

HaRakevet

ISSN. 0964-8763.

Series 20 #4

Issue No. 79 December 2007

הרכבת

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79:01. Normally in Jerusalem one gazes into the Heavens.... but here, for a change, is a view from the Heavens down onto the Holy of Holies - Jerusalem Railway Station as it appeared in 1994, with stock from the daily train from Haifa in the platform road, a bogie flat in Track 3 and active container traffic in the goods yard. View towards the Hinnom Valley and the Old City, signal box out of view to the right. (Photo Martin Frey).

EDITORIAL.

With this issue another Series reaches its end and a Subscription Renewal Form should hopefully be enclosed with this copy - if not, please contact the Editor or Steve Waldenberg for details! More subscribers are always welcome! We continue to lose money on each issue but - despite the blandishments of web sites and digitalisation (I thought digitalis was a poison?) - history teaches us that a good hard copy is usually to be valued, so we continue to subsidise the magazine.

Chen Melling writes that plans are under way to publish Paul Cotterell's unfinished album on Israel Railways, Paul's sister having generously agreed to underwrite the costs. A generous Obituary by Paul Catchpole in 'Locomotives International' mentions that arrangements had been earlier agreed that L.I. would be the publisher. Good! However, it appears that Israel Railways have scrapped the position at the Railway Museum which Paul had held - and since he was the main one to coordinate and initiate work, this is a major worry. It may be necessary to initiate a letter-writing campaign to the Railways Management to urge that this valuable - and indeed national - resource does not become further neglected. 2008 marks the start of "60 Years of Israel!" celebrations, and the Rakevet Israel has been a part of that history for all six decades.

Your Editor has had a very busy few months, finalising a divorce and a PhD (in that order). The PhD is on the History of Palestine Railways from 1945-1948, i.e. the last years of the Mandate period - at the time of writing the defence is imminent, at Kings College, London, but once this has been safely negotiated it is hoped to make copies available to those interested.

Enjoy!

The Editor.

79:03.

Paul Cotterell (z.l.) and the Editor in deep discussion at the Haifa Railway Museum - a signal lever is being worked to move the semaphore arm on the signal post to the left.

NEWS FROM THE LINE.

(a). LEHAVIM STATION OPENING.

A little belated - with apologies; this got missed out of issue 78. And as noted there, the station has since been renamed Lehavim-Rahat. The station opened on 23.06.2007; as usual, a Saturday evening and therefore the "beginning of the week". On 29.06.2007 Sybil wrote: "I went there this morning. The station is referred to everywhere as Lehavim; only on the timetables does it appear as Lehavim Merkaz (the implication being that there are other Lehavim stations!). Station nameboards say Lehavim. I asked the stationmaster about this; he says it's because there is also a "tahana tifulit" (control centre) called Lehavim, further south. Well, as I pointed out to him, not many passengers are likely to know about that.

Anyway, the station is just south of the road leading to Lehavim, a few kilometres south of what was Devira. It has two side platforms, only one being completed and in use so far. Because access to the second platform is blocked off, I couldn't go over there to take good pictures of the main platform. Quite a lot of people got off the southbound train at 11:15; not many boarded northbound at 11:36. Incidentally, Lod station - my favourite on the whole system, a really nice British-style outfit with a footbridge offering superb views - is the only one in the country with refreshments and toilets track side rather than street side. Great for when you are changing trains and want a cup of coffee!"

(b). PATEY MODI'IN OPENING.

For the record, Sybil sent the schedule for the press run: on Monday 02.07.2007:-

9:00-9:15 assemble at Ben-Gurion Airport (BGA) station.

9:15-9:45 ride in IC3 train on line in direction of Modi'in.

9:45 stop at Pa'atei Modi'in station.

10:00-11:00 Press briefing at station.

11:00 Ride by train (almost to) Modi'in.

Merkaz station and short walk into station

11:15 Tour of Modi'in Merkaz station.

11:30 Ride back from Modi'in to BGA.

12:00 End at BGA.

(c). LIVERIES

In June 2007 a competition was held to pick a preferred livery for the new rolling stock on order from Siemens - the single-deck push-pull trains.

62,871 people participated in the Railways' campaign for choosing the livery for the new Siemens trains, and the winner was the blue and white option, chosen by



34.9% of the participants; most of the votes - 58,871 - came from the public through internet sites, 4,000 came from passengers and railway employees; the railway administrations were surprised to find out the subject created interest abroad too; 287 votes came from USA, 227 from Europe, 20 from Australia and New Zealand and 13 from Africa.

The results of votes for each livery option were:

The winning option-blue and white - 34.9% consisting of 34.7% by the public (internet) and 38.3% by passengers.

In the 2nd place, the 3-colour (blue, red, and white) option which received 30.9% consisting of 30.8% by the public and 31.8% by passengers.

In the 3rd place, the blue and red option with 22.05% consisting of 22.3% by the public and 17.2% by passengers.

In the 4th place, the red and white with 12.04% consisting of 12% by the public and 12.6% by passengers.

(d). HOLIDAY SPECIAL SERVICES.

From a press release of 23.09.2007 by Isra-Rail Co. Ltd.:

"Additional passenger trains will be operated between 26.09.07 and 07.10.07 under a special timetable in order to face rising traffic forecast that may reach 140,000 daily during Sukot holidays, compared with a regular daily traffic of around 120,000.

On 26.09.07, 28.09.07, 03.10.07, and 05.10.07, which are shorter working days (due to Saturdays and Sukkot holidays on which trains are not operated), there will be additional trains on the lines: Beer-Sheva - Tel-Aviv - Haifa - Kiryat-Motzkin, Kiryat-Motzkin - Haifa - Tel-Aviv, and Tel-Aviv - Beit-Shemesh - Jerusalem.

On 30.09.07 and 01.10.07, there will be additional trains on the lines: Haifa - Binyamina - Tel-Aviv - Lod - Ashkelon, and Tel-Aviv - Haifa.

On Tuesday 02.10.07, the regular Thursday timetable - which already incorporates additional trains - will be operated.

The old rebuilt line to Jerusalem will enjoy special attention - longer trains will be operated to cope with the high demand from people of the Greater Tel-Aviv Area who are making "pilgrimage" to Jerusalem, including a visit at the Biblical Zoo." The Tickets for Sukkot were specially designed in the spirit of these holidays.

(e). BEER-SHEBA LINE DETOUR TROUBLES.

On 02.10.2007 Aharon Gazit wrote:- The Transport and Roads' Safety Minister Mr. Mofaz, recently decided to accept the complaint of the Mayor of Beer-Sheva, Mr. Terner, that passengers on the

line to Tel-Aviv are wasting 15 minutes because all trains call at Ben-Gurion Airport; according to Mr. Terner the railways did not check properly to find out how many actually need the airport station.

Mr. Mofaz decided that 36 trains would not call at the airport station, but had to retract this after the railway administration explained that the airport station detour adds only 8 minutes, and the re-routing of even some of the trains would cause many operational problems and is more complex than it seems.

(f). JERUSALEM WORKS.

Around 14:30 on 24.09.2007 a controlled explosion occurred under the street between the Jerusalem Conference Hall (Nation's Building - Binyanei HaUma) and the Central Bus Station. It caused panic in the city, which is used to terror events, and emergency forces hurried to the area; eventually, it was found that this was part of the works being carried out by the Moriya company to build the 80m.-deep Jerusalem new Central Railway Station. At least this shows that work is in progress!

(g). PASSENGER SURVEY.

A survey carried out recently by the Railways' Marketing Department reveals that 63% of rail passengers are singles (females and males); this is surprising, as it is three times more than their share in the general population!

The survey, codenamed "Flirt Express", which was prepared in order to draw the profile of the passengers, further reveals that 80% own a car which they left at home, while a third of the questioned passengers own even 2 cars, but they still prefer to use rail; this fact is particularly surprising, because 34.2% are soldiers, and 50% are not older than 34!

The level of education is high: 40.4% are academicians, 56% have finished more than high schools, while only 3.7% have finished only elementary schools.

40% arrive at the stations from places farther than 15 minutes travel, while only 10% enjoy 5 minutes time to arrive at stations.

31% use rail to go to work or the army; 31% use buses to reach stations and another 31% use their car for the same purpose.

(h). BUDGET REINSTATEMENT.

The government has recently reassessed its decision to cut the Railways' budget and decided that the \$200 Million will after all be retained in the plan.

(i). EARLY RETIREMENT PROGRAMME AND CHEAP LABOUR.

From a press release of 02.10.2007 by Isra-Rail Co. Ltd.:

"An agreement between the Railways' Management and the heads of the workers union for the voluntary retirement of 150 employees was signed today. The retirement programme is limited to one year and offers 2 options: An early retirement, or retirement with increased compensations for those who are either not veteran enough or too young to have the full retirement conditions.

The overall cost of the retirement programme is estimated at \$21 Million, which is between \$75,000 and \$175,000 per employee, depending on the retirement option, and is to be financed from the railways' internal sources. The early retirement option will be offered to those who are at the age of 55 and over, and have worked at least 25 years, however, in exceptional cases, those at the age of 50 and with at least 20 years of service, who wish to retire, may also have the same conditions.

The agreement has still to be approved by the Authority of Governmental Companies and the Finance Ministry's Wages Manager. The intention is to offer the programme to the employees in November/December 2007 (after approval), in order to have at least 75 employees retired during 2008; in parallel, the railways intend to recruit at the same period up to 30 new employees (in what is called "2nd-Generation conditions", namely through manpower companies), some of them driver's assistants and some inspectors; the cost of a new employee is 50% lower than that of a veteran.

It should be noted that the programme is not new and dates back to 2003; several options have been checked, but it is only now that the programme is to be realized."

(j). MODI'IN BUS PROBLEMS.

"On the same day, 02.10.2007, the outgoing General Manager Mr. Linchevsky wrote a letter to the Transport and Roads' Safety Ministry's General Manager Mr. Gideon Sitterman, in which he complained about the deterioration of Connex bus services to and from Modi'in Outskirts station; He explained that the railways are operating 58 trains daily to and from Modi'in - 29 in each direction, but only 38 bus journeys are operated; these start at 06:00 whereas the first train departs at 05:30; while the last train arrives at 24:00 and the last bus runs at 23:00, leaving the passengers (the traffic is

steadily rising) to wait for family members (if they have such) to bring them to the station or pick them up; the situation is worsening due to the insufficient parking area at the station and the intention of Connex to further reduce services. He therefore said that the railways are considering the operation of free shuttle services to and from the station.

It did not take long for the Connex response to come - on the very same day it was announced that as from 07.10.2007, buses to and from the station will operate every half-hour from 05:30 until the last train's arrival, co-ordinated with the railways' timetable; due to the poor reputation of Connex so far, we'll have to wait and see!" (Aharon Gazit).

(j). AND PARKING PROBLEMS.....:

On 20.10.007 from Aharon:

"While the traffic to and from Modi'in has already reached 4,000 daily (and it affects the competing Connex bus services on the same direction; the buses are not full!), the problem of shortage of parking areas at Modi'in Outskirts station is worsening, as was predicted by the railways. A couple living in Modi'in and using the rail services daily were surprised to receive a penalty ticket because of parking outside the arranged area. They asked the Station Master if the police had imposed the penalty, but he said that so long as there is no proper solution to the parking problem, nobody has to pay!

These two good citizens, who say that they have never had to pay any penalty, sent an angry letter to the railway authorities claiming that the situation pushes honest citizens to break the law; they even consider appealing to the court! The railways' response was that they had warned about the situation long before the station was opened, but due to different and uncoordinated bodies dealing with the access road, which is still uncompleted, as well as the whole area development, the situation is as it is. However they are pushing to build the already-planned underground pedestrian subway leading to and from the nearby mall where there is a lot of parking areas, thus avoiding the danger of crossing the main nearby road."

(k). MODI'IN CENTRAL OPENING.

The railways will open Modi'in Central station at the end of December 2007 or at the beginning of January 2008 at the latest. Originally it was planned to open the station together with the opening of the nearby Azrieli Mall which is still under construction; the idea was to enable passengers to park their cars at the mall's parking

area, which will be the only one near the station, but due to the delay in the mall's opening to at least March 2008, both the railways administration and the municipality have decided nevertheless to open the station - which is almost completed - as soon as possible. The assumption is that, due to its location at the city centre, many users will reach the station on foot, by bicycle, by bus, or even by one of the family members, until parking facilities are completed.

(l). MEASURES FOR THE HARD OF HEARING.

Isra-Rail Co. Ltd. made another step forward in terms of providing services for the public; the new station of Modi'in Outskirts, opened on 31.08.07, has joined another 26 stations all over the network equipped with a special audio system adopted for people with limited hearing abilities.

The purchasing and installation of the system were entirely financed by the railways, and were installed by the "Mehalev" ('From the Heart') organization - the Israeli centre for accessibility in communication, the umbrella organization of the disabled, and with the assistance of Kilim Electronics.

The system improves hearing at ticket selling areas despite the partition with the ticket seller, and the overall typical station noises; additionally, an induction loop system broadcasting directly to the disabled hearing instrument has been purchased.

(m). PUBLIC TRANSPORT PLANS.

From a press release of 18.10.07 by the Transport and Roads Safety Ministry:

"Minister Mofaz said today at the conference of "Public Transport Day", that "public transport must be the core factor of transportation in Israel; if we are not clever enough to develop public transport in a meaningful way, road traffic will become impossible". He further told the press that "from 2008 on, his ministry will allocate serious resources to public transport development in order to make it accessible to all public sectors, particularly in remote areas; these services cannot always be assessed from the economical aspect only; the services must be equally available to all".

"Public transport has not been developed sufficiently because there was no systematical vision, but within the 2008 to 2013 5-Year Plan, the services will be revolutionized; the committee created to investigate reform in public transport services is to publish its conclusions, which include a recommendation for creating a National Authority for Public Transport Management

which will integrate all the public transport means: railways, LRV, buses, and taxis. Public transport lanes will be added both in the cities and on intercity roads."

The Ministry itself has some encouraging data about the change in the public tendencies; between the 1970's and until 2004, there was a continuous decline in bus useage, but from 2004 the tendency changed; the number of passengers rose from 534.1 Million in 2004, to 555.1 Million in 2005, and to 588.5 Million in 2006; the main reason is the continues improvement in the economy, which means more employment, more money for shopping, thus more travelling; however, the real reasons for the gradual return to bus services are improvements in services which have changed their image, until recently considered as inferior.

A survey made by the organization "Transportation Today and Tomorrow" reveals that 63% of Israeli people are using their private car to and from work, while only 36% use public transport. The survey further unveils what will cause the car users to prefer public transport over their private cars:

- 44% said that cutting journey times by public transport will convince them to leave the car at home;
- 23% said that improvements in travelling conditions will do this;
- an additional 16.6% said that reliable timetables will do this.
- Finally, more than 40% said that public transport users are considered as belonging to a low social-economical level; but that this does not refer to rail users!

(n). BUILDING THE JERUSALEM LINE.

From a press release of 22.10.07 by Isra-Rail Co. Ltd.:

"The railways have today selected the Austrian consortium Voest Alpine in partnership with the Israeli infrastructure building company Shafir to carry out Section 3 of the A1 fast rail link to Jerusalem between Sha'ar Hagai (gorge entrance) and Emek Ha'arazim (Cedar Valley; just a name - no such tree is there!); this section is the most complicated one in the A1 project, and includes in addition to the alignment, boring the double tunnel No. 2 of 1.2 km, double-bored tunnel No. 3 of 11.5 km (the longest of any kind in Israel), and bridge No. 8 of 150 m; the overall length of the 2 tunnels is almost 25 km; the long tunnel is to be bored by T.B.M. technology for the first time in Israel. The winners have beaten other 4 competitors which participated in Pre-Qualifying. The works at the site are to begin in the first quarter of 2008."

(o). MANAGEMENT PROBLEMS.



The new section on the line to Beer-Sheva near Kfar-Menakhem replacing the old one on the left (already dismantled); photo by Aharon Gazit (79:04a)

An Editorial in 'Haaretz', 27.10.2007:-

"The probe into the train wreck at Beit Yehoshua last year, which resulted in five people killed and dozens injured, has produced severe findings regarding the Israel Railways' administration.

The police investigators who handled the case were amazed to find that a company of that magnitude was operating essentially without management. "As the investigation progressed, it became apparent that officials at Israel Railways did not know their positions or what they were responsible for," the head of the investigation team told Haaretz. "We found an organization whose management was one big failure."

Following the investigation, the State Prosecutor's Office stated it would try Israel Railways' Director-General, who is currently just about to leave office after a term of only two years. That itself is one of Israel Railways' problems: Frequently changing Director-Generals, who are unable to - or do not have the time to - reform the company's administration.

The State Comptroller has already noted the improper procedure that allows

former director-generals to become paid consultants for their former employer, thereby continuing to profit from the firm while no longer bearing any responsibility for its administration. The Comptroller also criticized former director-generals who profited from business dealings with companies that work with the railway. This may be one of the reasons why Israel Railways occasionally has acquired equipment that has proven unusable for the purpose for which it was purchased

This past week, Israel Railways appointed a new Director-General, General (res.) Yitzhak Harel. But the Director-General of Israel Railways - which was separated from the Israel Ports Authority four years ago and given the status of an independent government company with a multi-year budget of NIS 24 Billion - is facing an administrative crisis.

Israel Railways has lacked a Board chair for two years now. The Transportation Ministry and the Government Companies Authority have failed in supervising the Airports Authority and the political nominations there, and have failed in supervising the railway as well. An atmosphere of failed management will poorly serve the

new Director-General.

The Israeli consumers are very reserved in their criticism of the railroad's services, because they have become accustomed to receiving very little. They are grateful for every new line, and demand far outstrips supply.

The quality of Israel Railways' service is not uniform. Passengers in the South receive particularly bad service, and on Sundays and Thursdays passengers in the North and Centre also have a hard time squeezing into the soldier-packed cars. In fact, the train has become a means of transportation for people with time on their hands or who cannot purchase a car, instead of a first choice for people commuting to and from work.

There is no disputing the fact that well-developed railway services are a crucial national need that could reduce the number of road accidents, cut pollution, connect the Centre with other parts of the country and provide a convenient means to enter the congested Tel Aviv and Jerusalem metropolises.

The railway's services are decades behind those in the rest of the world, and

fall short of local demand. Tel Aviv and Jerusalem were connected by train as early as the late 19th Century. However, the new line from Tel Aviv to the capital has not progressed past Modi'in.

We can say the glass is half full and remember that up until 10 years ago, Israel did not have a proper train at all. But we also need to look outside, at other countries in the region and the world - even the less developed ones - and become filled with envy."

(p). NEW GENERAL MANAGER.

From a press release of 29.10.2007 by Isra-Rail Co. Ltd.: (Via Aharon Gazit).

"The Shapnitz Committee for Appointments of Senior Officers in the Public Sector, today approved the appointment of General (reserves) Yitzhak ('Khaki') Harel as the new General Manager of Isra-Rail Co. Ltd; the committee thus adopted the recommendation of the railways' Directorate, which had selected Mr. Harel out of no less than 80 competing candidates.

Mr. Harel (50) was formerly the Chief Commander of the Planning Department at the IDF (Israeli Defense Forces) General Staff, as well as commander of a division in the regular army, and commander of a division in the Reserves army; additionally he was a commander of an Armoured Brigade. He has a B.A. in the field of Public Administration from both the IDF College for Command and Staff as well as from the Haifa University. Mr. Harel is married with two children. He is currently the Chairman of the National Roads Company (formerly Public Works Department).

The Directorate has pointed out with satisfaction that the large number of candidates shows that the railways are accepted as a leading factor in the transportation and economy of Israel.

Mr. Harel will take up his job already on 01.11.2007 according to paragraph 42c of the Governmental Companies Law; his appointment will become official after the Ministers of Transport and Roads' Safety, and Finance sign the appointment."

We all wish him success!

(q). PUNCTUALITY PROBLEMS.

Punctuality of trains has been in a sharp decline during recent months; in a Channel 2 TV report of 05.11.2007 the reporter revealed that, according to an internal railway document, punctuality went down from 81% during August 2007 to only 67%.

The reason - according to the report - is problems with growing wear and tear on the wheels of passenger trains;

additional reasons for delays are track works, and temporary speed restrictions at level crossings until grade separations can replace them. Nevertheless, the "tired wheels" dominate as a cause! Some senior officials said that new intensive timetable is not realistic in these circumstances. The report came after the Court appeal by many passengers who claim to be affected by the delays; it should be mentioned that the Court is on the passengers' side; the newly-appointed General Manager Mr. Yitzhak Harel is now facing the problem of bad punctuality as a crucial matter.

An article in 'Yediot Acharonot' on Friday 23.11.2007 gave a grim picture of the situation. According to a survey by the 'Centre for Consumer Research' headed by Mr. David Idan, on the previous weekend 76 out of 220 trains (34%) were late by more than 5 minutes; 64 trains were between 2 and 4 minutes late, whilst 80 trains were on time or within one minute of schedule.

The new General Manager admits that there has been a distinct deterioration in punctuality. Whilst it reached 90% in June 2007 it went down to between 60-65% later and on 21.11.2007 had reached a nadir at 58%! He reported however that he had appointed a special committee of senior railwaymen which will meet weekly and analyse the reasons for delays. This committee has already concluded that there are several separate reasons, including a shortage of rolling stock (no date has yet been announced for the arrival of the next batch of push-pull trains from Siemens); consequent excessive use and wear of existing stock, leading to a higher maintenance requirement at the depots; and several extensive trackworks leading to speed restrictions, whose existence was for some reason not incorporated in timetable planning. The railway was being extensively developed and this did not help, but he is working towards attaining the 90% figure once more.

In some cases late running has led to passengers missing their last connecting services at night and being stranded, hoping at the best to be collected by car. Angry passengers have created a forum called "The Israel Railways Passenger" which operates a very active website. Between January and October 2007 IR had issued 66,749 compensation tickets to passengers suffering from delays.

The survey, conducted at six main stations, revealed the following:-

Beer Sheva Central: 16 trains checked, 6 on time, 4 were 'late by more than 5 minutes', maximum delay 32 mins., average delay 18 mins. = 25% delays.

Tel Aviv Savidor (Central): 94 trains checked, 27 punctual, 42 were late, max. delay 25

mins., average delay 11 mins. = 45% delay.

Ben Gurion International Airport: 46 trains checked; 19 punctual, 13 late; max delay 20 mins.; average delay 10 mins.; = 19% delay.

Modi'in Outskirts: 27 trains checked; 15 punctual, 4 late, max. delay 17 mins.; average delay 11.5 mins.; = 15% delays.

Haifa: Hof-haCarmel, Hutzot HaMifratz and Bat-Galim: 20 trains checked, 5 on time, 0 late, max. delay 14 mins.; average delay 10mins. = 50% delays.

Rishon LeZion-Rishonim: 17 trains checked, 8 punctual, 3 late, max. delay 8 mins., average delay 6 mins., = 17% delay.

Finally, the record of delays at Tel Aviv Central on Sunday morning 18-11-2007: 28 out of 35 trains - i.e. 80% - were late. By the afternoon of the same day only 5 out of 31 (16%) were late by more than 5 mins.

In addition to the issuing of compensation tickets, IR is trying to sweeten embittered passengers by providing stewardesses who issue chocolate coins (!) and a leaflet explaining the delays caused by trackworks. Between 08.11 and 15.11.2007 train services between Kiryat Motzkin and Nahariyya were stopped due to the double-tracking and grade-separation works being carried out on this section, whilst on 11.11.2007 a track machine became stuck on the line near Netanya, causing disruption to passenger traffic.

(r). ISRAELI COMPANY DEVELOPS FAULT DETECTOR FOR ELECTRIFIED RAILWAYS.

Ofil Ltd., a small hi-tech company based in Rehovot, Israel, has developed a camera which visualizes corona discharges which can indicate faults on high voltage lines and insulators. A special model has been built to test the lines of electrified railways. Videos on their web site show such corona on the Channel Tunnel and other lines. The camera combines the images from an ultra-violet sensor which displays the corona as white spots and a colour TV camera to make the corona visible and show its location. If and when Israel's electrification programme gets under way, this could be used to help in maintenance of the lines.

(s). DATA SECURITY APPOINTMENT.

In a press release of 13.11.2007 IR announced the selection of the Avnei Company to lead the overall data security activity in the coming three years; this followed a tendering process which lasted several months, in which 6 competitors

participated. The tender value is \$100,000.

(t). TRACK WORKS ON ASHKELON LINE.

Due to engineering track works, the stations of Ashdod-Ad-Halom and Ashkelon were closed between 02.12.07 and 04.12.07 inclusive, from 21:15 until the following morning; the three trains operated at these late hours terminated at Yavne; this arrangement caused minimal disruptions to passenger traffic. Traffic on the Lod - Beer-Sheva - Dimona line continued as usual; the temporary changes are not included in the regular service timetable.

(u). DISABLED ACCESS.

Transport and Roads' Safety Minister Shaul Mofaz said in a press release connected with the International Day of Equal Rights for the Disabled, that his ministry will allocate \$2.57 Million annually for infrastructures enabling improved accessibility for the disabled at public transport facilities; He further mentioned that, as far as railways are concerned, the situation is much better than with other modes; 93% of services enjoy one car with accessibility, and most of the passenger railway stations are also accessible.

(v). DELAYS TO SIEMENS SINGLE-DECK RAILWAY CARRIAGES.

From 'Ha'aretz Online' 09.12.2007: YET ANOTHER DELAY. By Avi Bar-Eli

"Bad news for train passengers: The new rail cars ordered by Israel Railways are now expected to be delayed once again and may not arrive before June 2008.

Germany's Siemens won the tender to supply the rail carriages, and Israel Railways is considering legal action against the company, including also levying the fines set in the contract.

Siemens won the huge tender in January 2006. It included immediate delivery of 86 cars for NIS 700 million, and included an option for 585 more at an estimated NIS 4 billion; all in order to meet the sharply growing demand for the train as well as the construction of new routes. The cars were supposed to have arrived now, at the beginning of December, but Siemens last year asked to delay the first shipment until April 2008, when the second shipment was also due. The Railways agreed.

However, the trains are often overcrowded, and the Railways struggle with chronically late trains, high maintenance costs and the continued use of trains slated for the scrapyard.

Siemens told the Railways that the cause for the delay were technical changes

at its manufacturing plants in Europe. The three companies that lost out to Siemens in the tender, Alstom, Bombardier and Kiepe, requested to see the tender documents and results at the time, saying that the delivery dates that Siemens committed to were unreasonable.

Siemens is now participating in the NIS 1.2 billion tender for electrification of the railways, and also won the tender for the Tel Aviv Light Rail's Red Line as part of the MTS group along with Africa Israel, Egged and Portugese and Chinese companies.

Siemens' response was not available by the print time."

(w). ENVIRONMENTAL ARGUMENTS.

Two controversial reports have been published recently. According to the first one, the Economical Company of the city of Modi'in, headed by the member of the Municipality, lawyer Amnon Merhav, is considering a Court appeal, claiming that the railways have caused damage of around \$1.56 Million to the city's main park (Anabe; still being created), during construction works for Modi'in Central station and the line leading to it, which passes through the park - mainly by not removing the waste materials and by not restoring the park area afterwards. The railways in response described the claim as a "blackmail", adding that the Court will decide.

The second report, which seems to be a "counter weight" to this attack has been published by Ing. Michal Zussman, the manager of environment and landscape treatment of the railways, who revealed that many flowers and trees are being planted along the line to Modi'in, which proves the railways' commitment; These works will be continued during 2008 also along the road being built beside the double-track line.

(x). MORE REALIGNMENTS ON BEER SHEVA LINE.

Between 16.12.2007 at 22:00 and 20.12.2007 at 04:30, traffic on the section Kiryat-Gat - Lehavim - Beer-Sheva - Dimona will be brought to an halt, due to double-tracking and upgrading works on the line, costing in excess of \$500 Million; mainly near the bridge of Hadorayim. As a result, all trains from and to the south will terminate at Kiryat-Gat; these disruptions are not included in the timetable, but the railway administration apologized when announcing the works.

Once traffic starts on the upgraded section, the older formation will be used for the toll highway No. 6 under construction, which runs on many sections adjacent or at both sides of the railway line.

(y). SAFETY CONFERENCE.

Between 17.12.2007 and 19.12.2007 Isra-Rail Co. Ltd., together with the Transport and Roads' Safety Ministry, and the French Embassy, will host an international safety conference named "Innovations, Regulations, and Safety". The conference will enjoy the participation of transport ministers from Israel, India, as well as railway managers, members of UIC, RSSB, SNCF, and many others; it will take place at Tel-Aviv exhibition centre.

79:05.

TENDERS.

(i). Tender No. MC/SR/17/07: A frame agreement for providing NTS services on IC3 Flexiliner dmsu. The contract is for 36 months with optional extension for up to additional 36 months. Latest bidding date: 07.08.2007.

(ii). Tender No. 18/3003/07/07 by the Israeli Ports Co. Development & Real Estates Ltd. for building a rail terminal (railhead) at the rear area of Ashdod port.

Works consist of carrying out infrastructure works for the railhead at the following three different sites at the Ashdod rear areas: A classification station with an area of 102 acres; an operational station with an area of 200 acres; a linking track between the two with an area of 22 acres.

Works at each of the three sites include: earthworks, transferring of the protected Ana tree to other areas according to the instructions of the National Nature and Parks Authority, infrastructure works for electrical wires and lighting posts, infrastructure works for water pipe lines and hydrants for fire fighting and washing, infrastructure works for signalling and communication cables, drainage works for rain water and special drainage works for areas of loading and unloading of hazardous materials, a track ballast layer, concrete supporting walls and a drainage channel, concrete roadbeds for RTG cranes, asphalt covering on the ballast layer and on roadbeds and linking with existing roads, fences and gates.

Implementation time: 24 months. Latest bidding date: 29.08.2007.

(iii). Tender No. MC/KB/09/07: Upgrading new inspection channels Nos. 9 and 13 at Haifa Kishon works.

Works include: earthworks, cast concrete, sealing, carpentry and locksmith works, sanitary installations, electricity, dismantling and demolishing, compressed air facilities, and concrete platforms. Implementation time: 6 months. Latest bidding date: 26.07.2007.

(iv). **Tender No. BT/RC/06/07: Supply of 10 X-Ray Scanning Machines for Passengers' Luggage at railway stations.** Latest bidding date: 14.11.2007.

(v). **Tender No. HN/KB/24/07: Infrastructure works on the Rishon-Le-Zion-West - Ashdod line; the section between Holot road interchange and Yavne.**

The contract contains the following structures:

Structure 01: Infrastructure for tracks.

Structure 02: Supporting walls.

Structure 03: A railway bridge over road No. 20.

Structure 04: An agricultural under-track passage at km 110+850.

Structure 05: A railway bridge over road No. 4311.

Structure 06: A railway bridge over Sorek river.

Structure 07: Various works.

Implementation time: 22 months. Latest bidding date: 26.11.2007.

(vi). **International Tender No. MC/RC/03/07: For the Manufacture and Supply of Buffers Type U5N and Rubber Spring Sets for Buffers.** Latest bidding date changed to: 15.11.2007.

(vii). **Tender No. BH/SR/23/07: A frame contract for providing maintenance services to the fire fighting system water based and mobile equipment** at all railway sites with option for additional sites on future. The contract is for 60 months with option for additional 60 months. Latest bidding date: 03.12.2007.

(viii). **Tender No. BT/MT/09/07: A frame agreement for providing Investigation Services, including tracing, unseen video system, graphology checks, tracing addresses and phone numbers, etc.** The contract is for 36 months with option for additional 24 months. Latest bidding date: 26.11.2007.

(ix). **Tender No. BN/KB/10/07: A frame agreement for Maintenance and Reconstruction Works on railway sites along the lines of Southern Israel between Tel-Aviv South, Jerusalem, Ashkelon, and Har Tzin;** includes: electricity, installation, etc. The contract is for 12 months with optional extensions of up to additional 48 months. Latest bidding date: 21.11.2007.

(x). **Tender No. MH/SR/20/07: A frame agreement for implementation and integration of the ERP (SAP) system in the railways.** The contract in-

cludes all the components and services of the system. The contract will start on the date of signing it and terminate at the date of the end of maintenance. Latest bidding date: 05.12.2007.

(xi). **Tender No. BN/KB/09/07: Frame agreement for Replacement of concrete, steel, and wooden Sleepers along the railway lines.** The contract is for 12 months with optional extensions of up to additional 36 months. Latest bidding date: 17.12.2007.

(xii). **Tender No. MC/RS/08/07: Annual frame agreement for supply of Brake Shoes for rolling stock.** The contract is for 12 months with optional extension of up to additional 48 months. Latest bidding date: 31.12.2007

(xiii). **Tender No. NO/SR/18/07: Annual frame agreement for providing Gardening Services at all railway stations and sites.** The contract is for 12 months with optional extension of up to additional 36 months. Latest bidding date: 30.12.2007

(xiv). **Tender No. HN/KB/30/07: Annual frame agreement for supplying, installing, and maintaining of technological facilities at Level Crossings.** The contract is for 24 months with optional extension of up to additional 60 months. Latest bidding date: 27.12.2007

(xv). **Tender No. NO/SR/19/07: Annual frame agreement for providing pest-control services at all railway offices, stations, and sites.** The contract is for 12 months with optional extension of up to additional 48 months. Latest bidding date: 24.12.2007

(xvi). **Tender No. MH/SR/10/07: A frame agreement for carrying out works of building, implementation, and integration of documents management and missions system, decisions follow-up, and an organizational portal based on Microsoft Office SharePoint Server 2007;** also the conversion of the existing information to the new system will be needed.

The agreement will include 3 months of system building and running, a guarantee of 12 months afterwards, and 24 months of maintenance from guarantee's termination; there is an option to extend the agreement by additional 60 months. Latest bidding date: 28.01.08.

LIGHT RAIL NEWS.

79:06.

A. JERUSALEM.

(i). **CONSTRUCTION AND ACCESS WORRIES.** An article by Gil Zohar in 'Jerusalem Post', Sept. 20, 2007:-

"Downtown business owners are worried about the traffic noose being drawn around the city centre as work continues on Jerusalem's long-delayed light-rail and busway system, respectively called the Red and Blue lines. Commuter woes will only worsen as sections of Jaffa Road begin closing this fall to facilitate track laying and landscaping.

Jerusalem Business Development Center (MATI) head Uri Scharf is concerned some businesses may not survive the long-anticipated interruptions. "The [construction] work will continue for nearly a year more. We've seen in other cities in the world, like Frankfurt or Zurich, where similar projects continued for three to five years, that certain businesses were compelled to close as a result of the blocking of entrances for their customers. And if that wasn't bad enough, the business owners were obliged to pay dearly for the paving.

"Here in Jerusalem, outgoing Municipal Director-General Eitan Meir has promised that during the entire period of work [on Jaffa Road], which will continue for a year, access will be assured to every single business, and that loading and unloading of merchandise will be permitted in the morning hours. Moreover, here the municipality isn't seeking the financial participation of business owners."

Will those steps prevent financial loss and store closings as customers dodge hoardings and dust? "In my view, there are going to be more than a little of the anticipated disruptions to business in the city centre," says Scharf. "But international experience teaches that a little suffering in the short term pays off in the long term. This whole complex process is going to bring life to the centre of town. What's been carried out on Rehov Shimon Ben-Shetah gives a preview of what is expected in other areas.

"Upon completion of the work there," he continues, "some good businesses, upscale restaurants and pubs opened. An indication of the positive impact of the work carried out there can be gleaned from the improvement of the taxes the Municipality is collecting in the city centre this year - NIS 120 million as opposed to NIS 3 million last year.

"This indicates that the serious business community has already absorbed where all this is leading. "By the way," he adds, "already today, according to a [sur-

vey] carried out, on average 130,000 men and women walk along Jaffa Road per day. This compares to 30,000 in the Malha mall. "Regarding preventing private vehicles from approaching [downtown], there are a number of cities in the world that have no access whatsoever to the centre," Scharf points out. "In London the restriction is backed up with heavy fines. In Milan there is no entry to a huge swath of the centre. I haven't heard these cities are dying."

Downtown business owners don't necessarily share Scharf's "no pain, no gain" view of the new transportation plans, and the pending closure of Jaffa Road. "My personal view is that the closure of traffic will kill the city," says David Aminoff, an accountant who gets a ride to his Rehov Ben-Yehuda office and takes the bus home. "People won't come downtown if they can't get in their car." The narrowing of the roads may lead to a disaster, with ambulances unable to get around the traffic jam, he warns.

"They'll have to make some parking [arrangements]," says Avi Schmidt, who manages a portfolio of rental apartments in the city centre. Otherwise business will suffer, he surmises.

Indeed Kikar Square plans to create five major commuter park'n'rides to feed the Red and Blue lines - but none in the city centre. The first, a new covered parking garage at Holland Square by Mount Herzl, the western terminus of the light rail, is slated to open in November, to be followed by others in Talpiot, Mount Herzl, Pisgat Ze'ev, Har Hotzvim and Binyenei Ha'uma.

But in the meantime, driving and parking downtown is becoming increasingly restricted. Signs have sprouted across downtown in recent days, posted by the Eden Company, a subsidiary of the Jerusalem Development Authority, noting further street closures as part of the ongoing pedestrianization of the city center.

The plan, modeled on Zurich's main drag, the Bahnhofstrasse, will see Jerusalem's major artery Jaffa Road and many branching streets closed to regular traffic, which will be re-routed to an inner city ring road. The newly affected streets include Rehov Herbert Samuel and the northern end of Rehov Yoel Salomon - which both connect Rehov Shammai to Kikar Zion and Jaffa Road. Recently signposted No Entry, drivers may only drive there during restricted hours, ostensibly for loading and unloading. And the traffic light on Rehov Herbert Samuel at Kikar Zion has been covered, pending its removal.

A few blocks to the west, at the other end of the existing Ben-Yehuda pedestrian mall, Ben-Yehuda and HaHistadrut streets have been similarly restricted, though they remain open for taxis. The offices of

the Neshet service taxi to Ben-Gurion Airport is located on the block of Rehov Ben-Yehuda slated to also become pedestrian-only.

Work is nearing completion to convert two one-block long streets downtown - the so-called "Little Bezalel" and Rehov Schatz - into pedestrian-only promenades covered with granite cobblestones quarried in China. Leading south from Rehov HaNevi'im to Kikar Zion, Rehov HaHavatzet has been dug up for a sewer drain. When completed, the roadway will also be made pedestrian friendly, thus eliminating curbside parking. Similarly Rehov Shammai, like parallel Rehov Hillel, will be narrowed and landscaped - at the expense of many parking spots.

The work has baffled drivers in the city center, who seem unable to comprehend City Hall's newest traffic maze. At Kikar Zion, where a temporary metal barricade has been erected to prevent cars from exiting onto Jaffa Road, perplexed drivers routinely shove aside the barrier and drive on. Other motorists veer through Zion Square and exit at the pedestrian crossing across Jaffa Road. To get to that point, they must drive through the no-entry signs on Rehov Herbert Samuel or Rehov Yoel Salomon.

Not all Jerusalem drivers are scofflaws, however. The more observant of traffic regulations make a three-point turn at the end of Rehov Shammai, which is now officially a two-way, dead-end street, causing back-ups and utter confusion. After repeated calls to the municipal hotline (106), and a referral to the parking authority, a source confirmed that the new traffic arrangements were permanent. The new road closings are meant to facilitate the laying of the tracks on Jaffa Road for the light rail project, which is five years behind schedule due to financial and technical difficulties.

While significant progress has been made on the light rail's 13.8-km long, NIS 3.5 Billion Red Line, including laying track on a section of Sderot Herzl and partially erecting the Calatrava Bridge near the Central Bus Station, the key to the whole vision - the closing of Jaffa Road except for trams - remains vague. "We still don't have any detailed engineering plans about Jaffa Road," admits light rail spokesman Shmuel Elgrabli.

The city spokesman's office confirmed that there was no date set for work on Jaffa Road. "The municipality will coordinate the [light rail] works with those involved, including local business owners, Egged bus company, the Transportation Ministry, the police, etc.," spokesman Gidi Schmerling told In Jerusalem.

As hazy as the near future may be, the final result is clear. "In the coming years it will be difficult to reach the city centre by

private vehicle," he says. Similarly Itcho Gur, spokesman of CityPass, the consortium building the light rail, confirms the municipality hasn't approved any plans yet for Jaffa Road. Everything is pending "until after the holidays," he says.

Will the huge investment in infrastructure and urban renewal pay off?

Zoning changes have primed the pump, says Eden CEO Asaf Vitman, allowing for an additional 1.2 million sq.m. of new commercial, residential and public sector development, he says. When the light rail is completed (expected in 2011), and the high-speed train to Tel Aviv pulls in to its new underground station two years later, downtown Jerusalem will have been transformed into a network of pedestrian-only streets extending from Mamilla, past the Mahaneh Yehuda market. A thicket of new buildings will also rise in the area, including a courthouse, a new campus for the Bezalel Academy of Art and Design, hotels and luxury condominiums for foreign Jews - and all will be difficult to reach by car."

(ii). MORE ON TRACK PROBLEMS.

Under the headline "The Curse of the LRV", one of the two most popular Israeli newspapers - 'Ma'ariv' (Evening News) - reported on 16.10.2007 in an article that although 4 km of the Red Line Appitack had already been laid, according to the city Architect Mr. Shlomo Eshkol, defects had been detected on the first-laid section of Herzl Avenue and it had to be dismantled and re-laid, and he is concerned that the same might apply to the whole of the laid sections; a letter with these details has been sent to the Transport and Roads Safety Ministry, saying that independent experts have to check the already laid sections.

The response from concessionaire City-Pass was that indeed there was a defect in the first sections laid, but Alstom's engineers who came specially to Jerusalem said that this has been resolved and work goes on well. However, the opening of the first line, originally planned for the end of 2007, may be delayed to the beginning of 2010, and City-Pass is now in negotiation with government on the new schedules!

(iii). BRIDGE AND BUREAUCRACY.

On 26.10.2007 Sybil Ehrlich wrote, rather exasperatedly:-

"The Calatrava bridge at the entrance to Jerusalem continues to be a story that you couldn't make up. Two weeks ago it was announced on the radio that the city entrance would be closed "tonight" from

9 p.m. to 5 a.m. to allow for the installation of the "toren" (mast) of the bridge. So the next day, Friday October 12, I rushed up there with my camera to see what I could see. What I saw was exactly what I saw the previous day, the previous week... nothing had happened. Monday of this week (October 22) all the local papers were full of ads from the Jerusalem Municipality announcing that there would be disruptions at the city entrance would be closed "tomorrow" to allow for the installation... Monday came and went, everyone having torn their hair out wondering how they would manage to get past that intersection, and with it NOTHING. On Tuesday I phoned the spokesman of City Pass that is supposed to be building the damn thing, and he said they hadn't got police permission for Monday - and apparently it could only be done in daylight - and in any case it was only one more section, not the entire mast, which they expect to finish to great fanfare at Hanukka (yeah, maybe...) but it would be "tomorrow" (Wednesday). On Wednesday morning I couldn't actually see any difference when my bus passed there in the morning. I phoned the City Pass spokesman to ask what time it would be happening so I could go out and take photos. He gave me the number of someone in the Jerusalem municipality. This person said... oh, you won't believe it (although by now we'll believe anything) it won't be "today" (Wednesday) because THEY HADN'T GOT A POLICE PERMIT BECAUSE OF THE MEMORIAL CEREMONY FOR YITZHAK RABIN!!!!!! I mean, the entire country knew it was that day but the Jerusalem Municipality didn't?????"

B. TEL AVIV.

Actually a little old, this news should have gone into the last issue!

(i). Works started at the end of May 2007, on renewal of infrastructure works on Jerusalem Avenue in Jaffa to prepare it as the alignment for the Red Line. The works are carried out from south to north on the eastern side of the avenue and vice versa on the western side; divided into 4 equal sections of 500m each, Each section is expected to take 4 to 6 months.

During work periods each section is closed for private car traffic, this being diverted to side streets already prepared for it; public transport is diverted to the western lane as well as bus stops; all other services for the local population, such as loading and unloading, close parking particularly for disabled, and rescue services, are being provided to the maximum possible degree, while additionally new parking areas have been prepared at the nearby streets.

Works on the first stage include:

moving water, sewage, and drainage infrastructures at the Dante complex, new traffic lights working on the Green Wave principle, the electricity network to become underground, new seats, new plantation, new lighting, etc.

During the second stage, after renewal of all the structures along the LRV alignment, tracks will be laid, and the Red Line will become operational about 6 years from now - 2013.

(ii). CONCESSION SIGNED.

From a press release of 28.05.2007 by NTA:

"To-day the BOT concession between the state of Israel and the concessionaire MTS for building, operating, and transferring the Tel-Aviv first LRV line - the Red Line - was signed after the Parliament's (Knesset) financial committee approved the state's financial commitment for the most complex and expensive infrastructure project in its history - the government share is \$2.1 Billion; the whole project will cost \$2.9 Billion.

The agreement signed by the Finance Ministry's Accountant General Dr. Yaron Zalikh, the Chairman of Africa-Israel (part of MTS) Mr. Erez Melzer, and the General Manager of MTS Mr. Yohanan Or, contains detailed principles for the complex BOT, including schedules and costs to be paid by the concessionaire and the state:

A. Schedule - the project will take 6 years to complete, namely: the design, excavation, and construction works will be completed by the first half of 2013; the underground works will start towards the end of May 2008 and 2 years later the surface work will start.

B. Works - the government and NTA accepted MTS' offer to bore two separate tunnels, one each direction (instead of a double-track single tunnel); 9 underground stations will be bored, and one underground station will be built in the cut and cover system, in order to minimize disruptions to daily life at the work site; additionally, there will be 21 surface stations.

C. An innovation introduced in this concession is the pre-design, parallel to financial closure - unlike other infrastructure projects managed by the state, such as the Jerusalem LRV, and toll Highway No. 6.

It should be mentioned that the Red Line project is the first BOT project in which the concessionaire is committed to purchasing from Israeli suppliers for 30% of the total project value!

Dr. Zalikh said: "The Red Line project is the Diamond in the Crown among the infrastructure projects being carried out in partnership with the private sector". Minister Mofaz said: "The LRV in Tel-Aviv will change the whole metropolitan area, by

being part of the Israeli transportation vision in which the public transport will mean quality, efficient service, and advanced technology for all users, thus reducing road congestion and road accidents".

NTA's Chairman advocate Benny Waknin said: "We still face a long period of design and building which calls for all the factors involved in the project both from the state and the concessionaire, to be determined; however, signing the agreement clearly shows the trust in NTA's ability to bring the project to completion".

The line is expected to carry between 100 and 120 Million passengers annually.

From Aharon Gazit: "Finally, some good words are appropriate about the person who deserves the copyright for the Tel-Aviv Metro - no-one other than Mr. Shimon Peres, who in 1972 as the Transport Minister offered it to the then-Prime Minister Mrs. Golda Meir; it was planned by a French Architect; however, like his other idea for fast trains running to Beer-Sheva at 170 km/h (he suggested then using the French RTG), this was too advanced for that time; we wish Mr. Peres (83) who already enjoys seeing fast trains to Beer-Sheva - though at the moment only at 140 km/h - many long years and hope he will enjoy seeing his second dream become a reality!"

(iii). PROBLEMS!

Unexpected delays in the project; in October a court at Tel-Aviv has cancelled the land expropriation at Yitzhak-Sadeh Street in the city, under which the Red Line is planned to run; the court accepted the appeal of the land owners against the municipality, the District Council for Planning and Building, and NTA (project management), explaining that "The behaviour of NTA was unacceptable, the area to be demolished is too large for the present stage, and NTA has spoken in two voices and controversial positions in parallel procedures".

**HaRakevet is produced
in England by
CPS-Aredale
Specialist short run
magazine printers.
0113 226 7497**

cpsairedale@ntlworld.com

NOTES AND COMMENTS.

(a). On 78:09 (f) - JAFFA STATION RESTORATION:

From Amith Ben Shalom,

"The two wagons brought to Jaffa station in September 2007 have a dramatic and tragic unknown background, related to dear Paul. On 02.05.2007 at noon, Paul was marking with black spray those two wagons at the Qishon-Workshops, with the coordinator of the transportation-company. Immediately after he sprayed the text 'Yafo' (Jaffa, meaning that the wagons were intended for the Jaffa station), he collapsed and died."

(b). Re 77:12 - K. HOFFMAN & SONS. Also from Amith Ben Shalom.

"One of K. Hoffman's products, was a platform-truck (No. 5 in Paul's article) called "KALMOVIL". My assumption is that the name is a combination between KALman & Decauville, and is also a pun, as KAL means also 'ease' and MOVIL a transporter.

Further information about citrus orchard usage of Decauville railways can be found in the book "CITRUS BLOSSOM" ("PRICHAT HAHADAR") by Dr. Nahum Karlinsky, now of the Ben-Gurion University at the Negev.

One other railway item mentioned in the book is a "HADOVIL", which means a Mono-Rail Decauville, used in especially narrow and crowded tree-rows. The single wheel (at the front of that so called wheelbarrow) had a "n" (opposite "U") shape. My family use to have one of those HADOVILs, without rails, and we used it to transfer citrus boxes (1-3 at time).

Further information about K. Hoffman, A. Siniaver, M. Kolodni (HAMANIYA) etc. could be found in "A FILTER GRAVESTONE TO AN INVENTOR" ("MATZEVAT FILTER LEMAMTZI") by Prof. Shmuel Avitzur. (Thanks to Shay Farkash, Nahum Karlinsky.)

(See illustrations from the catalogue elsewhere in this issue.)

(c). The last Decauville wagon & Paul's last e-mail. (Amith Ben-Shalom)

(See 76:09, 76:10 & rear cover). On my many visits to Kibbutz Na'an, to research the Hamaniya loco & Gan-Hadar/Niana narrow line, I sat down at the archive and perused the historic documents, with Chava Anoch (the activist) & Dr. Irit Amit-Cohen (who wrote the excellent book "The Enigma behind the Cypress Trees" (Hachida Me'achorey Habroshim)). In the file about the loco, I found a letter from a colleague archivist, Neta Sivan from Kibbutz Gan-Shmuel. Enclosed with the letter was a picture of a narrow-gauge flat wagon, pushed by 3 "Halutzim" (pioneers), between the orchard trees.

It took to me a little effort to contact Neta (all thanks to the web & E-mail inventory!) and this led to a few more important discoveries.

Neta and her husband Gidi found and sent few more old pictures of decauville vehicles at the kibbutz, in the orchard, in the cowshed, and in the hen-house. I forwarded all of them to Paul (by permission, of course!).

One day they e-mailed me "By the way" that there was a relic of a wagon at the kibbutz, on display... After an E-chat with them, I had almost the full story. It came few years ago from a Block-Factory or so at Hadera, as a gift from a contractor who bought the metal-waste from there, to Dede Amir of Gan-Shmuel. Dede put it on an original short segment of the track (of the orchard line seen in the pictures) in front of the kibbutz's "Little Yard" ("Ha'chatzer Ha'ktana").

A few hours later I rushed there, and took many pictures of it. Underneath the chassis I found something strange and unique: A toothed-wheel mounted on the axle, connected with a chain to an upper additional axle, and a wheel drive moving all this assembly! It looked very strange and nobody knew what this was for.

The following day was 02.05.2007. I e-mailed the pictures to Paul, as I had before with all the historic pictures I got from Neta & Gidi Sivan.

At 11:28 am I got a reply from Paul (In Hebrew): "YAFE, KOL HAKAVOD! I have no idea what is this SHTRUNGEL with the teeth, wheel-drive & wheel, and don't even want to guess. I assume that the wagon was built in Israel, but by who I again don't want to guess. Paul"

My reply was that maybe it was the chassis of another Hebrew loco, the second!! No answer came. An hour afterwards, Paul died....."

(d). FROM HOLLAND TO EGYPT.

From 'Op Oude Rails' 1991 (?) p. 16. "When the tramway company 'Oostelijk Groningen' ('Eastern Groningen') was closed in 1949, a trading company in Nijmegen was able to sell the rolling stock in all directions. Of the locomotives, the Verhoop-types

went to Egypt, whereas coaches went to Liberia and Switzerland."

Marc Stegeman adds: "These were locos designed by Verhoop, a mechanical engineer, for improved efficiency. They were built by Henschel and were quite successful. Nevertheless, after World War 2 and the temporary revival of the tramways, it was obvious that buses would soon take over. Our Ministry of Economic Affairs tried to promote the sale of new and used railway equipment abroad to improve the difficult financial situation. This trading company from Nijmegen went a long way to make contacts!" The 'OG' was of 1067mm gauge - 3' 6".

(e). FROM ISRAEL TO TIBET.

From 'Railway Gazette':- The Israeli firm NICE Systems and Smarton Technology have won a contract to supply real-time distributed digital video content analysis equipment to monitor the security of tracks and stations in Tibet.

(f). SURVIVING REMAINS OF 600MM GAUGE INDUSTRIAL LOCOS IN ISRAEL. (from Amith Ben Shalom.)

Kibbutz Naan :

1 HAMANIYA loco, mfc. 1939, the first and only known Hebrew/Israeli built (see 76:09). In good external condition, Semi-preserved. Remains are the original chassis & bogie, main engine block, transmission assembly.

Kibbutz Ein-Harod (Meuhad) :

1 ORENSTEIN & KOPPEL (Italy), mfc. 1938. formerly at Caesarea-Theatre restoration, later to Sdot-Yam kindergarten. Preserved. (48:12(b)).

Kibbutz Ein-Shemer :

1 RUSTON & HORNSBY LBT, mfc. 1959. formerly at Atlit Salt Co., later to Ein-Harod. From 1994 active & well preserved on the 'Oaks Line'. Now under general overhaul. (28:21).

1 DEUTZ 4wDM, mfc. 1960. Formerly at Timna mines and/or Hamovil-Haartzl. Found at Dump yard near Beer-Sheva. Active & well preserved on the 'Oaks Line', as a reserve loco. Now active instead of the above R&H.

Pardess-Hanaa :

1 RUSTON & HORNSBY LBT, mfc. 1959. Formerly at Atlit Salt Co., later to Ein-Harod. In very poor condition.

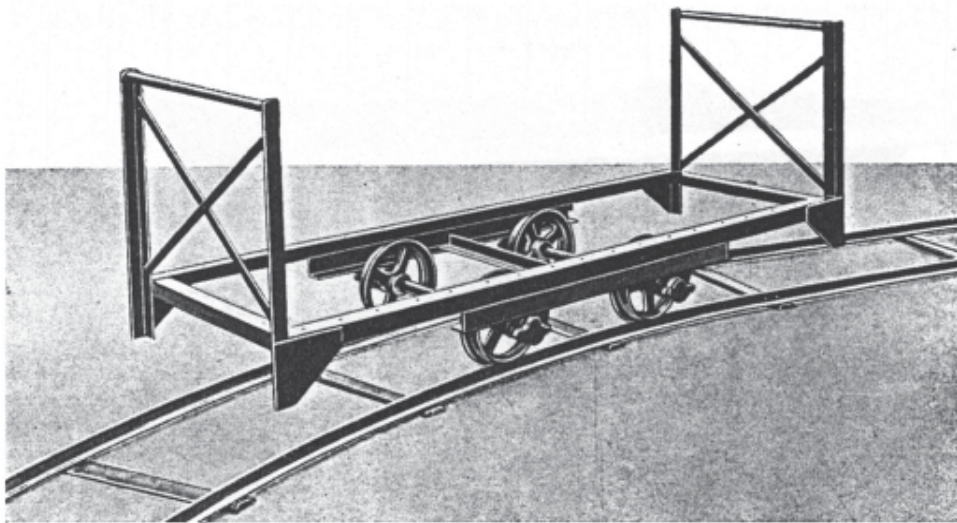
1 DEUTZ 4wDM, mfc. 1960. Formerly at Timna mines and/or Hamovil-Haartzl. Found at Dump yard near Beer-Sheva. In very poor condition. (48:12:(a)).

Atlit salt co. :

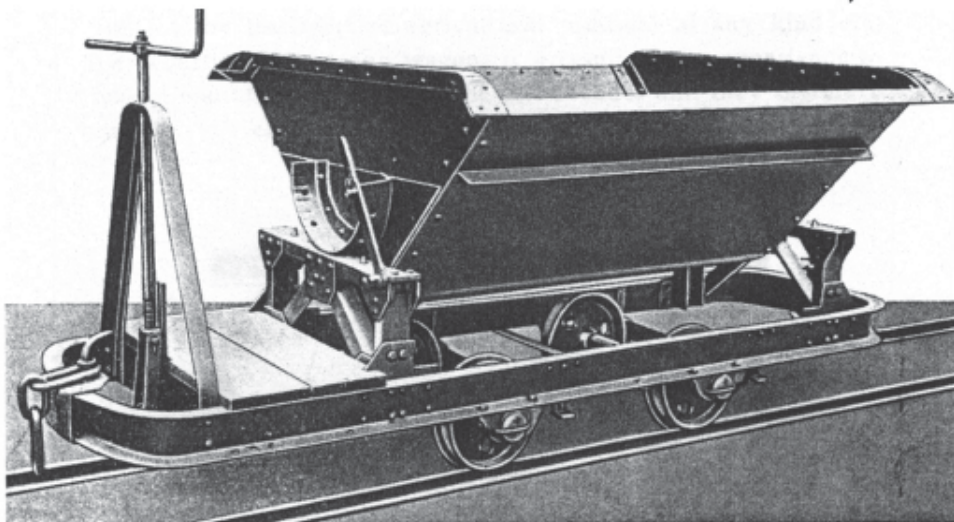
1 RUSTON & HORNSBY. mfc. 1939. Formerly at Atlit Salt Co., later to Ein-Harod. Well preserved. Static exhibit at Ein-Shemer at 2006.

Gesher :

1 HUNSLET 4-6-0-T (steam), mfc. 1917. Of

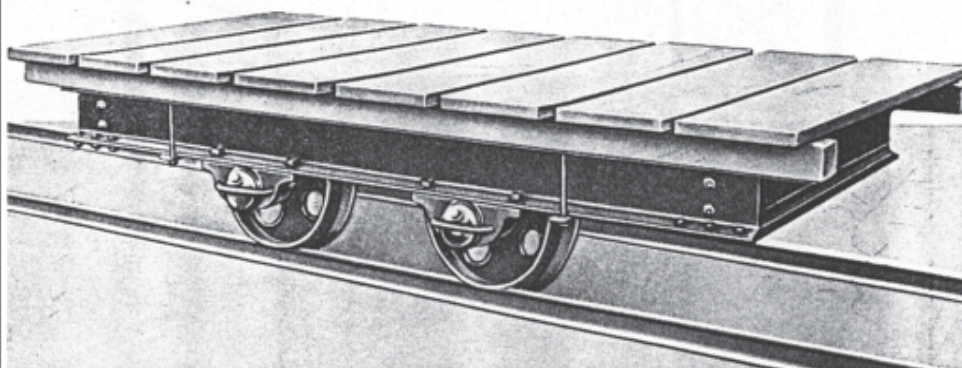


LIGHT RAIL TRUCK קרונית וקלמוביל



קרוניה מתהפכת עם בלם פלם פרג
 TIPPING WAGON WITH SCREW BRAKE.

Fig. 456



קרונית שטוחה - מסיבים גליליים
 PLATFORM TRUCK - ROLLER BEARINGS



קרוניה מתהפכת STEEL DOUBLE SIDE TIPPING WAGON
 ממעיק $\frac{3}{4}$ cbm.

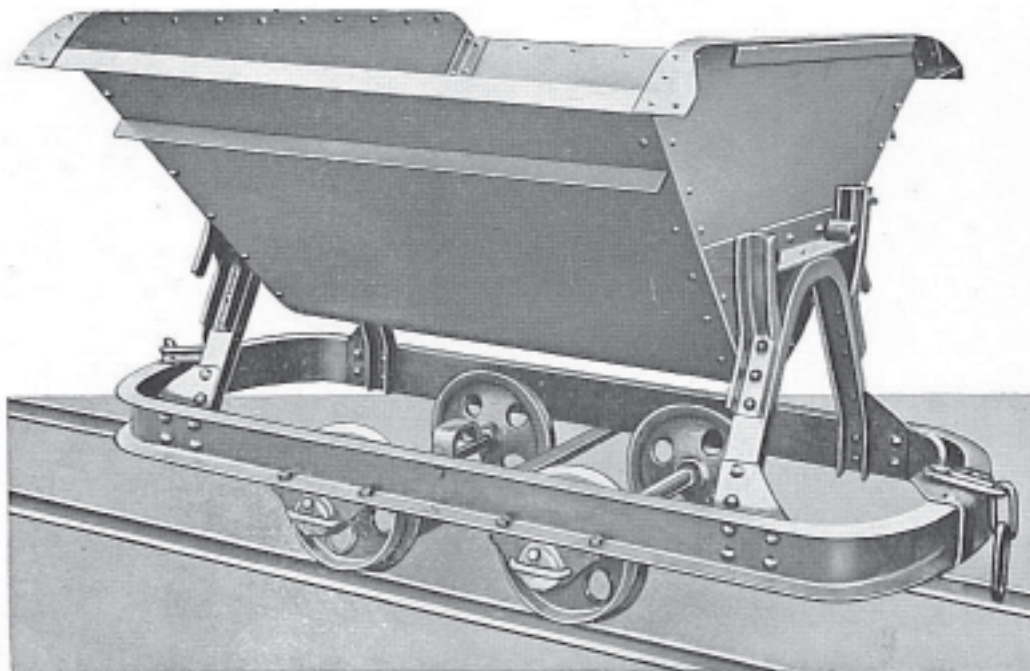


Fig. 450

קרוניה מתהפכת מיוחדת לקבלנים להובלת חול, אדמה, אבנים, חצק, בטון וכו' בעבודות בנין, כבישים, ישור חולות וכו' ולהובלת תוצרת הקלאית בשדה.

Specially suitable for Contractors, for the transport of sand, earth, gravel, concrete etc. in buildings, road making, levelling and for the transport of agricultural products of any kind etc. The construction of our wagons is a result of our experience in wagon manufacturing during the last decades and they therefore embody all essential advantages such as strong construction, easy manipulation etc.

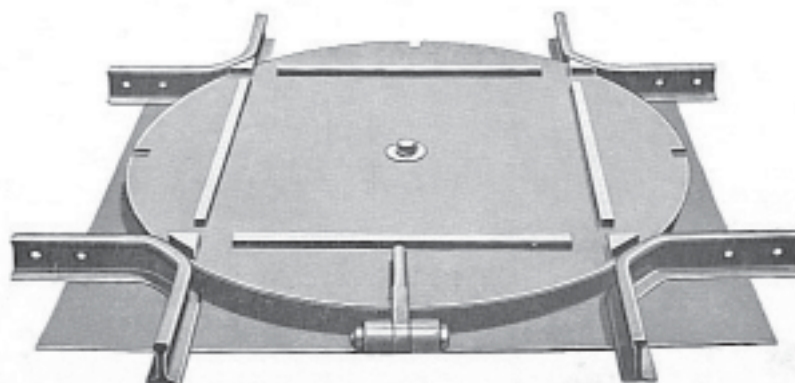


Fig. 461

צלחת מסתובבת WROUGHT IRON ROLLER TURNTABLE



קרוניה מתהפכת STEEL DOUBLE SIDE TIPPING WAGON
 ממעיק 1¼ cbm.

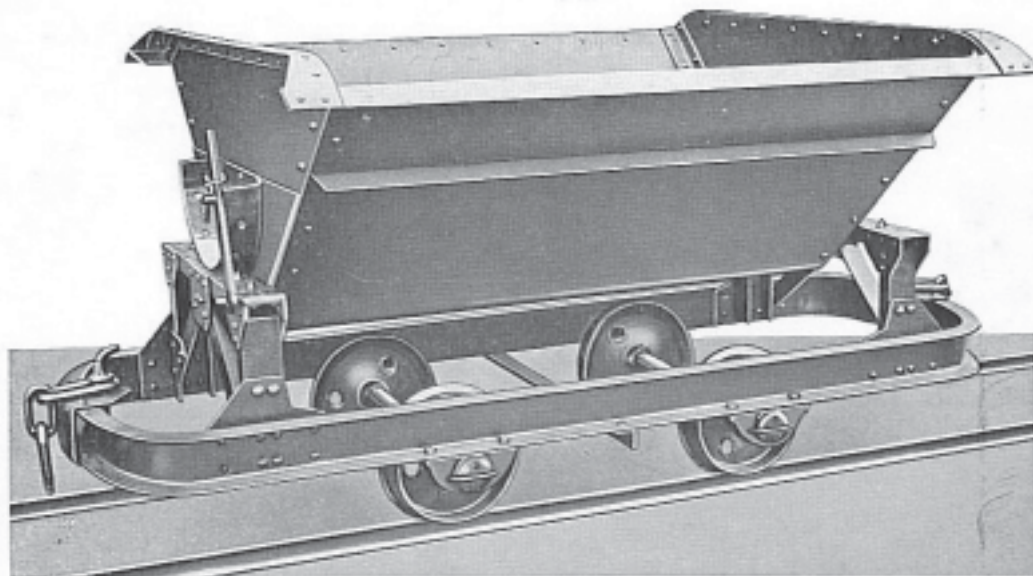


Fig. 455

אלה הן קרוניות לעבודות כבדות מותאמות להגור אחרי קטרים כבדים. בהרבה מאות מהקרוניות שלנו השתמשו בזמן בנית מפלי המים בנהרים לתחנת הכח של חברת החשמל לא"י.

These are heavy duty Tipping wagons, suitable for heavy locomotive traction. Many hundreds of our wagons were used in the construction of Naharayim water falls and Electric Power Station.

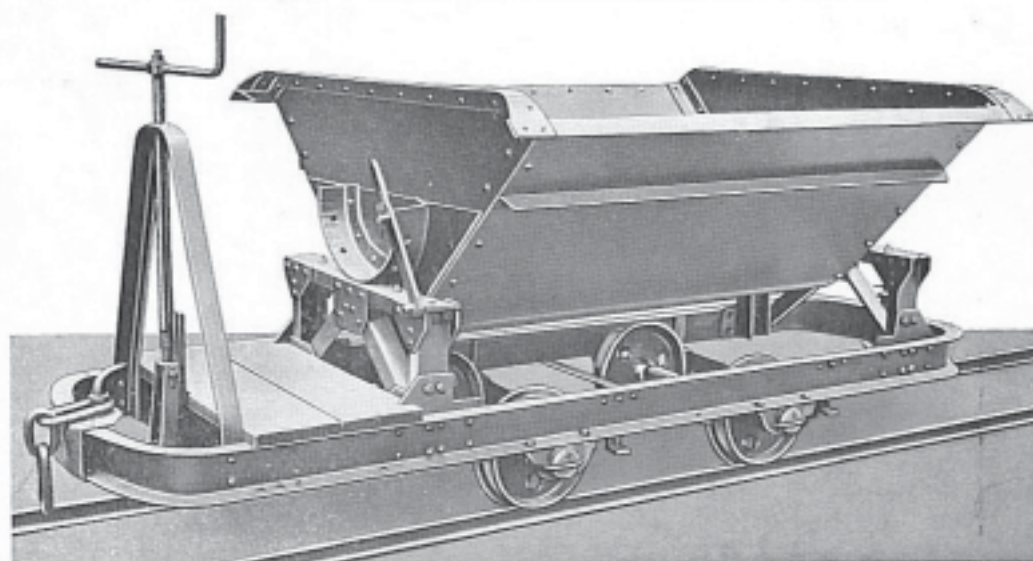


Fig. 456

קרוניה מתהפכת עם בלם פלם פרג
TIPPING WAGON WITH SCREW BRAKE.

the PEC at Naharayim, Well preserved and operational exhibit at Ein-Shemer at 2005 (with a diesel engine) (65:01).

Sdom:

1 BROOKVILLE mfc. 194? Of the PPL, At the Potash Factory Museum, Open-Yard . Chassis + bogies + Cab frame only, without engine.

(g). YAD SARAH ESSLINGEN GOES.

See issue 5:8, 1990. An Esslingen railcar driving trailer and an old Egged bus had been donated to the charity "Yad Sarah" in Jerusalem to use as stores.....

From Sybil Ehrlich on 26.10.2007: "Yesterday I happened to find myself on Rehov Hanevi'im and thought I would say Hi! to the Esslingen. Well, the Esslingen and its friend, the old bus, have disappeared and the site is derelict. There is a small notice thrown down on the ground saying that the Rehov Hanevi'im branch of Yad Sarah has closed. This is most unfortunate news. I have fond memories of this Esslingen because, apart from anything else, it featured in the very first photo I had published in Harakevet (No. 5). I will try and find out from Yad Sarah what happened to it."

Four days later, on 31.010.2007, came: "A woman from Yad Sarah called me back two days later (much to my surprise!). She said it had been removed and broken up on the instructions of the Jerusalem municipality. So I called the municipality. Turns out the plot of land was only leased to Yad Sarah and it has now reverted to the owner, so Yad Sarah had to clear out." I'm writing a piece about it for "In Jerusalem" next week. I found a pic that I took of it in 1990."

(h). THE MYSTERIOUS FIAT RAILCARS.

For some considerable time there have been rumours that Israel ordered, and then cancelled, some diesel railcars from FIAT - there was even a photo somewhere of one painted in the then-IR livery. From Andrea Canale of Milan, whom I met in Vienna, comes at last the following concrete information:-

"In 1973 Israel Railways ordered ten railcars from FIAT, that became Type 7225 in their catalogue and were built in 1975 in the subsidiary factory of Ferrosud in Matera (south east Italy)

They were equipped with two motors of type 8217.32, the same as FS Class ALn 668 of the modern series and ALn 663 (which was produced until the 90's), hydraulic transmission with SRM DS 0,9 gearbox of Swedish origin (similar to that for Swedish railcars of Class 1) and a bodyshell inspired by railcars previously built for Cuba and Mexico, with a front end inspired by contemporary FS ALn 668.1900.

Power was 324 kW and they had a maximum speed of 128 km/h, they were

air conditioned (at that time completely unusual in Italy) and had 68 seats (as the FS ALn 668, where '68' means the number of seats).

However, after they were built Israel Railways cancelled the order, according to the Italian literature because of the Yom Kippur war.

So FIAT tried to sell the vehicles to FS, but they were considered too different internally to operate in Italy, compared to the FS railcars (probably four were already fitted with a bar counter) so Italian technicians in Mexico offered them to Ferrocarril del Pacifico, which bought six units (four with bar and 60 seats, and two without bar) and to Ferrocarril Chihuahua al Pacifico, the power being increased to 346 kW and reduced top speed to 100 km/h due to the high gradients on its network.

They entered service in Mexico in 1975; FIAT railcars based on ALn 668 had operated there since 1958."

(i). PALESTINE RAILWAYS IN RAMALLAH!

Sybil Ehrlich writes:- "From a report in the 'Jerusalem Post' about Yasser Arafat's mausoleum in Ramallah, dedicated this week: "The mausoleum, made of glass and beige Jerusalem stone, is surrounded on three sides by water, and a piece of rail track is entombed underneath Arafat's grave. The water and piece of track are meant to symbolize the temporary nature of the burial site, officials said, with Palestinians planning to rebury their former leader one day in Jerusalem, their hoped-for capital."

No, I don't know what gauge it is... but come to think of it, it's probably the first piece of track ever in Ramallah!!!"

(j). S.S. THISTLEGORM.

See: Harakevet " 23:6:(d), 28:20, 68:6:(h).

In 'Black Eight' No. 122 (Autumn 2007) p.7f. is an article about the sale of some workplates NBL 24678, 24679, together with tenderplates and a Stanier hooter whistle - which had been taken from Stanier 8F 2-8-0's loaded on this ill-fated ship which was sunk in the Red Sea and whose cargo included several locomotives newly-built for the War Department. It quotes Ned Middleton, a diver, who runs a website (<http://www.redseadivers.com/thistleg.htm>) who has written:

The 'SS Thistlegorm' is an unofficial War Grave and whilst the Ministry of Defence would never seek to prevent Scuba Divers from visiting the ship - and never have! - they do regard all items taken from her simply as 'theft'!

The Thistlegorm was built by Joseph Thompson & Sons of Sunderland, and launched in June 1940. She was 126.5m in length and displaced 4,898

gross tonnes. Powered by a triple-expansion, 3 cylinder steam engine that generated a very comfortable 365 nominal horsepower. She was one of a number of 'Thistle' ships owned and operated by the Albion Line. With her construction being part funded by the British Government, however, she was destined for 'War' duties from the moment she was launched.

Despite her designation as an 'Armed Freighter' with an additional armoured Gun Deck built over the aft section, an overall shortage of weapons meant that only an old 4.7" gun and a heavy calibre machine gun - both of WW1 vintage, were all that could be spared for the Thistlegorm. Her maiden voyage was to the USA to collect steel rails and aircraft, her second voyage was to South America for grain and her third was to the West Indies from where she returned with sugar and rum.

Getting through the Canal was dependent on several factors - enemy aircraft activity over the Canal, cargo priority and how long other vessels had been waiting. At this time, however, two vessels had collided further up the Gulf of Suez and were virtually blocking the entire entrance to the Canal. This led to the 'Thistlegorm' - with her valuable cargo, remaining at anchor for a full two weeks.

Up until now these 'Safe Anchorages' - each with its own letter of the alphabet - were regarded as exactly that - Safe! There were no enemy ships and enemy aircraft rarely ventured this far south. This was, however, all about to change when German Intelligence received information that a large troopship (possibly the Queen Mary) was due to travel through the Suez Canal with 1,200 British troops destined for North Africa.

Having mastered the relatively new skills of night flying, Heinkel He111's from II/Kg26 (No. 2 Squadron 26th. Kampfgeschwader) based in Crete were alerted to the possible presence of such a large vessel. Their task was to seek and destroy. At 22.50 hours on 5th. October 1941 two twin-engine Heinkels crossed the north Egyptian coast heading southeast in search of this prize.

Aided by a clear moonlit night, they searched in vain for the big ship until fuel levels became critical. Then, just as they were on the point of returning home empty handed, one of the pilots spotted a ship at anchor. Turning away in order to put his aircraft in the best possible attacking position, the pilot turned again as he continued to lose altitude. He came in low over the sea and, as he approached the bows of the Thistlegorm, he released two bombs right over her bridge.

Both bombs penetrated No. 5 Hold - aft of the bridge, detonating a great deal

of ammunition. The resultant explosion sent the two locomotives spiralling into the air as the ship was ripped open like a huge tin can. Even to this day, the rear decks are peeled back towards the Bridge leaving many a Diver wondering what exactly he is looking at. Some accounts have even described this as 'Armour Plating'!

The vessel began to sink and the crew quickly abandoned ship - with hardly any time to launch the lifeboats, most of them leapt straight into the sea. One injured man, however, was trapped on the blazing deck and desperately needed help. Crewman Angus McLeay wrapped some rags around his bare feet and ran across the hot steel plates to rescue him - an action for which McLeay was awarded the George Medal and Lloyds War Medal for Bravery at Sea.

Caught unawares, the Thistlegorm had been given no time to defend herself and she quickly sank. It was timed at 01.30 hrs. 6th. October 1941 Captain Ellis and the other survivors were rescued by HMS Carlisle and then taken to Suez where he reported four members of his crew of 39 and five of the nine Royal Navy ratings had all lost their lives. Captain Ellis was subsequently awarded the OBE - for 'War Services' - by King George VI."

This must indeed now be the authoritative account.

(k). OBITUARY - PESACH ZEL. By Chen Melling

"In the early hours of October 23rd, 2007, the Israel Railway Museum suffered its second major personnel blow of the year with the sudden passing-away of Pesach Zel, a long time volunteer and former employee of many years of Israel Railways.

Pesach was born in Latvia, 1923, but was raised in Lithuania. During WWII he was drafted to the Lithuanian Division of the Red Army, and during his service lost one of his legs, a handicap which seems to have had surprisingly little effect on his later life and spirit.

In 1947 Pesach made ALYAH, and shortly after Israel's Independence, while living in Ramleh, he joined the young Israel Railways. Despite his "wrong" political allegiance at the time and lack of "HISTADRUT" membership, he managed to get a position in the Stores Department, where he remained for the remainder of his working career, which lasted until the age of 75.

Having been in contact with the Museum for some time before his retirement, it was only natural for the good-spirited and energetic Pesach to join the small band of pensioner-volunteers there, despite living as far away as Petach Tikva. Many-a-visitor will recall Pesach's smile awaiting them at the Museum's entrance and his never-ending bag of railway tales entertaining their visit there. Indeed, I myself had the good fortune of hearing many of them during my decade of acquaintance with Pesach, which gave me a real insight into working conditions and personnel relations on the railways. Somehow, despite all the hardships he must have endured in his work, when he recollected his memories it was always with a smile and usually made the person hearing the story laugh at the end.

The Museum is indebted to Pesach not only for his guest-entertaining skills, but also for countless of exhibits, ranging from tiny rail parts to the Mandate-period traveling bunker. All of these came to the Museum's possession (officially or otherwise...) through Pesach's excellent connections throughout IR and especially in Lydda Station, and his negotiating skills and patience proved invaluable on many occasions.

He will be greatly missed by his Wife, children and grand-children as well as by all regular visitors, workers and volunteers at the Museum."

79:08.

OTHER MIDDLE EAST RAILWAYS.

A. IRAN.

TEHRAN METRO DEVELOPMENTS.

From 'Railway Gazette' 'Metro Report' 2006 pp. 40-42. By Mohsen Hashemi, Chairman & Managing Director of TUSRC, and Chairman, Iranian Union of Urban Railway Companies.

"At the end of March, the Tehran Urban & Suburban Railway Co. launched revenue service on the final 9.6km. of Phase 1 of the metro network being constructed in the Iranian capital. This means that 90 km. of new railway is now in operation, carrying an estimated 10% of total travel in this area by all modes.

But this is far from the end of the task that has faced TUSRC since it was set up in 1975 as a partnership between the national government and the Tehran municipal authority. Construction has already started on Phase 2, and a Final Development Plan, due to be completed by 2020, could see eight metro lines, totalling more than 200 km., plus five electrified suburban lines totalling 170 km, serving more distant communities.

The concept of sustainable development and sustainability has many definitions, but one endorsed by the United Nations certainly applies to metro construction: 'Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.'

Of the 70 million people living in Iran, some 15 million are found in the seven largest cities, each with a population exceeding 1 million. In addition to Tehran, they are Mashhad, Esfahan, Shiraz, Karaj, Tabriz and Ahvaz. All of them generate huge numbers of journeys to and from work, schools, universities or shopping centres.

Our government has recognised the need to provide efficient access and mobility in and around these cities. Plans exist to provide each of them with metro or light rail networks of three or four lines, ranging from 40 km. in Tabriz up to 100 km. in Esfahan. Construction of at least one line has started in each of the cities except Ahvaz.

In total, Iran's urban rail plans envisage the creation of more than 200 km. of heavy metro in the capital, plus 170 km. consisting of five suburban lines around Tehran including one to Karaj that has been in operation since February 1999, and 380 km. elsewhere.

Phase 1 Now Complete.

While Tehran's population of 8 million is growing by 1.1% annually, together with its satellite townships including Karaj the area surrounding the capital is home to almost one-sixth of the country's population, nearly 11 million people.

The number of daily trips in Tehran exceeds 12 million. In 2004 bus and minibus carried 36%, taxis 20%, private cars 23% and other modes 16%. The metro carried 7% in 2004 but its share is expected to reach 40% in future.

Although construction of Phase 1 began in 1978, it was halted by the Iraqi invasion and the long war that followed. The effective start came in 1986 using local consultants and contractors.

Phase 1 includes two metro lines and the suburban line to Karaj and Mehrshahr, known as Line 5. The Red north-south Line 1 is now 28 km. long with 22 stations, and the Blue Line 2 is 20 km. long with 19 stations. Both metro lines operate at 2 min. peak headways, when each line carries up to 40,000 passengers/hour in one direction.

The 42 km. Line 5 runs from Sadeghieh on the western side of Tehran to Karaj and Mehrshahr. Whereas the metro is conventionally powered by a conductor rail at 750 V DC, the suburban line is built to main-line standards with 25kV catenary, and operated by push-pull trains of double-deck coaches.

Phase 2 Gets Underway.

The construction of Phase 2 has already been approved by the municipality, the interior ministry and central government. Work has begun to create two more cross-city metro routes, and extend both existing metro lines, bringing the total length of the metro to 123 km.

The Red Line is being extended north by 8 km. to Tairish, adding eight stations. The Blue Line will be extended 9 km. to Pardis, raising the number of stations from 19 to 23. Of the two new routes to be bored

beneath the city, Line 3 (light blue) will run northeast-southwest for 36 km. with 24 stations, and Line 4 (yellow) will run east-west across the city for 20 m. with 20 stations. headways will again be 2 mins., but longer trains will provide a higher capacity of 45,000 passengers/hour in each direction on the new lines.

Whereas there is only one metro interchange station at the moment, at Imam Khomeini Square where the Red and Blue lines cross, construction of lines 3 and 4 will increase that number to six. The total length of urban railway will more than double to over 200 km., and we expect TUSRC's share of urban traffic to reach 25% when the work is completed in 2012.

The long-term development plan, which extends to 2020, envisages an eventual total of eight metro lines with 228 stations, together with five suburban lines totalling 170 km. serving another 50 stations. In total, this network would have the capability to carry 7 million passengers per day.

Funding Construction.

In line with government and Tehran's municipal policies, future metro construction will be paid for in a different way. Funds for tunnelling and the right-of-way will come from the municipality, while the private sector will raise the money for stations from their property development potential. The government will fund the trains and other electrical and mechanical equipment.

On this basis, the Government, will contribute 50% of the total cost, the private sector 30% and the Municipality 20%. We plan to use long-term loans from the local and international banking market. The cost per km. is expected to be US\$40M to US\$50M for urban and US\$7M to US\$10M for suburban lines, depending on the technology used.

Civil work is done by local Iranian consultant and contractors using the French basic design and materials made in Iran. Tunnels are built using different construction methods, the most important of them being NATM, TBM and cut-and-cover.

Four different tunnelling profiles are used. Cut-and-cover creates a rectangular box 5.1m. high and 7.6m. wide, with the walls supported by piles, struts, curtain walls or a frame. Oval bored tunnels were excavated by making use of NATM, with support for the roof and walls provided by a truss, steel mesh and shotcrete. Circular tunnels of 8.15 m. diameter were excavated by TBM, the shields supporting the ground until pre-cast segments had been installed. Stations have also been built below ground using different methods. The principal decorative materials being used are granite and marmarite from domestic quarries. Platforms in metro stations are 140m. long on lines 1 and 2, increasing to 158m. for future lines, and the width is 5m. For suburban stations, platform length is 300m. and the width 7m. to 10m.

Rolling Stock.

All the rolling stock purchased so far has been supplied by Changchun Car Co. of China. On Lines 1 and 2 we are using trains of seven 19.5m.-long cars, with a total capacity of 1,400 to 1,600 mostly standing passen-

gers. Maximum speed is 80 km/h. However, all 28 axles are motored on Line 1 trains because the maximum gradient is 5%, whereas on Line 2 two of the cars are trailers. The Line 1 fleet also has 130 kW DC traction motors, whereas Line 2 trains have AC motors of 180 kW. A total of 805 cars have been supplied or ordered for the metro so far.

The suburban lines are worked by trains consisting of 10 double-deck cars, also built by Changchun, with a 25kV electric loco from Zhouzhou Electric Works at each end, each with four 800 kW DC motors.

Power for the metro is taken from the national supply at 63 kV at five locations where it is transformed to 20 kV for distribution to the 25 substations that feed the third rail at 750 V DC. Each of the five primary substations has two 30 MVA transformers. Line 5 has its own 25 kV 50 Hz feeder station.

Control and Communications.

Signalling is based on fixed-block computer-based interlocking and coded audio frequency track circuits forming the core of the system. It is worth mentioning that we have provided for the introduction of fully-automatic train operation in the future.

The complex power network is supervised and controlled from our Operations Control Centre. Monitors and mimic panels give the operators an overall view of the whole network, and they can act immediately to guarantee continuity of operation in the event that one of the high-voltage substations loses power.

Data transmission is based on ring-configured optic fibre links, with pulse-code modulation and multiplexers. These cover all data requirements, including links between plant at stations and their related systems in the control centre, as well as data related train running, the power network, fare collection or voice communications. This includes public address, which is very helpful in emergencies for directing passengers. CCTV allows station masters to have a clear view of all areas within their station, enabling them to take action when necessary. Plant at the Phase 1 metro stations includes 180 escalators and 125 passenger lifts.

Ventilation is clearly important in a city where temperatures can be high, and 120 powerful jet fans are available to keep the air fresh in tunnels and stations below ground.

A contract for supply and installation of automatic ticket vending machines was awarded to SANAM last year. This Iranian company is determined to acquire the know-how for domestic production of these machines, and installation of the first equipment at the stations has already started.

Successful Operation.

It is now seven years since the first 31 km. section of the TUSRC's network opened to the public - the suburban Line 5 connecting the western terminus of Line 2 to Karaj, the biggest satellite city.

The first 12 km. of the Blue Line also went into operation in 1999, with two further sections opening in 2003 and 2005. The first 10 km. and 10 stations of the Red Line opened in 2001, and the remaining 18 km. with nine

more stations followed in 2002 and 2003.

There is no doubt that the Tehran Metro has been an outstanding success. It immediately generated high ridership, changed the city's image, and generated investment in new buildings at stations. Daily ridership on the three lines currently stands at around 1 million.

TUSRCV has in hand a US\$2-5 Billion programme to construct lines 3 and 4, plus extensions to existing lines totalling around 70 km. Phase 3 has already been approved by the city council.

We believe that it is possible to build and commission new lines of around 28 km. with 20 stations each, capable of moving 45,000 passengers/hour in each direction, within six to eight years at a cost of no more than US\$50M/km. The nature of a metro makes it easy to divide a project into manageable parts, each of which can be completed in a maximum of 40 to 48 months.

Yet most of the underground metro lines built around the world in recent years have cost more than US\$80M/km. We believe that consultants, project managers and contractors need to address their cost estimates. Many cities dream of building metros, which have much to offer to the emerging mega cities, but this will not always be possible, especially in developing countries, unless we can find ways to keep the costs down."

B. LEBANON.

(i). RAILWAY INFRASTRUCTURE. PART 1.

From 'Fahrplancenter News' No. 41, (July 2006 - May 2007), pp. 8-10. (Translation from German by the Editor.)

"Since the plans for the construction of an electric suburban railway from Beirut along the coast both northwards and southwards were dropped some six years ago - for environmental reasons!! - and for the same period there has been no rail movement of any kind, it seemed a suitable time to explore once again what is left of the Chemins de fer de l'Etat Libanais (CEL) - the Lebanese State Railways. Visitors to Beirut constantly report that the station is still standing and full of wagons, and from the most recent reports it appears that many buses also stand on the old station site.

Thanks to some very good satellite pictures it has proved possible for the 'Fahrplancenter News' editorial team to inspect almost the entire CEL system. To this must be added that even the most recent maps of Lebanon continue to show the railway lines. The CEL is still a member of the UIC (International Union of Railways), and (purely statistically) all property, railway lines and buildings still belong to the CEL. The CEL still employs a management team of some 30 persons, but on the wages list there are over 70 persons, presumably including watchmen at the Beirut station. Since 1999 no transport statistics have been kept.

Parts of the Lebanese coastal railway, the HBT, between Beirut and the Israeli border, were first built some 65 years ago, for strategic reasons during the Second World War.

But the line was also the missing link between the standard gauge railways of Turkey, Syria etc. in the north and Palestine/Israel and Egypt in the south. With the current construction of the tunnel under the Bosphorus, it should theoretically be possible to link Africa with Europe by rail, especially since the line through the Sinai Peninsula is being reconstructed and - let us be optimistic - even the line through the Gaza Strip is to be rebuilt. The CEL system could play a key role in international traffic - perhaps one day in the Near East the realisation will dawn that trade is better than war.

The Civil War and further conflicts and a fully-uncontrolled building boom with roads and all sorts of buildings has led to the relatively quick abuse and re-use of the surviving but disused railway infrastructure. But we shall now take a fictional journey along the CEL lines, beginning at the tunnel on the Israeli border.

From Israel the railway reaches Lebanese territory through a tunnel under the Ras en Naqoura. The tunnel is still complete, but closed at each end with a provisional wall. In Israel not all the rails are still lying up to the tunnel and a cableway crosses the railway just before the tunnel, much too deeply to let a train pass. After the tunnel - now in Lebanon - the line runs very close to the coast; sometimes tracks are still laid for a few hundred metres, then the trackbed is used as a road, probably for military reasons. After a short distance of some 4 km. the railway reaches the first habitation, Naqoura; Here the line runs on the edge of the beach right through - there was once a station, a building can still be located, and there must have been two or three tracks here.

From Naqoura the railway runs at first directly on the coastline, whereby in places the railway alignment has become a sort of beach promenade. After about 3km. the line crosses the main road and runs east of the road northwards through extensive fruit orchards and at about Cape Ras el-Biyada it passes under the headland in a tunnel, several hundred metres long. After the tunnel the line continues west of the main road and crosses, on a bridge which is still intact and with rails, the valley of the Ouadi Chamaa. Shortly afterwards the small village of Mansoura is traversed, once more alongside the road, and a small empty area indicates the site of a former small station, which must have had at the most only two tracks; there is no longer any appropriate building standing.

Shortly after this place another river has to be crossed; here the bridge piers stand still in the water, and the abutments are also largely intact, all indicating that the bridge was (legally or illegally) properly dismantled. Rails still lie at the northern abutment. In the passage through Rachdié, in contrast, one can no longer see any trace of a railway station and in the middle of the village is a large hole, which swallows up the railway alignment adjacent to a former road crossing. This is, incidentally, the only former level crossing where rails can still be seen in the asphalt; at all others the rails have either been ripped out or covered with asphalt.

Now the line reaches the town of Tyre (or Sour) - here the line passes between

the houses and has therefore been transformed into a sort of 'rear car park' or back alleyway. The station area is without rails, the building stands still somewhat forlorn by the empty area. After Tyre the line continues mainly through orchards, and the rails are mostly still lying here - admittedly partially covered in undergrowth, but at least still present. At one point, north of Matanyet ech Choumar, the line passes between large glass houses.

About 15km. further north is the village of Sarafand (or Ez-Zahrani), which also indicates a former small station, of which one can still find traces in the centre of the village, although the station building appears to be now roofless. At most there were but two tracks here.

After a further 8 km. comes a refinery - very important for the country - and alongside this area the railway layout remains intact, and the refinery is still rail connected. Immediately south of the refinery one also finds a fairly large bridge over the mouth of a short but very fast-flowing river, and this appears also to be still unaffected. North of the refinery is another tank storage depot and theoretically traffic could still take place between the refinery and the oil storage depot, although there is no siding to the storage depot. A further bridge is also still standing, but shortly before Saida (Sidon) the construction of a motorway has involved the simple removal of several hundred metres of the rail alignment. Some 4km. further on the station of Saida is reached, on the western side of the old town, and apparently at least one track is still present, at least in a part of the station area.

Northwards about 3km. and after the hamlet of Bramiye another river, the Ouadi Nahr is crossed on a large and intact bridge. Following this the line continues, mainly with still intact rails, through orchards, traverses around the headland at Cape Ras Sahare, as well as that of Ras en Nabi Younes, north of the village Ouadi ez Zaniye. One cannot tell whether there used to be a station in Ouasi ez-Zaniye, at least there appears to be no sign of such. 2km. after the Ras en Nabi Younes the line cuts off the village of the same name from the beach. One continually finds sections in which the rails are still lying, and so one can assume that around here all the rails are still laid and it is only that some have been covered by sand, or by asphalt.

At Cape Ras el Saadiyat there is an oil-powered power station, producing electricity. Until the late 1990's oil trains from the Beirut Harbour reached here - some 7km. south of Damour - almost daily. One of the two then-serviceable Polish diesel locos (built by Cegielski) would be used for these trains. At the power station there is a real station layout with, from the coast inwards, a crossing track, then the through line, and then two sidings used for the unloading of the tank wagons. Although the pictures date from around 2005, they show still some 20 tank wagons standing here, but no locomotive is visible. Today the power station is served by very numerous road tanker lorries, which use the motorway.

About 3km. after the power station comes the greatest bridge of this line. Coming from the south the tracks end abruptly at the abutment, after which one finds only some

fragmentary remains of the piers which once carried the steel lattice girders. At the northern bank of the Damour River there begins a further lengthy and substantial approach bridge which crosses the low ground adjacent to the river, which can be flooded at high water.

After a further 3-4 km. the railway reaches the town of Ad Dâmûr (or Damour), which today has some 15,000 inhabitants. The town became infamous on 9th. January 1976 for very dreadful reasons, as it was here that the first major massacre of the Lebanese Civil War took place - whereby within a few days some 582 inhabitants were murdered. 16,000 armed men from Syria, Palestine, Afghanistan and other countries - a total of 15 fighting groups - under the leadership of Arafat attempted to wipe out the almost 100% Christian town! Ad Dâmûr survived, but of the station all that remains is an empty space (filled with vehicles, containers and rubbish) and with no track left visible. From here there once ran a further track of 1050mm gauge. It is now around 17km. to the station of Beirut.

Near Naamé one can still see a bridge over the mouth of a stream where it enters the sea, but on both ends of the bridge the approach embankment is missing. Now the line follows the motorway and for the construction of exit lanes or parking places the railway trackbed has been in places removed or covered - in 2005 some of these parking laybys were still under construction. Near Khaldé, a small place without a station, refugees (or travellers?) have settled on the alignment and constructed tents and shacks. Shortly thereafter the trackbed disappears completely under the motorway which, according to newspaper reports, was widened in 2004 - this for around 1 kilometre. Shortly after is reached the southern end of the Beirut Airport, and from here the railway is more or less intact for some distance. At some places one can even make out the rails in the road level crossings. Some 5km. further the line plunges into the sea of houses in South Beirut. Sometimes the rails lie in the rear yards of housing blocks, then they continue further at the edge of a road. Through this thickly-populated area, one of the poorest districts of the city, it is often difficult to follow the alignment fully. It seems that in places the rails were just pulled out of the roads during construction works and then afterwards not relaid. In other places the railway trackbed provides the only green area in this district.

South of Beirut there must once have been a Halt with the name Ain el-Hadath - that existed still in the 1960's. In the district of Ain er Roummané there approaches from the right the narrow gauge (1050mm.) line from Damascus, it crosses the standard gauge and then follows this, always at some metres distance - however there are no more rails to be seen on this. Some 200m further there was a platform between the two lines, that was called Et Tanouna Halt, although it appears highly unlikely that substantial numbers of passengers ever changed trains here to go from the southern coast to Lebanon's mountains and the skiing resorts. In the district of Forn ech Chebbak, not far from the Beirut River, there is a triangle of tracks; To the right curves a line connecting to the bridge over the river and shortly afterwards the other track from the bridge curves

and joins the line we are describing. These are the tracks of the northern line, coming from Tripoli. Immediately after the triangle comes the main station of Beirut, which looks externally very like a French provincial station. Even today the General Management of the CEL has its headquarters in this station. The area is scattered with stored goods wagons. Many vehicles and especially the depot buildings suffered severely during the civil war. Some of the westernmost tracks have disappeared under piles of rails; these come from the furthest northern third of the station area, which was only recently completely dismantled and asphalted and turned into a bus park. On the western edge, outside the station area, the 1050mm gauge track continues past - a standard-gauge line joins this and the line continues with three rails as mixed-gauge past the northern end of the station and further northwards, through residential areas. In the area of a widened main road the track has been removed, but one finds between the houses a railway bridge over a smaller street, the bridge still carries rails and much undergrowth. Between the houses there is mostly rubbish on the railway trackbed. After a curve to the left, Beirut St. Michel is reached."

(ii). LEBANON: CURRENT NEWS. From 'Fahrplancenter News' No. 41 p. 10. (Translation by the Editor).

Within the framework of an international project for the encouragement of railways in the Arab Near East, at the beginning of 2005 restoration works on the Lebanese railway lines actually commenced. Works began on the section of narrow gauge line from the Syrian border near Serghaya to Rayak and these were performed mainly by the Syrian Army, as they have (or had - there are contradictory reports) a base there. In 2005, with a credit from Kuwait, Syrian railwaymen and Lebanese construction workers began works on the rebuilding of the line from the Syrian city of Homs through the Bekaa Valley to Rayak.

These all became known from Lebanese press reports soon after the Israeli intervention in Lebanon. In total, from mid-2005 \$5.23M had already been invested in the reconstruction of both lines, a further \$4.3M was planned to be spent by 2008, for the planned reopening of the Homs-Rayak and Rayak-Damascus lines.

According to these sources, however, during the 2006 Israeli intervention in Lebanon all these works on Lebanese territory were 100% destroyed. The roads in the region also suffered severe damage. The intention was to make it more difficult for extremist organisations to bring weapons into Lebanon, whether by rail or road.

How shall the next projects therefore be carried out? Within the aforementioned development framework it was decided in May 2006 to build, rebuild or improve several rail corridors. These included:-

- Haydarpasa - Ankara - Aleppo. (Existing).
- Aleppo - Damascus - Amman - Ma'an - Aqaba throughout in standard gauge. (Partially existing.)
- Haydarpasa - Ankara - Van - Tabriz - Tehran. (Largely existing.)
- Baghdad or Basra - Tehran. (Partially existing).

- Basra - Kuwait - Damman. (Already long-planned.)

- Damman - Riyadh - Jeddah. (The first section to Jeddah exists.)

- Ma'an - Jeddah (former Hedjaz Railway, to be reconstructed as standard gauge).-

- and, importantly for Lebanon, Baghdad - Mossul - Aleppo - Homs - Akkari - Tripoli. Apart from between Akkari and Tripoli, trains can currently run on all sections of this route. The detailed planning for the missing section will however soon be completed. In general the idea is to rebuild the former alignment. Even the border bridge south of Akkari should be completely reconstructed. In the harbour at Tripoli a Customs Free Zone for Iraq is planned.

In general all these corridors are intended to be completed by 2020. Existing lines will be repaired, upgraded and improved. Freight trains will then be able to travel at speeds of at least 60 km/h. Passenger trains are also envisaged, with a speed of at least 90 km/h. Saudi Arabia, Kuwait and the Emirates wish to provide the main funding.

There is also - admittedly vague - talk of a railway line Tripoli - Beirut - Gaza - Cairo, whereby it is noticeable that Israeli place names are specifically not mentioned! However, before this line can ever become reality, there must be some Peace in this region."

C. TURKEY.

(i). DELIVERIES TO TURKEY DURING THE SECOND WORLD WAR.

A couple of recent articles in 'Eisenbahn Magazin' touched on the issue of several four-wheel coaches which were built in Germany for export to Turkey but, for a variety of unclear reasons, never delivered. Now a more substantial article by Paul Scheller (issue 8/2007, pp. 30f.) (with thanks to Joachim Deppmeyer for information) entitled "Balkan Boycott" sheds a little more light on this matter.

"Hermann Hoyer, in his article in the 3/07 issue, lists no recipient for three of the carriages from the Lindner production. These three Ci coaches were in fact sold in April 1940 to the Köln-Bonner Eisenbahn and received there the numbers 1522-1524. With this the gaps in the available knowledge of the distribution of the vehicles ordered in 1938 have been finally filled. Of the four coaches sold to the Kreisbahn Hersfeld-Heimboldhausen, two were used as 2nd. class and 2 as 3rd. class - though all four carriages were originally built as type Ci (i.e. 3rd. class.)

These 24 Ci vehicles formed however only a small part of the planned exports to Turkey which were withheld and eventually disposed of elsewhere. The KBE took over not only the three Ci coaches from the Lindner batch but also three railcar trailers built by Westwaggon. These C4 vehicles received in 1940 the KBE numbers 1525-1527.

The Deutsche Reichsbahn absorbed 150 covered and 55 open goods wagons of the Turkish type and 11 tank wagons, as well as 25 freight steam locomotives of the Turkish Class 56; these were numbered 58 2801 - 58 2805 by the DRG. Seven more locos of this type were sold to the Bulgarian State Railways. Of the 25 Reichsbahn locos, in 1941

ten were also sent to Bulgaria in exchange for DR locos that had been on hire.

Also affected by the halt in deliveries were twelve ABi, (i.e. 1st./2nd. composites), six Luggage vans, two Weight Measuring wagons (Eichwagen - normally used for testing weighbridges), one Saloon coach and a Dynamometer Cach, and an Ambulance or Mobile Clinic coach. (Sanitätswagen.) At first these vehicles did not find any purchaser, and it seems that some of them at least did eventually find their way to Turkey, after some delay.

Even if the 24 Ci from the 1938 order never reached Turkey, there were similar coaches of this type, from earlier orders, which were delivered. One could also find there the ABi type, ordered parallel to the Ci, with their five windows instead of six (as shown in the photo on p. 48 of 'Eisenbahn Magazin' 5/07.) In total however there were not many of these, which is why after the war the stock was increased by further vehicles built in Czechoslovakia. It seems that these 4-wheel coaches were all used in the Izmir region.

Background to the Halt in Deliveries.

Locomotive historians normally link the sudden halt in deliveries to Turkey from Autumn 1939 onwards with the complex situation surrounding the TCDD Class 56 engines. Reasons for the halt are given variously as the complex wartime situation, war-related problems in production or Turkish problems with payment. All these reasons are incorrect. If it were possible to deliver locos to Bulgaria in 1940/41, then it would have been equally possible to deliver them to Turkey. Until August 1944 Turkey could be reached overland without any hindrances, and the locos and vehicles were paid for by Turkey with raw materials that were vital for the war effort - both before and after the halt on deliveries. The suspension of deliveries was therefore based purely on political grounds. .

Following the formation of the Turkish Republic, much money was invested in the expansion of the railway network. The most important source for deliveries of all forms of railway materials and Turkey's major trading partner was Germany. The peak of this commercial relationship was reached in early 1938 with the largest order to date for railway vehicles. It was planned that it would take at least two years to fulfil these orders.

Despite this commercial affinity with the German Reich, the Turkish government under İnönü - Atatürk had died in 1938 - was not prepared to let itself be drawn once more into a European war. As the German intentions to start a war became ever clearer, Turkey therefore also sought in addition closer relations with England and France. Once some minor disputes about territory had been resolved, in October 1939 a Treaty was signed with England and France. The response of the German regime was the suspension of delivery of the railway materials that Turkey had ordered. Those items that were already completed but had not yet been delivered were held back, whereas contracts for vehicles not yet built were cancelled.

Replacements from England.

As a replacement for the missing

deliveries from Germany, England offered Turkey the delivery of railway materials instead. As immediate assistance 20 2-8-0's of type 8F were delivered in 1941, these having been ordered by the War Department as wartime locomotives. (See 'Eisenbahn Magazin' 2/01). In addition there were, standing on various sidings all over England, several hundred covered vans which had been built in Britain to French OCEM norms (these served to standardise on dimensions between the various French railway systems), and which were to have been employed in France for conveying supplies for British troops there. Due to the rapid French capitulation these had not reached the European mainland. They could not be used in Britain itself due to their continental profile / loading gauge. 400 of these 'stranded' vans were shipped to Turkey in 1940/41, and a further 250 constructed from parts already to hand soon followed them. In addition some short-coupled hopper wagons for iron ore were built in Britain to German drawings. The locos of TCDD Class 56 which had been ordered in 1939 from British manufacturers - 37 in all - were in fact only delivered after the war.

Even before the English deliveries arrived, the German - Turkish economic relationship had already become normalised once more. Once Turkey guaranteed to remain neutral, in July 1940 a new trade agreement was signed and in 1941 the delivery of railway equipment was recommenced. The suspension of deliveries had therefore not lasted even one full year. Some of those vehicles which had not in the meantime been disposed of elsewhere were now at last delivered, and also those 2-10-0 locos of what had become DR Class 58.28 which had not already been sold to Bulgaria were delivered at last to those who had originally ordered them. No new replacement 56's were built, however. Instead, in 1943/44 a total of 53 Kriegsloks of the Reichsbahn Class 52 were sent to Turkey, becoming there Class 56.5.

Following a phase of deliveries to Turkey from both England and Germany, from 1942 onwards German exports once more predominated. On reactivation of the contracts from 1938, in 1942/43 several hundred goods wagons were produced for Turkey including, in addition to covered vehicles similar to Type 'Gs Oepeln' and open wagons similar to Type 'Villach' with simple suspension, also long rail wagons of welded type. These vehicles were paid for with deliveries of Chrome and Wolfram ore for Steel production, but also with Tuna fish, which reached their German recipients in refrigerated vans."

Illustrations include DRG 58.2802 (built for the TCDD by BMAG/Schwartzkopff in 1940); A 1st/2nd. Composite 4.wh. coach Abi 772 built by Busch in Bautzen in 1939 and delivered before the suspension; a Type 'Gklm-u' 4wh. van with corrugated-iron roof, built for Turkey but ending up via the DRG after the war with the ÖBB in Austria; a 4wh. van of Turkish type with shunter platform classified 'G 19/Gklm 92' in use on the DB; a British OCEM van used as a mobile workshop in Istanbul in 2006; a 4wh. steel open built by Gothaer Waggonfabrik, 55 of which were absorbed by the Reichsbahn as Type 'Omp Ludwigshfen'.

(ii). CAMLIK RAILWAY MUSEUM.

From 'C.R.J.' No. 151 p.223.

"A May 2007 visitor to the Museum found four more locomotives had been added since the last list (was published). These are 2-8-2 46059 (Henschel 23659/1937) and 2-10-0 56045 (Henschel 24000/1940), both previously stored at Alasehir; and 4-8-0 46005 (Henschel 20713/1927) and 2-10-0 56917 (Corpet Louvet 1711/1926), both from storage at Camlik station sidings. They will be cosmetically restored in due course. All four are displayed around the turntable and, to accommodate them, 0-6-0T 3355 and 2-6-0T 3405 have been repositioned on the sidings. It is confirmed that the 2-6-0 exhibited as 34068 is in reality 34057 (Nohab 1844/1930). Owner of the Museum (but presumably not of most of the exhibits) is Attila Misirlioglu, a very successful Selcuk businessman, who has invested a considerable sum in the project, and receives no subvention from the Turkish Government or TCDD. The Museum is well worth a visit; entrance fee is the equivalent of just over GBP 1, and included on the site are two highly-recommended restaurant and a recently-opened ceramics factory.

0-6-0T 3312, formerly stored at Alasehir, has been moved to the Bursa area, reputedly for display at a Governor's premises."

(iii). ISTANBUL TRAMS.

From 'Op de Rails' (NVBS) 2007-9, p. 326.

"The South Korean firm Rotem will build (together with Skoda for the electrical equipment) 34 single-articulated trams for the Istanbul transport network. They are destined for a line Otogar - Bagcilar, still to be constructed.

Istanbul has also acquired four Stadtbahn B-cars from Köln, from the 2000-series (built 1977). There is interest in about 30 of these vehicles, which are being withdrawn in Köln. These will then work the line Zeytinburnu - Bagcoilar (opened in 2006 and worked as a separate extension of the city tram lines) and replace the Express Tram stock which is currently used here."

(iv). ESKISEHIR TRAMS.

"The tramway in this city is a great success. 160,000 travellers per day use the two lines, and the 18 'Flexity Outlook' trams from Bombardier can hardly cope. A further four trams of this type have therefore been ordered."

D. EGYPT.

(i). TRAVEL REPORT, FEBRUARY 2007.

In 'Eisenbahn Kurier' 8/2007 pp. 72-76 is a well-illustrated article by Matthias Hille on Egyptian railways. (The accompanying map indicates the Sinai line as "demolished in 1967", which is incorrect - see also other mentions in this issue.) It is based on a holiday in February 2007.

"I flew from Berlin to Cairo, and a connecting flight brought me to Luxor. In the plane I read once more the information brochure from the travel agency: 'Photography on Stations is not permitted'. But I it didn't seem too terrible; somehow, I'd manage.

From Luxor I wanted to spend the first week on the lines of Upper Egypt. The most traffic is on the double-track main line from Cairo to Aswan. Numerous express trains alternate with the 2nd. and 3rd. Class local trains, which are used almost exclusively by the natives. The few goods trains transport mainly phosphates and minerals. In addition there are trains of sugar cane from Edfu to Kom Ombo, where there is a large sugar factory. The simple, four-wheel wagons for the sugar cane transport possess neither brakes nor a through pipe for any braking system; at the end of the train a Caboose rolls along, as at the end of all Egyptian freight trains.

Two freight lines branch off from the Nile Valley railway at Qena. One goes to Bur Safaga on the Red Sea and is used for transport of bauxite and aluminium; The second crosses a new Nile bridge to a goods station near the river. North of Nag Hammadi another freight line diverges to El Kharga, a desert oasis in the western Sahara, and used for phosphates.

My first train ride brought me [northwards from Luxor] to Nag Hammadi. Here the line to Cairo crosses from the right to the left bank of the Nile. Unfortunately it is impossible to photograph the large bridge, and the Tourist Police on the station do not let me out of their sight. However, on the way I noticed two small diesel locos on a sugar cane narrow gauge railway near Qus.

So on the following day I got off the train at Qus. Many tractors and trailers were already waiting in front of the sugar factory. A pick-up already overfilled with natives took me some way into the countryside. The narrow gauge track is initially laid right on the edge of the road, and indeed after a short while we overtook the loco which I had seen the previous day, travelling alone. The two men on the machine stare amazed at their new passenger. Off we go, the bouncy tracks soon veer off into the fields. It's a wonder that the little loco doesn't derail! At the next village at a triangle we meet a loaded train. The loco crew get their well-earned 'baksheesh' and at last I can take the pictures I have been longing to. The little loco makes plenty of smoke with its heavy wagons, and I am even able to walk comfortably alongside. Then I travel a part of the way back, but take my leave already in Shanhuriya, for here one comes again to the standard-gauge ENR line. With a Passenger Train 3rd. Class I make my way back to Luxor.

On the next morning I take the express Train to Edfu. The loco crew naturally noticed me with my camera, and the German colleague was promptly invited into the cab of the Henschel loco. Wonderful, this is how I 'learn the road' to Aswan! The Henschel loco has already been working for twenty five years, but is still well-liked by the Egyptian crews. Shortly before Kom Ombo we pass by a beautiful section of line close to the Nile. I must certainly come back here!

Next morning at 4am the alarm goes - one must be prepared to make sacrifices if one wants good pictures! The Express from Cairo is almost punctual and so an hour and a half later I stand on the station at Edfu. But how to get further? First, a car brings me to the stand for the Collective Taxis; I try to explain my wishes. "Direction Kom Ombo?" I ask. The

man nods. After 15 minutes the taxi does indeed set off, but at the main road it turns in the wrong direction. I jump out, and wait further. At last a Jeep comes in the right direction. Here, also, the Egyptians are amazed to see a strange face at such an early hour. After half an hour my destination is reached - a short walk, and I am at the line. Soon the first night train from Cairo to Aswan roars past. Fantastic! It isn't boring, either, for with one or two trains per hour in each direction, the line is kept pretty busy. I have brought provisions and water with me, and so I can wander without worries to seek out the best points for photography.

The first holiday week is soon past. With the Express I go to Cairo. The railway network of Lower Egypt is very tightly-knit, many lines link the capital with towns in the Nile Delta, on the Mediterranean coast and on the Suez Canal. In addition there are transversal links. The future development of railways in the Sinai will also be interesting. The big, two-section swing bridge near El Ferdan seems to be intact, however the tracks that diverge from the Port Said line showed in spring 2007 no signs of use. Another important freight line should also be mentioned; it leads from Helwan in a south-westerly direction to the area of the oasis of Baharija, in which region iron ore is mined.

The double-track main line from Cairo to Alexandria has the greatest frequency of passenger services. Here also the Gas Turbine trains are used; at about two hours journey time they form the fastest link between these two major cities. Whoever has brought a lot of time with them can take the local passenger train from Alexandria via El Alamein (scene of several battles between the German/Italian Afrika Korps and the British 8th. Army in the Second World War) to Mersa Matruh. Some six hours are required for the 311km. long line. An extension of the tracks to the Libyan border is planned.

Apart from the Metro lines in Cairo, all routes of the ENR are operated by diesel locos. These locos have no national class number, as we know them, but are simply numbered through, and numbers of withdrawn locomotives are re-used. In addition all vehicles are numbered in Indian [sic. - he means Arabic. Ed.] numbers, which one can decipher with a little practice.

One sees the Henschel locos of the series 3000 - 3221 and 3241 - 3299 (Type AA22T) hauling almost every type of train. These were built between 1976 and 1992. Later, between 1996 and 1998, Adtranz in Kassel built a total of 68 members of a successor type DE 2550, in two variants for passenger and freight services. The General Motors machines of type G22W-AC are also to be found all over the country, but are used only on slow passenger and freight trains. Locos of type CP18-71 (Nos. 2301 - 2330) and JT22MC (Nos. 3222 - 3240) are only to be observed in the north of Egypt. In the goods yard at Tanta I even saw two LEW-V60, [i.e. DR 0-8-0D type] which however were no longer serviceable.

My fourteen days of holiday were over, so I boarded the plane at Cairo again, determined to return again some time....."

(ii).CAIRO METRO CONTRACT.

From 'Tecni-Rail' - Marzo 2007, p.44 - the Editor's first attempt to translate from Spanish!

Alstom has received the contract for the construction of Line 3 of the Cairo Metro.

"The Egyptian Ministry of Transport has allocated the contract for the first phase of Line 3 to Alstom. This is valued at 144.8M Euros. Alstom is now also charged with providing the signalling, telecommunications and electromechanical equipment - worth a further 29.8 and 115M Euros respectively. During the first phase, construction of the 4.3km. of the main section of Line 3 from Abbasiya to Ataba providing a link with Line 2. A second phase of 6.2km. will link Abbasiya with Al Ahram, and a third will extend the line from Ataba to Mohandiseen and Embaba. It is planned that by 2022 the final 12 kilometres will be completed, to the airport."

E. JORDAN.

(From 'C.R.J.' 151, Autumn 2007, pp.220f.

The following notes are based on the report of a participant in a February 2007 tour organised by the D.G.E.G.:-

(i). HEDJAZ JORDAN RAILWAY.

"The tourist train stock was used to travel from El Hasse (the junction for the Aqaba Railway) to Dera'a in Syria. Nippon Sharyo Pacific 85 hauled four coaches built on the frames of tank wagons, plus a Hedjaz Railway coach for the crew and, for most of the way, a water wagon. The descent into and the departure from Amman were both very slow (10 km/h), apparently owing to the need to traverse areas with road and pedestrian traffic. The throughout journey required two days.

The steam locos have been moved around in the last few years, and some are displayed in gaudy colours but without identification. Also, a store of three locos has been established just north of Libban station (26km. south of Amman). This was passed in the dark without stopping so identity of its occupants is open to doubt. Locos recorded at Amman were:-

RSH 2-8-2, 21 displayed on bridge by station; 23 outside shed; Jung 2-8-2, 51 in station; HSTP 2-6-2T, 61 in station yard, 62 on a plinth; HSTP 2-8-2, 71 in shed, 72 displayed at south end of station; Nippon Sharyo 4-6-2, 82 outside shed, 85 operational. Locos possibly in store at Libban were RSH 2-8-2 22 (its tender at least is there), Jung 2-8-2 53 and Nippon Sharyo 4-6-2 81. The railway has acquired some motorised trolley made by Daihatsu, Nos. 601/3/5 being seen.

(ii). AQABA RAILWAY.

The area around Ma'an workshops has been much tidied and the station turned into a museum. GE UM10A1A 40211 was shunting there, attached to a match truck as it has Hedjaz Railway drawgear whilst the potash stock has automatic couplings. Also present was the frame of GE U17C 960, but no other motive power. At Aqaba there were seven derelict locos in a line, and probably parts of four others. This line of wrecks had been enhanced in May 2000 by the arrival of 305 and 962, but otherwise was much as it had been on a previous visit in 1999. The line included GE UM10A1A 40209, but this may have been

merely awaiting attention. U17C 955 has been adapted for use on the tourist train. Within the works were three other locos, of which U20C 303 left while the party was present and was seen working in tandem two days later. A full check of the operational stock was not made, but except for two locos crashed in 2000 it does not seem to have changed since 1999. There was no sign or news of new locos."

F. SYRIA.

(i). NARROW GAUGE.

From the same source:-

"The intention had been to run a period train, with Hartmann 2-8-0 91 and three coaches, from Bosra via Dera'a down into the Yarmuk gorge at Zeizoun and back to Damascus. In the event the train ran from Bosra to just below Mezerib in the direction of Tel-esh-Shehab, and then nearly back to Dera'a. The loco had a steam leak between the regulator and one cylinder. A bandage was applied to lessen the leak, but the start was two hours late. Making photo-stops had the advantage that boiler pressure could be built up again. At Mezerib it was decided to propel the train as far as the waterlogged cutting leading into the gorge. Some of the party walked up the village street to look over into the Yarmuk gorge, with bridges 13 and 14 visible immediately below to the right, and the final bridge (15) and tunnel (7) just out of sight to the left, between the train and onlookers: literally looking at the 'Promised Land' but not reaching it. The train was finally abandoned just before sunset.

The short section of former DHP line from Mezerib to the pleasure grounds is now deemed to be out of use. Jung 2-6-0T 61 which used to be there is now at Cadem, as is Hohenzollern 0-6-0T 35 once on display at Zebdani. However, Jung 2-6-0T 62 remains at Kanawat, where all tracks are now removed. At Dera'a the loco shed has acquired doors. De Dion railcar ACM 3 was inside, along with some permanent way equipment, though its trailer was at Cadem. Noted at Dera'a was the first of many new yellow trolleys by Muromteplovov - seen on both narrow and standard gauges. Also present were Jung 2-6-0TT 66 and Borsig 2-8-0 161, both outside. All the other steam locos were accounted for at Cadem, but the impression was gained that standards had deteriorated. Hohenzollern 0-6-0T's 33/24/35/37, Jung 2-6-0T 61, Hartmann 2-8-0's 93 and 106, Borsig 2-8-0's 160, 162, Hartmann 2-8-2's 259-263, all ex-Hedjaz Railway; SLM 2-6-0T's 130-752/753, SLM 0-6-2T's 031-803, 804, 805 and Hartmann 0-4-4-2T's 02021-961, 962, ex-DHP. As previously recorded, the majority of these are derelict. Oddly, two of the diesel locos, 401/2, and two of the Ganz-Mavag railcars, R-12 and R-501, were not located. At Hame the locos of the 'Trans-Lebanon' scheme on the DHP were seen: Hartmann 2-8-0 90, SLM 2-6-0T's 130-751 / 754 / 755. There is also a museum of small exhibits nearby. It should be noted that two of the locos carry false plates to make them look complete: 130-755 (SLM 849/1893) carries replica plates 855/1894, and 130-751 (SLM 851/1894) has the plates from derelict 130-753, namely 853 of 1894. In reality, SLM 855/1893 was a 2-6-0 supplied to Finland!"

(ii). CHEMINS DE FER SYRIENS. (CFS).

"There is still a G8 0-8-0 among the scrap at Jibrin, presumably 040-052. The G8 outside the railway offices in Halab (Aleppo) is still present. It carries the number 040-460 in Arabic numerals, but no other identification could be found on it. The 0-6-0 in the station forecourt at Al Ladhqiyyah (Latakia) carries works plates and a number on the tender only: Esslingen 2490/1891, 030-159. There is a '9' or '19' on the motion, all of which facts support the assumption that the loco was CF Ottoman d'Anatolie 19. But there are also other plates which appeared to be Esslingen 2105/1891, but probably really 2405/1891, which would have come from CF Ottoman d'Anatolie

Both CFS and TCDD have closed, or will close, sections of the Istanbul - Halab route for major repairs. The Syrian section was subject to a 40 km/h speed limit. At Meydan Ekbez, the Syrian frontier station, TCDD 33009 (EMD, 2004) arrived with a long freight including a crew support coach behind the loco. There was reputedly one public train a month from Qamishli to the Iraq border, but details were hard to establish. The frontier station of El Yaroubieh had several trains of sheeted wagons waiting to cross into Iraq, presumably carrying relief supplies.

A successful visit was paid to Jibrin Works at Halab, where some 80 diesel locos of various types were seen. About 50 of these were LDE-2800 series Co-Co DE built by Lugansk between 1974 and 1985, and the principal project at the Works was rebuilding locos of this type with 3200hp GE engines. The Works itself was in the process of being upgraded, to enable it to meet the needs of the diesel fleet, and this included provision of a new building to maintain a batch of five-car DMU's from South Korea which was in course of delivery. Four of the six CEM-built 1.05m gauge Bo-Bo DE locos from Ma'an in Jordan, formerly belonging to Grant, Lyon, were on flat wagons in the Works yard."

(iii). D.G.E.G. SYRIAN TOUR REPORT.

In 'Eisenbahn Kurier' 11/2007 pp.70-74 is an article by Werner Drescher, also describing the D.G.E.G. 2007 tour of Syria.

The Bagdadbahn.

Much has already been written about this railway - the section which is on current Syrian territory was built between 1912 and 1935 - so we need not repeat too much here.

On the still single-track line Meydan Ekbes (Turkish border) - Aleppo, the only railway link from Syria to Europe, many of the rails are still from the origins of the line and bear inscriptions such as 'Hoesch 1912', 'Hoesch 1914' 'Union 1911.'

Almost all buildings on this section are also original and some in good condition. There are many witnesses to German railway technology of the time, such as water cranes from Breuer in Höchst am Main, the turntable at Meydan-Ekbes from MAN-Werk Gustavsburg and many other items. It is amazing that in spite of the age of the infrastructure there is still a heavy traffic - especially freight - on this line. The top speed is mostly around 40-60km/h, often less. Passenger traffic plays only a minor role. Once a week there is an international train pair between Damascus and Istanbul

and between Damascus and Teheran. In terms of internal national traffic there is only one train pair, departing early mornings from Meydan Ekbes and afternoons back from Aleppo. These trains consist of only two coaches.

Between 1940 and 1982, as trains still ran from Haydarpasa to Bagdad (Taurus Express), these reversed in Aleppo and then traversed the same line back out again until the junction of Muslimiya. This is where the line towards Karkemis diverges to Bagdad. Between Karkemis and Al Qamishli the Bagdadbahn has formed since 1916 the actual border between Turkey and Syria and is operated by the Turkish railways (TCDD). On the Syrian side this section is used only as a connection to several industrial customers. Near Al Qamishli the Bagdadbahn runs once more through Syrian territory, before it enters Iraq at El Yaroubieh. Also on this section of the line there appears to be very little traffic. In the station of El Yaroubieh a loaded freight train was noted, which had been standing here for a considerable time. But not even the railwaymen could tell us anything about it or its destination station in Iraq.

The Syrian section of the Bagdadbahn is now a part of the CFS. The Bagdadbahn station in Aleppo, which is also largely in original condition (even the bell is still present) is now the centre of the CFS; here the Railway Headquarters is situated.

The C.F.S.

The first railways in Syria date from the time when this country was still a part of the Ottoman Empire. In 1894 the Hauran railway was built from Damascus to Muzairib, in 1895 the Lebanon railway followed from Damascus to Beirut. Beirut was for a long time the harbour for Damascus. Both railways were built to 1050mm gauge. Further lines - built to standard gauge - were built after 1906 between Aleppo and Homs, and in 1916 from Homs to Rayak. Here it was possible to change into the Lebanon railway for Damascus or Beirut. In 1916 came also the line between Homs and Tripoli (now in Lebanon), and in 1942 between Tripoli and Beirut.

These lines were built under French domination. After the First World War and the collapse of the Ottoman Empire, France received the Mandate for Syria and Lebanon, so that the construction and operation of railways was handed over to French concerns. However, no significant lines were built in this period. Between 1941 and 1943 Syria became bit by bit independent, and in 1956 the railways were nationalised.

At this period the country faced major transport problems. Amongst other things, there was no railway link to its Mediterranean harbours. Beirut was pretty well unreachable from Damascus, and Iskenderum (formerly Alexandretta) was also not reachable any more from Aleppo. In addition the energy supply for the further development of the country from an agricultural to an industrial state was insufficient. As a result of this the Euphrates Dam was built, which holds back the river over a length of 85km. Its main wall is 4.5km long and 55m high and its eight generators produce about 20% of Syria's electricity.

The Aleppo - At Thawra line was built in 1968 together with the construction of the

Euphrates Dam. Initially it was used as a works railway, and a short while later a diverging line was extended from Al Euphrat to Deir ez Zor. In 1969/809 this line was taken into operation and in 1975 with the construction of Deir Ez Zor - Al Qamishli the link to the Bagdad line was achieved. This line is therefore around 560km long. With completion of the ca. 30km line Akkari - Tartus in 1969 a Mediterranean harbour could at last be reached by rail. In the following years further lines were built:-

- 1975 Aleppo - Lataqia (200 km.)
- 1983 Homs - Damascus (205 km.)
- 1983 Mahin - Kneiffs (111 km.), freight only, transport of phosphates to Tartus.
- 1983 Akkari - Tartous. (42 km.)
- 1985 Aleppo - Hama - Homs. (196 km. partially on new alignment.)
- 1989 Tartous - Lataqia. (96 km.)

The total route length is currently around 2,500 km. All those lines built after 1960 as well as the erection of the Euphrates Dam were only possible with the help of the Soviet Union and its associated states. The Western nations pulled back their interests after 1963 when the Ba'ath party under President Assad took over power. So much of the signalling and safety equipment comes from the DDR, and the USSR, the DDR delivered around 400 passenger coaches and a large proportion of the freight wagons in traffic. The locomotive stock comprised:-

No. 001. Class LDE 1200, ca. 12 locos. Co-Co, Russian type TEM2. 1,200 hp. Built from 1972.

No. 101. Class DE. ca. 8 locos. Bo-Bo, built France, 650hp.

No. 201. Class LDE 2800. ca. 80 locos, Co-Co; Russian type TE 114, 2,800 hp. Built 1974-1984.

No. 301. Class LDE 1800. ca. 30 locos. Co-Co. GE Type U17C. 1,800hp. Built 1976.

No. 401. Class LDE 2800. ca. 30 locos. Co-Co. Russian Class TE 114. 2,800 hp. Top speed 120 km/h. Built 1982-85.

No. 501. Class LDE 1500. ca. 25 locos. Co-Co. CKD Class CME-3. 1,500 hp. Built 1983.

Shunters.

No. 601. Class LDE 3200. ca. 30 locos. Co-Co de. Alstom Type AD33C. 3,200hp. Built 1999-2001.

However, many of the above-mentioned locos are standing at the repair works at Aleppo and elsewhere. About 30 of those with 200-plus numbers were rebuilt from 2001 with General Electric engines of type V12GE7FDL, and a further 35 are to be so reconstructed. CFS envisages the purchase of some 40 locos of up to 4,000 hp. Many of the reconstructed locos are fitted with centre buffers/couplings for the Phosphate traffic. Besides phosphates, oil and agricultural produce form the main goods to be transported by rail. In the north-east of the country - Syria's 'bread basket' on the line to Al Qamishli - are large silos with their own rail connections.

Passenger traffic plays only a relatively minor role on CFS. This is concentrated on the lines Aleppo - Lataqia and Damascus - Aleppo with four daily train pairs each. On other routes there are one or two daily train pairs to Aleppo or Damascus.

For the future, Syria wishes to expand and rebuild its railways and make them more attractive. A first step in this direction is the ordering of ten five-car multiple-unit railcars, each with three motor coaches of 559 hp. each, diesel-hydraulic transmission and a top speed of 160 km/h, delivered by the South Korean firm of Rotem. These vehicles receive the classification 673. Their service will be initially on the Aleppo - Lataqia and Aleppo - Damascus lines. By February 2007 seven of the railcar sets were already in service and a workshop for them was under construction at Aleppo.

Further lines will be rebuilt for higher speeds - for example, the Syrian section of the Baghdadbahn. Construction of new lines is also planned - including a direct line from Damascus via Palmyra to Deir es Zor, and a new line from there into Iraq. A new construction of the Lebanon line from Damascus to Beirut is also planned. A high-speed line to Jordan and Saudi Arabia for speeds of up to 250 km/h is also envisaged.

The reconstruction of the main station for Damascus on the site of the former Hedjaz Railway station has been under way since 1999, but is not making much progress. There should even be a 30km. long Metro line from here to the Damascus Airport....

The Hedjaz Railway.

Damascus is the starting-point of the much-described Hedjaz Railway, which was in service for only a few years to link with Medina some 1,308km. away. It was built on the instructions of Sultan Abdul Hamid II, designed and built by German engineers, and was officially intended to help the pilgrims make their 'Haj' to Mecca - it was therefore originally conceived to extend to Mecca, and was named a 'Holy Railway' since it was largely financed through donations. As a consequence it still has the status of a 'Waqf' or a holy foundation. Between 1904 and 1908 the line was taken into use in stages. In addition branches were built Deraa - Haifa and Kum Gharas - Bosra. [sic. Actually the Bosra branch came later. Ed.] Traffic on the line was severely affected by the events of the First World War, but never ceased completely.

After the collapse of the Ottoman Empire the Hedjaz line was divided in 1920 between the new states and regimes - the Mandate territories of Syria (French), Transjordan (British), Palestine (British) and the new independent kingdom of Saudi Arabia. 1924 marked the final end of the southern section, following heavy rainfalls and the occupation of Mecca by Saudi-Arabian troops. So the line's fate was sealed. There were indeed several attempts to get the line rebuilt and reopened, but all have failed.

On the Syrian side the line is operated by the Chemin de fer du Hedjaz - CFH - but there is no regular traffic even now. Occasional goods trains run between Damascus and Amman. The international passenger train Amman - Damascus shown in the international timetable actually operates as a bus. For railway enthusiasts, a particular attraction is formed by the steam locomotives built by Hartmann of Chemnitz and Borsig of Berlin-Tegeel. They all date from the period around the First World War. The passenger coaches

also date from this epoch and are in original condition. On the line from Deraa into the Yarmuk Gorge some occasional special trains for enthusiasts are run.

The CFH also operates what is left of the Lebanon line. On Fridays there is one train pair between El Hame and El Alfje near Damascus. 6-coupled tank locos built by SLM in Winterthur are used here - built in 1894!

The CFH also has plans to revive the Hedjaz line for regular traffic. For about a year trials have been held with some passenger coaches from China, but they were not suitable.

On the Jordanian section of the Hedjaz (Hedjaz Jordan Railway - HJR) the situation is not very different. There is no real regular traffic. Goods wagons and coaches from the time the line was built lie scattered by the hundred at various stations. In the 1950's the pilgrim traffic blossomed for one last time. In this period locomotives were ordered from Germany (Jung), Belgium, Great Britain and Japan. Many of these machines are also still operational and are used nowadays for special trains.

On the ca. 200km. line Qatrana (km. 326.2) - Batn el Ghul (km. 519.7) The Hedjaz line serves for the transport of phosphates. For this a 116 km. line was built in 1975 from Batn el Ghul to Aqaba on the Red Sea. Both sections are operated by the Aqaba Railway Jordan. The station at Ma'an (km. 458.8) has in the meantime been wholly rebuilt and is now the operational centre. Traffic is worked almost exclusively by General Electric diesels (built 1974-76) of type UM10 A1A, often double-headed.

On the section between Aqaba and Wadi Rum a form of tourist traffic has been established. In 2005 'new' coaches were built, actually new bodies on the frames and bogies of existing goods wagons. There are also thoughts of using the entire Hedjaz line in Jordan for touristic purposes; in addition there are ideas to run a standard-gauge high-speed line parallel to the Hedjaz railway from Damascus via Amman to Saudi Arabia. One can await developments with interest."

G. DUBAI.

(i). DUTCH LINKS.

An article "Zelfs Dubai is OV-Minded" by Arjen Jaarsma. Translated from the Dutch by the Editor. 'OV Magazine' 04.10.2007.

"In Dubai you feel the energy, you feel the vibes, you feel different. Dubai is with 1.4 Million inhabitants the largest city in the United Arab Emirates, has a mix of nationalities and is growing fast, very fast. The ambitions are high, the skyline is imposing and there is building going on everywhere. Dubai is hip, modern and in a certain manner also artificial. Public life is carried on mainly in shopping malls, everything is directed towards consumption and all rooms and inner spaces are air-conditioned so that contact to the outer world is quite limited. This fantastic plastic city is not only a very expensive town; Dubai is amongst the top when it concerns use of water, production of household waste and dependence upon cheap Asian labour (which is kept in miserable work camps), an economy that is centred on foreigners (who simply leave if the economy dips) and a trans-

port system that is heavily dependent on the car, with congestion through the entire day as a result.

It has come to be accepted that a further growth of Dubai to a projection of at least 4 million inhabitants will not be possible without good public transport. At the moment work is under way on two metro lines; and how! The town is filled with a large number of building sites and in several places bits of bare metro can be seen on tall pillars. Often they make a very miserable and forlorn impression, desolate, in the middle of this busy town.

But that should not last much longer, for in two years, on 9th. September 2009, the first metro line should come into use. The Red Line, with a length of 52 km., 4 underground and 24 above-ground stations, will have been built in 4 years and 19 days. What a pace of construction! And naturally it will be a state-of-the-art system with automatic train control, smartcards and the whole thing air-conditioned. About a year later, in October 2010, the Green Line should open: 18 kilometres and 14 stations, of which a substantial part is underground. At the beginning of 2009 work should start on construction of the Purple Line - 49 km. above ground - and this should be ready in December 2012. There is also a Blue Line on the map but the precise route for this has not yet been decided.

Dubai is also investing in infrastructure for motor cars, but nevertheless there is a noticeable move to a more expensive form of transport in the town. The bus fleet will be expanded in 2007 and 2008 from 620 to 1,200 buses, all 6,000 taxis will be replaced in the coming years through hybrid vehicles, bus stops will be upgraded, ferryboats replaced by modern vessels, an extensive tramway system will be laid in the coming years and Dubai will also start to invest in a network of cycleways. With other consultants - amongst others from the Dutch Velo Mondial - I was hired by Balancia to develop a master plan."

(ii). BERLIN LINKS.

The Berlin public transport authority BVG produce a little monthly free newsletter, distributed in buses and trams, called 'Plus'. In the December 2007 issue, p.18, is an item about the Underground Railways in Dubai.

"The BVG supports the Roads and Transport Authority (RTA) - this is what the transport authority in Dubai is called - with the construction of a Metro in the second-largest of the United Arab Emirates. The first contacts between the BVG and the RTA were formed during the International Rail Transport Fair in Berlin (Innotrans) last year. The guests from Dubai were enormously impressed by the Berlin U-Bahn and the organisation of the BVG. In 2009 the first of three planned Metro lines will begin operations. The trains will run automatically, without a driver. In the trains there will be three different types of carriage, for V.I.P.'s, women and children, and a normal 2nd. Class."



**Damascus
Kanawat Station**



79:09
*Photos by Roelof Hamoen
(courtesy of Marc Stegeman)
show the works under way at
Damascus Kanawat Station in
October 2007, and the model
for what is NOT the Third
Temple but merely the
completed project for a
Damascus Main
Station.*

NEWS FROM THE HOLY LAND.

“Nachrichten aus dem heiligen Land.”

Thanks to Haim Goren I have received some time ago a copy of an article in quaint old German (and Gothic typeface!) from a magazine, “Das Heilige Land”, of 1892, pp.36-37. Translation is mine. Ed.

“The railway between Jaffa and Jerusalem. The “Baschir of Beirut writes as follows:

“The railway line between Jaffa and Jerusalem brings great advantages for the Holy Land. It makes travel easier, encourages trade, simplifies the transport of land products and eases the travels of the pilgrim. Until now the cultivation of fields was wholly limited to what the farmer needed to grow for his own requirements, for there was no means of transporting any surplus to the market.

An English Consul explained recently in an article, in which he describes the richness of the earth, the sole reason for the laziness of the inhabitants, their lack of any effort to bring forth more produce from the spoil, that they had no means of transport available in order to deliver it.

Now however that one is aware of this evil situation, swift help must be sought to relieve it. The first and best means of improving the transport accessibility must be the laying of more railways. For this reason a line between Jaffa and Jerusalem was the first to be undertaken, and hopefully with the year 1892 a new era of prosperity will open up for Palestine. This first line is truly a pioneer, opening the way for more, for it will remove the prejudices which have until now been blocking the line’s proponents like a solid wall. The French engineer Lolas, who directed the construction, received at the same time as the concession for the line Jaffa - Jerusalem permission to continue the line further into the interior of the country and to link Jaffa with the Suez Canal. This latter line is very important, indeed vital for the planned network, for without a connecting link to Egypt the short line from Jaffa to Jerusalem has really little significance. A link with Egypt however has the advantage that the majority of travellers from and to India would make a short excursion detour to Jerusalem and so the number of visitors to the Holy Land would rise appreciably.

One must ask - how could industry develop and flourish in such a poor land, especially when there is no coal and water?

As regards Water, a rational cultivation, and especially the development of

forests in the mountains, would lead to an increase in precipitation, as has also been noted in Egypt, where with the planting of trees the winter rains have become stronger and last for longer.

The necessary supplies of coal can be brought quite easily from neighbouring countries, especially when the link with Egypt has been completed. Syria, however, to which Palestine actually belongs, has a wide range of treasures of all types. Coal deposits have been discovered near Tripoli and Antioch; the Lebanon conceals valuable metal mines, and on the shores of the Dead Sea there are salt, sulphur, naphtha and coal.

The soil of Syria is very fertile. The Mulberry tree is especially well-represented in Lebanon, so that the silk industry is flourishing there. The land produces wine and oil in quantity and fine quality. It is therefore not a poor country, only one that has been neglected and reduced in circumstances through Turkish maladministration.

With better means of transport and improved security, the number of pilgrims, who visit the holy sites, would also increase each year, and so the laying of railway lines is also from a religious perspective a major advantage.”

In the same collection of news items (including one on the forthcoming locust plague, the young wingless crickets being already massed on the banks of the Jordan) is an item on p. 40f. on “The First Locomotive in Jerusalem”.

“The ‘Kölnischen Volkszeitung’ has received a report from Jerusalem dated 24th. August:

“Last Sunday a large crowd streamed through the Jaffa Gate in the direction of Bethlehem. There, not far from the town, between the colony of the German Templars and the road to Bethlehem, the station for the new line for the railway from Jaffa to Jerusalem, due to open shortly, will be built. On this day however the first locomotive had reached the Holy City, in order to introduce itself and to provide evidence that the project, spoken about for so long and encumbered with so many difficulties, has truly reached a significant stage. Everyone wanted to see the locomotive. What a remarkable monstrosity so close to the Holy City! The ancient walls of the Middle Ages and their towers and turrets on Zion watched on as though insulted at this smoking and snorting creature, This is bringing a new Era. Some are full of

hopes, others of fears. This introduction of the culture of the end of our century into the heart of the promised and even now holiest land of the earth will bring many changes and alterations with it. Will they be for the better? That, God will decide.

The Arabs and Turks, Christians and Jews, the farmers and Beduins watched the rolling, steaming machine with enormous curiosity. It went forwards and backwards. It pulled a few wagons behind it: and yet one could see no horse, no donkey and no camel that had pulled it into motion! That was a wonder! An ancient Jewish mother, who had never in her life left the confines of Jerusalem, saw the thing with a shock and declared that the devil was within it. A group of wild Arab youths approached the non-beast, in order to look at it better. Then it gave a howling shriek and swished and spat right and left, spewed forth water and steam, moaned and poured out smoke. The young lads retreated immediately. “Ma schah Allah”, they cried. “What does God want? That is the Satan!”

The Orientals will soon get used to this novelty. The still, quiet plains of Palestine must get also acquainted with the rattle of the railway train and the whistling of the locomotive; The hateful coal smoke will also mix with the pure air of the holy land. The pressure of civilisation requires this. The Land of the Bible cannot resist it; it will be brought into the currents of the world. French, English, Americans, Russians, each tries to outdo the other to bring their spirit and their methods.... The German Palästina-Verein has been formed; It now invites - along with the earlier Verein of the Holy Sepulchre - in all the wide regions of the Fatherland, wherever there is interest and support for a catholic and national entity, to join in the efforts for the Land of the Saviour through prayer and self-sacrifice.”

And further: from issue 53 of 1909, p.106, under “Vermischtes” (‘Miscellaneous’), can be found the following intriguing entries:

“1. Two Trains Daily from Jaffa to Jerusalem.

In earlier years many a pilgrim on his journey expressed the hope that he would be able to land in Jaffa early enough to be able to catch the first train to Jerusalem; that was indeed important, insofar as he who missed the first and only train of the day was obliged of necessity to wait patiently until the next day. However, since last month two trains now travel between

Jaffa and Jerusalem each day.

2. Planned Electric Railway.

Between Jaffa and Jerusalem an Arab and a Greek would like to build an electric railway link; at the same time electric lighting would be provided for both towns. Regarding an application to the Ministry for this project, it appears that the Ministry is aware of the feelings in Jerusalem on such a proposal, and it is felt that the request will meet with a not-unfavorable response.

The erection of a telephone link between Jaffa and Jerusalem is also being discussed; an Ottoman and a Russian wish to pursue the project.

In Damascus it appears, by the way, that progress has been more extensive; the Quarterly Statement of the P.E.F. reports in its January number that Motor Wagons now traverse the distance between Damascus and Palmyra in ten hours: at the same time there is now a proposal for the restoration of the Triumphal Arch at Palmyra.

3. Regarding Trade and Agriculture, the same journal reproduces a report of the British Consul for 1907, which is to some extent of interest even now. From goods imported to Jaffa, items amounting to a worth of 500,000 Pounds Sterling were conveyed on to Jerusalem. In the Plain of Sharon there are some 500 machines for watering the land in use. In many places fruit trees are being planted. Experimental planting of cotton has taken place in the Sharon Plain and at Jericho, apparently not without success.

The above is complemented by reports in the French magazine "Jerusalem"; these also date from 1907 and relate only to the area under the authority of the Jerusalem regional government; this has some 300,000 inhabitants, with the towns of Jerusalem (70,000), Jaffa (45,000), Gaza (40,000) Hebron (20,000), Bethlehem (8,000), Ramleh (8,000), Lydda (7,000 inhabitants). Imports are valued at 20 Million Francs, exports from this region amount only to about 12 Million Francs. Around 4,000 people engaged in commerce are counted in Jaffa and Jerusalem, of whom 70 per cent are Jews.

1500 hectares are being planted with oranges; as significant exports apart from oranges, soap and barley are mentioned. In the year 1904 wine worth 1 Million Francs was exported, in the year 1907 however only 575,000 Francs' worth.

As regards the postal systems of the different countries, in 1907 the Austrian Post had an income of 65,100 Francs, the German Post 30,500 Francs and expenses of 26,325 Francs; the Russian Post had in comparison very low expenses of 24,870 Francs against an income of 72,000 Francs.

The railway from Jaffa to Jerusalem (a French line) had in 1907 six locomotives, 17 passenger coaches and 61 goods wagons.

The following steamers arrived in the year in question: 163 English, 113 Austrian, 82 French and 102 Russian etc.

From this source I also read that a link between Jerusalem and Gaza and Jerusalem with Amman east of the Jordan are being planned. Whoever is planning a journey to the Holy Land would however be advised not to wait for the fulfilment of all these plans, as this could require a great deal of patience.

4. The reality behind all these wonderful plans for the future should not be forgotten. What the present day in reality offers and what will in probability remain so is an increase in prices for foodstuffs. One can read the results in a notice in the Palastina Year Book (4th. Volume, page 4): The provision of accommodation for members (of the evangelical institute) in Jerusalem has become dearer to the extent that the Hotel Fast, in conjunction with the generally increased prices in Palestine, now has to charge 8 Francs for Full Pension per day." "

79:11

EXTRATERRITORIAL EXPEDITIONS: WITH TRAIN NO. 62951 BETWEEN THE WORLDS IN NORTHERN MESOPOTAMIA: A JOURNEY ON THE BAGDADBAHN IN MARCH 2004.

By Marc Lobmann.

"Nusaybin. March 23rd. 2004. If you'd asked us only weeks before, we'd have told you that we'd plan on hitting the Hedjaz. No word about a lonely Turkish desert town in Kurdistan. No word about the Syrian border, or barbed wire and other military necessities. And no word on getting up at 5am. to meet a train that's truly unique in this world.

Yet we all know that travel itineraries do change, that railroaders do strike and that construction works take place. And with a little help from our Romanian and Turkish friends we ended up here, shuffling along the business district of this last encampment before the Axis of Evil.

Sure, our alternative itinerary turned out to be a full success with all the historic cities and Aramaic churches on the way, but the biggest attraction yet was due to be 'visited' today: the thrice-weekly TCDD train from Nusaybin to Gaziantep along the former Baghdad Railway. This 400 kilometres, 12-hour torture in unclimatized second-class coaches with no service at all would surely be a pleasure if there just wouldn't be that bleak, flat, agricultural terrain that it's travelling through. Yet this IS a pleasure, as the track of this railway line was chosen to be the exact border between the newly-established Turkish Republic and Syria sometime in the 1920s. With the Turkish membership in the NATO this became the border between freedom and barbarism - at least from the viewpoint of the Western states. While the border was enforced and more strongly guarded than ever before, the trains kept on running - right through the wires, towers and trenches - at first daily from Istanbul to Baghdad, later from Gaziantep to Nusaybin, nowadays only three times a week.

The future's not bright either: Judging from the overall traffic volume observed, this train does not run for economic reasons. The overland autobusses do the same trip in half the time, offer more amenities and spare the traveller the delays gained by shunting freight cars at various occasions. The Turkish Railroad (TCDD) would be off better by abandoning the passenger service and all its associated services as the line carries not enough end-to-end cargo or intermediate military traffic; still this train simply seems to keep running, to show the Turkish dominance in the region.

The business district ended flat at the menacing border fence to Syria. Raised directly on the Western side of the Iron Curtain in Germany we felt some sort old familiarity with this kind of scenery. Soon talk about the 'Good Old Times' began, easing the tension that built up over the last days by the strong anticipation of arriving at the small railroad station. Once again such a 'last spot' on the border of free spontaneous and hassle-free travel. Once again the end of the world... And we were right: The station's backyard was already guarded by barbed wire - we did never get closer to a border by rail than we did here.

And yes, we even came here an hour early, in deep mistrust of any TCDD timetable and to take in some of the atmosphere before the train's departure. Unfortunately we had to accept that the station and all of the track is off-limits to photographers - a small Kodachrome still seems to pose a bigger threat than satellites and radars together. 'What a beautiful world' to return to, equipped with a small digital camera and a direct cellphone data link to the web server at home... Upon taking the last bend in the station's dilapidated access road we were spotted by employees, who led us to the sales office hidden in some shack off the main building. Our excitement at getting tickets from the highly bureaucratic-looking officer was drowned - he just forbade us from photographing the station. Instead of par-

ticipating in a highly bureaucratic act, we were given simple tickets by some lower employee in a dark and dusty place, that truly lived up to its former glory by displaying weathered posters of famous tourist destinations in Turkey and a 1996 timetable on its walls.

Once on the train, composed of two simple 2nd-Class coaches and to our regret with no attached freight cars at all, we had nothing left to do but to wait. The last car was jammed with military personnel on their way to some post on the railway line, the first one filled with about six regular passengers and us two jerks. Nevertheless an elderly man decided to join us in our compartment right after departure. As we do not speak 'Kurdish, Turkish or Arabic' (as we were often asked for), we were just staring at each other. Doing so, we were not surprised that the man left right at the first, unofficial stop of the train, just a few hundred yards after the station - yet just to return with a fresh and steaming hot pita-bread to share breakfast with us!

Still indulging the delight we entered military country right after the Nusaybin city limits. From now on until Karkamis station, some 293 kilometers further west, the scenery did not change that much. Spying out north we saw all that concrete and wire, all these towers and ditches and the occasional tiny town made of cube-shaped clay houses patched with plastic and sheet metal, all backdropped by the brownish hills of inner Kurdistan. Gazing out south, right into Syria, we had no hills at all, but neatly-kept green fields, villages made of well-kept clay houses, each complete with its own satellite antenna, and cheerful kids running up right to the tracks without fear. Only a little barbed wire was to be seen in a few places... We were gliding between two worlds, between the "would-like-to-be-Europe" Turkish Republic and Arabia. Between impoverished reality and staged wealth.

While the occasional battered station building along the road gave witness of the line's days as an international rail corridor, soon the only real variations were the 'real' stations that were left, each of them with not more than a few tracks, some buildings and a water tower. What made them special were all the neat machine-gun nests, sand-bag bunkers and double-strength fences put around them, making each of the stations a federal stronghold against the Arabs and more likely the local Kurds, opposing the Republic for decades by now. While life crowded in outside the station grounds, this was clinically clean: No-one selling bread or fruit, no spectators - only the proud station keeper, military personnel and the few passengers that cared to take a stroll along the sand patch serving as a platform.

Stations - and we did not take their names as we were sure to recall them with the help of the Thomas Cook Overseas Timetable - still did have their individual flavour. One had two grain elevators, one for each state, the Syrian elevator rebuilt for truck usage, another one featured a border crossing with a wonderful

complicated layout of gates and checkpoints. Many had loading ramps physically located in Syria and yet exclusively used by Turkey with a little help from barbed wire, the sort featuring extremely sharp rust-free little blades.

Idling along the route we encountered about three freights en route to Nusaybin. Being told that no freight is forwarded from Nusaybin to Al-Qamishli in Syria and further on to Iraq, we marvelled at about 100 freight cars terminating in a town of 50,000 with no specialized freight forwarding facilities visible. As we recall Nusaybin station, we found the track into Syria servicable and silently accused the employees of leading strangers astray for the Republic's well-being. You don't tell people what they can easily observe from a mile's distance..."

One of these intermediate stops was stretching in length, I recall a town named Ceylanpinar. We were getting short on water and on several occasions I thought of hopping out to the communal well on the far end of the station building. Just as I did so, the freight came in and our trains began to move. No water for the next hour and even more if the next station has no easily identifiable well.

To my explicit surprise, a soldier showed up only minutes after my unsuccessful attempt to get water and gave us a 1.5 liter bottle filled with fresh cool water. We politely thanked him and decided to see the soldiers more as guys with a hard job than as what they are commonly seen.

Even more surprising was what happened at the next station, not more than a four-sided farm building with a courtyard doubling as a station. The same soldier as before knocked on our window and wanted me to get off. As soon as I got outside, he led me swiftly through the deserted station to a well located inside the court directly under a mid-sized water tower of clearly identifiable Prussian-German origin, put right in the middle of nowhere by the original infrastructure contractors of this line in 19-oh-something. If there's a heaven for railroad fanatics - part of it is surely here! Filling the water bottles from the well of a distinctively Prussian water tower in a well-kept state rarely seen at home surrounded by clearly marked Arab architecture and a Turkish soldier representing the troubled recent past of this strip of land - unbelievable!

Hours of longing painfully slow creeping along the narrow black line on the map ended in seconds of mystically clear blueish water: We crossed the river Euphrates. Left Mesopotamia and began our journey towards the Mediterranean Coast. The bridge was the last stronghold of military necessities, Karkamis station just next door was more civilized, yet still bordering Syria. Here was the place where auxiliary trains from Gaziantep ended until only a few years ago. Here is where the direct disused line to the Syriah town of Haleb branches off, where cars from Damascus and Istanbul once met to continue on to Baghdad. We spent only minutes here gazing at the station building posh with architectural elements

from Southern Germany to continue on through a totally different landscape.

The railroad has to pass several rough ridges of red-brownish hills and mountains and features all you would expect from a true mountain main line: winding curves, tunnels and cuttings. The surrounding agriculture is big on pistachios; neatly harrowed reddish soil embraces every gnarled tree.

Just before the sun dropped behind the mountain tops we stopped at the cement works of Mustafayavuz. No sign of a station anywhere, just dusty greyish tracks nailed on the pure rough soil, some used, some unused and torn up or twisted. We received about 20 cement hopper cars here and lacking a dedicated switcher engine, every passenger in the cars had to witness the complete switching action with the engine interlacing cars and hoppers wildly. I was lucky to enjoy 'tourist status' and roam the grounds freely - if there would have just not been the friendly conductor willing to take pictures of me in front of the engine. That's how I lost the last opportunities to shoot pictures in the fading light. For now I have nice shadowy scenes of greyish surroundings with brown uninspiring cars put in...

Soon afterwards we arrived at Gaziantep station, a wonderful well kept cubistic sandstone structure featuring all a traveller would want. Friendly personnel, a ticket counter, luggage stowage, exceptional clean hall and waiting-room, a luxurious restaurant (easily the best place in town) and original German engine watering facilities. Sure, a timetable was missing; still newspaper cutouts on railroad politics were put up next to the counter as everywhere in Turkey. As we had not received the latest copy of the Thomas Cook, we wanted to verify the two year old timings with an employee - and he verified them indeed. There is a daily mid-day commuter to Narli, he said. What he did not know was, that half of the formerly existing trains were cut only weeks before. Gaziantep sees a mere 1.5 trains on an average weekday...

We had a lot of time left to explore the this town of 250,000, met a taxi-driver fluent in German who worked only yards away from my Lübeck home, went up to the citadel to look down on the sprawling city with at least 62 minarets, strolled along the overcrowded museum featuring all the Roman statues narrowly saved from the all-consuming newly built water reservoirs in the mountains - and found ourselves next to oil tank cars of the Iraqi Republic Railways! These cars, built in 2002 and early 2003 by a Turkish manufacturer should not have been here. And they were not stranded here due to the war, featuring clear signs of recent use. Nusaybin border crossing was open for business, as this was the only rational way these cars could have come to Gaziantep - the way to Baghdad was open to be pursued later in this century...



Remains of what may have been - or intended to have been - the second locomotive built in Palestine: Relics of a Decauville wagon with some form of chain drive affixed, at Kibbutz Gan Shmuel. (Photo: Amith Ben Shalom).



see page 10

הרכבת