's Israel Railways introduced a door-to-door service, combining train and truck for parcels distribution. It was called 'Israel Express'. The base was at what became later - and what was until recently - the Railway Museum main building, which at the time was a store. The trucks used were of old Bedford types and a small GMC of WW2 vintage. An example of the latter type was used once as a small bus, and can be seen at the Egged Museum at Holon.

7). - In 1960 an interesting initiative to promote rail travel was made by the owner of a ticket selling agency Grünberger, at the time and for some years in Shapira St. He succeeded in putting together combined organised tours from Haifa to Jerusalem. It included a special Egged bus to Haifa Central, reserved seats on the train, and a special Hamekasher bus to see the city and eat lunch, and then back to Haifa. It didn't last long, because Egged saw it as a threat to "Egged Tours". However, his idea is worth mentioning. I recently contacted his grandson, Mr. Kupferstein, who was my friend at school and is today a senior engineer at Zim Hamburg. He said that after his grandfather's death nothing was left, although he did remember this initiative. Apparently an article on it appeared in "HaTzofeh" newspaper.

8). - During the 1950's, because official "reserved seats" had been introduced on the Esslingen railcars and O&K coaches, some of the wooden compartment ex-PR coaches also received small plates above the seats with their numbers and became "Reserved". This arrangement only applied to the Jerusalem - Tel Aviv route, and lasted until about 1962.

9). - Another note about reserved seats - later, such seats were available on Haifa - Tel Aviv services, and these were always in the coach at the northern end. Since the British built at Haifa Central a multi-purpose building that incorporated not only the signalbox and a pedestrian footbridge but also the toilets, and since the trains always stopped with the endcoach opposite this facility, it used to be joked that the ticket was not only for the seat but for the smell !

10). - Among the coaches in service on this line were the two ex-ESR ones captured in 1956 during the Sinai Campaign. In 1961 they were painted in dark blue livery, as were all the remaining ex-PR cars. One of them ended its life near Hof HaCarmel station as a bogie-less body, together with another steel-bodied ex-PR coach.

11). - In October 1961, about four months after the Carel Fouché coaches were placed in service, I travelled from Tel Aviv to Haifa on the 17.07 train, which consisted mainly of the new French stock with one O&K coach. But the real exception was a former Ambulance (ex-Midland) coach converted to a buffet car. The train was stopped at Beit Yehoshua because a fire broke out in one of the axle-boxes of this buffet car. It was uncoupled, and it was withdrawn shortly after.

12). - Finally - I have been attempting to trace, with no success, the former line from Kafr Jinis to Tel Litwinsky. In my efforts I did discover a garage, located behind Shipude Hatikva and Sadiya Chatuka streets. It is the former station of Yahudia (Yahud); the current owners are Yitzhak Mayish and Meir Lander. They were among the first to arrive here in 1948 and told me that the line was used for a while to bring wounded soldiers from Latrun (probably through Ramle and Lod). At exactly this point they were then transferred by ambulance to Tel Hashomer, because a viaduct and bridge near the Avia Hotel was blown up during the war. According to their descriptions, Baldwin locos were used. On the column behind them in this photo was the station name board until 1960 ! They then removed it. The rails were still visible until 1960, and one piece of rail is still used as a support in the garage structure.

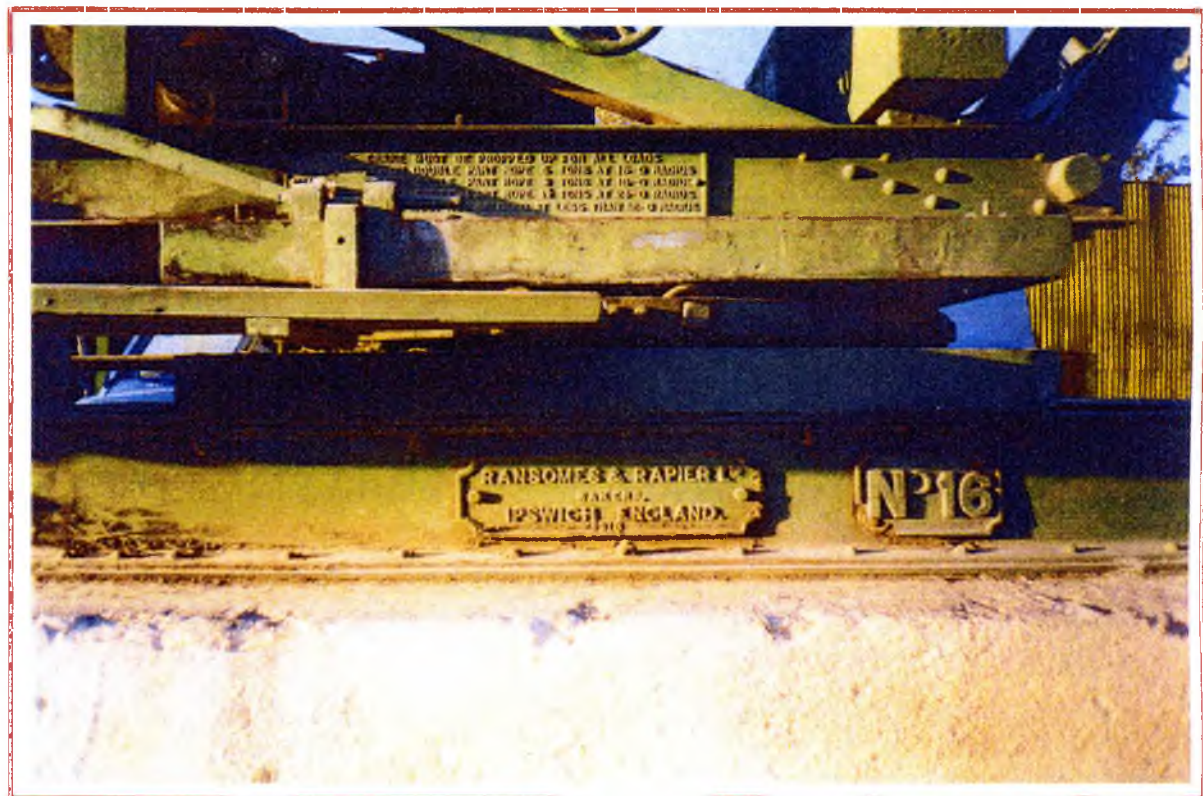
51:16.

A SURVIVING WW1 60cm. GAUGE RANSOMES & RAPIER CRANE:

by Paul Cotterell.

Urio Ben Rehav was kind enough to supply the two accompanying photos which he took at Amman station in Jordan on 2nd. November 1999. They show what looks to me very much like a Ransomes & Rapier 'Goliath' type mobile crane, of which two were delivered to Palestine in April 1918 for use on the 60cm. gauge military lines of the British army (see 11:26.)

One shot shows a close-up of the works plate with the date 1918, and a separate small plate shows the number 16., Is this the superstructure of the Goliath crane which was set up at Jaffa station after World War 1 ? This crane disappeared from Jaffa at an unknown date sometime after 1934. Maybe it was taken to Amman for further use there. The photo shows the crane to be in remarkably good condition: quite freshly painted and apparently in working order. Too bad that Goliath bogie wagon once displayed at Jerusalem station was scandalously sold for scrap about 1982 - it could have been married with the superstructure seen here to make a complete exhibit.



The Goliath Crane referred to by Paul coterill on page 27