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הרכבת

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83:01. *A timeless image of the Hedjaz Railway as it has been for around a century - a Hartmann 2-8-2 hauls a special train in October 2005 through the Yarmuk Gorge and over the 13th. Bridge. For how much longer will such trains be possible?
(Photo: Robert Humm, Stamford.)*



*Ruston Hornsby loco, see
pages 17 - 18*



EDITORIAL.

The months fly by and the Editor is struggling to complete this issue - and the current Series 21 - for December. Once again there is much to report from Israel, and this issue includes more on the problems of the Jerusalem light rail line (one can hardly call it is a 'System') - but we have received also a lot of information on astounding proposals for Pan-Arab rail development in the Arabian Peninsula and the Gulf States. Progress - should

it really happen - means that many familiar images will soon belong to the past. Of course, such schemes have been mooted before and yet the old Hedjaz stock still runs up and down when required.....

Paul Cotterell's last book, 'Make Straight The Way', almost complete when he so suddenly died, has been finalised by Chen Melling and others and has been published privately by Israel Railways; the hope is now to find a publisher for an English and possible also a German version - Martin Frey having offered to sponsor a translation into German. We hope to report on progress on this matter in due course. In the meantime there remain a few articles and illustrations which will hopefully be published in this and the coming issues.

Putting the magazine together in between so many travels and travails remains sometimes a difficult matter - not helped by technical glitches on computers and a filing system that really needs a good sort-out 'one of these days' - so the Editor apologises for any errors or omissions but hopes you will nevertheless find this issue interesting and reasonably balanced and will renew the subscription! Enjoy!

The Editor.

NEWS FROM THE LINE.

(a) . DAILY GRIND. In March of this year, IR awarded a multi-year contract to Harsco Track Technologies (HTT) for a coordinated rail grinding service program that includes furnishing personnel, equipment and maintenance. The Programme is part of IR's plan to transform into a modern system capable of handling double its current volume of passengers and freight by 2010. HTT is supposed to begin in April 2008. First phase is to equip IR with modern rail grinders.

(b) .(i). MORE JERUSALEM LINE PROBLEMS. 'Nature-destroying Tel Aviv-Jerusalem train route Blocked.' By Ehud Zion Waldoks, 'Jerusalem Post', 06.11.2008 "The Council of National Parks and Nature Reserves blocked a route building plan proposed by Israel Railways in the Judean Hills Nature Reserve on Thursday. The plan was part of the route for the Tel Aviv-Jerusalem hi-speed train. The Council rejected a plan to build a series of bridges over the Yitle Stream and approved a Nature and Parks Authority

suggestion to build a 13-km tunnel instead. Environmental groups had claimed building and maintaining the bridges would cause serious harm to the reserve. The council approved the plan 14-2." And

related to this: (b):(ii). THE GREEN BLUES.

The A1 fast rail link to Jerusalem is suffering further - the Greens, who have already appealed to the Courts regarding the tunnels and succeeded in bringing works to a halt, are now preventing access to heavy works vehicles to this area. Unfortunately for the railways, this is happening just before the general elections due to take place in February 2009 and so it seems unlikely that anyone in the Cabinet will be willing to take responsibility for any decisions - this this strategically important project is blocked! (N.B: It is an interesting conundrum for the Greens, for the delays to the railway simply mean yet more traffic on the roads..... Ed.)

But: (b):(iii). From a n IR press release of 02.12.2008: "The Government's socio-economic Cabinet today approved the renewal of works on the A1 fast link to Jerusalem, after the results of an economic survey strengthened the case for the project even more than when this was initially done in 2003. The Railways' response was: "We bless the decision; the cabinet demonstrates its commitment to the importance of the link between the centre of Israel and its capital city, strengthening its inhabitants, reducing the number of cars on the road, and also reducing road accidents and pollution." As well as meaning the resumption of tunnel-boring, this decision will also speed the electrification project, of which the A1 line is an integral part. (c). GLOBAL POSITIONING. From a press release of 22.10.2008 by Isra-Rail Co. Ltd. "Due to the growth in passenger traffic, and further development works all over the network, the railways have re-c e n 11 y completed the installation of a new GPS-based Positioning and Monitoring system at a cost of \$2M. The **system** has

been developed by Trilogical



83:03. Not an ideal photograph, but the only image available to date of the new Siemens-built IR rolling stock - one Driving Trailer and two coaches being hauled by OBB No. 116.282 on 29th. July 2008 round the west loop around the Vienna-Kledering marshalling yard on its way to Siemens in Prague for further work - final fitting-out due to be carried out in Israel. (Photo - by Stattman, in Schieneverkehr Aktuell Oktober 2008, p. 22.)

Technologies Ltd., which is part of the group comprising Fishman, Foreignlind Investments and Mayer Co. for Cars, Trucks and Buses (sole

representative for Volvo and Honda in Israel) which was selected in the tender in which all Mobile Data providers in Israel participated. The company has rich experience in Mobile Data systems including tracing and management of car fleets as well as developing civil and military applications in Israel and abroad. The company also participated at Innotrans this year."

(d) . BEER-SHEVA LINE DOUBLING.

From an IR press release of 24.10.2008: "As part of the continuing development works carried out on the line to Beersheva, which includes realignment of curved sections and double-tracking, the aim being to cut the travelling time between Tel Aviv and Beer-Sheva from 80 to 45 minutes, the line (including that to Dimona) was to be closed 27-29.10.2008 - for this period all trains were to start from Tel Aviv HaHaganah. Services to Jerusalem and as those to Haifa and Nahariyya would operate normally."

(e) . TECHNICAL GIBBERISH.

The Editor cheerfully admits he doesn't understand much of the jargon of this item but - well, it is 'News'. "The Malam-Team Group, Israel's top IT provider, recently won the Isra-Rail. Co. Ltd. \$5.5M Tender for implementation of SAP ERP system. This is the biggest ERP project of 2008 and will provide services to more than 700 users of finance, logistics, human resources, maintenance, management of real estate and projects, sales, quality assurance and safety. The ERP Project for the railways will include creating a platform for implementation of additional subjects such as: Documents management, Portal, GIS systems integration, Business Intelligence (BI) etc. The winner has an overall responsibility, within which the SAP department of the ERP section of Malam will carry out the fitting, development, installation, integration and user-training. The procedure will take two years employing a large professional and specialist team which will work closely with the railways' users. Mr. Ronen Benbenisti, the ERP department manager at Malam Systems, said "The ERP Department's aim since its creation in 2007 has been to win the implementation of the most complex and leading ERP projects in Israel; winning the Railways' tender goes hand in hand with the departmental strategy, which is constantly growing, this becoming a meaningful factor in the Israeli ERP market. Malam has recently successfully completed the implementation of an ERP SAP system at the Israeli Gilat satellites company facilities in 14 countries and we are ready for the new challenge at Isra-Rail Co. Ltd."

(f) . LEVEL CROSSING SAFETY.

Eldor Communication Technologies Ltd., an Israeli system integration company founded in 1983, has developed its C.A.S.A. Collision Avoidance and Safety Alert system for level crossings; this has been installed as a pilot at ten sites and proved successful and may soon be adopted as standard.

(g) . SIGNAL FAILURE.

On 03.11.2008 there was a signalling failure in the section Na'an - Kiryat Gat; traffic returned to normal after a few hours.

(h) . ROAD BRIDGE NEAR BINYAMINA. The long-awaited grade separation between Binyamina and Zichron-Ya'akov which will replace the level crossing with Road 44 is at last taking shape. The 800m. double road bridge - work on which, together with widening Road 44 from two to four lanes, is being carried out by the National Roads Company - will cost \$53M at this stage. The Grade Separation No. 17 runs over the railway line at km. 37.650 (from Haifa), and the bridge currently being built will eliminate both the level crossing and the kink in the road from the northern direction. A second bridge will follow soon. An important point to mention is the fact that in future it will still be possible to quadruple the railway lines, as the bridge is designed for this.

(i) . BRIDGES AT HAIFA.

Due to bridges being constructed in the northern part of Haifa, including a grade separation over the line to Nahariyya, work carried out at night by the Yefe Nof company meant that two trains had to be cancelled each night between 00.30 and 03.00 on 16.11.2008 and 05.12.2008. (However, a later press release of 30.11.2008 indicated that the Yadin road bridge, between Lev HaMifratz and Hutzot-HaMifratz stations, had been completed early and trains were running regularly once more.) (j) . TRAFFIC STATISTICS. On 06.11.2008 Isra-Rail published the passenger and freight traffic report for the 3rd. quarter of 2008:- The Railways carried more than 8.8 M. passengers, 11% more than in the same quarter of 2007; punctuality reached 90.9% as against 73.87% in the same quarter - a 23% improvement. The daily average number of passengers reached 128,000, which is 6% higher than in the same quarter in 2007, but lower by 3% than in the 2nd. quarter of 2008; during Sept. 2008 122,000 were carried. The three new stations of Modi'in Central, Lod-Ganei-Aviv and Petakh-Tikva Kiryat-Arieh opened during this year, and contributed to the rise in traffic. Another note is the rise of 2% in the share of suburban journeys, compared with the same quarter in 2007. Income from passengers rose by 11.3% from \$40.0M in the 3rd. quarter of 2007 to \$45.2 M in 2008. The average income/passenger rose

by 1.8%, the result amongst others of a 2.5% rise in tariffs at the beginning of 2008 as well as the higher share of inter-city journeys in August, a typical vacation month. Passenger/km. was as follows:-

2007	3rd. quarter	462,080	= 58.1
2007	4th. quarter	496,395	= 56.1
2008	1st. quarter	473,237	= 55.7
2008	2nd. quarter	492,642	= 56.3
2008	2008 3rd. quarter	500,644.	= 56.7

Regarding Freight traffic,
2007 4th. quarter 1,976,866 tons.
299,906,346 Ton/km
2008 1st. quarter 1,954,774 tons.
302,716,614 ton/km.
2008 2nd. quarter 1,872,217 tons
293,725,522 ton/km 2008 3rd.
quarter 1,636,403 tons (11% less than the
previous quarter.)
259,083,223 ton/m, a 12%

drop.
Km/wagon was 7,176,245; 7,483,419;
7,280,843; 6,080,491 (- 16%) respectively.
Wagon load: 47,810; 49,069; 46,914;
39,161 (- 17%) respectively. Planned haulage
for the 3rd. quarter had been 1,851,000, but
only 1,636,403 was attained. Ton/km. had
been planned at
259,019,000, but only 259,083,223 was
attained, i.e. 88% of the plan. Phosphate
traffic was down to 73% of plan, Acid in ISO
tanks to 65%, Containers to 85%; but these
results are offset by additional haulage of
Potash (101%), Sulphur (112%), Grain (106%)
and Sand /Refuse (110%). The potash
especially takes the long line from Nahal Tzin
- Tzefa - Ashdod. Daily tonnage in the 3rd.
quarter was 23,000, down 12% from plan. In
the 2nd. quarter it was 26,000 tons. Other
reasons for lower haulage results are
holidays and an 8-day strike of port workers
during August and September 2008.

(k) . DESIGN AWARD.

From an IR press release of 09.11.2008: "The Railways' Planning Department has this year won the prestigious 'Design Award 09' from the organisation for Architecture and the schools of architecture, for landscape development - including the large Adorayim bridge over a creek of that name, and over toll Highway No. 6; this replaces a 52-year old bridge, and involves also urban planning along the Na'an - Beer-Sheva line. IR beat 1,000 other competitors in this competition for architecture and design, which is judged by senior staff at architecture faculties as well as senior Israeli architects. For the Railways' Planning Department winning has become almost a tradition. In 2006 the award was for the Beer Sheva Universita station as a functional and high-quality building, and in 2007 it was given for the design of Lehavim-Rahat station. This

is a tribute to the hard work and devotion of the architects, in collaboration with the Railways' Planning Dept. and the sub-contractors. Isra-Rail Co. Ltd. again has proven itself as one of the leading public companies regarding service for passengers and the state, as well as in high investment in the environment."

(l). BEER-SHEVA WORKS. From a press release by IR, 11.11.2008: "In order to enable the Ministry of Housing and Construction to build an access road between Road 40 and the Ramot neighbourhood of Beer-Sheva (near the University) the railways are building a grade separation to enable safe passage of road vehicle under the line. A temporary turnout is to be laid to enable the laying of a temporary track, as well as preparatory works for building the road, and therefore rail traffic will be stopped during the night of Thursday 13.11.2008 and Friday morning 14.11. Train 131 from Tel Aviv to Beer-Sheva (22.09 from T.A. Savidor) will terminate at Kiryat Gat; trains 1610 and 1612, which usually depart Beer Sheva Central at 05.19 and 06.19 respectively, will start from Kiryat Gat."

(m). THURSDAY EXTRAS. From 20.11.2008 IR is operating an additional two trains on the Tel Aviv - Haifa line, one each way, Thursdays Only. Thursdays are characterised by particularly high traffic, mainly due to the great number of soldiers travelling either home or to their bases for the weekend. It has therefore been decided to extend two Beer Sheva

- Tel Aviv trains to help handle this traffic. The 12.27 departure from Beer Sheba Central will now terminate at Haifa Central - The Eight at 15.02. The current 15.09 from Tel Aviv Savidor will now start back from Haifa Central - The Eight and terminate Beer Sheba Central at 16.43. This measure is additional to other attempts to cope with the growth in passenger traffic, which include the operation of two double-trains, each of 5 double-deck coaches, coupled together to give 1800 seats capacity on Sundays, as well as operating a midnight train to Tel Aviv Savidor - this commenced in August this year.

(n). KIRYAT ATIDIM - NEW BUS SHUTTLE SERVICES.

Kiryat Atidim is a new hi-tech area in north-east Tel Aviv. IR is soon to start a new service of bus shuttle connections from B'nei Barak station, to provide a solution for workers using rail services and at the same time reducing road-vehicle emissions. The arrangement has been approved by the Transport and Road Safety and Finance Ministries, and is in cooperation with the Kiryat-Atidim management, including General Manager Mrs. Elka Hani and Customer Service Manager Mrs. Iris Gefen. The aim of the bus shuttle is to resolve public transport

conventional problems - passengers showing their rail tickets will be conveyed. Shuttles will depart Bnei Barak at 40-minute intervals in the morning - 07.25, 08.05, 08.45 and 09.25 - and return in the afternoons - departing 15.15, 16.05, 15.40, 17.15 and 17.55. These allow good connections from and to trains in both the Tel-Aviv and Kfar-Sava directions. Journey time should be 7-9 minutes. Initially a pilot project for three months is planned, after which all concerned will meet to evaluate the results and if acceptable extend it for a further year. The management of Kiryat Atidim is responsible for preparing the shuttle, with bus stops, flyers, a driver's booth and so forth. The service will be named 'Green Future'. In this way IR joins those private and public-sector companies which are already operating complementary transport services to and from railway stations - these include the Herzliya Municipality which runs a shuttle for hi-tech employees working at the city's western industrial area; the Com-verse hi-tech company which already operates from Bnei Barak to Ramat HaChayal hi-tech area and back; and Intel, which provides such services from Kiryat Gat station to its local plant.

(o). KFAR CHABAD FUNERALS.

All trains between Nahariyya, Haifa, Tel Aviv, Jerusalem and Beer-Sheva and Ashkelon in both directions were planned to add a halt at the ultra-Orthodox (Hasidic) village of Kfar Chabad on 03.12.2008, to enable the maximum number of participants to reach the funerals of the victims of the attack on the Chabad Jewish Centre in Mumbai (Bombay). There is normally only an hourly service here. (Aharon adds that one of the residents of Kfar Chabad is Mr. Shlomo Maidenchick, a famous loco driver during his working life.) Mr. Harel announced that "This was a dreadful terrorist event and a cross-continental tragedy, which the entire State of Israel watched unfolding; our task is to provide a rapid transport solution for a large number of mourners, and therefore I have decided that each train that passes the village will make a call."

(p). RISHON-LEZION LINE PROGRESS.

From an IR press release of 08.12.2008: "The high demand for travelling from south of the Tel Aviv metropolitan area (Bat Yam, Holon and Rishon LeZion) has created congestion on the main access roads Nos. 4 and 412, as well as accidents and air pollution. A double-track railway line between Tel Aviv and Rishon-LeZion West, now under construction, and running in the median strip of the Ayalon Highway, is intended to solve the problem for the public using this route. The IR Tenders Committee has approved publication of a tender for the 'Sha'ar-Holon' (Holon Gate) station as well as infrastructure for the double track between Tel Aviv-HaHaganah station and Tel-Giborim (at

Holon), at the Holon Road Junction; a section of 2.5km. The \$19M project is due for completion in 2011; traffic forecast for the station is

640,000 in 2011, 830,000 in 2012, and over 1 M. in 2013. The infrastructure works on the whole line between Tel Aviv and Rishon-LeZion West require, among others, construction of railway bridges over the Ayalon highway and the Holon road junction. The first stage includes widening the Ayalon alignment, thus preparing the roadbed for the laying of the double track. This is being carried out by Netivei-Ayalon Co. as an implementation arm for the railways; the second stage will include tracklaying and station construction - this work will be carried out by IR.

(q). CAR PARKING IMPROVEMENTS.

Israel Railways is attracting an increasing number of car users who are tired of being stuck in bottlenecks and traffic jams; the rise of 11% in passengers in the third quarter of 2008 over the same quarter in 2007 means that some of the station parking areas are also suffering from congestion. IR has therefore decided to promote, enlarge and rearrange some parking areas.

(i). East of Netanya station - currently an open field used for improvised parking, the \$1.5M project involves an access road and a new car park for 270 cars; it is being promoted and co-financed by the Netanya municipality; planning documents have been submitted, the agreement has been signed and implementation is due in 8 months.

(ii). Hadera West station - the project here includes rearranging the parking area and space for an additional 300 cars. Design has been completed and IR is negotiating to hand over the construction to the Netivei-Ayalon Co., which is already building the nearby grade-separation, at a cost of \$2M. Implementation time is 6 months.

(iii). Kiryat Motzkin (Kiryat Shmuel). The project involves enlarging the existing parking area for an additional 190 cars, west of the Kiryat Motzkin station in an area known as Kiryat Shmuel and which belongs to the Haifa municipal area - the railway line forms here the border between the two cities. The project should cost \$0.75M and will be financed equally by IR and the Haifa municipality. Implementation time: 8 months.

(r). SMART CARDS.

On 09.12.2008 IR announced the award of the international tender for purchase and maintenance of smart-card systems to

A.M.N. Co. (Organisation of Science Management and Consultants) at a cost of \$27.5M. The non-contact technology-based smart-card system enables identification and personalization of passenger control and entitlement administration, accelerated sale inside and outside the stations, as well as quick and efficient regulation of passenger flow at entrances and exits, whilst saving space, maintenance and time resources. The system will also enable combined services between various public transport modes, to a standard familiar to all public transport operators in Israel. It should be reliable, transparent and customer-friendly in use. Industrial standards have been agreed between the Isra-Rail Co. Ltd., in cooperation with the Transport and Roads Safety Ministry as well as leading public transport operators. When completed the system should allow a large-scale integration between the different operators, thus enabling passengers to use a single card whilst changing modes of public transport, eliminating delays and simplifying a 'door to door' service for the passenger. As a part of their sale and control system of ticket sale, the railways are currently operating a magnetic-strip-based ticketing system. This technology is now considered relatively old-fashioned, restricting cooperation for creating complementary public transport systems due to the difficulty in producing the required quantity of tickets, their control by other transport operators, etc. IR emphasises that their investment in the smart-card system is intended to encourage use of public transport. The new system should be introduced within the next two years, initially in parallel with the existing system.

(s). NEW CONTROL CENTRE.

From an I.R. press release of 14.12.2008: IR has opened at Hof HaCarmel station one of the world's most modern rail traffic control centres, capable of controlling the entire IR network from a central point. The most modern and innovative information systems and operating technologies have been incorporated, enabling transmission of digital information in real time - including traffic and the location of trains. This permits a wider operational overview. The centre will also permit accurate information on arrival time of trains to be given, and not just their scheduled times. A period was allowed before full inauguration to allow testing and checking the new system. For this reason all traffic ceased on Friday 19.12.08 from 00.01 to 16.17; traffic should return to normal on Saturday night 20.12.08. It currently operates some 500 trains daily, of which 338 are passenger services. These have been controlled by an analogue system based on ten regional signalling centres used for routing the trains along the lines in a coordinated manner. But this system is not advanced enough to cope with current and growing need. The new centre (known as 'Masua' - 'Antenna') - should enable improvements in services and punctuality and enable IR to cope efficiently with future growth.

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TENDERS.

(j). No. MS/RC/2008/34: Construction and operation, leasing, renting and selling of cars within railway stations. These services are to be provided at sites in the following stations: Rosh haAvin North: 6000 sq. m. Tel Aviv South: 3,500 sq. m. Beer Sheva Central: 4,500 sq.m. Kesariya-Pardess Hanna: 4,200 sq. m. Modi'in Outskirts: 9,700 sq. m. Beit Yehoshua: 7,600 sq. m. The services to be provided include: Car rental on an hourly-based tariff (including bicycles); car rental for one day and more (also including bicycles); leasing; sale of cars formerly used for rental/leasing by the authorized company. The contract is for 60 months with an optional extension of up to an additional 60 months. Latest bidding date: 31.12.2008.

83:06.

LIGHT RAIL NEWS.

(Much of this is from Aharon Gazit.)

(a). ANNUAL PUBLIC TRANSPORT CONFERENCE. On 07.10.08 the Jerusalem Municipality, encouraged by the (then-)Mayor Mr. Lupoliansky (until 11.11.08) who did not participate, hosted the annual conference of Public Transport Operators in Israel including the LRV projects and Isra-Rail Co. Ltd. members; (Aharon also participated.). The conference reviewed several major projects still progressing, like the first LRV line, re-organizing the whole Jerusalem bus network, adding BRT lanes, real-time information through satellites, and night bus lines to and from entertainment areas. Participants were greeted by Mr. Yair Maayan, the Municipality manager; Mr. Alex Langer, Deputy General Manager of the Transport and Roads' Safety Ministry; Mr. David Levi, Manager of the Jerusalem Transportation Master-Plan team; and Mr. Yossi Checkkes, Egged Buses Co. Jerusalem Area and Financial Department Manager. Main presentations included:

- Mr. Dror Ganon, a senior Deputy Manager for public transport in the Transport and Roads' Safety Ministry, spoke about the public transport policy from the regulator's point of view. - Ing. Kobi Bartov, Transportation and Infrastructure Development Department in the Jerusalem Municipality, described the complexity of combined public transport systems in a unique city like Jerusalem. - Ing. Ami Laks from the Transportation Master-Plan team made a detailed presentation of the LRV project. - Finally, Mr. Asaf Avrahami, Traffic Engineering Manager of Egged Jerusalem, introduced the drastic changes in the bus network as a result of redeployment; he explained that the changes were difficult not only for the public to get used to, but also for the bus drivers, who had been used to the same traffic directions for years and had to change the "diskette" in one day. Therefore Egged has deployed many guides, who are actually company employees, at most bus stops as well as on buses in order to reduce confusion. All the speakers mentioned the successful collaboration of Egged with all the boards dealing with the master plan. The conference concluded with a tour in a double-deck bus with an open roof (used daily for tourism around the city) along the LRV line including the depot at the French Hill neighbourhood in northern Jerusalem, and at the city traffic control centre.

(b). CALATTRAVA BRIDGE. From a press release of 04.11.08 by the Jerusalem Master-Plan team, LRV project, City-Pass, the Municipality, and the Transport and Roads Safety Ministry: "On 03.11.08 an agreement was signed between all the above-mentioned bodies, enabling the consolidation of definitions for the tests which the Calatrava suspension bridge will soon undergo, while simultaneously enabling track laying on it in order to avoid any further delays. According to the agreement prepared by Mr. David Levi, Jerusalem Master-Plan Manager, and the new City-Pass Manager General (in Reserves) Yair Nave, the arbitration between the state of Israel, and City-Pass which had already started will be suspended, and a common team will soon decide which tests the bridge will undergo, consulting with the bridge architect and designer Mr. Santiago Calatrava. Furthermore, Messers Levi and Nave have been authorized to give their final decisions on issues not agreed by the professional team; should there be no agreed issues at all, the arbitration procedure will continue. Mr. Levi said this morning that without the agreement, the project could suffer from delays due to the complex arbitration procedure. He added: "We speak about soluble technical issues; the citizens of Jerusalem have the right to have the LRV in service as soon as possible, and all those involved must find solutions rather

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than creating obstacles; fortunately, we have now good partners at the concessionaire management, and our common interest is first of all the concern for the public while strictly maintaining project quality and without violating the rights of any side". Mr. Nave said that he is happy with the agreement which will promote works and enable the completion of the line to schedule. [Which schedule? Ed.] City-Pass is extending all works including track laying, and these are now being carried out on 12km. of the 13.8 km alignment of the LRV line. According to the planning, the work teams and the special construction equipment will soon reach the Makhane-Yehuda market (the city market) and the Davidka areas, both highly essential for the city and requiring a strict co-ordination between all involved in order to minimize the disruptions for business at the market and city centre. On 11.11.08 the common team was to fly to Zurich, Switzerland, to meet with Mr. Calatrava regarding the bridge tests and track laying on it.

On 25.11.2008 a further Press Release announced: "The sophisticated checks have started on the Calatrava bridge, in order to determine the precise location for the tracks to be laid. These tests could only commence after the successful discussions last week in Switzerland between partners in the project and the designer. The checks will be made along the whole 360m of the bridge using sensors and laser instruments which will indicate the precise location for the tracks. Data received will enable CityPass to cast the two concrete layers, and to embed the track baseplates precisely so as to enable a constant and smooth ride of the trains on the bridge. Santiago Calatrava said that such checks are routine, and are carried out on each type of bridge made of either concrete or steel, adding that the Jerusalem bridge has successfully passed all the loading tests made some months ago. The location tests here are of particular importance due to the fact that the bridge has a circular radius of 90 degrees and that the tracks climb from street level to a height of 6m at the apex of the bridge. David Levi, General Manager of the Jerusalem Transportation Master Plan, said that the checks are fully State-financed, as the whole project belongs to the public sector.

(c). JAFFA STREET. From a press release of 10.11.08 by the same as above: "Yesterday, 09.11.08, City-Pass has started the preparatory works for track laying in Jaffa Street at the Makhane-Yehuda market. Works will include narrowing sidewalks on the northern side, safe pedestrian crossings, safety fencing, and of course, loading and un

83:07.

loading arrangements agreed between all the mentioned participants and the unions of the market and city centre businessmen in order to minimize disruptions during works."

Now that works have started near the market, all the LRV alignment is being worked on; on many sections the track is completed; along Herzl Boulevard final paving is near completion; on the central section of Jaffa Street works are advancing at full tempo with the first concrete layers completed at many sections, and on the next month track laying will begin at Pisgat-Ze'ev in northern Jerusalem. Most of the LRV cars are already parking in the depot at the French Hill where the control centre is nearing completion. Additionally, along the whole alignment can be seen holes for thousands of trees to be planted; these have been grown in glasshouses in the north of Israel, and will be put into the holes as "adults" in order to save time.

(d). BUS FEEDERS. From a press release of 11.11.08 by the Jerusalem Master-plan Team: "Last week, Egged Bus Company started testing the new Mercedes-Benz high capacity urban

B. SAUDI ARABIA.

OTHER MIDDLE EAST RAILWAYS.

A lot of information this time, and some of it duplicated - on top of the usual problems as to whether to separate 'Jordan', 'Syria' and 'Hedjaz', we have complementary reports on developments in Saudi Arabia and the Gulf States.

A. JORDAN.

(i) . FAR RAIL TOUR.

From 'C.R.J.' No. 155, Autumn 2008, p. 413. "In October 2007, from 19th. to 21st., there was a FarRail tour, which used 2-8-2 51 for a mixed train from Zarqa to Amman, with diesel 40213 as pilot, 4-6-2 82 with a passenger train from Amman to Qatrania, and 2-8-2 71 with a goods train from Amman to Qasir. Initially-scheduled 2-8-2 23 was said to be non-operable. Pacific 85 and seven coaches, used for the Aqaba - Wadi Rum tourist service, were stored at Amman station.

Off the railway, three locos are preserved at universities: 2-6-2T 63 at Al al-Bayt University, Mafrag; 2-8-2 73 at Mut'ah University, Karak; and 4-6-2 84 at Amman University. Following the demise of the International Train, the HJR only runs special trains, and according to a member of staff, the FarRail workings were the 22nd. such of 2007, with most others running from Amman to Qasir or Jizra, and behind a diesel.

The railway also derives revenue from the 171km. section south of Qatrania which is leased to the Aqaba Railway Corporation."

(ii) . SWISS 'GLOBOTRAIN' TOUR.

See 81:07:E. for details of a 'Globotrain' tour of the Hedjaz Railway in 2008. The new catalogue gives details of a similar tour from 9th.-23rd. October 2009, this time under the leadership of Erich Gysling, jointly with Camera Tours of Amman. Cost is CHF 6980, and the group should consist of 25 - 40 persons. The 15-day programme includes flight from Zurich to Aleppo via Amman, on Day 3 a CFS ride from Aleppo to Homs, thence bus to Palmyra, Day 4 to and Day 5 in Damascus, Day 6 visit to Cadem and steam ride to Deraa and Bosra, Day 7 by bus (!) to Amman, Day 9 train Amman - Qatrania and bus on to Karak, Days 10 & 11 in Petra, Days 12 & 13 in Wadi Rum, Day 14 in Aqaba.... As one can see, the programme is aimed more at general tourism with relatively little 'Railway content'.

(i). AL MADINAH RAILWAY MUSEUM. From 'C.R.J.' 155 p. 414: "A firsthand account of operations at this museum was obtained... in October 2007 from a Syrian loco-driver, Habib, who had been on loan three times for two-week periods to run the locomotive there, with the last occasion just a month previously. He was being employed because the contract of the previous Indian loco-driver had not been renewed and he had returned to his own country. During his stay in Arabia, Habib ran 2-8-0 105 (Hartmann 3465/1910) together with a restored passenger coach (Baume & Merpent 1905) six times daily each way between the shed and the station, a distance of 300 metres. Due to the extremely high daytime temperatures, the runs took place at night, between 21.00 and 03.00!

No more has been heard of the project at Al Ula."

(ii). NEW LINE. From 'Lok Magazin' Nov. 2008 p. 30. "In Saudi Arabia a rail line is to link the Persian Gulf with the Red Sea. In addition the existing line from the harbour city of Dammam on the Persian Gulf to the capital Riyadh will be rebuilt and a new extension on to Jiddah will be constructed. Jiddah is

bus type 'CapaCity'. Buses of this type are to be used both as feeders for the LRV lines in Jerusalem and Tel-Aviv, as well as on lines with high traffic yet not enough to justify an LRV system, and in Haifa as the selected high capacity mode. Three years ago the Dutch Phillas high-capacity double-articulated bus was tested in Jerusalem, and according to the results, the Transport and Roads' Safety Ministry has decided to try additional types of high capacity buses. The CapaCity bus is to be tested for: suitability on a variety routes, boarding and disembarking of passengers with different needs, accessibility for the disabled, travel comfort, seats, etc. As for the bus itself, the manufacturer claims that the single articulated vehicle with 4 double-leaf doors has capacity for 193 passengers, stairless entry, and area for standees enabling comfortable access for children, baby carriages, and disabled. The diesel engines conforms to Euro 5 emissions." (e). MORE POLITICS. From 'Jerusalem Post'

"Barkat cancels meeting with light-rail constructors over dire conditions. By Etgar Lefkoviets, Dec. 16, 2008. "Jerusalem Mayor Nir Barkat on Tuesday abruptly canceled a meeting with the Israeli head of the international conglomerate that is carrying out construction of the city's repeatedly-delayed light rail system, the city said.

The mayor's decision to nix his appointment with the Director-General of the City Pass Conglomerate Yair Naveh came after a tour Barkat took along the planned route of the light rail uncovered "disgraceful environmental neglect, dirt, waste and an array of safety and transportation problems," Barkat spokesman Evyatar Elad said. arkat, who has been a long time opponent of th project, has said he would examine the project's feasibility and would consider cheaper, more effective alternatives to the light rail system, including the use of environmental-friendly buses." (The Editor adds: Anyone standing as a mayoral candidate can hardly have failed to observe the works along the route - almost all construction is taking place very much in the public domain: so this appears to be a formal public challenge by the new Mayor to the supporters of the rail line to get their act together. And some would say, 'Not before time'.)

between Cadem and Kanawat station had not progressed, but it was said that the legal battle with the previous contractor had ended and that a new contractor had been found, with work to restart soon. In 2005 a five-car rake of Chinese air-conditioned coaches, built by Sifang Car Co. Ltd., had been delivered, but was currently stored at Cadem. Two of the Roumanian Co-Co DE locos, AV-401/2, were again missing. On enquiry it turned out that these had been returned to Roumania about a year previously to be rebuilt, and were expected back in a month or two, although they should have been back much sooner. According to staff there were plans to use these locos with the Chinese coaches between Kanawat and Damascus Airport. However, this would involve laying a third rail on, or a parallel narrow gauge track beside, the standard-gauge CFS line between the junction south of Cadem and the Airport, which is east of the city and near the CFS line to Halab."

(iv). RAILTOUR ISTANBUL -DAMASCUS.

The new 'GloboTrain' Catalogue lists a '1001 Nights' (actually 12-Day!) railtour from Istanbul to Damascus - running twice in this direction and twice in the other, in April and October 2009, run jointly with Lernidee Erlebnisreisen GmbH of Berlin, and costing around CHF 5,800. A CFS sleeping car (built Bautzen) will be used. The tour includes several excursions to tourist attractions. More details from GloboTrain, Neuengasse 30, CH-3001 Bern, www.globotrain.ch.

D. KUWAIT.

In 'Lok Magazin' October 2008 p. 28.

"The Emirate of Kuwait in the Persian Gulf is entering the Railway Age. A 245km. long line is to be built within the next eight years from the border with Iraq in the north to the Saudi Arabian border in the south. A branch line heading west will be 255km. long." Presumably this may re-use some of the alignment built by the Iraqis after their invasion of Kuwait? See also below.

E. ARABIAN PENINSULA AND 'PAN-ARAB' GULF STATES DEVELOPMENTS.

'Fahrplancenter News' is an amazing source of information, and although Samuel Rachdi in Steinen, Switzerland, seems to be going through a lot of drastic problems at the moment, with his health and business, he nevertheless puts together a magazine that brings together news one will not find anywhere else. Here is, from the current issue (No. 44 Juni-Dezember

a harbour on the Red Sea and not too far from Mecca. The new line will be 945km. long. The financing will need to be in place by early 2009 at the latest. The main goods to be transported will be bulk materials and containers."

(iii). CROATIAN LOCOS. In 'Lok Magazin' December 2008 p. 29, "Four of the former 14 (JZ) locomotives of Class 663, now 2063, which came to the Direktion Zagreb have been sold via a French contractor to Saudi Arabia. Engines concerned are: 2063.002 (ex 663.003); 2063.004 (ex. 663.007); 2063.005 (3x-663.012) and 2063.013 (ex-663.011). These four locomotives had been sold by the Croatian State Railways in 2005 to the American firm NREC; following overhaul by the firm TZV Grendelj in Zagreb they were however sold on to a French company. The engines of class 2063 were delivered to Yugoslavia in 1972 by GM-EMD of La Grange, Illinois."

C. SYRIA. From 'C.R.J.' No, 155 p. 415. "The following notes all relate to the FarRail party tour in October 2007: HI INTERNATIONAL TRAIN - DAMASCUS - AMMAN. The twice-weekly mixed train service had ended about a year previously, after it was announced that a new standard gauge electrified high-speed line would

be built to link the two capital cities. According to staff there had been a few goods trains on demand after that date, but the last one had been in May, behind steam. The only traffic was textiles from Syria to Amman Customs (south of Qasir station). Although one rake of covered wagons remained at Cadem, scrapping of wagons was in progress at Dera'a, and most of those in Jordan appeared to have been scrapped already.

(ii). STEAM SPECIALS. Locos used on FarRail specials between 15th. and 19th. October 2007 were 2-6-0T 755 between El Hame and Ain-Fidje (there having been regular trains on this section during the school holidays until a week previously); 2-8-2 262 from Damascus to Dera'a and only just able to complete the trip; 2-8-0's 91 and 160 on various workings from Dera'a into the Yarmuk Valley and to Bosra. Incidents included a landslide and a derailment on the Yarmuk trips. Of the four serviceable locos, only recently-restored 160 performed well; Mallet 0-4-4-2T+T 962, which had been moved from Cadem to Dera'a specially, was not used, having been declared a failure.

(iii). FUTURE PROSPECTS. Work on the underground connection

2008) pp. 10-12, his insight into the Near East. (Anyone wishing to know more about railways anywhere in the world is heartily encouraged to take out a subscription -contact Fahrplancenter at: S. Rachdi, Fahrplancenter, Bahnhof, CH-6442 Steinen SZ, Switzerland - 25 to IBAN DE 69692 8003 5084 9687 000 Dresdner Bank AG, Filial Singen, Germany. BIC/SWIFT DRESDEFF692. Marked FCN. Or write info@fahrplancen-ter.com for details.

"FOR THE FUTURE - RAILWAYS!"

"The governments of Saudi Arabia, Kuwait, Dubai, the United Arab Emirates, Yemen and surrounding countries are united on one subject: The oil boom period will soon be past, and plans for what will come next have to be made in time. A strengthened industrialisation, the tapping of natural resources, even the development of agriculture and the construction of a generous and extensive railway network all have absolute priority.

The following is a general overview of the various individual countries and projects.

(i). SAUDI ARABIA.

The main projects are certainly to be found in Saudi Arabia, involving not only freight railways but also high-capacity lines for passenger traffic. The first TGV project in the Near East will soon be commenced, the line Mecca - Jeddah - Medina. The line, around 444km. long, will not only link these three important cities, it will more importantly serve the streams of pilgrims to the holy sites of Islam. This traffic alone will provide over 10M passengers a year. For the sacrifice festival of 'd-al-Adha alone some 2M. pilgrims travel into the country via Jeddah. The fast trains will bring the Faithful in 30 minutes to Mecca or in 2 hours to Medina. At present the bus journeys take three times so long. This passenger railway alone will require an investment of around \$US1.76 Billion.

The other holy cities in the region, such as Mina, Arafat and Muzdalifa, will also get rail connections. The eventual aim is to transfer the entire pilgrim traffic from road to rail.

This line will also form the western end of the transversal line across the peninsula. A 945km.-long railway will link the capital Riyadh via Taif to Jeddah and this, together with the already-existing line of the Saudi Government Railways Organisation (SGRO) from Dammam to Riyadh this will form a ca.1,500km. long corridor from coast to coast. Construction of this 'Saudi Land Bridge' should start in June or July 2009, and the total investment for this line alone will amount to some \$US5 Billion. Construction will be undertaken by a Saudi-Australian consortium known as Tarabot.

The construction of two branch lines in the west has already been decided.

One will go from Taif to the southern city of Khamis Mushayt; Another line will run from Jeddah to the town of Jizan on the border to Yemen.

Along the Persian Gulf coast a new 115km. line from Dammam to the industrial centre of Jubail is already under construction. This will essentially serve to facilitate the transport of goods between the industries of Jubail and the harbour of Dammam.

On 21st. January 2008 the Russian Railways were awarded the tender to construct the 520km. long section of the North-South line from Riyadh via the King Khalid International Airport to Al Zabirah on the iron-ore line currently under construction from Ras Azzawr. This line, intended for both passenger and freight traffic, will cost ca \$US 800M.

In total the Saudi railway system will expand in the coming 10-12 years from ca. 850km. to ca. 3,500km. and will reach all the important population and economic centres. All lines will be built to a standard to enable passenger traffic and there will be no level crossings between rail and road. Minimum speed possible will be 120km/h, the specifically passenger lines are being built for speeds of 300km/h.

(ii). KUWAIT.

At the end of June 2008 the Kuwaiti government published official statistics regarding the planned railways in the country.

First will come the construction of a 165km. Metro network; this will have four lines and around 50 stations. Line 1 will be 23.7km. long, Line 2 will be 21km., Line 3 24km. and Line 4 22.7km. long. 65% of the route-mileage will be constructed either as elevated or underground line, so that the road network will not need too many alterations and not too much land-take will be required. The construction of this network, costing some \$US 11.3Billion, will commence sometime in 2009 and should be completed by 2014. The entire Metro will be built with State and private capital, whereby the private firms will provide 26% of the costs. An annual passenger volume of 69.1M is expected. At the same time road traffic should sink by some 30%.

From the beginning of 2008 planning of a national railway network has also been under way. It should reach a length of 505.3km. All lines will be built as double track and electrified with 50kV AC. Both passenger and freight traffic is envisaged for all lines. The main line will run North-South - 244.8km. - from the border with Iraq (with a connection to Basra) to the border with Saudi Arabia (and continuing to Dammam.) A 42.5km. line will link the International Airport with the capital and two West-East lines will run from new industrial centres to Kuwait City. They will be normal lines for both passenger and goods

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traffic and a maximum speed of 160km/h. Although the State Railways will be built and operated by Kuwait, they will form a part of the Pan-Arab Railways system. Construction should begin in 2010.

(iii). DUBAI.

Construction of a rail urban network system in Dubai is already the most advanced project. In Autumn 2009 the first route, the 52.1km.-long Red Line 1 will commence operations. It will run from the Harbour to south of the International Airport. 4 of the 35 stops will be in the 4.7km.-long tunnel section, the rest of the line will be built mainly on viaduct. An extension of this line to the border with Abu Dhabi is envisaged. The whole railway will be operated automatically (without drivers.) Construction of the 17.6km.-long Green Line, which will run from Al-Qusais-2 to the Medical Centre of the city, is also well-advanced.

In September 2009 construction of the 49km. long Violet Line will begin. This will be an Express line with few stops and will link the two airports of the country, outside the urban area. Furthermore two additional lines totalling 60km. are planned, although only the route for the Blue Line has been fixed, whereas for the Yellow Line all that is currently known is which urban areas are to be served.

As extensions to the automatic Metro system there are currently (with some eight months' delay) monorail lines under construction, which will connect the palm-shaped artificial island off the coast with the rail system. The trains for the Monorail have, like those for the Metro, already been delivered.

In terms of Tariffs Dubai is already well advanced. From the opening of the Metro only standard tickets will be available which will encompass all land-based transport systems (Metro, Monorail, Bus, Ferry) and allow unlimited transfers!

At a later stage the construction of several modern tramway lines to reach further areas is envisaged. However, construction of these would not begin before 2012.

(iv). ABU DHABI.

The government of this Emirate has been observing the developments in Dubai very carefully from the very beginning and has decided to build an identical Metro system. Construction is planned to begin in the second half of 2009, and the identical Japanese vehicles will be ordered as in Dubai. The Abu Dhabi Metro will initially comprise just one long line which will connect at the border with that of Dubai and so permit through running of trains.

The aim of both Abu Dhabi and Dubai is initially to reduce car traffic by some 35%, which in both cases will be encouraged by very low fares.

(v) . UNITED ARAB EMIRATES.

At the initiative of Abu Dhabi and Dubai all the governments of the United Arab Emirates have established an International Commission for the Encouragement of Rail Traffic along the Gulf Coast, involving Saudi Arabia, Kuwait, Qatar and Bahrein. The aim is to link the Emirates with each other and with their neighbouring states by rail, whereby in the heavily-populated regions along the coast several Urban-style systems will be built. The aim of these countries is to replace short-hop air journeys of under 300km. and long-distance bus journeys of over 50km. by rail. Fast inter-urban railways of 140-160km/h are preferred for this aim, rather than real 'high speed lines'.

The same Commission has formed a sub-committee which is to investigate the construction of 'normal' railways through the Emirates. A network of some 2,000km. from Kuwait to the border of Oman should transport almost all freight and many passengers. Planning and coordination of this international network will be placed under the Gulf Cooperation Council (GCC). In December 2008 the first cost estimates for this railway system will be presented.

At the same time the GCC has revived the discussions with Turkey, broken off in 2005, whereby the entire Arabian standard-gauge network should eventually be linked to the European system through Turkey. Two possible corridors are being investigated, either through the western part of Iraq or through the eastern part of Jordan and Syria. The GCC has let it be known that the link between their network and Turkey should be completed before 2020.

(vi) . OMAN.

In a few years the Sultanate of Oman will have its first railway. This line of some 200km. will link the industrial city of Sohar with Barka, both being in the Batinah region. The Minister for Economics, Ahmed bin Abdulnabi Macki announced this at Oman's first Economics Forum. It has already been decided that this line should be extended southwards soon afterwards, towards the planned industrial centre of Duqm and its new harbour. The city and harbour of Sohar are currently the economic centre of the country and will guarantee a heavy traffic volume. In addition a Special Economic Zone will be created at Sohar which will guarantee further freight volume. Although only freight traffic is initially envisaged, the line will be built from the outset to a standard that will allow passenger traffic.

The freight trains will, depending on length and weight, travel at 80-100km/h., and later passenger trains, also diesel-powered, would reach 160km/h. The entire project is still in the planning phase, and detailed planning should be completed by 2010 at the latest. However, the project is already firmly established in terms of political decision-making.

(vii) . YEMEN.

The construction of a railway line from Saudi Arabia to the Yemeni capital Sana'a was also decided within the framework of the GCC plans.

This was not without consequences. Hardly had the first studies begun in April 2008, than the government of Yemen decided to extend this line to the harbour city of Aden, since this is the economic centre of the country. The Saudi-Yemeni railway should convey both passenger and freight traffic from the outset. Since the topography of the country is very difficult for railway construction, the opening of the line is not envisaged as occurring before 2016 or 2017.

(viii) . BAHRAIN.

In 2009 construction will begin of the first light express line in the capital of Manama. This line will link Juffair with the city district of Seef. In addition to this double-track, electrified line, Manama will get a normal tramway, the first line of which will link the International Airport with the express railway. The entire urban area will be criss-crossed with a dense network of bus routes, which will at several points be connected to tramway and railway. As a final project the construction of at least one long Monorail line is planned. All these projects are to be finished before 2033 and by that point the individual motor traffic should be reduced by at least 25% of the 2007 levels."

(ix) . INTERNATIONAL LINKS.

"On 17th. April 2008 the governments of Syria, Jordan and Saudi Arabia signed a new treaty regarding the future of the Hejaz Railway. This was the first high-level meeting on this topic since 2001. The new Treaty alters that of 1966. In 1966 it had been decided to administer the Hejaz Railway or its surviving remnants together; in the new Treaty the route is divided between the three countries, although only similar and compatible systems must be built. Saudi Arabia has already signalled its willingness to take over a large amount of the financing. It has been definitely decided that the line will be to standard gauge and built to the most modern international standards. It will serve to convey pilgrims to Mecca, and will be linked at Damascus to the existing Syrian system.

The Syrians plan to remove and rebuild the existing Damascus - Dera'a line to standard gauge was approved and also the Jordanian plan to rebuild the Amman - Zarqa section has been accepted as compatible with the new standards. The rebuilt line should serve not only passenger traffic; Saudi Arabia is hoping to establish a high-capacity link from the coast of the Red Sea to the Mediterranean harbours in Syria and a direct link to Turkey and Europe. The reconstruction of the entire Hejaz Railway

should take place in stages between 2010 and 2025.

Also not new is the project to build a railway line from Dammam along the Persian Gulf coast and through Kuwait to Iraq, where at Umm Qasr south of Basra a connection to the Iraqi network should be made. Since a line between Basra and Iran is already under construction, this project has a new current significance, since Saudi Arabia has - despite political differences - interest in a rail link through Iran and especially in the direction of Russia and Central Asia. Kuwait likewise has high hopes for this line, and in consequence it is especially Kuwaiti circles that are pushing for the speedy planning and concretization of this project."

(x) . JORDAN.

IN SEARCH OF 1.6 BILLION DOLLARS.

"Now that the 'S-Bahn' project for rebuilding the line Amman - Zarqa is finally making some progress, following the replacement of the Chinese-Pakistani consortium by a Spanish-Kuwaiti consortium due to some tax problems, the aim is now to get on with building this route as quickly as possible..

The basis for this haste can be found in the fact that Jordan, together with 12 other Arab countries, has signed the Treaty for the Economic and Social Commission for Western Asia, in which it is laid down that national railway systems should be built and connections to the neighbouring countries established by 2020.

US\$4Billion are planned for the standard-gauge railway infrastructure and US\$2Billion for the purchase of locomotives, carriages and wagons. But the country needs financial help for this.

The railway network should eventually total 1,080km and the North-South axis will run from Dera'a (Syria) via Mafraq, Zarqa, Amman, Qatrania, Ma'an to Aqaba. The East-West line should begin at the Iraqi border, make a connection on the way with the northern line under construction in Saudi Arabia, and lead further via Irbid to Azraq. In order to annoy neither the Israelis nor the Arab neighbours, in Irbid two parallel stations will be built. One, for the line Mafraq - Azraq, will be a through station, the other for the planned line from Haifa will be a terminus, although the track layout must allow for a connection between the two lines at any time.

The entire system will be built initially as single track. The Transport Ministry is already intensively occupied with the acquisition of the necessary land, and this will be wide enough to allow for the laying of a second track. Only the 'S-Bahn' section Zarqa - Amman will be built as double track and electrified from the outset. Passenger services will be offered on all lines, since although petrol in Jordan is still quite cheap, the aim is to move as much traffic as

possible to rail, so that the fuel subsidies can be reduced gradually.

For the present the Hedjaz Jordan Railway resumed operation on the narrow-gauge section Amman - Dera'a from mid-2008, but the eventual final closure of this line could occur at any time."

F. IRAN.

(a). MAJOR ORDERS.

"Raja Trains, the company that runs the passenger trains in Iran, has an urgent need to increase its rolling stock. [See 81.07.] The number of lines is constantly increasing and the demand for transport is rising even more. Therefore several large orders have been placed in recent months. In the coming two years the following items should be delivered. From the Iranian industry will come:

- 20 sets of coaches of the 'Paradis'

type;

- 40 Couchette Cars.
- 100 1st.-Class Passenger coaches.
- 368 2nd.-Class Passenger coaches.
- 50 Railcars.
- 150 Passenger train Locomotives.
- 52 Restaurant Cars.
- 30 Car-Carrier wagons.-

From Rotem in South Korea will come:

- 120 2-car Railcar sets. From Chinese

suppliers will come:

- 6 Generator Cars.
- 3 Restaurant Cars.
- 31 1st.-Class Passenger coaches.
- A Locomotive Simulator.
- A Carriage-Cleaning Installation."

(b). INFRASTRUCTURE.

"In mid-2007 the Government took several initiatives to accelerate construction of new lines. Additional construction firms were set to the task and the number of construction machines and workers was significantly raised. Further finance sources were tapped.

Russia is since November 2007 increasingly involved in the construction of the new line Qazvin - Rasht - Astara - Azerbaijan, which also employs Russian tunnel-building techniques. It is hoped to bring the line into operation by 2011 at the latest, instead of 2013.

Introduction of the new line Bam - Zahedan is definitely planned for March 2009. This line will link the Indian sub-Continent with the Near East and Europe. Works on the 400km. line are being progressed rapidly. At the end of 2007 the tracks were already laid for 100km from Bam till past the station of Shur Gaz and were being used by coinstruction trains. From Bam to Shar Guz the line runs approximately on the same alignment as the main road, but then it bends south-eastwards through uninhabited country. Here several tunnels have needed to be bored. The works were held up for

several years in this region, after an uncompleted tunnel collapsed following an earthquake and apparently a large number of workers were buried (exact numbers were never published.) The line now being built lies some 60km. to the south of the originally-planned route, as the geological conditions are better here. In January 2008 all major civil engineering constructions in this mountainous region were over 50% complete. In February 2008 the rails and sleepers had been delivered and stored in Kerman, Bam and Shr Gaz. In Zahedan a new passenger station is being built 15km. south of the town and immediately to the east of this a new transshipment and gauge-changing station is being built. It was decided not to build this gauge-changing station nearer to the border at Mirjaveh, the border station, for strategic reasons.

The renovation of the broad-gauge section of the line from the new station in Zahedan to Mirjaveh is being carried out by the Iranian State Railways IIRR. In March 2008 sleepers for this gauge were ordered. It is reckoned that the laying of the tracks between Bam to Zahedan will have been completed by the middle or end of December 2008.

Also making good progress is the construction of the line from Torbat-e-Hey-dariyeh to Herat in Afghanistan. Although work only began at the end of 2006, by March 2008 over 65% of all earth-moving had been completed on the Iranian side and almost 50% on the Afghanistan side. The line is being built completely by the Iranian State, but some 350 Afghans are employed in Afghanistan, which means some badly-needed employment opportunities are being provided. Rails are already laid on the first 12km. from Torbat-e-Heydari-yeh; the track materials were being delivered from July 2008".

(c). DR LOCOS IN 1991. Not 'News' but in 'Eisenbahn Kurier' 10/91 p-14: 'CLASS 131 FOR IRAN': "20 large diesel locos of Class 131 (Co-Co's) received a further lease of life. No longer needed on the DR, they were hired to the Iran State Railways for nine months. There is no reason why they should not then be purchased. The locos were shipped from Hamburg Harbour in September 1991. These included 131 004, 012, 014, 015, 016, 017, 018, 019, 028, 035, 036, 039, 041, 043, 048, 052, 059, 060, 071. The machines were gathered together at the Halle G. Depot and prepared for their service in Iran; this involved amongst other things changes to the power supply equipment." (Editor adds: These are the later DB Class 231-234 types.)

G. YEMEN - DJIBOUTI. (p.13).

An Intercontinental Railway is planned! "The Al-Noor Holding Company of Tariq Bin-Laden of Saudi Arabia desires to

invest in a great style; In consequence on 28.07.2008 the ceremonial beginning of construction of a US\$ 200-Billion mega-Project was celebrated. In the presence of many Al-Noor managers, investors from 19 countries and the State President of Djibouti, Ismail Omer Jeelah, the contracts for the construction of a combined road/rail bridge between Yemen and Djibouti were signed. This bridge, to be known as the 'Bridge of Horns' (since it will link the 'Horn of Africa' with the southern tip of the Arabian Peninsula) will link two new major cities still to be built, to be known as Al-Noor-Yemen and Al-Noor-Djibouti. The Cities.

Al-Noor-Yemen should be built over an area of 1,500 sq. km., that in Djibouti will be 1,000 sq. km. large. Both cities will possess extensive residential areas, appropriate communal infrastructure, universities, industries, transport networks for public and private transport, medical centres and regional offices for almost all important international organisations and companies. In the Yemenite city some 1,000,000 employment places will be created, in Djibouti some 500,000. The effective population of each city will be some 4 to 5 times this. The construction of the cities will cost some US\$ 120 Billion. The Bridges.

Between the southernmost point of Yemen and the most north-eastern point of Djibouti a 28.5km.-long bridge will be built, which will run via the Red Sea island of Perim. These 28.5km. are the shortest distance between the two countries.

The bridge will be constructed partially as a suspension bridge, in order to be high enough over the sea level so as not to disturb shipping in this very busy sea lane. The bridge will carry a 6-lane motorway and a 4-track railway. The standard-gauge railway will be electrified, two tracks should be used exclusively for freight trains and the other two for passenger trains. Estimates are for a daily volume of 40,000 tons and 50,000 passengers. All trains will work to a unified regular clock-face timetable and on the Yemeni side the line will connect with the airport. (No airport is planned for the city in Djibouti). In addition some 100,000 cars would use the bridge daily. In addition the bridges should carry pipelines for water, gas and oil products, electricity and telecommunications. The entire bridge structure will cost approximately US\$50 Billion, and finance for this is already in place.

A further hope is that with this project in the southern part of the Arabian peninsula and the Horn of Africa (Somalia, Djibouti, Ethiopias, Eritrea) the economies of these countries can be so strongly improved that civil unrest will be reduced."

H. TURKEY - ARMENIA -GEORGIA. USA BOYCOTT PROBLEMS.

(Fahrplancenter News' p.13.)

"In the first months of 2008 the construction of the new railway line from Akhalkalaki (Georgia) to Kars in Turkey was begun. Both countries required to take out credits for this project, using financial sources in Japan, the USA and other countries. At this time the Republic of Armenia transferred operation of its railways to the RZD, (Russian State Railways), and the Armenian Railway was renamed the South-Caucasian Railway.

With the Georgian invasion of South Ossetia and the following problems in this region there was suddenly other activity within the USA. For historical reasons Armenia is rather isolated, the borders to Azerbaijan, Iran and Turkey are closed, and only Georgia is accessible by land. The transit route to the 'friendly' Russia goes only through Georgia.

The sudden cutting of Georgian-Russian relations has led to the mobilisation of the financially-powerful Armenian emigrant population in the USA. This group has put pressure on US President Bush so that the banks, which have been financing the building of the Turkish-Georgian Railway, have in turn withheld the credits due to pressure from Washington.

The Armenian interest lies in breaking the 'US-oriented' transport axis Turkey - Georgia - Azerbaijan, in order to exert pressure on Georgia to reactivate the axis Armenia - Georgia - Russia. Once again the USA finds itself embroiled in international political complexities, for here it is supporting a country friendly to Russia against its own ally Georgia!"

I. AFGHANISTAN.

From 'Fahrplancenter News'. p. 27. "The construction of the line from Torbat in Iran to Herat in Afghanistan is making faster progress than expected. Several sources reported identically on 19.10.2008 that the line was already 60% complete. In Afghanistan the line is known as the Kha-waf-Herat Railway and each kilometre has cost around \$US 2M. In Herat the station is under construction and the track layout is already being prepared so as to be able to receive the railway line from Turkmenistan. At the end of 2008 goods traffic from Iran to Herat should commence, though as yet there is no mention of passenger traffic. During 2009 the US\$4Billion-line from Herat to the Turkmenistan border will also be begun."

J. TURKEY.

(i). NEW TUNNELS EUROPE - ASIA. "On 13.10.2008 it was possible for the first time to walk through the

bore of the new tunnels in Istanbul linking Europe with Asia. Amongst those taking part were Turkish President Erdogan. The tunnel, around 14km. long, lies 58m under the surface of the water and is at present the deepest underwater tunnel. Rail traffic should begin around 2012-2013. The line will have three underground railway stations and will be electrified at 25kV. 44 ten-coach multiple-unit sets have been ordered for urban traffic services."

(HL STADTBahn VEHICLES FOR ISTANBUL.

In "Eisenbahn Revue" (International Edition) 5/2007 p.243:

"A contract for 34 new two-part Stadtbahn tram vehicles for the Turkish city of Istanbul has been allocated to a consortium of the Czech builder Skoda and the South Korean Rotem. These are destined for the new standard-gauge line Otogar (Bus station) - Bagcilar, which will be electrified at 750V DC. Rotem will be responsible for the mechanical sections and the final erection, whilst Skoda will supply the IGBT transformers, the asynchronous motors of 150kW each and the controls. The vehicles are meant to be delivered between 2007 and 2008 and will be built both in South Korea and in Turkey."

By coincidence in 'Schienen-verkehr Aktuell' (Austrian) October 2008 p.13 in an article on the resale of trams from Vienna to other cities, is a note: Utrecht was looking for new vehicles for the extension its standard-gauge lines to Nieuwegein etc. - "Since in Koln the B-series Stadtbahn vehicles that had begun to enter service in 1973 were now being withdrawn, the idea grew to purchase the number required. This idea however foundered on the rather excessive prices demanded by Koln - only in Istanbul, it seemed, was anyone prepared to pay 300,000 Euros for each 30-year-old railcar, especially since this could be financed by German development aid. In this manner a German tramway company could be subsidised by German development aid!"

K. MIDDLE EAST TRAMWAY PROJECTS.

In "Public Transport International" No. 5 September/October 2008, an issue headed "Light Rail, not a mode to be taken lightly", is an article on pp. 14f by Mo-hamed Mezghani, Head of Middle-East and North Africa, UITP. (mohamed.mezghani@uitp.org) (This is abbreviated as the 'MENA' Region.)

"If we exclude the Egyptian trams in Cairo and Alexandria inherited from the British colonial period, only Tunis has a light rail network (5 lines, 46 kilometres), developed in stages from the 1980's and currently

in the process of being extended. The MENA region's interest in light rail is thus relatively recent and can be attributed to the following:- the rapid increase in the urban population.

- the increase in the number of households with cars.

- Traffic congestion resulting from the above and the inadequacy of existing road infrastructure.

- soaring oil prices meaning that low-energy modes of transport must be developed and modal shift promoted.

- the increase in transport-generated pollution and greenhouse gas emissions.

- the deteriorating image of public transport; packed and polluting buses, poor quality, badly organised service etc.

This situation has forced public authorities in nearly all countries in the MENA region to think about the feasibility of reserved right-of-way systems, supported by other public transport modes. The expensive nature of metro networks means that they are limited to megacities such as Tehran, Cairo and Algiers or wealthy cities such as Dubai. Bus Rapid Transit (BRT) networks are still little known in the MENA region and their construction requires a relatively large amount of road space to be given over to bus lanes. This is why a large number of towns have opted for light rail, which has a number of advantages:- High capacity with optimal use of space.

- Supply can be adapted to demand (by adding or removing carriages).

- Equally usable in both urban and suburban areas.

- High commercial speed.

- Greater comfort and better accessibility.

- Environmentally friendly (no polluting emissions or noise in urban areas).

- Fits easily into various urban settings.

- Helps improve the city's image.

- Enables urban road space to be re-allocated.

- Easily fits into a public transport / car intermodality scenario.

- A host of technological innovations make light rail a progressive form of transport (complete or partial low floor, sub-surface traction current, tram-train, etc.)

Iran undoubtedly has the most ambitious urban rail development programme. A national body has just been set up to plan and coordinate the construction of rail systems in the country's main towns. At present, six towns are constructing light rail networks (Esfahan, Mashhad, Shiraz, Ahvaz, Karaj, Tabriz) and six other towns will shortly follow suit, all under a national plan framework.

The increase in oil prices on the international market presents Iran with con-

siderable resources for funding its projects. The same is true for the countries of the Gulf region. Thus, in Dubai, alongside the construction of its automated rail system (2 lines, 69 km., to come into service gradually from September 2009), the construction of a light rail line is also planned (Al Safooh Tram: 14km., 19 stations), which will follow the northern coast of the Emirate. It is slated for launch in 2011. The neighbouring Emirate of Abu Dhabi is finalising a transport masterplan study, which is set to recommend the deployment of a light rail network as part of the Abu Dhabi 2030 development plan.

The Saudi Arabian capital Riyadh (5 million inhabitants) is undertaking the construction of two light rail lines: 41km., 40 stations. Jeddah and Medina also have similar projects in the pipeline. Doha, the capital of Qatar, had announced the construction of 140 km. of light rail as part of its bid for hosting the Olympic Games in 2016. Since Qatar was not shortlisted, the scale of its projects might be reduced. Nevertheless, private property developers are currently constructing a 25km.-long tram line as part of new land development in the Doha area.

In Jordan, the construction of a light rail link between Amman and Zarqa (26km., 12 stations, following the route of the famous Hejaz Railway) has been delayed owing to the contract initially won by a Pakistani-Chinese consortium being rescinded. The contract has just been granted to a Kuwaiti-Spanish consortium that is to be responsible for building, operating and transfer (BOT) over a 30-year period. The system is expected to come into service in 2011 .. "

The article continues to discuss developments in Algeria and Morocco. There is also a table of Light Rail Networks in Iran:-

Town	Population (2004)	Total network length	Number of lines	Network under construction	Stations
Mashhad	2,838,000	60km	4	19km	22
Esfahan	1,573,000	112km	4	12.5km	15
Tabriz	1,523,000	44km	3	18km	20
Karaj	1,460,000	60km	6	25km	26
Shiraz	1,279,000	48.5km	3	24.1km	21
Ahwaz	841,000	64km	4	24km	25

L. TURKISH LIGHT RAIL NETWORKS.

In the same magazine, 'Public Transport International': pp.8f. "Close-Up on Turkey's Light-Rail Landscape." By Myriam Hernandez Irigoyen.

"...Over the last 20 years, Turkey has seen a light rail boom, linked directly to its economic and population growth, as well as marked urban migration patterns. With these trends set to continue in the foreseeable future, Turkish cities have had to face growing problems of sprawl, traffic congestion and pollution. Taking up the challenge, Turkish authorities are increasingly turning to light rail; the country has currently seven systems in operation, two of which opened in the last five years, with a further four new systems (in Kayseri, Gaziantep, Adana and Samsun) under construction. Of the existing systems, six are currently extending their network. [A...] study tour focussed on four systems.

Konya: This ancient city of Central Anatolia has shed its agricultural tradition to become an important industrial centre of over 1.4 million inhabitants. Konya's authorities realised early on the importance of investing in the right public transport system to alleviate transport problems and help structure the future growth of the city. But the light rail project approved in 1985 only started up in 1992, having faced severe delays on political grounds.

The current network has two lines and 35 stops, covering 22.4km and running mostly on an exclusive corridor, although trams do not enjoy priority at crossings. The round-the-clock service has now hit 30 million passengers/year. Study tour participants were particularly struck by the excellent condition and performance of the 60 secondhand Duwag GT8 vehicles imported from Cologne through 1988-2004.

Having completed a 3km. university campus extension in October 2007, Konya is now planning an 8km. extension out to a southern residential development and the acquisition of 20 new low-floor light rail vehicles.

Eskisehir: The LRT system in this industrial city of 500,000 inhabitants is part of a broader urban development plan to gradually implement a modern transport infrastructure harmonising the city's development needs with quality of life and environmental concerns. The Bombardier - Yapi Merkezi consortium built the system in scarcely 20 months. It

started up in December 2004 The operator, ESTRAM, is a sub-company of the Kentas-Espas joint venture, and won the contract to operate the system for 10 years. The current network covers 16km. with two lines connecting the northwest-southeast, southwest-northeast areas of Eskisehir crosswise and forming a network between two hospitals,

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two universities, the bus terminal and several public service buildings. This network is served by 18 single-directional, 100% low-floor Flexity Outlook LRV's, with five more vehicles to be delivered at the end of this year.

The 91,000 LRT boardings per day on a weekday are growing to match the booming population and feasibility studies are already underway for future extensions. Study tour participants met the city Mayor, Prof. Yilmaz Buyukersen, who is a strong advocate of public transport and is currently seeking funding opportunities with the central government for the planned extensions.

Bursa: With a population of 1.8 million, Bursa is Turkey's fourth largest city, as well as one of the most industrialised and culturally charged: it was the first capital of the Ottoman Empire and the departure point of the Silk Road.

Bursaray light rail system was conceived as part of the City Master Plan developed in the mid-1980s; however it was not until 1997 that a contract was signed with a Siemens-led consortium for its construction. Phase one of the system opened in 2002; this Y-shaped line currently covers 22km, running on exclusive right-of-way over 5km., with five underground stations. Study tour participants visited the most recent extensions to this network; a 5km. stretch inaugurated last April, featuring a 700m viaduct.

The municipal company Burulas operates and maintains the system, transporting over 190,000 passengers daily in 48 Siemens high-floor B 80 D LRV. Study tour participants were impressed by the accessibility standards of the system, which has level boarding and platform elevators on each station.

Istanbul: The urban rail operator of a city of 11 million, the challenges faced by Istanbul Ulasim are not small. Founded in 1988, its network now has seven urban rail lines totalling 64km - one metro line, five LRT lines and one funicular.

The LRT system covers 51.5km, mainly in the European side of the city, with only one small circular line (10 stations, 2.5km) on the Asian side. On the European side, the three existing lines offer connexions between the airport and the city centre, the Zeytinburnu and Kabatas neighbourhoods and both sides of the Golden Horn. The latest addition to the system was inaugurated in June 2007. The LRT fleet has 105 high-floor LRV's commissioned in the 1980s and 55 Bombardier Flexity. Eighteen second-hand Duwag LRV's [were] bought from

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THE CITRUS LINE AT KIBBUTZ MIZRA

(Amith Ben-Shalom)

Uri Yinon brought to my notice a narrow-gauge flat wagon that is shown at the tiny museum in Kibbutz Mizra, north of Afula. A few days later I went there to look at it. It is a 60 cm -gauge flat wagon, with approx. 30 m' of rails & sleepers. The rails are "o" shape cross-section, known as "pipe rails". This unusual form was not found before, and is known only from pictures of an advertisement of "PAAMON" factory, from the 1930's. Welded iron sleepers are fixed every approx. 1-metre intervals, with outstanding edges. The sections are assembled together with fishplates and male/female joints. The wagon wheels have smaller diameter than conventional Decauville wheels.

According to Pini Shiboli, the founder of the museum, the alignment used to be in the kibbutz's grapefruit orchard, 2030 years ago, for transportation of the fruit-containers, where a muddy landscape prevented other forms of movement.

After a few phone calls, I reached Doron Greenwald, who worked in the orchard, 30-40 years ago. According to him, they bought it somewhere (no longer remembered) and used it for a few years, sometime between 1960-1970.

He remembers 3-4 flat wagons, of 2 types: one rigid wagon for hauling the fruit-container (which weigh about 500 Kg.), and another type to transport the rails/sleepers when assembling/disassembling them/ while moving the alignment from one area to another.

A small turntable was also included in the alignment, together with about 200 m' of rails & sleepers, divided to 4-5 m' sections.

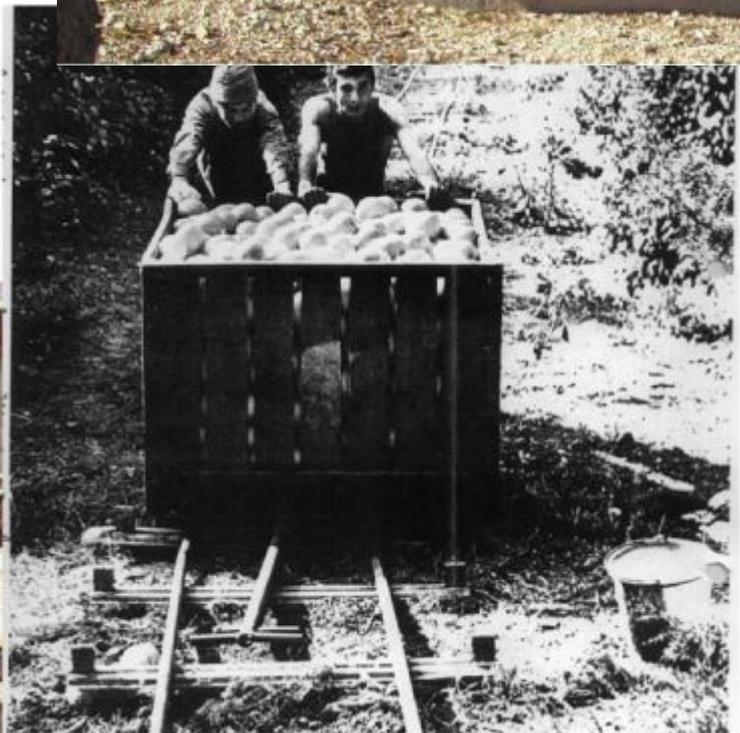
Chen Melling found a very similar draft in a book (dated 1973) about Kibbutz Sarid, a few kilometres west of Mizra. It seems that the photo was taken from the same period (1960/1970)

(Thanks to: Uri Yinon, Shai Farkash, Chen Melling, Pini Shiboli, Yosefa Fechter, Doron Greenwald)

Pictures:

1, 2, 3: The wagon and rails in Mizra, 2008 (Photo: Amith Ben-Shalom)

4: The wagon at Sarid, from "Kibbutz Sarid" (Hans-Juerg Stefan, published by "Bsileia", Basel 1973) reproduction: Chen Melling.



because fruit-containers entered use at that time, and not before.

FROM THEN TILL NOW (Part 21):

Noted in reading by Paul Cotterell from Baruch Katinke's book 'Me'az v'ad Hena'; see earlier installments in 11:22, 13:17, 16:15, 19:19, 20:15, 24:11, 30:21, 38:15, 46:12, 59:15, 61:9, 63:11, 64:9, 66:13, 68:13, 69:10, 71:08, 82:10 and xxx. This is the chapter entitled 'Feisal did not give Baksheesh' on pp. 237-239 of that book.

One day Major Cotching [the Chief Mechanical Engineer] informed me that the Emir Feisal and his brother the Emir Zeid [?spelling] would arrive before noon to visit the central railway workshops at Cadem. As Mouchly was on leave the Major asked me to accompany them on their tour. I would have to explain what work was being done in each department and answer their technical questions, if there were any. The visitors arrived at the appointed hour. The head manager [sic], Colonel Holmes, and Major Cotching received them and presented me as an engineer and son of the land [sic] who could speak Arabic. For a whole hour we toured the large works which employed some six hundred workers. Emir Feisal understood and even spoke English, while the Emir Zeid could manage a few halting words in the language. The Emir Feisal, by his appearance and conversation, gave the impression of a sociable and polite man. In contrast his younger brother was in all ways a Bedu, as pompous and boastful as the stars that were arrayed on his robe [abayah]. The English, then wanting to befriend the Arabs at all costs, generously handed out military jobs and functions to Beduin leaders, and appointed them to high ranks in the Arab army they had helped create. On all sides in the streets of Damascus it was possible to meet Beduin dressed in abayot [robes] with military shoulder flashes attached and innumerable stars on them.

As we walked with the visitors from department to department, through the central yard of the workshops, we passed an engine that had collided with another loco a few days before and was badly damaged. The Emir Zeid lingered by the engine and gave every appearance of being very pleased. According to him, he knew the loco well since, by his own hand, he had mined the track and blown it up. As proof of the truthfulness of his words he said that he could even remember the number of the engine and pronounced the number (as he was reading it on the loco numberplate). It was only with the greatest difficulty that we managed not to laugh at the bombast of this wild man.

When the formal visit ended Major Cotching took me aside and said that in his opinion the Emir Feisal should be asked if he was in need of anything that the workshops could provide. On my asking in Arabic, Feisal replied that the heater in his palace bathroom did not work properly, and he would be obliged if we repaired it. I translated his words for Major Cotching and he told me to visit Feisal's residence with one of the machinists that same day and repair everything to his satisfaction. I arranged with the Emir that we would arrive at the end of the day's work. On our arrival we found an

Continued from page 122

Cologne to bridge the gap until 32 Citadis are delivered by Alstom.

Istanbul Ulasim carries on average 800,000 passengers a day - yet rail based transport represents only 7% of the daily trips in Istanbul. Traffic congestion and environmental concerns have led the municipal government to invest heavily in public transport. 60km. of extensions and new urban rail lines are being built, with a further 98.35km. planned."

To this can be added, from NVBS "Op de Rails" magazine 2008-11 p.498: "Also the mid-Turkish town of Kayseri plans to open a 17.5 km long tramway line. Ansaldo-Breda has started to deliver 22 Sirio tramcars of the low floor type. Black Sea coastal town Samsun is next: This line will count 17 km and 22 stops". For this line, 16 Sirio tramcars (32 x 2.65 m) of low floor type with 2 control posts are ordered."

ancient and broken-down heater ["ther-mosiphon"] that was fuelled with coal. I promised Feisal to build him a large and grand new heater as soon as possible. Next day we manufactured a larger than standard size coal-fired heater made of copper with silver filigree, a product of Damascus, with verses from the Koran on it. A few days later the machinist fitted the thermosiphon in the residence of the Emir. The machinist returned in a towering rage from the Emir's house. He had received no baksheesh from the Emir, not even one cigarette.

As the time approached for the changing of the guard between the English and the French, a major exodus of the railway management was felt. Repair work in the shops was reduced and neglected, and the number of locos awaiting repairs increased greatly. The water cisterns also - the arteries of the railway - were not repaired or maintained. The Arab clerks in railway service, all of them office functionaries and mostly from well-connected

families, talked openly of the cozy jobs which awaited them after the English left, and even promised the earth to men in the mechanical service when control would be in their hands. The English railway management ignored this talk and allowed the chaos to spread. The English promised good jobs to the mechanics and engine drivers if they would join the railway service in Palestine, at the head of which would be the management that had worked until then in Damascus. Everything was apparently directed to the stoppage of train traffic when the British quit Damascus.

On the 24 of the month of November 1919 we were invited, my friend Mouchly and I, the two senior mechanical officers among the sons of the land [sic], to appear before the chief railway manager, Colonel Holmes. We were very warmly received by him in his private office. He told us that he and the British railwaymen would shortly be leaving Damascus and would transfer, to similar posts, for work on the railway in Palestine. In his words he would be very pleased if we too escorted him to serve in Palestine in the same posts in which we had served in Damascus. This was a subtle invitation to help the departing English in arranging the "chaos". Both of us agreed to his suggestion, and took the opportunity to write our requests to resign from service in Damascus on the pretence of urgent family affairs. I wrote that my aged and sick mother insisted on my being near her. We presented our requests to Holmes. He signed his assent on them and gave an order to the cashier [lit. kupah] to pay us the wages due to us, and gave us a certificate of appreciation for the good work we had done in Damascus. After an hour or so we left him with handshakes and the wish "Till we meet again in our new service in Palestine". The next day I returned to Haifa.

This is the last of the pertinent extracts from Katinke's book. In fact, he decided not to rejoin the railway in Palestine but went on to other work and other projects to do with the development of the 'Yishuv' (Jewish settlement) in the mandated territory. And, of course, he had many more adventures along the way. All this, though, is beyond the scope of this series of articles. Appended here is Katinke's record of railway service as noted and signed by Colonel Holmes on 19 November 1919, and reproduced from Katinke's book. There is a short and not entirely accurate partial biography of Katinke in the footnote to Harakevet 30:21.

I leave it to the reader to draw his own conclusions from these extracts. Translation has not always been straightforward, and other Hebrew speakers may sometimes disagree with mine; though not, I think, over more than certain words or

phrases. Throughout this series I have tried to retain the idiosyncrasies of the original Hebrew. Finally, I will just emphasize that Katinke's book should be treated with great care by anyone seeking an accurate historical account - it was not intended to be that. It is an autobiography, a compilation of rich personal memories from exciting times. And as anecdotal history it is excellent.

General Manager's Office,
Hedjaz Railway.

Damascus, 19th. November 1919.

Mr. B. Katinke,
General Inspector of the
Loco Department.

Record of Service.

Mr. Baruh Katinke, Mechanical Engineer, was engaged by the Hedjaz Railway on the 24th October 1912 with a salary of 1400 Turkish piasters per month as Technical Agent of the Loco Department.

On the 1st. March 1913 he was promoted to 1st Class Technical Agent and was granted an increase of 300 Turkish piasters.

On the 1st. November 1914 he was promoted to Acting Chief of Technical Bureau with a salary of 1800 plus 600 Turkish piasters as bonus.

On the 1st. September 1915 he had to give up this job and was Acting Mechanical Inspector with a salary of 1700 plus 500 Turkish piasters as bonus.

On the 1st. July 1917 he was promoted to General Inspector of the Loco Department with a salary of 2500 Turkish piasters.

On the 1st. October 1918 he left his job on behalf of the Occupation.

On the 10th February 1918 he resumed his job as General Inspector of the Loco Department with a salary of 2500 Turkish piasters (2200 P.T.E.).

On the 1st. July 1919 he was granted an increase of 500 P.T.E. and up to date occupies that position with a salary of 2700 P.T.E. plus 220 P.T.E. rent of house per month.

Signed (Col. Holms) Col R.E.
A.D. Gen. Director of the R.F.H.

NOTES AND COMMENTS.

(a). SAVIDOR.

On Har Herzl, (Mount Herzl) in Jerusalem, is an area devoted to 'special' graves for those who served the State of Israel in some high capacity - and adjacent to this is the (unfortunately) large military cemetery. Next to that of Teddy Kollek, lie the graves:-Menahem Savidor. Son of Anna and Dov Chodorowski. Born 1917, Died 1988. Speaker of the Tenth Knesset 1981 - 1984. Member of the Ninth and Tenth Knesset. Raia Savidor - His Wife. Daughter of Liza-Eta and Dr. Yitzhak Karukes. Born 1929. Died 1988."

Menachem Savidor was the head of Israel Railways for a period and the Editor once interviewed him - back in around 1981 - at the Knesset about his experiences in Kishon Workshops in the late 1940's.

(b). DOUBLE-DECKERS.

In 'Eisenbahn Revue' 5/2007 p. 219 is an article on double-deck coaches. The carriage works at Gorlitz has built 6,670 double-deck coaches since 1948, and 16,730 coaches in total.

IR has had 147 double-deck coaches delivered from Gorlitz. Luxemburg has received 85, Denmark 67, whilst more than 200 have been built for the Netherlands (together with the works in Aachen)...

(c). DOUBLE RAKES.

Jeremy Topaz of Rehovot writes:

"When I saw the photo of the double-double-decker in this issue of HaRakevet (82:1) I had two thoughts: 1: There is nothing new under the sun. 2. I am just lazy. About 18 months ago, at around 6:15 - 6:30, whenever I got up that early, I observed (from my balcony), a rake of two empty D/D sets passing Rehovot on the way to Ashkelon. At first I thought maybe they were short of drivers in Ashkelon, but then I figured it out. At night, all the trains in the southern region are parked in Lod. The first scheduled train from the north arrives in Ashkelon at 7:15. By that time, 5 trains have left Ashkelon for the north, so they have to get there empty. It could be that the first two (5:27 and 5:48) also get there as a double - I never got up THAT early - but by the time the last two are needed, the single track from Rehovot to Ashdod means that because of the trains going north, they can't run too many trains southwards. So it pays to send them as one.

(d). EVERYWHERE IN A DAY ...

Sybil Ehrlich decided, just for fun, to work out whether it's possible to travel over the entire (current!) Israel Railways passenger network using timetabled trains in one day. "The challenge was to fit in Jerusalem in daylight because of the scenery, and Dimona, with its very sparse service.

"I'm not suggesting it as an idea for a day out, but you might be interested to know that it is possible, as follows:

Depart Nahariya 04:53
 Arrive Tel Aviv Merkaz 06:45, depart 06:54
 Arrive Jerusalem 08:37, depart 08:43
 Arrive Tel Aviv Merkaz 10:13, depart 10:54
 Arrive Kfar Saba 11:26, depart 11:40
 Arrive Rishonim 12:45, depart 13:22
 Arrive Lod 13:30, depart 14:21
 Arrive Ashkelon 15:03, depart 15:07
 Arrive Lod 15:48, depart 16:28
 Arrive Beersheba Tzafon 17:34, depart 17:40
 Arrive Dimona 18:04, depart 19:00

Arrive Beersheba Tzafon 19:24,
 depart 19:34

Arrive Beersheba Merkaz 19:43,
 depart 20:27

Arrive Tel Aviv Hagana 21:48, de-
 part 21:55

Arrive Modi'in Merkaz 22:30."

(e). RE: TERRORISM EXERCISE.

Sybil writes: "I was interested to read the small item at the top of page 7 about the terrorism exercise on August 28. Only querying the date!

On Sunday August 24th. I took a couple of English railway enthusiasts (first-time visitors to Israel) on the train to Jerusalem as a prelude to seeing sites of railway interest in the capital. It was somewhere around Bar Giora, looking out of the window on the left-hand side, that we noticed a railway carriage lying on its side a short distance from the track. I don't go that way very often, but couldn't remember seeing such a thing previously. It must have been in connection with the exercise. But would it have been there for at least four days before the exercise? Anyway, that no doubt explains what it was doing there."

(f). INDUSTRIAL LOCOS.

On 80:11 & 81:11.

Amit Ben-Shalom writes:-

"Marc Stegeman is right and wrong.

The (wrong) first picture in 81:11 (that appeared also in 80:11) doesn't show a Ruston locomotive, and also not an O&K locomotive.

It is a Hudson-Hunslet 4wDM locomotive, probably from 1935 and was supplied to the Silicate brickworks, and later (or before) was at Mushaba Sulphate Mines (see 80:11, and the references given there to prior articles about the subject).

Three years ago I also thought that the locomotive was from O&K, and had a long discussion with Paul on that subject. He was very determined that it is a Hud-son-Hunslet, and proved to me why and how, and convinced me.

Although they seem very similar, we couldn't identify the exact type or serial-number of that locomotive, but it can be one of three possible locomotives, with 10-20 hp diesel engine.

In Palestine & Israel there were eight 60 cm diesel Hudson-Hunslet locomotives (At the Sinai Mining Concern, at the Palestine Potash Company, etc.) and nine 60 cm diesel/crude-oil German O&K locomotives (at Palestine Potash Company), together with one or two Italian O&K locomotives.

It's a pity that Paul can't take a part in this discussion, and I hope that I'm representing him with honour. "



This was all that remained of Ruston 175415 at the Israel Salt Company's dump



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CliffPass workers laying the flat stone blocks on the Calatrava bridge to simulate the weight of traffic; Photo: Project Management

