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הרכבת

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98:01

As it was in Syria only a few years ago: A Railway Touring Company Tour in the 1980's. Photo by David Eatwell.

EDITORIAL.

Where did the summer go? Already we approach the Jewish High Holy Days and it is important to get this issue to Steve Waldenberg to handle the layout, print and despatch so as to enable the Editor to clear his head and make other more spiritual and homiletic preparations!

Within Israel infrastructure works are beginning to show fruit in reduced journey times, and more are under way, progress continues on new construction projects - including to Eilat at last! - and despite budgetary constraints it appears that investment in Urban Transport is being prioritised.

In the region as a whole, the political upheavals and open conflicts means unfortunately that little positive news is received or is likely to be received for some time. So the rubric 'Other Middle East Railways' is a bit sparse this time and includes much from the past.



98:03 Pictures of the TBM to be used on the Red Line; source: NTA spokesman Mr. Ilan Leizerovich



הרכבת

NEWS FROM THE LINE.

(i). REBUILDING WORKS AT PELESHET JUNCTION:

The railways are carrying out extensive and substantial infrastructure works to complete the double-track line from the recently-opened Yavne West station and continuing to B'nei Darom junction, to create a direct link between Ashkelon, Ashdod and Yavne West and so on to Tel Aviv through the Ayalon South (the median strip of Highway No. 20). When completed, by the end of 2012, the frequency of services to/from Ashkelon and Ashdod will improve significantly, and the journey times will also be reduced.

The works include building a complex flyover interchange between the line from Yavne East to Ashdod and the new link from Yavne West to B'nei Darom Junction near the Peleshet Junction, which is the triangular junction linking the old main line to Ashdod Port and which is in consequence being realigned.

One consequence of the works was a modification to the timetables between 22.06.2012 and 13.08.2012: From Friday 22.06.2012 and Thursday 26.07 inclusive traffic between Rehovot and Ashkelon would be reduced in both directions, from two trains per hour per direction to one. The other train would start / terminate at Rehovot. Between Friday 27.07 and Monday 13.08.2012 (inclusive) there would be no traffic between Rehovot and Ashkelon, and replacement bus services would be provided.

(ii). INDUSTRIAL RELATIONS - NEW DRAMA!

In a dramatic announcement on 27.06.2012 the Chairman of the General Workers' Union Mr. Ofer Eini suspended the Chairman of the Railway Workers' Union Mrs. Gila Edrei and three other members from their jobs in the union; the reason, already well-known, is her behaviour towards the judge in the Labour Tribunal as well as the disruptions to railway services and damage to the Railways' reputation. Many - including most of the railways' workers - congratulated Minister Katz and the IR General Manager Mr. Zafir.

On 01.07 the Labour Tribunal decided formally to suspend her and six other Railways Union members from their jobs. Her response was on the lines of "The last words have not yet been said" but there were no immediate disruptions.

(iii). EDREI'S FATE IN THE BALANCE.

According to later items in the media, the fired Chairman of the railway

workers union Mrs. Gila Edrei may be fired also from her work; this severe development is still being discussed at labour tribunal.

And from a press release of 06.08.2012 by Isra-Rail Company Ltd.:

"The Labour Tribunal has today rejected the appeal of the Workers' Union chairman Mrs. Gila Edrei and Mr. Shay Tal (another union member) to be compensated by the railways' management; the court also described the steps taken by the appellants to create a new union as illegal. Their appeal is to be discussed, however, during September 2012."

(iv). LEVEL CROSSING SMASH.

On the morning of Friday, 22.06.2012 a Veolia bus carrying school-children was hit by a double-deck train at a level crossing near Nitzanim just north of Ashkelon.

The bus driver had not only violated the traffic regulations by ignoring the red flash lights, but also broke the barrier arms; The result was that the bus fell on its side, fortunately with only ten children slightly injured. [Ed. adds: One wonders how such guys get these jobs and what the parents are going to do to him next time he shows up for work....]

(v). AYALON BOTTLENECK WORKS.

"From a press release of 04.07.2012 by Isra-Rail Company Ltd.:

During the last 18 months, the railways have been busy installing an electronic solution for the bottleneck shared by all the trains, namely the Ayalon railway corridor at Tel-Aviv.

In the current situation, there are only three main line tracks through which only 11 trains/hour can run in each direction only at rush hours. The aim of the project is to increase the number of trains/hour in each direction at rush hours, from 11 to 14, both by technological changes and systems' renewal, but without changing the track infrastructure.

The solution taken is installation of a signalling system using SBS (Short Block Section), based on creating split sections of 700 to 800 m each, thus enabling the increased number of trains/hour. Towards completion of the project, and the introduction of the summer timetable on 14.07.2012, there will be no traffic all over the network (except the Rehovot - Ashkelon section) between Friday 06.07.2012 and Sunday morning, 08.07.2012; traffic will then resume at 04:00."

The railways will provide alternative shuttle bus services for all the lines affected by the closures. The new timetable will also include shorter journey times - some of them significant - on several lines as well as more than 40 additional trains all over the network."

(vi). CHINESE INVOLVEMENT IN THE EILAT LINE:

From a press release of 04.07.2012 by the Transport, National Infrastructures & Roads' Safety Ministry:

"Described as a significant and important step towards building the rail link to Eilat, initial negotiations started today (Wednesday), between Israel and China regarding the possibility of implementing the project by the Chinese government. The negotiation became possible thanks to a co-operation agreement on transportation and infrastructures signed on Tuesday night 03.07.2012 in Beijing between Minister Yisrael Katz and his Chinese counterpart Mr. Li Shenglin.

Minister Katz said: "Within the coming 2 weeks, Chinese work teams are to prepare the offer of their government for building the line; it will include implementation and financing through the Chinese National Bank EXIM, which belongs to the government.

Upon acceptance of the Chinese offer, the scheme will be brought to the Israeli government for approval; this is the first time in which the Chinese ask to be involved in big Israeli transportation enterprises and assist in their financing. The agreement signed between the two governments is intended to promote transportation enterprises and co-operation both between the two countries and between Israeli and Chinese infrastructure companies; the Chinese are also showing a great interest in building a channel port in Eilat, a project being checked currently by the ministry. The agreement just signed enables the involvement of the two governments in transportation projects in both countries, thus opening new opportunities for Israeli companies to take part in transportation enterprises in China".

According to the agreement, on the Israeli side, the National Roads' Company (formerly the mythological Public Works Department) will be responsible, on behalf of the Transport, National Infrastructures & Roads' Safety Ministry for implementation of the memorandum of understanding, while, on the Chinese side, the Chinese Infrastructures and Transportation Company CCCC with more than 112,000 employees will be responsible on behalf of the Chinese counterpart ministry.

On 15.07.2012 the National Roads Company issued its own press release:-

"Israel and China began initial negotiations for the possible construction, via the Chinese government, of the Eilat railway line that will transport passengers and cargo from Eilat to the center of Israel..... The Chinese proposal will include a plan for execution of the project as well as financing solutions, via the national EXIM bank that belongs to the Chinese

government. The Minister of Transport said that this is the first time that the Chinese wish to be involved in large transportation projects in Israel and to assist in their financing. It should also be noted that the Chinese have also expressed great interest in the construction of the tunnel port in Eilat, a project that is currently under examination by the Ministry of Transport.

According to the agreement, the Israel National Roads Company will be responsible on behalf of the Ministry of Transport for implementing the Memorandum of Understanding, and the company responsible from the Chinese side will be the Chinese Infrastructure and Transport Company CCCC. This is the largest governmental company in China, and it employs 112,000 workers.

A few months ago, the government approved a resolution submitted by Minister Katz for the construction of a railway line from Eilat to central Israel for the transportation of both passengers and cargo. According to Minister Katz, this is a venture of great strategic national importance, that will be used to transport cargo from Eilat port to Ashdod port, and will serve as a terrestrial bridge from Asia to Europe. A professional team is currently examining three possible alternatives for the railway line: construction of the line based on an agreement between the government of Israel and another government, establishing a collaborative venture with the private sector, or construction that will be financed by the national budget. The plan includes construction of double railway tracks from Zin to Eilat, that will be about 170 kilometres long. The route includes 63 bridges, totaling 4.5 kilometres, and 5 tunnels totaling 9.5 kilometres. The railway line from Tel Aviv to Eilat will total 350 kilometres. The travel time from Tel Aviv to Eilat will be two hours and the train's maximum speed will be 250 KPH in sections in which the topography will permit such speeds."

[It should be noted that not everyone is so happy at this - see 'Notes and Comments'.]

(vii). ADVERTISING FOR MORE TECHNICIANS.

The railways are advertising for personnel with a picture of a loco containing the phrase: "This train can't be missed!" Another picture can teach us about the change in the requirements from the new generation of technicians; it speaks about studies supported by all the high academic boards in Israel - including generous scholarships, while the whole is closely accompanied and supported by Birmingham University!

(viii). SERVICE IMPROVEMENTS TO THE SOUTH:

From a press release of

15.07.2012 both by the Transport, National Infrastructures & Roads' Safety Ministry:

"The transportation revolution for the people of Southern Israel has started today, 15.07.2012, with the completion of upgrading and double-tracking the line between Ramla and Beer-Sheva University stations. The \$800 million project includes - besides nineteen new grade separations and dozens of railway bridges and realignment as well as double-tracking - also upgrading the signalling and communication systems.

The services on the new line, which are an integral part of the new summer timetable which is implemented gradually from today, provide fast train services covering the line between Beer-Sheva University and Tel-Aviv HaHagana in just 55 minutes (originally planned for 50 minutes) - two trains/hour in each direction at rush hours, calling only at the intermediate station of Kiryat-Gat, and a semi-fast (called 'suburban') service calling at Lehavim-Rahat, Kiryat-Gat and Lod intermediate stations.

Later, after receiving additional new trains and with new drivers completing their training, the fast trains will be operated twice per hour in each direction all day.

Additionally, there will be a night trains between Beer-Sheva, Kiryat-Gat, Lod, Ben-Gurion airport, Tel-Aviv, Haifa and Nahariya in both directions, enabling the population in the south not only to reach the airport, but also the entertainment centres of Tel-Aviv."

Within a few months, a new night line service is to be introduced between Ashkelon and Ben-Gurion airport, with stops at Ashdod, Rehovot, and Lod.

Departures of the fast service from Beer-Sheva Central northbound are at: 07:25, 08:25, 09:25, 15:25, 16:25, 17:25. Southbound from Tel-Aviv Hahagana: 07:43, 08:43, 09:43, 10:43, 15:43, 16:43, 17:43.

The rebuilt line was opened by Transport, National Infrastructures & Roads' Safety Minister Yisrael Katz, the Railways General Manager Mr. Boaz Zafir, the mayor of Beer-Sheva Mr. Rubic Danilovich, and mayors of nearby cities. Both Minister Katz and Mr. Zafir said that the new service is a milestone in the railways' history, making the south and centre of Israel much more accessible and putting an end to the conception "periphery."

Mr. Zafir added that as a part of the improvements of passenger services, a new wireless internet system of 'smart' information is to be introduced in the present summer at most railway stations to provide the passengers with real time updates regarding train traffic, as is done at airports with air traffic.

(ix). SMOKING PROHIBITED.

Starting from 11.07.2012, smoking is forbidden at all the areas of railway stations including platforms, with the exception of specially marked areas, if there are such.

(x). NO RESERVATIONS.

During the summer, there will be no reserved seats, due to pressure of passengers.

(xi). INFRASTRUCTURE WORKS ON NAHARIYYA LINE.

From an announcement of 16.07.2012 by Isra-Rail Company Ltd.:

"The railways are continuing the development boom and investing \$148 Million in upgrading and double-tracking the section of line between Kiryat-Motzkin and Nahariya. Works include, as well as those mentioned, also adding further platforms at both Acre and Nahariya stations, upgrading and improving the track infrastructure south of Acre, grade separations and under-track agricultural passages, and an acoustic wall at Kiryat-Motzkin.

Due to upgrading works and building a new platform at Nahariya station, the following traffic changes are to take place within the coming months until further notice:

Train traffic southbound from Nahariya is to be reduced. During day time, all trains destined at Nahariya, will terminate at Acre station. On Saturday nights, traffic will run as per regular timetable. Passenger traffic between Acre and Nahariya stations will be served by shuttle bus services. Traffic to/from Acre station will run regularly."

(xii). MORE TRAFFIC TO JERUSALEM ZOO?

The announcement of 05.08.2012 by the Jerusalem Municipality concerning construction of two huge aquariums, one containing sea animals from the Mediterranean Sea and the other of the Red Sea, adjacent to the Biblical Zoo, which has a railway stop, may give a real boost - particularly on holidays and vacations - to the sleepy old rebuilt line to Jerusalem.

The planned \$20 Million "Marine Water Park" is mainly financed by a donation from the Gottesman family from the USA.

It should be mentioned that, due to the introduction of the new summer timetable, journey time between Tel-Aviv and Jerusalem is now 20 minutes shorter - thanks mainly to the shared rebuilt and upgraded line section Ramla - Na'an (used mainly to/from Beer-Sheva) - and although the main benefit is for the people of Beit-Shemesh, the whole line enjoys the acceleration; travel time to the Zoo is now not longer than by using two buses; Further-

more, those going by car find the parking area is relatively limited.

(xiii). NEW I.R. DIRECTORATE CHAIRMAN.

From a press release of 01.08.2012 by the Transport, National Infrastructures & Roads' Safety Ministry:

"Transport, National Infrastructures & Roads' Safety Minister Yisrael Katz, has appointed Mr. Doron Weiss, who was until recently Deputy Chief of the General Security Service, as an Active Chairman of the Isra-Rail Company Ltd. Directorate, succeeding Mr. Ori Yogev who had been in this post for the last 18 months.

Minister Katz, thanked Mr. Yogev for his share in promoting the important rail reforms the ministry is performing, adding that due to the big challenges the railways are facing, a fully dedicated and a full-time chairman is needed to assist the railways to achieve all its goals.

Minister Katz added: "I'm convinced that a co-operation between the newly appointed chairman will enable Isra-Rail Company Ltd. to continue its unprecedented development momentum, and fundamentally change its service and safety levels".

Mr. Weiss, 57, served for 34 years in the General Security Service, in a variety of operational and administrative jobs, of which 10 years were at the headquarters as: Chief of Planning Dept., Chief of Human Resources, and the Chief of the Northern Region.

In his work so far at the Railways' Directorate, he was involved in the safety and service reforms intended to bring the railways to an equal level with the advanced rail networks; He also created a new security plan which saved the railways about \$75 Million annually.

Mr. Weiss has an M.A. in Business Management from the Tel-Aviv University, and B.A. from the Bar-Ilan University."

(xiv). JERUSALEM LINE SECTION TURNED INTO FOOTPATH.

Former railway alignments may be used quite different than originally planned; this has happened with the abandoned section of the historical line between the Jerusalem Ottoman-built railway station, not used since 1998, and the Malkha station opened in 2005; while the rails remained in situ, the track has been covered with wooden plates (laid on the steel sleepers) and used for pedestrians, while the nearby road is used for bicycles.

There was once a suggestion to build an LRV line on the alignment, to be further extended to Beit-Shemesh, thus replacing the very lightly-used heavy-rail line, but this was also "abandoned".

(xv). NATIONAL ROADS COMPANY RAIL PROJECTS UNAFFECTED.

In a press release in July both the General Manager Architect Shay Baras and the Chairman Mr. Yair Shamir, said at a conference of projects' managers, that the company is keeping to its schedules and hopes not to be hurt by the budgetary cuts.

To sum up the first half of 2012, tenders valued at \$0.9 Billion have been published for implementation including the revival of the Yizrael Valley (Hedjaz) railway line including stations, and the new railway line between Acre and Carmiel, including tunnels.

(xvi). SPENDING PROBLEMS.

The railways were strongly criticized in the week beginning 20.08.2012 by the media, after the management requested an emergency aid reaching dozens of millions of Dollars in order to be able to pay salaries of sub-contractors' employees; The railways lost only \$47 Million in 2011 (partially a result of extensive damage caused by collisions). On the other hand, the media is accusing the railways for spending \$0.4 million on events for the employees, something that can't go hand in hand with the deficit.

(xvii). PRE-QUALIFICATION FOR NORTHERN PROJECTS.

Invitations to pre-qualify for the Akko - Carmiel and Haifa - Beit Shean lines projects were issued by the National Roads Authority. Tenders or expressions of interest need to be received by 24.10.2012. Tenderers need to demonstrate experience in various aspects of railway construction, track and ballast laying, telecommunications etc. and a 'robust' financial backing.

(xviii). NEW PUBLIC TRANSPORT SMART CARDS.

From a press release of 28.08.2012 by Isra-Rail Company Ltd.:

"Three weeks after introduction to the public and selling more than 2,300 smart cards at railway stations to the passengers, the railways are about to start full operation of the "Multi-Lines" card at stations. The "Multi-Lines" cards will be valid for all public transport modes, thus encouraging passengers to use public transport and avoiding the need to by separate tickets; it will not only save time and money for passengers, but will also save the railway about 412 tons of paper currently being recycled annually.

The new smart card will compensate for delays - "Post Paid", will be chargeable at the stations, and will enable passage to/from platforms at Tel-Aviv stations. The introduction required a lot of changes at gates, vending machines, etc. The main supplier for the equipment is the Israeli company Aman, while sub-suppliers

are the Israeli company Shimkotec and the Italian company Elseg.

(xix). INFRASTRUCTURE WORKS AT PLESSET.

Due to infrastructure development works near Pleshet junction (on the new Yavne West - Ashdod line being built - see above), the Rehovot - Ashkelon line was closed on 29.08.2012 from 22:30; consequently, southbound trains which left Binyamina at 21:17 and 22:17 terminated at Rehovot.

(xx). NIGHT TRAINS.

With the full introduction of the new time table on 01.09.2012, there will be five night trains between Beer-Sheva Central and Tel-Aviv Savidor Central stations at one hour intervals on both directions, all calling at Ben-Gurion International Airport.

(xxi). BICYCLES ON TRAINS!

With the introduction of the new timetable, passengers will be able - at last - to carry bicycles on trains.

(xxii). CONSTRUCTION WORKS TO CONTINUE THROUGH THE NIGHT.

from a press release of 02.09.2012 by Isra-Rail Company Ltd.: Two weeks after an injunction was given by the Jerusalem District Manager of the Environment Ministry on 14.08.2012, to stop all tunnelling works on the A1 fast rail link between 19:00 and 07:00 due to disruptions to nearby residents, it was cancelled on 02.09.2012 by the Jerusalem Magistrate Court; It was explained that the Ministry's decision does not reflect a proper balance between the residents' needs (those at Mevasseret Yerushalayim near Jerusalem who appealed) and the needs caused by works along the alignment; thus work now continues to schedule.

(xxiii). TIMETABLE ISSUE POSTPONED.

The Railways' management has decided that at the moment and for a while, timetables will not be sold, due to a planned introduction of night trains between Tel-Aviv and Ashkelon in the coming months.

98:05. (A).

TENDERS.

(i). Tender No. TM/KB/04/12: Track maintenance, foundations, and rebuilding drainage canals: The contract is for 12 months with optional extensions of up to additional 48 months. Latest date for submission of proposals: 26.07.2012.

(ii). Tender No. MS/RC/2012/6: Introducing a stand for selling flowers and gifts at Tel-Aviv Savidor-Central station. The contract is for 36 months with optional extensions of up to

additional 24 months. Latest date for submission of proposals: 30.07.2012.

(iii). Tender No. SO/SR/12/12: Frame agreement for providing human Telephone Information Services for passengers and internal organizational services including a Helpdesk: The contract is for 24 months with optional extensions of up to additional 60 months. Latest date for submission of proposals: 09.10.2012.

(iv). Tender No. NO/SR/19/12: Manufacture, Supply, Installation, Guarantee, and Maintenance of static Orientation and Information Boards for public transport services at railway stations; The contract for supplying the boards is for 24 months with optional extensions of up to additional 36 months. The guarantee is for 60 months with an option for additional 36 months. Latest date for submission of proposals: 15.10.2012.

(B).

TENDERS AWARDED

The railways have announced the winners of the following tenders:

(i). The local company Itzuv Bama (Stage Design) won tender No. MS/R/2012/4 for renting a building located on the old dismantled alignment of the Ramla - Na'an junction section at \$282,243 annually.

(ii). The local company of Mr. Levy Gil won tender No. MS/RC/2012/1 for renting a building at Rehovot station at almost \$15,000 annually.

(iii). The local taxi company Services for Castel Taxis Union Cooperative Society Ltd., won tender No. MS/RC/2012/2 at \$39,440 annually, for providing taxi services to/from Herzliya station.

(iv). The local company G. Gidor Shachar Ltd., won tender No. TM/KB/02/12: a frame agreement for carrying out works in the railways' northern sections.

(v). The local Israeli company Dor Information Technologies Ltd. has won tender No. TK/MT/11/12 for providing consultancy services regarding communication, telephones, radio, ultra light current.

(vi). The railways have recently announced that the local Israeli company M.A. Automatic Machines Ltd. has won tender No. MS/RC/07/2012 for introducing and operating automatic machines for drinks and food at stations all over the network, at \$606,232.00 annually or 47% of revenues; whichever is the higher of the two.

(vii). The Israeli advertising company Reuveni Pridan Ltd. won tender No. SO/SR/01/12 for providing advertising, planning, and media purchasing services.

(viii). The Israeli company Martens Hofmann Management Consultants Ltd. won tender No. CA/MT/04/12 for providing bonuses calculation services.

(ix). The railways have announced that the local company Acre Ltd. has won tender No. TK/RC/01/12 for supply of electrical equipment including spares worth \$150,000.00 annually.

LIGHT RAIL: A. JERUSALEM.

From a press release of 16.07.2012 by both the Jerusalem Transportation Master-Plan team and the Jerusalem Municipality:

"The Local Council for Deigning and Building has approved today the submission of the plans to extend the Red Line Henrieta Sold/Hantke streets to the Hadassah medical centre at Ein Kerem. The new section, planned by the architect Shlomo Aharonson, will increase the line length from the present 13.8 km to 22.5 km, and will serve half a million people.

The line consists of four different design sites: the first section involves reaching Ora junction integrated in the running road and has two stops near Iceland and Mexico Streets.

The second section is at Ora junction and connected with the employment centre there.

The third section runs on difficult terrain - planned outside the running road, partially on bridges.

The fourth section refers to the entrance to the medical centre with two stations, one for the University and the second for the centre itself.

It should be mentioned that under an agreement with the Transport and Finance Ministries, the extension will be managed by the Municipality as a result of lessons learned a from the implementation of the Red Line already built and due to the importance of public sensibility at such projects.

Works on the extension between Hantke street and Ora junction have already started, to be followed later by extension works to the Medical Centre. It should be mentioned that in order to avoid disruptions to the medical centre's daily routine activity, the LRV infrastructure is being built within hospital tower area, and will thus enable passengers to descend and enter the hospital's different sections directly. The foundation works for the LRV station are currently being laid."

B. TEL AVIV.

(i). WORKS START.

From a press release of 26.06.2012 by NTA:

"The Greater Tel-Aviv LRV system is already underway and has reached - possibly - the point of no return. So far, the work of moving surface infrastructures into underground sites has been carried out at a cost of \$380 Million.

Works are in full tempo at the three excavation sites: Em Hamoshavot in Petakh-Tikva, Galei-Gil in Tel-Aviv, and Herzl street in Tel-Aviv (an irony of fate: this runs exactly under the long-abandoned alignment of the Jaffa-Jerusalem line!); At these sites the TBM will be put in order to start tunnel boring; the PQ tenders have been recently published for a conventional NATM boring system, as well as for the LRV vehicles.

Transport, National Infrastructures, and Roads' Safety Minister Yisrael Katz, who visited the construction sites today, has been deeply impressed by the tempo of works, adding that "It is a shame that the project was not carried out several decades ago; It would have solved many transportation problems".

He added: "I'll very soon present to the government a motion to build a rail network over the whole Greater Tel-Aviv Area (called here the Dan Agglomeration) while putting the emphasis on underground alignments. Cost is estimated at \$12.5 Billion, and the sources for financing it have still to be found, but it will be the coming generations who will enjoy the projects' fruits."

NTA Chairman Mr. Michael Ratzon said: "There is an urgent need for legislating the NTA Law, which will enable us to remove bureaucratic barriers, thus moving faster on building this nationally-important modern mass transit system project for the Dan Agglomeration; any delay has a significant meaning in terms of both public funds and public suffering, as they have to cope daily with a lot of difficulties on the roads".

NTA General Manager Mr. Yitzhak Zuchman said: "If in Jerusalem the LRV project had to deal with one municipality only, we have to cope with quite a complicated reality and with full coordination and cooperation with Five municipalities (Petakh-Tikva, B'nei-Brak, Ramat-Gan, Tel-Aviv-Jaffa, and Bat-Yam), but we'll do it; the Red Line between Petakh-Tikva and Bat-Yam will start working at the end of 2017; anybody visiting the area will just not be able to recognize the Dan Agglomeration."

Mr. Ratzon and Mr. Zuchman thanked Minister Katz for his strong support of the project."

(ii). NTA-Tel-Aviv LRV/METRO Project Management Tender:

PQ No. 017/2012: Design and Implementation of Tunnelling for the Red Line using NATM system: Line length: 23 km. The main part of the line will run underground,

consisting of sections to be implemented by Cut & Cover, TBM, and NATM systems. The NATM section will be 1.5 km long, consisting of twin bored tunnels, each of single line and with safety passages, and three underground halls totalling 3.5 km. The time for implementation is estimated at 3 years. Latest date for submission of proposals: 27.09.2012.

(iii). INITIAL INTEREST IN TENDERING.

In a press release of 01.07.2012 by NTA:

"After the PQ (Pre-Qualifying) tenders for the LRV system and for boring as per NATM system had been published last week, infrastructures, excavating/boring, and system companies from USA, Europe, and the Far East, have shown interest. In the middle of July a conference for the preliminary sorting of the participants will take place. International experience in rail transportation including building the depot, as well as civil engineering will be needed. The winner of the system tender will be selected in the 3rd quarter of 2013."

(iv) TUNNELLING TENDER.

. From an NTA press release of 03.07.2012:

"Following publication of the PQ tenders for the LRV system and for boring the 3.5 km long tunnel by the NATM system between Petakh-Tikva and Bnei-Brak last week, NTA today took a further step forward by publishing PQ tender No. 053/2011 for TBM-boring of the more than 8 km long tunnel between Geha Junction - at the border between Petakh-Tikva and Bnei-Brak - through Jabotinsky Road in Bnei-Brak, Ramat-Gan, Begin Road in Tel-Aviv, and up to Herzl Street in Tel-Aviv towards Jaffa, where - ironically - it will use the long-abandoned Ottoman-age, 1892-built alignment of the Jaffa-Jerusalem line, as well as the Boxes tender - i.e. for the underground stations; this is NTA's biggest tender.

While the TBM tender had been separately published already on March 2012, it has been decided - after reassessment - to combine it with the Boxes tender, as is acceptable in many projects of this sort worldwide, in order to cut implementation time, increase co-ordination between interfaces, and reduce risks.

NTA Chairman Mr. Michael Ratzon said: "This huge and complex project has been worked on already for dozens of years; corner stones have been laid, many hundreds of millions poured in, but nothing moved. Suddenly, during the year and a half since NTA received from the government the authorization for carrying out the project, an unprecedented change is seen all over the work sites; our aim is to publish already in 2012 all the implementation

tenders and we intend to keep at it; it is just a matter of time till the first LRV run in service in the Dan Agglomeration”.

NTA General Manager Mr. Yitzhak Zuchman said: “We’re doing our best to have all the machines: tractors, bulldozers, tunnel boring machines, etc. at work sites; the Dan Agglomeration inhabitants need the LRV no less than they need air for breathing, otherwise the situation will become intolerable and people won’t be able to move”.

(v). CONFERENCE FOR TENDER PARTICIPANTS.

From a press release of 18.07.2012 by NTA project management:

“NTA continues at full activity to promote the Greater Tel-Aviv Area LRV first line - the Red Line. During the last two days, about 90 companies from USA, China, Russia, France, Italy, the UK, Netherland, Spain, Austria and Israel participated in the conference of the competitors for the LRV regarding the system, underground sections, depot, and TBM for the twin bored 16 km tunnels, to be integrated with the boxes’ tender for stations sites.

The tenders are for the very complex works, after NTA has already completed works of moving infrastructures valued at \$375 Million.

NTA Chairman Mr. Michael Ratzon, said: “The massive participation of so many competitors means full trust in NTA, in the project, and in the State of Israel. A priority will be given for bidder who will create an enterprise together with Israeli companies, will invest in Israel, offset, and investments in the local industries.”

“NTA will strictly keep work quality, safety, and high standards, while remaining within the budgetary framework; We will do our best to steward public money. Many doubted that we’d be at the stage we achieved within 8 months; within a year we will be deployed in 14 sites; this will have an effect on everybody in the area, but we will do our best to minimize the suffering of the public. The winners will benefit from the project, particularly due to the present global economic crisis”.

NTA General Manager Mr. Yitzhak Zuchman said: “NTA is coordinating with all the involved municipalities and governmental departments regarding the provisional traffic arrangements during works as well as receiving all the necessary permissions and allowances”.

At the end of this month there will be another conference of the bidders, this time for boring tunnels in the conventional methods, and it is anticipated that the number of participants will be equal to the present one.

The winning bidders are to be selected till mid-2013; beginning of works to follow; the Red Line will see test runs at the end of 2017; commercial operation in

2018. The cost is \$3 Billion.

(vi). SECOND CONFERENCE FOR POTENTIAL BIDDERS.

From a press release of 30.07.2012 by NTA:

“33 companies from eleven countries, including some of the leading firms in their specialities, participated today in the Pre-Qualification Conference prior to the tender which is to be published soon, regarding boring the 3.5 km tunnel between Petakh-Tikva and B’nei-Brak in the conventional system. This is the third conference organized by NTA which took place in July 2012.

NTA Chairman Mr. Michael Ratzon explained that the project will not be affected by the recent government budgetary cut; NTA General Manager Mr. Yitzhak Zuchman also said that the money for the project is secured, backed-up by Minister Katz.

Mr. Ratzon further attacked those still dreaming of returning to the BOT system; he advised them to remember that the former bidder (in the BOT system) took six years without even starting the project, while with NTA, with half of the manpower, the project is rapidly moving ahead.

The tunnel is to be bored 20 m under street level, in a soft soil, and with underground water; the winning bidder is to be selected in the third quarter of 2013, to be further followed by the beginning of works.”

(vii). GOVERNMENT SUPPORT.

From a press release of 27.08.2012 by NTA:

“With budgetary cuts in the background, Finance Minister Mr. Yuval Steinitz, met with NTA Chairman Mr. Michael Ratzon, and expressed his ultimate support for the project and team, adding that “Thus is a national, principal, and unique first priority project to be implemented and on schedule”. Mr. Ratzon said that works are proceeding according to the aims, work plan, schedule, and budget.

Minister Steinitz will soon visit at the projects’ work sites, and teams of both the ministry and NTA will work together in order to prevent any budgetary obstructions, thus bringing the line to operation within 5 years as originally planned.”

(viii). STAFFING ISSUES.

NTA announced on 02.09.2012 that despite the recession the company has recruited from the beginning of 2012 39 employees, and published tenders for an additional 75 employees, mainly: engineers, architects, industrial management, etc.

Both NTA Chairman Mr. Michael Ratzon, and NTA General Manager Mr. Yitzhak Zuchman said that the earliest that the recruitment of qualified employees is completed, the faster will be progress on the project.

98:07.

OTHER MIDDLE EAST RAILWAYS.

A. TURKEY.

(i). DIESEL LOCO NOT ACCEPTED:

From the Turkish Railways chatline and British magazines:

“While looking through Wikipedia came across an article that mentions TCDD has given class DE37000 to twenty GE PH37ACi, similar to the class 70 being delivered to Freightliner in the UK.

http://en.wikipedia.org/wiki/GE_Power-Haul . I am always dubious of articles on Wikipedia so am wondering if anyone can confirm the TCDD class given to these new engines. John Peakman of Calgary, Alberta.”

The initial response: “The link quoted on the Wikipedia page is that of the TCDD website, here: <http://kurumsal.tcdd.gov.tr/home/detail?id=1208> TCDD themselves refer to the loco as class DE37000. The actual context is referring to a 2-week training course being run in the Eskisehir district to familiarise maintenance staff with the new locos. Jeff Hawken, Rugby, England.”

Then: “Contrary to reports seen a few weeks ago it appears the Turkish built PowerHaul demonstrator locos has been on test in Turkey, and photos show it with number DE37001. <http://www.demiryolportal.com/forum/index.php?topic=394.0> ; A short video shows the loco on test (it looks like just outside the Tülomsas factory in Eskisehir) <http://www.youtube.com/watch?v=qESjSQvcNuw> .The last paragraph on this link says TCDD have ordered 20 locos, but I’m sure this has never been announced by GE <http://yenisafak.com.tr/Ekonomi/?t=01.03.2011&i=305820> Now it appears that the loco will not be acquired by TCDD after all, but instead be shipped to Britain and absorbed into the Class 70 fleet with a sopecial number, probably 70.099.

(ii). HIGH SPEED.

In the Dutch enthusiast magazine ‘Op de Rails’ issue 5-2012 pp.243 is an article by Henry van Amstel on “High Speed Lines around the Mediterranean” - the title has to be understood a little loosely as it covers Turkey, Saudi Arabia and Morocco! These countries have at least taken concrete steps to make vague plans into reality. (Translation from Dutch by the Editor).

TURKEY.

“The Republic of Turkey, linking Europe and Asia, has a surface area of 783,000 sq. km. and is one-and-a-half times as big as France. The total popula-

tion is ca. 74M. Istanbul with 12M inhabitants is the largest city of the country - divided onto both sides of the Bosphorus; the Turkish cities are spread fairly widely over the country, though the population density in the eastern parts is thinner. There are substantial cities but the countryside is almost empty. Ankara is the capital, with 5M inhabitants, and other cities with over a million include Izmir, Bursa, Konya and Adana. In addition there are a further six cities with over half a million inhabitants. Turkey is an extensive country, the distance from east to west is 1,600km. The Turkish State Railways TCDD (Türkiye Cumhuriyeti Devlet Demiryolları) operate a network of 10,984km., mostly single-track and not electrified. Though one cannot speak of a dense network, the railway lines do reach into almost every corner of the land. Due to the mountainous nature of the landscape, construction was always expensive. It was preferred to make lengthier and indirect alignments rather than to bore expensive tunnels. This led to and leads still to the need to make extensive detours, which cost a lot in terms of travel time. Though Istanbul and Ankara are 408km. apart in a straight line, the railway between them is 576km. long. In the Interior the relationship is sometimes even worse.

For several decades the railways suffered under insufficient maintenance, with as a result a neglected infrastructure and sinking traffic statistics. A strong growth in population, an enormous growth in car traffic (with an annual tally of more than 4,000 killed in more than 77,000 car accidents) and a rosy economic development led to a change in thinking as regards the future of rail transport. In the 2009 budget for the first time more money was allocated to rail than to road investment.

It is hardly surprising that the first idea was for the link between Istanbul and Ankara. Including both cities and those who live along the route, this reaches a total catchment area population of some 25M. The existing line is only double-track for some 110km., about a fifth of the total length. Although the whole line is electrified, the line has many sharp curves and the quality is poor. In the 1990's there were plans to improve services and so proposals were made to straighten out some of the curves and make the line ready for speeds of 100km/h. During this process however it was decided that the amount of travel time gained would not be enough to justify the investment; in addition a heavy increase in traffic was expected and then the existing line would have capacity problems and not be able to carry all traffic on offer. Following an intermediate phase during which consideration was given to rebuilding the existing line for 200km/h., the decision was taken to build a wholly new rail line.

Initially the concept was to build a direct straight line between the two cities, i.e. straight through the mountains; However, this seemed too large a project to finance and so instead it was decided that the new high-speed line would follow the existing route via Eskisehir. In the towns the line would be combined with existing tracks so as to reduce excessive noise. At first in Eskisehir a tunnel was built under the city centre for both new and existing routes. The first contracts were signed in 2000 and work could begin on construction of the new high-speed line a few years later. This has not yet been completed. The section between Ankara and Eskisehir is finished in the meantime and work is currently under way on the last section of 56km. between Eskisehir and Istanbul. The choice to build new high-speed lines rather than to improve existing infrastructure remains the principle for the future. The existing network will also however be rebuilt and remain therefore suitable and available for local passenger services and freight traffic. Once the new high-speed line Ankara - Istanbul is complete, the distance will be reduced from 576 to 533 kilometres.

An important step was taken on 13th. March 2010, when the high-speed line between Ankara and Eskisehir was opened. The time to travel between the two cities was reduced from three hours to eighty minutes. Once the entire high-speed line to Istanbul has been completed, times should be down to three hours. It is hoped to attract much more traffic through these schedules, which are in a position to compete with air travel. Part of the increase should also result from completion of the Marmaray, the Bosphorus tunnel which should link the European and Asian sections of the metropolis; once this is complete, it will be possible for the first time in history to run through train services between the Asiatic and European continents. The ferry trip from Europe to the old terminus at Haydarpaşa will then belong to the past, however romantic this might be. Fortunately there are plans to restore the old station to its former glory.

A few years earlier, on 20th. November 2007, the first high-speed rolling stock of type HT65000 reached Turkey, following a ten-day voyage from Spain. The design and exterior of the train set are based on the Spanish AVE 120, albeit the Turkish sets are formed of six cars whereas their older Spanish sisters are of four cars. The sets have a capacity for 409 passengers, of which 55 are in Business and 354 in First Class. It is clear that those citizens who do not possess such deep wallets are being encouraged to continue travelling on the older, slower lines! In addition there are some seats reserved for the handicapped and their attendants. Maximum speed of

the trains is 250km/h. With a few exceptions, this is the speed at which it is considered in Turkey an optimal relationship between travel time and energy costs has been attained. In urban areas the speed will be reduced to 120km/h due to noise factors. Two sets can run coupled together, and in addition it is possible to add two further cars to each set without affecting their desired operational characteristics.

Following a construction time of four years, on 24th. August 2011 the second high-speed line was opened to service. The million-cities Ankara and Konya were linked from this moment by a 320km. long high-speed route. Until then the travel time between the two was around ten hours over the 688km. via Eskisehir and Afyon - a long time even for rail enthusiasts. The current time is only 75 minutes. Between Ankara and Polath use is made of the Ankara - Eskisehir line. On this line too the HT65000 series are being used, but consideration is being given to raising the line speed so that a journey of just one hour would be possible. For this rolling stock would be built in Turkey itself, high-speed trainsets of the KTX-II type from South Korea developed by Hyundai and Rotem and suitable for speeds up to 350km/h. There are also negotiations with Alstom under way regarding a possible delivery of the new AGV high-speed train type.

The project is by no means complete with the construction of these two high-speed lines; in the coming ten years it is expected that a further 8 Billion Euros will be invested in the railway network. It is hoped that in 2023, when the Republic celebrates its centenary, a network of 4,000km. of high-speed lines will have been completed. In general this means a star-formed network based on Ankara, and from here lines are being designed to head in several directions. One important such plan is for a 466km. long line straight to Sivas in the east, and a beginning has already been made on this. The current travel time of twelve hours (!) should be reduced to only a quarter of this. An extension towards Kars, close to the Armenian border, is also envisaged. The population density in the east of Turkey is thin and the distances are great.

A further and certainly just as spectacular project is the direct 524km. line between the capital (once again via Polath) and the harbour city of Izmir on the Aegean Sea, the third city of the country and currently accessible only via a long range of detours. Contracts for the first section between Polath and Afyonkarahisar have been allocated. In December 2011 the link to Bursa was also allocated. It is planned to have Bursa linked to the railway network by the middle of 2015, this has been until now the only large city with over a million inhabitants that did not have a rail link.

European Turkey will also not be forgotten. A high-speed line is envisaged from Halkali, a western suburb of Istanbul, and Edirne near the Bulgarian border. The distance to Central Europe is still extensive, but with investments in Bulgaria and Serbia new train connections would be possible. Should all its ambitious construction projects reach fruition, then it seems that Turkey will in the coming decades become one of the leading countries world-wide for high-speed rail traffic."

B. SAUDI ARABIA.

From the same article in 'Op de Rails' 5-2012:

"The Kingdom of Saudi Arabia has an area of around 2.1M sq. km., making it the thirteenth-largest country in the world, and has around 30M inhabitants. Of these, 35% are younger than 15! The population growth, which was already above average, will therefore continue into the future. The majority of the population live in the middle of the country, the urban area around the capital Riyadh has some 7 million inhabitants. Other large population centres (Dammam, Khafji and Djubeil) lie in the oil-rich but politically-unstable Gulf Region. In the western inland region lie the cities of Mecca and Medina, holy for Moslems. The government is putting much effort into reducing its dependence on the troublesome Gulf Region by developing large-scale industrial projects along the coast of the Red Sea. This has included construction of the King Abdullah Economic City. By 2025 this should have a million inhabitants and be an employment growth motor for the young Saudi population. Approximately a hundred kilometres to the south lies Jeddah, with about 3 Million inhabitants the second city of the country and the largest port city on the Red Sea. Due to its oil income Saudi Arabia is a very rich country, although the wealth is certainly divided. The country has an excellent road network and also a network of modern airfields, so that almost every area is easy to reach.

The country does not possess much of a railway network. For many years it comprised two lines from Riyadh to the Persian Gulf. The Hedjaz line, opened in 1908. that ran from Damascus to Medina, has long disappeared under the sands.

At the beginning of this century the Saudi leadership altered its attitude to the importance of rail traffic. This led to three spectacular projects. The first was the North-South Railway. This comprised a number of railway lines in the north of the country with a total length of 2,200 km. The aim is the transport of millions of tons of bauxite and phosphate from a number of mines in the north. For this purpose a new harbour, Ras al-Khair has been built on the Persian Gulf. The infrastructure will be ready in 2012. In the coming years the line

will hopefully prove its worth. At the moment the northernmost point is Al Haditha on the border to Jordan. An extension in a northerly direction (towards Europe!) is certainly feasible. The Jordanian government is however less enthusiastic and in Syria there are other problems....

The second project is known as 'The Landbridge'; the main section of this is the creation of an East-West link between Jeddah on the Red Sea and the harbours on the Persian Gulf. There are three parts to this project; the first involves laying a single-track line between Jeddah and Riyadh; The second the modernisation of the existing line Riyadh - Dammam; and the third the construction of a new line between Dammam and Djubail. The most important reason for this Landbridge is container traffic, but in addition passenger trains should be operated at speeds up to 220km/h.

In terms of this article the holy cities of Mecca and Medina are the most important. Each has around one and a half million inhabitants, and in addition each year the Haj takes place at Mecca, the pilgrimage that each adult Moslem is pledged to undertake once in his or her life. For a short period the city receives two and a half million visitors, a number that is expected to rise to 3 million. In addition there is the Umrah, a further pilgrimage to the city during Ramadan or other major festivals. Public transport from Jeddah, where the King Abdulaziz International Airport is situated (and which has a separate Haj-Terminal) is totally insufficient. The transport of the multitude of visitors is carried out by means of endless columns of taxis and buses. In order to offer travellers an alternative the Saudi government has resolved to build a high-speed rail line.

There will be five stations along the 444km. railway line; these include the two termini at Mecca and Medina, then two halts in Jeddah, one at King Abdulaziz Airport (with a possible extension to the Haj terminal and one in the centre of the city, where one can also change to the Landbridge line to Riyadh. The fifth station will be near King Abdullah Economic City. Most of the traffic will take place on the 78km. section between the sea and airport at Jeddah and Mecca.

The stations have been designed by Foster & Partners, together with the local architectural bureau of Dar al Riyadh. The stations are so designed that from 2012 they can deal with 60M passengers per annum, a number that according to estimates could double over the next thirty years. Although each building will have its own identity, they will all share recognisable similarities. The most spectacular designs in glass and steel are modelled to some extent on recognised Islamic architectural forms.

The line will be built for speeds up to 320km/h. In conformity with European standards, which have been strictly established for Saudi Arabia, the electrification will be at 25kV/50Hz.

On 26th. October 2011 the Saudi Railways announced that the Saudi/ Spanish Al Shoula Consortium, including train constructor Talgo, railway operator RENFE and infrastructure contractor Adif had won the most substantial contract: construction of the entire trackbed including tracks, telecommunications, overhead catenary, safety equipment with ECTS Level 2. In addition the consortium may deliver the high-speed trainsets and is responsible for operation and maintenance for a period of twelve years. The contract is estimated as being worth 6.7M Euros. One of the other participants was the China South Locomotive & Rolling Stock Works. This would have been the first time that the fast-growing Chinese railway export industry would have had success in the area of high-speed trains. In consequence the reactions in Spain at the announcement were understandably jubilant.

This euphoric atmosphere did not spread to the constructor of the high-speed train equipment Talgo. The combination of operator/ constructor/ maintainer seemed simply to be the strongest possible. With the choice for Talgo material not only the Chinese constructors but also the French combination of SNCF/Alstom was avoided; these had offered their double-deck TGV Duplex. Although the capacity of a TGV Duplex is greater than that of a Spanish AVE 112 (516 as opposed to 318 seats), it is the Spanish trains upon which the new sets will be based. The first order is for 35 sets, with an option for a further 23. The choice also involves acknowledging the importance of local climatological factors. Whoever has been in Arabia knows that one can expect temperatures of up to 50°C. Less well known is that the temperature can also drop to around freezing point. Both such conditions are recognisable also in Spain and the 102/112 series have stood up well and have demonstrated their reliability.

The opening of the Haramain high-speed line is planned for the end of 2012; this will mean a construction time of just three years. Considering the shortness of this period some question marks must be placed against this estimate. As we know well in the Netherlands, the punctual delivery of rolling stock followed by the extensive testing of all systems and materials is a matter that can take a long time. On the other hand, the Spanish partners already have much experience and the Saudi Government clearly invests great priority in the speedy and successful conclusion of this project."

C. ADEN.

In 'Die Museums-Eisenbahn' 2/2012 p. 7 is a small photo of a salt works in Aden in which a camel is portrayed hauling at least four loaded 4wh. tippers on what is almost certainly 60cm. gauge Decauville track. There is no further information.

D. AFGHANISTAN.

In 'Die Museums-Eisenbahn' 2/2012 p. 11 is a set of questions to unclear aspects of the history of the firm Lenz & Co., a firm which operated several minor railways in Germany and also in foreign countries. (Translation by the Editor.)

- "The method of shipment of the vehicles ordered in Germany and delivered in component parts together with their re-erection in Afghanistan for the line Kabul - Darulaman opened in 1923 shows many similarities with the methods used for Lenz railways in Africa. The last rails of the line, closed in 1942, have now been turned into money by the Taliban. The Bundeswehr has rescued two locos out of the museum in Kabul and secured them. Do these perhaps also belong to the Lenz firm's history?

- During his visit to Europe in 1928 King Amanullah signed in Berlin a contract with the Allgemeine Baugesellschaft Lenz & Co., which was responsible for the foreign business of the AGV concern. This involved the construction of an extensive metre-gauge network over several hundred kilometres in Afghanistan. Lenz sent out the Dutchman Adrianus van Lutsenburg Maas as Project Leader. Whether the project ended with the deposing of Amanullah in 1929 or whether it was simply not pursued further by his successor King Nadir Shah is not known."

E. JORDAN.

In 'Heritage Railway' issue 165 July 5th.- August 1st. 2012 p.101 is an article by David Morgan, Chairman of the Heritage Railway Association, on a recent trip to Indonesia to attend and support the establishment of the Asia Pacific Heritage and Tourist Rail Organisation. He writes about the Heritage and Conservation Department of Indonesian Railways, and the presentation by the president of the Taiwan Railway Society, and "a consultant from Jordan promoting the importance of restoring the Hijaz Railway, which once ran from Istanbul [sic] to Medina, passing through Turkey, Syria, Palestine, Jordan and Saudi Arabia, built to carry pilgrims to Mecca. This was the railway blown up by T.E. Lawrence - so maybe we should be a little helpful towards trying to rebuild it. Of course, being a visionary project, it will take many many years and there is unlikely to be much progress on the Syrian stretch of line for the time being for obvious reasons."

F. EGYPT AND SUDAN: JOURNEYS IN FORMER TIMES. UP THE NILE IN 1964.

In Ken Westcott-Jones' book 'Exciting Railway Journeys of the World' (1967) in Chapter Eight is 'Up the Nile from Delta to Source' (pp. 80-90.)

"Dreams of an all-British Africa with a railway linking Cairo with Cape Town seem as remote to us today as the 'thin red line' at the Battle of Waterloo. But very elderly people can still recall the great plans of Cecil Rhodes at the turn of the century and his 'Cape to Cairo' line. In the present political climate Rhodes is in danger of being totally discredited and eliminated from history. Already one country which bore this Empire-builder's name has become Zambia, and even his grave on top of the Matopo Hills near Bulawayo may not continue to be a famous African memorial.

The Cape to Cairo railway was never built. It never will be, even though railway building in Africa continues apace and new lines are projected. Different political reasons affect routes these days, such as the line from what was Northern Rhodesia to Tanzania and the Indian Ocean, an outlet required by the present Government of Zambia to avoid dependence upon the British-owned Benguela Railway from Elizabethville to the Atlantic through Portuguese territory, and the route through Rhodesia to Beira.

When I was at school, and indeed right up to the end of the thirties, when atlases showed an 'all-red' pattern through Africa from the Mediterranean to the Cape of Good Hope, the 'Cape to Cairo' link was proudly shown as a firm or dotted line. The overland journey was possible, but not by rail all the way. People use it to travel to East Africa, particularly Uganda, but since the end of 1964 the rail section has been cut back from its former length by the floods resulting from the Aswan High Dam construction. Today, the journey from Alexandria at the Nile Delta to Jinja at its source has less than a thousand miles involving rail travel, and indeed requires the taking of a plane over one section.

This is the story of the Nile Delta to Source trip as it was in 1964, and an account of how the traveller to Cape Town carrying on by surface would manage to get to South Africa. It follows the route that Rhodes and his planners dreamed about, but much more slowly, much less certainly and involves a form of travel he never knew."

"The journey begins in Alexandria, and it is a smooth, easy beginning, departing by air-conditioned express train at 2.15 p.m. The express carries first and second class passengers only and stops only once, three miles from Alexandria's terminus at a wealthy suburb called Sidi Gabir. The

first class has reclining seats and anti-glare windows; refreshments are served at each seat. There are air-conditioned diesel units running between Cairo and Alexandria built by Ganz of Hungary, but this afternoon express is usually a locomotive-hauled train, although it takes the same time to reach Cairo, two and a half hours for the 129 miles.

The green, cultivated Nile Delta countryside with its palms and palmettos whips past the smokey-blue windows, the town of Damanhur, normally an important stop, being passed at a fair speed. The first sight of the Nile proper comes between Damanhur and Tanta, just after passing a large village called Itael Barud, when the train rolls across a big bridge spanning the wide main stream flowing to the Rosetta Mouth. Tanta, junction for Damietta - and the Damietta Mouth - is seventy-five miles from Alexandria and the express passes through it slowly at about 3.45 p.m. A fast run through level country, heavily populated and cultivated, lasts for twenty-six miles to Benha Junction, where the line to Port Said and the Suez Canal goes off to the left. Shortly before entering Benha the wide Damietta-Nile is bridged, and there is no further sight of the famous river before arriving in Cairo Main at 4.50 p.m. although numerous canals and sweet-water channels may be noted as the country seems to become more dry and artificial.

All trains over this busy line from Alexandria work into Cairo Main, a big terminus in need of renovation, but the 9.30 a.m. slow train from Alexandria carries a through coach for Assiut in Upper Egypt which is worked on to the 2 p.m. departure. The Nile Delta to Source traveller, though, wants to take the 8 p.m. express from Cairo Main to El Shallal, the Nile port seven miles beyond Aswan. A de luxe 'Rapide' leaves at 6.45 p.m., which conveys first and second class sleeping cars and air-conditioned diners to Luxor and Aswan, mainly intended for tourists. Needless to say it is unwise to head for Upper Egypt, or even to consider the journey up the Nile, except between November and April, for the heat is fierce. Even in January, day temperatures of 90 degrees (F) are common at Aswan, but it falls to 45 degrees or less at night and the air is very dry. In summer, at the time of the Nile inundation which adds moisture to air already heated to 115 degrees in the shade, Upper Egypt can be purgatory.

The heavy express to Upper Egypt, usually hauled by a powerful General Motors diesel, or a pair of them, pulls away into the darkness at 8 p.m. and almost immediately crosses the Nile, now a wide, single stream, and canters through the bustling suburbs near the Gezira Island. Soon it passes El Giza and if it is a moonlit night, or if the various language Son et Lumière performances are taking place (and they usually do between 8 p.m.

and 9 p.m.) the pyramids of Giza will be clearly visible against the night sky.

Within seven miles of Cairo Main Station the train is rolling across the desert; true, a desert studded with night-club tents and cafés, floodlit monuments and hotels, but a desert just the same. In five more miles the train has reached beyond the range of habitation, with only King Zoser's 'Step' Pyramid and the curious Pyramids of Sakkara breaking the starry outline of sky and barren rolling sand. But the lines soon reach the Nile bank and cling to it, with rushes and greenery making a thin strip on either side of the life-giving river. Ancient Memphis passes in the darkness, then modern Dahshur station. Diners in the rather luxurious restaurant, eating the somewhat indifferent Egyptian 'International' dinner, have nearly finished their meal by the time the train reaches its first stop, El Wasta, fifty-seven miles from Cairo. It is, or should be, 9.24 p.m. A branch line goes off due west from here to the Faiyum Oasis.

Never wandering more than a mile from the great river, the trains continue towards Upper Egypt, stopping at Beni Suef at 9.56 p.m. and Maghagha (112 miles from Cairo) at 10.45 p.m. The sleeping cars are cool and wide, well sprung and easy to ride in at the moderate speed of the Upper Egypt Express. The second class, with four berths, may be noisy but the tendency is for Egyptians to go to bed early and rise early, the dominant factor being sunshine and sunrise over the desert which rarely fails to delight even those Arabs who have seen it virtually every day of their lives. Besides, Moslems must pray at this time, which entails quite a disturbance for those sharing sleeping cars if unable to partake.

Minya station, serving a big town, comes and goes, while a fifteen-minute stop is made between 1.30 and 1.45 a.m. at the important city of Assiut, the first place of real importance in Upper Egypt. It is 235 miles from Cairo to Assiut, a distance which will have taken the train five and a half hours at an average, including stops, of a little over forty miles an hour. The 'Rapides', for all their advertised non-stop schedules, usually make the Assiut stop for service purposes and do the journey very little quicker.

Other stops during the darkness are at Sohag, Girga, and Nag Hammadi, and sunrise will see the train, with its hundreds of awakening passengers, nearing Qena, 381 miles from Cairo, where it stops at 6.14 a.m. Qena is the junction for a line going south-west to the oasis of Kharga. The restaurant cars open early for a breakfast of coffee and rolls with some passengers enjoying the porridge-type Egyptian breakfast dish known as 'Fool' made from beans. Hard, high, barren mountains close in towards the east bank of the Nile as the

train rolls towards Luxor, famed winter resort and tourist centre where visitors go to see the Valley of the Kings. The Luxor stop is from 7.22 to 7.40 a.m., time to admire the magnificent hotel buildings and to recoil from the hundreds of beggars and dragoman-guides crowding the station. This is no place to leave moveable pieces of luggage unguarded, and a stroll on the platform is not recommended.

Leaving Luxor, keeping to the deep Nile valley while the hills and mountains now rear up on both sides, the train passes ancient Thebes and is within two miles of the site of the greatest archaeological find in history - King Tutankhamen's Tomb, unearthed in 1922 by Lord Carnavon and Howard Carter. Beside the sparkling river, with its feluccas sailing down to Lower Egypt, and palms growing hugely along the line, it is hard to realise that rain is virtually unknown in this region, but a glance beyond the narrow limit of vegetation soon reminds one of the utter desert.

There are some stops along the line as the blazing heat of the morning advances, Isna, Idfu, and Komombo, all large villages beside the Nile. Eventually, at mid-day, Aswan is reached, the big city spreading widely with its new importance as an engineering centre for the 22,000 men on the vast High Dam project. Aswan is 549 miles from Cairo and arrival is scheduled for 12.10 p.m., sixteen hours and ten minutes after departure, an average of exactly thirty-four miles an hour including stops. There has been very little climbing, and Luxor is only 256 feet above sea level at the Rosetta Mouth. The Nile is slow and stately below Aswan, its cataracts still to come. In fact, during the seven miles from Aswan Station to the Upper Egypt railhead at El Shallal, the train passes the first cataract as well as the ruins of Philae, and at 12.40 p.m. halts for the last time beside the steamer pier. Now, of course, all is altered by the diversion of the Nile and the erection of the High Dam, and the picture changes from month to month. Our journey, though, is an account of how it was before the blasting of the diversion channel by Premier Krushchev in 1964. The Shallal train still runs, but the steamer may take a different route or use a different pier. A notice at the time of writing states that the through service, Cairo - Khartoum, has been permanently withdrawn due to changes in the water level. Passengers are advised to fly from Cairo or Luxor to Khartoum and vice versa. A hydrofoil service runs from Aswan south to Abu Simbel on Tuesdays, Fridays and Sundays from October to May, while a weekly train, intended for local traffic, operates on the Sudan Railways from Wadi Halfa to Khartoum, leaving Wadi Halfa at noon every Monday. The gap is from Abu Simbel to Wadi Halfa, but really determined surface travellers to-

day, intending to go from Delta to Source, can find local vessels, unscheduled, to cover this thirty-five miles.

But as things used to be, a large and comfortable Nile steamer would be alongside Shallal pier, with first and second class cabins and deck accommodation. It left at 2 p.m. and steamed upstream past Garf Hussein, Saboa, and Abu Simbel - stopping so that the giant temple and its smaller counterpart could be visited - before reaching Wadi Halfa and the Sudan Customs at about 5 p.m. the next day.

Here a blindingly white, clean train of the Sudan Railways waited, twin diesels at its head and extremely comfortable first class sleeping cars ready to accept passengers, who found the air-conditioning more than welcome. Even in the days when the train was steam-hauled and such luxuries as air-conditioning were unknown, the train was cool and attractive, with huge external blinds, well insulated roofs, and even ice in the compartments set in boxes with fans playing on it.

The desert crossing took eighteen hours, the scenery the same in the first hour as it was in the last, just eternal desert, the utter desert of Nubia. The only stops of importance were at Abu Hamed, junction with a branch which followed the Nile round to Kareima, at Berber, Atbara - where the line to Port Sudan goes off - and Shendi. A restaurant car, full of white napery and comfortable chairs but indifferent Anglicised food, catered to the needs of first and second class passengers. In pre-war days, when this train was used by Government officials and business people going to Khartoum, it was rated as one of the world's luxury trains and the standard of service on Sudan Railways was very high, although all reports point to the somewhat insipid 'upper middle class' British food. It has always been a twice-weekly service, speeded up slightly by the reduction of water stops in recent years. In 1937, the peak of the service before aircraft took away the cream of the traffic (and even then Imperial Airways were making inroads into it), the train left Wadi Halfa at 8.50 a.m. and arrived at Khartoum at 9.05 a.m. the next day. Until the suspension of service late in 1964, it left Wadi Halfa about 6 p.m. and reached Khartoum just before noon the next day.

This train had brought the traveller to one of the hottest cities in the world, where the White and Blue Niles join. Khartoum is laid out in the shape of a Union Jack, a fact which one often sees when taking off from the airport or coming in to land, but which is not apparent from the ground. For two or three months of the year, between Christmas and March, Khartoum, always dry, can be acceptably cool in the evenings, and when in transit at the airport, as I have often been on the way to Uganda, Kenya, or South Africa one

is ushered out of a plane for an hour at 4 a.m. I have actually felt it to be quite cold. Even so, spending a whole afternoon at the airport during a March day when the B.O.A.C. VC10 was on trials, the temperature reached 107 degrees in the shade. Anyway, the traveller by rail had only a short while to suffer the fierce noonday heat, for his train to Kosti left at 2.30 p.m. - provided he had arrived on a Tuesday.

The 238 miles to Kosti took - and still takes - some fourteen and a half hours, the train grinding slowly up beside the Blue Nile through country which, while no longer desert, appears hot and dry. There is plenty of cotton to see on the way to Wad Medani, then darkness shuts out the view of Africa steadily becoming more tropical, the true savannah grassland. There are sleeping cars, first class only, and a restaurant on this ambling train, but the jerking stop and the noise of Sennar Junction, where a British-built low dam stretches across the Blue Nile, is the junction for Kassala and Port Sudan by the southern route, for Rosieres, the railhead up the Blue Nile towards Ethiopia, and the Nyala - Wau line which passes through Kosti. The train leaves Sennar and swings westwards, running for three hours to arrive at the White Nile at 4.55 a.m., where passengers for the Nile Source change to a waiting steamer.

The lengthy part of the journey begins at Kosti, where passengers are thankful of the cool conditions at dawn as they make their way through hordes of people behind porters bearing baggage on their heads to a large, cumbersome-looking, flat-bottomed vessel with a high superstructure, which is to be their home for the next ten days - if they are lucky. Belonging to the Sudan Railways, the steamers on the Kosti - Juba service are well equipped in first class, although a bit run-down, but they are slow upstream and have to push barges loaded with merchandise and deck passengers in front of them.

If all is ready the Nile steamer casts off at 10 a.m. and, with its massive rear paddle churning, steams away for its uncertain journey of more than a thousand miles up Africa's largest river. It passes Africa in the raw on the old trade route, the climate becoming more humid as it gets further upstream. Famous sights include the huge Bor herd of elephants which inhabit the east bank of the Nile between Malakal and Juba - some of the biggest tuskers to be found anywhere. Frequent glimpses of members of the Dinka tribe will also be obtained, the warriors standing for hours on end on one leg, resting their spears as they watch the passage of the vessel. The further south in Sudan one travels, the less clothes the people wear (Dinkas are naked) and the more heathen they become. There is constant friction between the Moslems of the north and the heathens and a few Christians of the south.

Passengers on board the steamer will invariably include a number of missionaries, bound for South Sudan, Uganda and Tanzania. Young bearded Americans and Europeans are usually among the second class passengers, glad to be making the adventurous trip of their lives, travelling 'hard' across Africa. In the old days British Government officials would be found in the first class, taking the customary precedence at table, but these have disappeared, and today's Sudanese officials fly the trip, except for lower grades. Several traders will be among the passengers, making inter-port journeys.

I said that with luck the ship will make it to Juba in ten days. It all depends on the Sudd. Sudd is a conglomeration of floating plants and rushes coming down the Nile which forms into clogging islands between Malakal and Juba, and since the great floods of 1961 it has been coming down from Uganda in enormous quantities. I have seen it stretching as far as the eye can see in green masses, obliterating any sign of the proper channel, and I doubt if the Kosti - Juba steamer has achieved a ten-day run since November 1961. The last time I was on the Uganda - Sudan border in 1963 the boat had taken fourteen days, but the year before I heard of two twenty-three days passages. However, the passenger who is not in a hurry has little to worry about; he is fed and provided with a bed (even if the bed linen gets dirtier and sweeter all the time) without extra charge. It is sometimes a case of the captain trying channel after channel without success, searching in vain for the real river, while the paddle wheels become clogged and have to be freed by constant reversals. All this is carried out in exhausting, humid heat, often with no breeze and with insects buzzing about in droves.

However, the Sudan Railways steamer eventually reaches its 'railhead', nearly 1,300 miles from any tracks, and passengers disembark at the hot, sprawling town of Juba. The hotel on the Nile is also owned by the Railways. I have spent an uncomfortable night or two there, for it is not, or was not, air-conditioned and the diesel generator for lighting is none too reliable, while for those with electric shavers the 50 volts produced is insufficient to scrape off a beard!

In theory the Nile steamer is scheduled to reach Juba at 1.15 p.m. on the tenth day after leaving Kosti. This amazingly precise time is no doubt calculated from a straightforward run when the river is not in flood, and before the Sudd became such a problem. A bus would, also in theory, be waiting to take passengers on to Uganda, only fifty miles away to the south, where the border is crossed at Nimule. Most of the time, it seems, passengers need to spend the night at the

Railway Hotel in Juba, and provided no delayed or diverted aircraft are using the big Juba airstrip (I have had a twenty-four-hour stopover there) the hotel is large enough to provide bedrooms for all.

The road up the Nile, climbing high above rapids and falls, is improved of late, but it is usually six hours before one is in Uganda, if the bus is running - and, due to political problems of late, it often does not. Formerly, there was a change to another stern-wheel paddle steamer which pressed on up the Nile past Rhino Camp to Butiaba, a three-day cruise of great scenic and game-watching interest. Transfer was made to an East African Railways bus for the run to Masindi for lunch at the Masindi Hotel and then on for a few more miles to Masindi Port on Lake Kyoga. Here another paddle steamer was boarded for the leisurely lake crossing to Namasgali. Here at last were railway lines after a break of 1,500 miles from Kosti. There was a through coach for Nairobi and another for Jinja where the Nile flows out of Lake Victoria, its true source. All this has changed with the opening of a new railway line called the Northern Uganda Extension, which leaves the Nairobi - Kampala 'Uganda Mail' route at Tororo and reaches out through north-west Uganda via Mbale - a delightful town 4,000 feet up on the slopes of Mount Elgon - Soroti, Lira and Gulu, to end up at Packwach on the Nile. What should actually happen now is that the bus from Juba should pass Nimule and link with the train at Gulu's newly opened station, about sixty miles south of the Sudan border and close to the northern edge of the great Murchison Falls National Park. Passengers continue by train over the new line to Tororo and direct to Nairobi if Kenya is their destination, or they change at Tororo for a two and a half hour run to Jinja by a new cut-off. Jinja is a big city, more famous now for its factories and smelteries than the Nile source, which, at Owen Falls, is a great hydro-electric dam with a modern brewery beside it. The Ripon Falls, which Speke discovered in 1862 have disappeared with the damming of the newborn river.

The Nile Delta to Source traveller has reached his destination, and there were quite a number of passengers journeying this way every week until the end of 1964. But the 'Cairo to Cape' traveller does not exist any more, if he ever did. It is, of course, possible to continue onwards by surface, which would first of all involve taking a modern ship across Lake Victoria from Port Bell at Kampala (or even Jinja on some days of the week) to Mwanza on the south shore of this second-largest body of fresh water in the world.

From Mwanza East African Railways take over by train from their ship, and at a gentle pace on the metre gauge the

traveller is borne along to Tabora in Tanzania, where he changes for a westbound train to Kigoma on Lake Tanganyika. Another steamer trip follows, down the length of the long, narrow lake to Abercorn, then a bus to Malawi; or, more traditionally, the steamer drops him at Albertville in the Congo where a train trip takes him westward to Kabolo on the Lualaba River, a tributary of the great Congo. A steamer runs up as far as Bukama where, wonder of wonders, he finds a railway which goes all the way to Cape Town! Not that trains do, but the tracks would allow through running, and it is possible to do the journey with one change only, at Elizabethville in Katanga, which had three through trains a week to Cape Town. Elizabethville is now called Lubambashi.

So much depends on weather, the state of various rivers, road conditions and general connections, that no one can genuinely schedule, even to within a few days, a complete surface trip from the Nile Delta to South Africa, not even to the Nile Source. But whoever makes this trip, or part of it, especially through the heart of Africa below the Sahara, enjoys one of the great travel experiences of a lifetime."

98:08.

(i). THE CHILDREN OF TEHRAN.

From 'JewishGen' website.

"In my endless quest for Holocaust literature, I found and read Henryk Grynberg's book translated from Polish to Hebrew: Dzieci Syjonu, The Children of Zion, The Path of Agony of the "Tehran Children", Yad Vashem, Jerusalem 1995. The book was translated by Zeev Shos, who added an excellent historical background to the children's testimonies. The book is based on 73 testimonies - "Protocols" - taken and registered from the children immediately after their arrival to the Promised Land. The protocols of the children's testimonies are in the archives of the Hoover Institution, Documentation Box 197, Folders 1-4, Polish Information Center - Jerusalem, at Stanford University, in the collection "Poland - Ministry of Information and reports of Jewish Deportees." They were the basis of Grynberg's book, which enfoldes the historical events of this less explored chapter of the Holocaust through the eyes of the little Jewish refugees from Poland and their struggle for survival in the Soviet Union. The book was also published in English, as I found out later: Henryk Grynberg, Children of Zion, Northwestern University Press, 1998. The original book in Polish is Dzieci Syjonu, Warszawa: Karta, 1994.

The end of Grynberg's book has the original list of those who arrived on February 18th, 1943, those who arrived in

August 1943, and those who gave the testimonies. I knew immediately that I would translate and process these lists and post them on JewishGen as part of their Holocaust database, both as an integral part of the survivors' database, and as an addition to the Pinkas Hanitzolim (Register of Survivors) already computerized. The aim is to help the children find the relatives they have never known, as they were so little when the cruel circumstances of the war separated them from their family, their roots, and their past. The list contains the year of birth of the child, the parents in many cases, and the town of birth in Poland. I translated it and then found the original typed list in English in another book about the Tehran Children (in Hebrew): Gadith Shamir: "The Tehran Children" Since the Eruption of Second World War, Published by the Public Commission to Commemorate the "Tehran Children" by Meir Ohad, Tel Aviv 1989. There I found the original list (but only those who arrived on February 18th, 1943), which was translated into Hebrew in Grynberg's book. I matched my entries to this list.

Re-checking the data was like inserting the information for the second time. Then Mr. Henryk Greenberg proofread the list and my sincere thanks to him for his kind cooperation with JewishGen and me. I thank also Yad Vashem which approved the project. My thanks also to

NOTES AND COMMENTS.

Eva Floersheim, author of the moving web site about Holocaust children searching their identity ("Missing Identity"), who also proofread the list.

The escape of the children from Poland saved them from the clutches of the Nazi extermination machine, yet exposed them to the cruel fate of helpless refugees, fighting all sorts of hardship: diseases of many kinds, incomprehensible hunger, cold, forced labor and confinement to an orphanage. These events are less documented in history books, and in this respect the "Children of Zion" contributes, through the testimonies of the individual child, to the general review of history.

The "Tehran Children" escaped from Poland to Russia after Germany conquered it in September 1939, or lived in regions annexed to the Soviet Union following the Molotov-Ribbentrop Pact of August 1939, which divided Poland between the two powers. Some of the children's original Polish towns moved from German hands to Russian and via versa during the period in which the Jews ran away, fleeing eastward from certain death, as history proved later. There were around 300,000 such refugees, according to some estimates.

In the beginning of 1940 the Soviet authorities, through the NKWD, began mass expulsion of Polish citizens to gulags

in Siberia. Many hundreds of thousands of Polish citizens, many Jews among them, were expelled to the depth of Russian Siberia. After weeks of a horrible journey in cattle cars, the deportees were settled in Siberia and lived under harsh and difficult conditions. The mortality rate was very high; many of the children died or became orphans in this period.

On June 22nd, 1941, Nazi Germany attacked the U.S.S.R. despite the non-aggression pact between them, and a new era started for the Polish refugees, Jews among them. An amnesty was declared; as a result all the Polish citizens were set free from the gulags (see Appendix III on the JewishGen Yizkor book site). A mass emigration started, towards the Asian territories, mainly Uzbekistan, Tajikistan, Kyrgyzstan, Kazakhstan, and Turkmenistan.

A wave of hungry and sick refugees, wearing torn rags, flooded the towns of Tashkent, Samarqand, and others. Many of the children lost their parents in this period, and many of the children themselves died of hunger and epidemics.

At the same time, Lt-General Wladyslaw Anders was freed from prison in Moscow and founded the Polish Armies in Exile, which would attack Germany in Italy, passing through the Middle East. The Soviet authorities agreed to the emigration of about 24,000 Polish citizens with the Anders army, including around 1000 Jewish children, most of them orphans, and 800 Jewish adults.

By the end of 1941, Sikorski, the prime minister of the Polish Government-in-exile, managed to convince Stalin to send around 25,000 Polish soldiers of the Anders Armies to Iran, to arm themselves and to strengthen the British armies in the Middle East. Thirty-three thousand soldiers left, 11,000 citizens with them, including 3,000 children, of which about 1,000 were orphaned Jewish children. The "Tehran Children" left in trains from Samarqand to Krasnovodsk, and from there, through the Caspian Sea to Pahlevi, an Iranian port town on the Caspian southern shores. From there they moved to Tehran.

In Pahlevi, refugee tent camps were immediately erected. The Jewish children suffered from heat, starvation, sicknesses, and also the abuses by their fellow Poles. The situation changed once the Jewish Agency learned about the refugees' camps and opened its Eretz Israel Office in Tehran. Messengers and instructors were sent to the camp; as a result, living conditions improved significantly. It is worth mentioning that Tzipora Sharet, a leader from the Yishuv in Eretz Israel, contributed to the children's welfare. David Lauberger (Laor), one of the adult refugees, was appointed to be the head of the camp. In 1995, David Laor submitted many documents, photographs and items to Yad

Vashem. This material was the basis for another book about the "Tehran Children" published by Yad Vashem (Hebrew) "I Did not Have Time to be Sad," 1996 (the story of Kaner Majloch from Pruchnik, a symbol of the children's odyssey).

In January 1943, the evacuation of the tent-city began. The children moved to Afwaz and then to the Iranian port of Bender Shapur, where they embarked on the S.S. Dunera, headed to Karachi. This route was chosen since the Iraqis refused to grant them transit visas through Iraq. From Karachi they embarked on another ship, the Neurolia, which sailed to Suez, Egypt. Then they crossed the Sinai Desert by train, they were quarantined in El Arish for another two days, and finally after an odyssey of four years of agony, they arrived home and disembarked the train in Atlit in Eretz Israel ("Palestine" at that time), on February 18th, 1943."

(ii). TURKISH DIESEL RAILCARS IN GERMANY.

The Teutoburger Wald-Eisenbahn AG (TWE) operated a line between Ibbenbüren Ost (on the Rheine - Osnabrück line) via Lengerich (where its Hohne station is parallel to the main Münster-Osnabrück line) to Gütersloh Nord, adjacent to Gütersloh station on the main Bielefeld - Hamm line. From here, on reversal, a line passes under this main line and goes via Verl to Hövelhof on the Bielefeld - Paderborn line. A large proportion of this system is still operated for freight, though the northern section to Ibbenbüren has been suspended for a while.

A lengthy and detailed article by Jochen Fink in 'Die Museums-Eisenbahn' 2/2012 pp.28-41 describes the history of the railcars used on this line and the following is taken from it. 'The Turk' DEGA II.

Following the war the DEGA (Deutsche Eisenbahn Gesellschaft AG) leadership looked intensively for possible railcars for their lines. No new construction could be considered in view of the extent to which surviving capacity was being used for repairs to DR vehicles; Nevertheless in 1947 the DEGA was able to purchase a railcar that had not been intended for a Kleinbahn at all.

In October 1940 the Turkish State Railways ordered from MAN six two-car Diesel railcar sets for high-quality express services. They would have two 420hp. motors and a top speed of 126km/h. The interiors were very comfortable with 1st. and 2nd.-class seats, separate toilets and washrooms, and a small bar. Due to the war MAN was only able to deliver one set in 1944 (MT 5201 a/b) to the TCDD; (A photo shows this at Haydarpasa station in 1944.) In 1944 three sets went to the Slovak State Railways (Nos. MT 5203

a/b, 5205 a/b and 5206 a/b.) Two sets remained in Germany. One (MT 5203a/b) was burned out in an air raid on the MAN works in Nürnberg on 19.10.1944. Set MT 5204a/b was painted in camouflage livery and stored in Hof, where it survived the end of the war. Following plundering only the naked coach body was left, the transmissions were apparently destroyed, only parts of the Diesel motors were left. The frame ends were missing from both ends.

In 1947 the DEGA had inspected the remains of both war-damaged double railcar sets, and considered the MT 5204a/b repairable. In August 1948 the DEGA decided instead to create two separate railcars of them, by adding a new cab at the far ends but still with a through communicating gangway. The cars were clearly substantially 'simplified' during their reconstruction, so the streamlined fairing at the front was removed as well as the cow catchers; The number of seats - now just of wood - was significantly increased, toilets and specialised areas removed and fitted with benches. It was after all decided to do without any form of movement between the cars. In addition the DEGA ordered from MAN completely new driving and carrying bogies as well as a further reserve motor with transmission, which came from the burnt-out remains of MT 5202. In early September 1949 the former A-Car (works no. 1239.185) went to Königstein (Taunus) and was trialled on the Frankfurt - Königstein Eisenbahn for two weeks, before it was transferred on 18.9.1949 to its future intended line, the Rinteln-Stadthagen Eisenbahn.

A destination for the former B-Car (works No. 139.186) was only decided upon in November 1949. It would go as DEGA II to the TWE and replace there the loaned railcar NHS No. T1 and help out until an Esslingen railcar could be constructed and delivered. On 20.1.1950 the railcar carried out acceptance trials on the 'Schiefe Ebene' from Neumarkt-Wirsberg to Marktschorgast. Following correction to some minor faults it was driven to Lengerich on 27.1.50. It was painted according to MAN specifications with Nitropon enamel paints, red and ivory. In the following days DEHA II was formally accepted by contract and from 30.1.50 placed in service from Lengerich at a rental of 110DM per day. In late summer 1950 the gearing was altered from 50:27 to 50:18, which reduced the top speed in fifth gear to 83.9km/h. Although the top speed on its own infrastructure was only 50km/h, it was intended to retain 80km/h capacity to allow for trips onto DB tracks.

There was some argument with the authorities and the EZA Minden about the braking capacity, for the railcar was initially allocated a braking weight of only 45t., although the railcar still had the TCDD-specification magnetic brakes fitted

הרכבת

to the carrying bogie. Due to these arguments the official authorisation came only on 24.1.51.

On 30.3.1953 the rental price was reduced retroactively to 1.1.53 to 85DM/day and the sister railcar DEGA 1 was formally acquired by the RStE. In November 1953 with the renumbering system they became VT 91 RStE and VT 92 DEG. (Deutsche Eisenbahn Gesellschaft).

The railcars were not particularly beloved by the workshops staff. Initially they managed 8 - 10,000km. per month, later from 1954 this sank to 4-5,000km. From 1.1.55 it was formally acquired by the TWE and was given a heavy overhaul in April-May 1957, acquiring six new side windows to the cab and new lamps. ... In October 1960 it was decided not to give the 20-year old vehicle another full heavy overhaul but only a light one suitable for a further three years' service. In June 1965 it was withdrawn following a transmission failure and on 22.1.1968 was moved on its own wheels to the Klöckner Rohstoffhandel GmbH in Osnabrück for scrapping.

(iii). RECYCLING I.R. DIESELS.

The Editor's attention was drawn to a documentary on recycling old diesel locomotives, to be shown on the German television channel 'ntv' on 08.07.2012. It turned out to be a film made by National Geographic Channel and bits can be seen online. It is No. 13 in a series on 'Mega-Recycling' and was filmed at the National Railway Equipment Company workshops at Mt. Vernon, Illinois. The film follows the dismantling of an old (ca. 50 years) GP9 Bo-Bo - this takes about two weeks, depending on condition, various parts being considered for refurbishments, re-use or sale. In this case in the end only the 17m. long frame is re-used, the other components being sold for scrap (the metal in the hood alone is worth \$970) or refurbished for use elsewhere. The workshop has 30t and 10t travelling overhead cranes. The motor can weigh 14 tons and would cost \$120,000 new. The frames are washed down and grit-blasted and then onto them in the erecting shop is mounted over the next seven weeks whatever is needed to make a new, more efficient and modern locomotive that can work another fifty years - a "Generator Set", cab, control cubicle etc. - the new loco will use 35% less fuel than its predecessor, produce 85% less emissions, and be quieter. A new livery can mean using 190 litres of paint.

What makes this relevant to 'Harakevet' is that in the opening shot over the yard - 10 hectares big, with 6.5km, of track on which up to 100 old diesel locos are stored awaiting their turn to be picked apart and put together again - was Israel Railways G12 Bo-Bo No. 104! And in another shot in the distance can be seen an IR hood with the distinctive slanting dark

blue and yellow stripe livery. So this is where some of the former IR motive power has met its destiny on its way to a recycled nirvana.....

(iv). CHINA.

It is perhaps worth pointing out that not everyone is totally happy with the involvement of China in Israeli infrastructure projects, for a variety of reasons, some of them theological. Is this the right partner



Yo-Yo on China Shipping containers, Haifa 2010.)



(morally speaking) for a country like Israel? Of course, China has invested and sent workers to Saudi Arabia (where they had to convert to Islam in order to work) and exported locomotives to Iraq and is now investing in railways throughout Africa.... as well as the cross-Asia link. So there is no concern about their technical ability. At the same time, China has opposed certain political changes in Syria.

The line to Eilat will be 180km. long and cost ca. 20 Billion NIS (ca. 4 Billion). And further Chinese-Israeli joint projects should follow. The Chinese Transport Minister Li Shengin has said that the Eilat line is a part of the Chinese policy to support other countries and encourage them to improve their transport and other infrastructure. But the world learned long ago to look behind every Chinese statement to seek the Chinese interest hidden behind!

(v). TURKISH ROLLING STOCK IN THE TAURUS EXPRESS.

In the German magazine 'Bahn Epoch' is an article on a journey from Basra to Hamburg in summer 1939, and there has been some e-mail correspondence

concerning the rolling stock illustrated, its provenance and fate. For the sake of widening the scope for future correspondents (and for the historical record) we reproduce some of it here, slightly edited.

Paul Scheller wrote: "[One]... photograph shows two old passenger cars in the train in Mosul, one third class and one first or first/second class. Photographs taken by K. R. M. Cameron in 1942/43 and published by Werner Sölch show also two old passenger cars in the Taurus Ex-

press). These Cenup wagons had still their original Bagdad Railway numbers in 1945! E.g. 7001ff were covered vans delivered from 1904 onwards. Since the wagons were not renumbered, then it is possible that the passenger carriages of C.D. also retained their original numbers, for example Hughes' "C 303". And this is the reason to ask the following question: Are there also lists of passenger cars of C.D. and L.S.B. in the P.R. Working Timetables and could we so identify the two local passenger cars in the Taurus Express?"

The photos Paul attached include:-

1. 'Vierachsiger D-Zug Wagen III. Kl., geliefert für: Soci t  Imperiale Ottomane de Chemin de Fer de Bagdad.' i.e. Bogie Vestibule coach 3rd. class, delivered to the Baghdad Railway.' Then [translated by Ed.] Drawing No. 11222, standard gauge, length of body 18410mm, length over buffers 19710mm, height to top of roof: 4130mm, greatest width: 2980mm. Length between bogie centres 13500mm, length between bogie axles 2500m. Buffers 1040mm. Seats: 80. Screw brake. Westinghouse air brake. Hardy Vacuum brake. Weight: 39000kg. Wheel diameter 1000m.

2. Van der Zypen & Charlier G.m.b.H. Eisenbahnwagen und Maschinenfabrik. C ln-Deutz. 'Bagdadbahn: Vier chsiger Gep ckwagen.'

3. Ditto. 'Bagdadbahn. Vier chsiger Durchgangswagen 1 & II Klasse.'

4. Fig. 29. Four-axle carriage 1. class, for the Bagdad Railway. (Anterior Asia.) Carriage with corridor in centre; 8 compartments 1 class with 48 seats. Shadow roof. Electric lighting by dynamo. Steam heating. Standard draw and buffer gear. Westinghouse, Hardy and screw brakes.

Dimensions:
Length 20 020mm = 65'9"

5 - see inset next page

Additional carriages probably from Islahiya and Adana. Double-heading with 56.0 (2-10-0) across Taurus. From Irmak banking by a 1D (2-8-0)."

6. Typescript by Hugh Hughes. 'Middle East Railways 1942-1946'. Numbered H29 6/1995.

"In October 1944 I was in Baghdad again and this time I paid a visit to the Baghdad North locomotive shed where a friendly Iraqi Locomotive Superintendent, who had been trained at Derby, took me

press of the same types and Hugh Hughes noted these two cars in 1944 labelled as 'BAGDAD CD' and 'BAGDAD LSB'. The cars are former CFOA and BAGDAD passenger cars delivered by German carriage works before 1914, e.g. 9 C4 built by G rlitz in 1902 for CFOA, A4 for CFOA built by MAN, C4 for BAGDAD built in 1905 by D sseldorfer Eisenbahnbedarf and some BC4 for CFOA and PPost4 for BAGDAD built by van der Zypen & Charlier (there are some mistakes in the v.d.Z. diagrams, 'Gep ckwagen' = PPost4, 'B4 BAGDAD' = BC4 CFOA). The Turkish part of the Bagdad Railway became TCDD, but I think the passenger cars in the picture are not TCDD cars! BAGDAD CD - mentioned by Hughes - means 'Cenup Demiryollari' and 'BAGDAD LSB' means 'Lignes Syriennes du Bagdad'. These cars were owned by the private Turkish South Railway and their Syrian counterpart and I think they were only used for local passenger services in the Turkish - Syria border region and not for passengers to Istanbul.

Greg Martin sent me excerpts of P.R. Working Timetables 1943/44/45. There I found rolling stock lists of C.D. wagons (and many other interesting mat-

5. Taurus Express 1942. From Aleppo.		
621	Cenup	Loco. Aleppo - Tel Kotchek?
D		TCDD Istanbul - Bagdad?
Coach		ex-CFOA Istanbul - Bagdad?
Coach		Bagdad Istanbul - Bagdad?
Wagons-Lit Type SG	CIWL	Istanbul - Bagdad?

Taurus Express. Meydan Ekbez 1943.		
3688	WD	Loco Meydin-Ekbez - Aleppo.
56.0	TCDD	Loco Meydin-Ekbez - ?
D	CIWL	Bagdad - Istanbul.?
WL Type SG	CIWL	Bagdad & Tripoli - Istanbul?
WL Type SG	CIWL	Bagdad & Tripoli - Istanbul?
Coach	TCDD	Bagdad - Istanbul
Coach	ex-CFOA	Bagdad - Istanbul
D	Bagdad	Bagdad - Istanbul.

on a tour of his domain. We interrupted a card school in one of the workshops, and I learned how to fire an oil-burning metre gauge locomotive, but I was also told how to get to the main workshops at Shalchiya which I promptly did on the following day. The Works Manager was most obliging and gave me generous access to blueprints, allocation and other records covering all the locomotive stock, standard and metre gauge, on the system.

On the 29th. I noted some standard gauge bogie coaches waiting to leave as the Taurus Express for Haidarpasa, opposite Istanbul:-

workshops in April 1945 this suggests an interchange of parts.”

Ray Ellis from Australia added: “I get the impression that once TCDD was established, all the previously separate railways’ rolling stock was added to TCDD stock. As you say some was renumbered, some was not, and there were still cars with their pre-TCDD numbers around for many years. The Taurus train appears to have been an interesting mix of stock, anything was likely to turn up! Your photo shows what appears to be TCDD German built steel stock.

C 3030	3rd. class.	Labelled BAGDAD CD. Plate: Düsseldorf Oberbilk 1905
AB 105	1st./2nd.	Labelled BAGDAD LSB.
3401	Wagons-Lits Restaurant Car.	Plate: Metropl. CW&F. 1928. Board: Toras Ekspresi
3450	Wagons-Lits Sleeping Car.	1st./2nd. 177 berths. Plate: Birm. RC&W No 49.
1320	Wagons-Lits Sleeping Car.	Plate: Ateliers de Marly - Nord 1939.

Then at 1700 hrs on the 30th. it was back on the Nairn bus (an articulated one this time) for Damascus and at 0800 hrs. on the 2nd. April we left on the narrow gauge train for Deraa, Samakh and Haifa, arriving about 2000hrs. A detailed account of this journey, the continuation to Cairo, and my return from Cairo to Damascus a month later appeared as item 11 in Hara-kevet 5.

In September 1945 our battalion moved all the way from Tehran to Suez - by road! This did not however prevent me from paying another visit to the Shalchiyah Works at Baghdad where I found two ROD 2-8-0's Nos. 70724 and 70747, two of six which had been transferred from Palestine two months earlier. They were painted black with W(arrow)D on the tenders and the numbers in yellow on the cabsides. LNER numberplates, 6527 and 6233 respectively, were also on the cabsides; but 70724 in fact was supposed to be LNER 5354 while 70791 (also Iraq ex-PR) was ex-6527. As both 70724 and 70791 were under repair at Azzib (199 Workshop Coy)

Werner Sölch covers this train in his German language books, which are worth looking at. He did much travel through Turkey and into the Middle East countries, including going to Baghdad, behind steam too!”

The photos Ray adds were captioned (Ed.'s comments in square brackets, Paul's below):-

1. Baghdad Railway Restaurant Car built 1914. [This looks almost identical to the well-known Ringhoffer-built teak cars of which one is restored and one stands un-restored at Schwechat Museum, Vienna.]
 2. “The ‘Anatolia Express’ was inaugurated in 1925 to provide a sleeping-car service from Haydarpasa, on the far side of the Bosphorus from Istanbul, to Ankara. The train runs through the wild spaces of the Taurus mountains. This photograph, taken in 1930, shows the original wooden rolling stock.”
 3. CIWL Dining Car No. 3404 in the ‘Izmir Express’ at Izmir, 1965. [‘Lokantali Vagon’]
 4. An article, perhaps from Railway
- הרכבת

Magazine:-
“Turkish Passenger Cars.

The Chemins de Fer Orientaux own several different types of passenger vehicles, the majority being similar to those of the older pattern used on the French railways - short compartment carriages with side doors and running on four wheels. They have a double roof to protect the interior from the sun and are comfortably furnished; the 1st. class are upholstered in crimson plush, the 2nd. class in brown striped plush, and the 3rd. class in plain varnished wood. Externally the 1st. and 2nd. class carriages are painted dark green with black mouldings and fine light green lines, whilst the 3rd's are finished a dark brown with black bordering and stripes.

The new stock is on the open car or corridor system, and we illustrate above one of the fine 2st. and 2nd. composite cars recently built by Messrs. Ringhoffer, of Smichow, for service on the international trains between Constantinople and Vienna. Externally these cars are finished in varnished teak wood, with the Company's title in French and Arabic attached to the sides in brass characters. The length of the car shown is 18.350m and the distance between the centre of the four-wheeled bogies 12.000m. They have a wheelbase of 2.500m each. The height from the rails to the deck roof is 4,030m, this does not include the light outer shade along the central portion. The car illustrated has four half compartments fitted for sleeping, two 1st.-class berths in each, with a folding wash basin, two ordinary 2nd.-class compartments each with eight seats, a sleeping compartment with four 2nd. class places, and two half compartments with two 2nd. class berths in each; the total carrying capacity is 32 passengers, with a lavatory at each end of the car. Gas light, air and vacuum brakes are provided.

The 3rd. class cars of the though trains are en suite of similar build and appearance, but, course, plainly finished internally.

The six-wheeled baggage van shown is the same builders and is painted dark brown, a novelty being the dog's head painted on the doors of the dog box.

Our third illustration shows one of the 3rd. class cars of the C.de F. d'Anatolie, the metre gauge railway running out from Haida Pacha, on the Asiatic side of the Bosphorus at Constantinople, with connection to Smyrna, &c. The stock is of modern build, with end platforms and a through passage down the train. 1st. class cars are painted dark green, 1st.

and 2nd. class composites finished in varnished wood with brass figures attached, while the 3rd class are painted a dark grey with black borders and fine red lines and lettering in white. The weight of this vehicle is 13,203 kilos; the simple vacuum brake with one pipe is fitted.

On all the Turkish trains separate reserved compartments of each class are found for ladies, labelled in French 'Reservé au harem', and also in Arabic."

[Interesting - this line was of course not metric but standard gauge.]

5. TCDD Buffet Car No. 1494 at Yedikule, 1964. [Marked in large letters on the side: 'BÜVET'.]

Chen responded:

"I wish someone had bothered to detail PR's coach livery in as much detail as they did CFO's... PR's Working Timetables from the 1940s only listed goods stock of neighbouring and partner railways, except for ESR. While I know of no standard-gauge coaching stock which arrived here from the North (DHP, LSB, CD etc.) there certainly were such carriages owned by the WD which frequently visited PR's system and are not mentioned as well. The story is different on the narrow gauge, as lists are provided for both CFH (Syria) and DHP (Lebanon and Syria) coaching stock, which indeed came here on a regular basis during WWII."

Paul Scheller then added the following information:;

"When TCDD was established only the CFOA lines and the northern part of the Baghdad Railway formed the TCDD network. The southern region "Hatay" was occupied by French troops and also after their retreat the French Government behold some rights in the Turkish region neighboring their Syrian mandate. Therefore not the TCDD, but the private railway "Cenup Demiryollari" served the Turkish lines south of Toprakkale and Fevzipasa. And the old passenger cars near the CIWL WR and WL in the Taurus Express are not TCDD but CD (Cenup Demiryollari) or LSB (Lignes Syriennes du Baghdad) cars.

Some remarks to the texts in Ray's attachments:

The first and second class composite car described in the article about CO is a typical car of the "Convention Train" between Vienna and Constantinople. In 1868 the "Berliner Kongress" obligated the Balkans states to build a through connection to Istanbul. In 1888 run the first "Convention Train" fulfilling this obligation. Around 1900 Ringhoffer built new cars for this train in a joint order by StEG, MAV, CES/SDZ, BDZ and CO. These cars were all of the same type, but owned by

the different railways along the line from Vienna to Constantinople. They have massive rivetted underframes instead of truss rods.

The "Anatolia Express" never runs "through the wild spaces of the Taurus mountains" - this would be the wrong way. The Anatolia Express was very important for the government officials working in the uncomplete and very uncomfortable new capital city Ankara. "Working in Ankara but living in Istanbul" was their motto. The "Anatolia Express" had originally CIWL WL type R, later type S and ST.

The CFOA line out of Haydarpasa is no metre-gauge railway. There was a first railway to Izmit built in 1873 in 1100 mm gauge. The CFOA bought this railway and regauged the line as part of its network in 1893/94. An ex-CFOA third class car for suburb trains is preserved in the railway museum in Ankara."

(vi.) SYRIAN RAILCARS.

Paul Scheller wrote: "Some additional information about the seven SGP railcars for Syria: Built in 1958, works numbers 79089 - 095, destined for Beyrouth - Aleppo - Kamichli.

Preceding were four railcars ZZ ACD 1 - 4 built in 1934/35 by De Dietrich. They were French built but with German drive: The CLM 85 LC 4 diesel engines were "licence Junkers", the Mylius gearboxes came from DGG Berlin and the bogies were "type Görlitz" (Broncard, Autorails de France, Tome 3, De Dietrich et al.)"

(vii). HOLOCAUST CLAIM AGAINST S.N.C.F.

In 'Der Spiegel' 26/2012 p. 66 is a brief item on this continuing legal saga. At a hearing before the Justice Committee of the US Senate in the first week of July several survivors, legal experts and lawyers spoke. The 91-year-old Leo Bretholz from Baltimore described vividly how he was sent from Paris in autumn 1942 together with a thousand others in cattle wagons - without water, "with just a piece of bread and a piece of cheese" as provisions. The SNCF had carried out the transport and had been paid by the Nazis 'per head and per kilometre'. A total of 76,000 Jews and Resistance fighters were deported in SNCF trains to death camps. Bretholz himself was able to escape from the wagon on the way to Auschwitz. In the USA a 'Holocaust Rail Justice Act' is currently being prepared, which will enable legal claims against the State-owned railway company. The Deutsche Bahn does not believe it will get caught up in this, as a multi-million sum has already been paid into a Compensation Fund, whereas the SNCF has until

now paid nothing. Last year SNCF head Guillaume Pepy had admitted that this organisation had been a 'cog in the annihilation machinery of the Nazis.' "

(viii). ANOTHER ROTHSCHILD LINK:

Just a bit of personal editorial whimsy here. In 'Continental Railway Journal' No. 170 (Summer 2012) p. 516 is an article by Chris West on the 'Vitkovice Doprava n.s.' industrial complex in the former Czechoslovakia. It includes:

"Construction work began on an ironworks in the village of Vitkovice in 1829, with the project being financed by Archduke Rudolf of Habsburg, who was also Archbishop of Olomouc. In 1831, the Vitkovice works comprised three puddling furnace plants: plate, bar and section rolling mills; a machining shop; a fitters' shop, etc. The first blast furnace was lit in 1836. The works passed to the Rothschild family in 1843, who bought up coal mines to gain cheaper coal, and invested heavily in the Vitkovice plant equipment. By the end of the 1850's, the plant was operating three blast furnaces, 31 puddling furnaces, a new foundry and engineering shop. The first recorded railway, using horses, dates from 1856. During the recession of the early 1870's, management of the works passed to the Gutmann brothers....."

(ix). MORE ON GHADDAFI'S TRAIN.

Further information on the IC4 diesel multiple unit in Libya (see Harakevet 93 cover and 93:08:A) comes from 'Op de Rails' 03/12, thanks to Marc Stegemann (translation by the Editor):-

It appears the photo was taken at an exhibition organised by Italian businessmen to encourage exports to Libya. (Or better said, Libyan imports from Italy!). It appears that the train set is Set No. 09 which had been delivered in 2007 not to DSB but, with additional yellow and green lines round the black window band livery, had been shuffled off instead to Libya. And this at a period when deliveries to DSB were running behind schedule! Neither Ansaldo nor the Libyan nor Italian governments seem to wish to provide much information as to how this occurred, leading in consequence to a stream of rumours. Was it a present by Italy to its former colony? Was it intended to boost sales of Italian rail equipment? Or was it - the luxurious interior implies that this is likely - a personal gift to Muammar al-Gadhaffi?

The production line for the IC4 carriages was closed on completion of the order and it is now impossible to build any more. In view of the situation in Libya it seems probably that this set must be written-off as 'lost' and the Danish railways will have to get by without set 09!

TO JERUSALEM IN 1967.

The Editor (who always keeps an eye open for such discoveries) recently acquired (for a pittance in a box of old books and magazines at the Oxenhope Carriage Shed) a scuffed second-hand book entitled 'Exciting Railway Journeys of the World' by Ken Westcott Jones, published by Alvin Redman of Fleet Street, London in 1967. (There is no ISBN number but remarkably it was printed and bound in Hungary!)

In the Introduction, p.12, he writes: "In my book 'Great Railway Journeys of the World' the emphasis was on routes with an important history playing a major part in the development of the areas and countries through which they ran. They were 'great' in the fullest sense of the term, but all of them could qualify as 'exciting'. Now I turn to a series of journeys by rail which are definitely exciting when made for the first, or even the second time, by anyone who enjoys travelling by train, but are not necessarily great. They include such under-used lines as the Haifa to Jerusalem link, maintained twice a day in each direction by passenger trains, yet carrying only one in fifty of the persons making the journey between the two cities...."

The following account is fascinating because there is so little published on travel over this line (especially the Inland Line) at this period. There are a few factual or historical errors - it was hardly 'the Turks' who built the Jerusalem line, the Ottoman authorities indeed did all they could to hinder development, and the Haifa - Lod line was built by the British in 1917-8, albeit partially on the route of the Turkish 1915 military line from Tulkarm southwards; No mention is made of Jaffa as being a nearer port than Acre; There were never any through Beirut - Jerusalem services; The German units were diesel-hydraulic and no. 102 was built by SAFB in Belgium, albeit with a GM engine. In addition a footnote on p. 73 indicates "Since this chapter was written the short, sharp Middle East war of June 1967 has changed the entire Israeli-Arab border situation."

Nevertheless we shall reproduce Chapter Seven: 'Transition to Jerusalem' in its entirety (pages 73-79) as an authentic contemporary account from a much-travelled and experienced railway traveller.

"A pilgrim centre for Moslems, Jews and Christians alike, the City of Jerusalem straddles the spine of mountains running through the Middle East from Lebanon to the Red Sea. The Holy City is a city divided, barbed wire and sandbags, gun emplacements and watch-towers being more surely a physical barrier than the Berlin Wall. In comparison the Wall and the checkpoints through it between East and West Berlin, are liberal, for no Jews and no Arabs cross the solitary gateway between the two Jerusalems, the Mandelbaum Gate. Only bona fide tourists can cross, and then only a one-way crossing is permitted, although United Nations personnel pass in both directions in their white jeeps throughout the day, and at Christmas and Easter members of Christian orders resident in Israel are permitted to make a pilgrimage into Jordanian Jerusalem and Bethlehem, returning the same day or the next day.

To this divided city more than 2,500 feet up in the dry mountains of what was once Palestine a single line of railway curves and climbs from the Mediterranean Coast. It is entirely within the State of Israel, and in fact 95% of the lines which made up the Palestine Railways of the British Mandate passed into Jewish hands at the time of the War and Partition in the harsh spring of 1948.

The Turks built the line to Jerusalem before the turn of the century, when they controlled not only Palestine but all the territories of the Middle East down to the Arabian Sea. Access to the Holy City had been prohibited for foreigners until an agreement in 1867, when limited pilgrimages were allowed, and later on a definite tourist traffic grew, necessitating means of access from the nearest port, which was on the Bay of Acre. They built a railway to follow the level plain along the coast for about seventy miles and then inland to twist and climb through a wilderness that has not changed since the time of Christ.

Until the laying down of the British Mandate early in 1948, when there were no insuperable barriers to travel throughout the Middle East, through coaches came to Jerusalem from Cairo across the Suez Canal and from Beirut in Lebanon. With the establishment, mainly by force, of the Jewish State, almost all the 440 kilometres of track became the Israeli State Railways except for a few kilometres near and to Nablus, which city is part of the Kingdom of Jordan. The Egyptians were in the Gaza strip and Israeli trains could no longer run south of Ashqelon, while in the north the tracks were broken above Nahariya shortly before they entered Lebanon. The old coast line to Beirut is still visible but totally disused below Beirut and in a bad state of repair, unlikely ever to know

the roll of wheels again.

But the bulk of the system was expanded by hard-working Jews, who have built new lines and now operate an efficient system over some 620 kilometres. More extensions are planned, mainly down to the Dead Sea at S'dom to evacuate valuable potash deposits, and right through the Negev to the lonely 'frontier' resort-city of Eilat. Every day except from sundown on a Friday to sundown on a Saturday (the Jewish Sabbath, strictly observed in Israel), fifty passenger trains are run. Four of these operate between Haifa and Jerusalem, a distance of 112 miles.

No steam workings survived on Israeli Railways after the end of 1960, and all trains are either diesel-hauled or composed of diesel-electric multiple units, most of the power having come from Germany in the form of war reparations. Being short-lived items of machinery, the diesels have been supplemented or replaced by heavy units from General Motors in the United States. The train to Jerusalem will be hauled by one of these 1,500 horsepower monsters with a walkway and hand-rail right round and an overall cab at the rear. On a hot November afternoon with a hint of 'Khamsin' wind blowing, the train I boarded at Haifa station was five coaches in length with No. 102, a General Motors diesel, at its head.

Israeli Railways are incredibly cheap to travel on, an all-one-class system involving fares which work out at about five shillings for sixty miles. The only concession to a superior category of comfort is 'reserved class' which means one coach with slightly better seats, all numbered, in which the passenger may book a seat in advance on payment of about one shilling. I had such a seat in the coach next to the locomotive and found it less than a third full. Sharp at 4 p.m. the diesel roared more loudly than usual and pulled away from the berth-side station at Haifa.

The line along the coast, nestling the shore below the great mass of Mount Carmel, is suitable for relatively high speed and the regular Haifa-Tel Aviv multiple unit trains, which run the fifty-seven miles in sixty-five minutes (it was sixty minutes until 1960) normally average seventy miles an hour along this stretch. The Jerusalem trains, however, make all the stops and rarely exceed sixty miles an hour between stations. Our direction was exactly opposite to where Jerusalem lies for the first two or three miles, for we had to go north-west to round the point of Haifa Harbour. Once round we ran due south with the Mediterranean to our right and the bulk of Mount Carmel rearing to the left. Atlit was the first stop, eleven miles, achieved in eighteen minutes. Then came a fast spurt along the level, less than a mile from the sea and the beaches with a traffic-clogged highway on

our left carrying every kind of bus and madly-driven car between Tel Aviv and Haifa. The railways are under-used, Israelis seeming, like the Greeks and other Levantines, to attach some kind of status symbol to road travel even if it means sitting hunched in the back of a lorry. However, the trains do carry more than five million passengers a year, about twice the population of the State of Israel, and this compares favourably with the 248,000 in the last year of the British Mandate, although the population of Palestine as a whole in those dark days of 1947-48 was less than a quarter of that of Israel alone at the present time.

At 4.26 p.m. we slid to a stop at Dor, got under way again quickly and ran for seven more minutes to Zikhron Ya'aqov. Another short fast run took us to Binyamina, a junction where the Jerusalem and Tel Aviv lines divide. We had done twenty-one miles in thirty-seven minutes with two intermediate stops, a creditable performance although without gradients or obstructions. Binyamina is the nearest station to the resort of Caesarea, the old Roman port on the Mediterranean with its miles of harbour wall and ruins still being excavated. A golf course, the only one in Israel, has been built here, together with a fashionable and expensive resort hotel designed by a French architect.

The direction was now south-east, and as soon as we left the Tel Aviv line the running became rougher, indicating that the track to Jerusalem used by only two passenger trains - and about four freight trains - in each direction daily, is not so well maintained. Early darkness gathered quickly, for in Israel - and Jordan for that matter - they have no Summer Time and the clocks are kept on Athens time, so it becomes light extremely early in the morning and dark unexpectedly in what seems the middle of a hot afternoon. They say it enables the air to cool down in time to produce an appetite for dinner!

As we bumped along towards the next station, Hadera East (and I have memories of waiting an hour and a half amid the hot concrete of this place for a car that was due to meet me but had mistaken the line and was uselessly hanging about at Hadera West), several Jewish men began to cluster at the end of the coach for a prayer meeting. They chanted and recited under a leader, who did not seem to be a Rabbi, and only the women and myself remained seated. This was something to do with sunset, I was told, and I recalled seeing Moslems praying in a train in North Africa, on one occasion requiring a stop to be made when coming from Constantine to Bône in Algeria so that prayer mats could be spread outside. Sunset, I gathered, must be of equal significance to Jews and Moslems when travelling.

Now five or six miles inland from the Mediterranean, the train was running

within a few hundred yards of the Jordan border. There are farmlands on both sides of the train with a range of low hills to the east, but the animals grazing to the left of the train are Jordanian beasts. At Eyal, the next stop, reached at 5.20 p.m., we were only half a mile from the barbed wire border, while the village of Eyal is even nearer. The direction of travel again becomes due south while the border heads south-south-east, giving some elbow room and enabling many of the more ardent Jewry on the train to breathe more freely.

Rosh-ha-Ayin is the next station, exactly sixty miles from Haifa, reached at 5.34 p.m. so that the train has averaged almost forty miles an hour. It is fortunate that the names are up on the stations both in Hebrew and English. A small buffet is open in the next coach, doing good business with sweetmeats and coffee and other light refreshments. The up-and-down motion of the train at speed, however, makes it a little difficult to keep liquids in a cup. Eventually, in a blaze of lights and with some strident hooting the train runs into Lod Junction (once known as Lydda) where the line from Tel Aviv comes in and the Ashqelon line goes off to the south-west. Israel's busy International Airport is only a couple of miles away.

The Lod stop, begun at 5.52 p.m., lasts three minutes and coincides with a train to Tel Aviv from Jerusalem. This town is the geographical centre of Israel and is both busy and industrial. By road and rail it is a matter of forty-two miles up to the capital, and in the depths of winter, when occasional heavy snowfalls whiten Jerusalem, it is not unusual for some cars to be driven fast downhill to arrive in Lod with snow still on their roofs. Trains, too, have come into Lod before now with the last vestiges of Jerusalem snow melting off the roof, for the forty-two miles involves not only a drop of 2,500 feet but a rise of temperature on a hard winter's day from 30 degrees Fahrenheit to 55 or 60 degrees. I have heard of youths packing the snow on the tops of cars and keeping it in being so as to throw a snowball in Tel Aviv!

The train pulls away from Lod and still continues southward for six miles to Na'an, the actual junction for Jerusalem. It was not a junction in Turkish and Mandate times, but the Israelis have built a new line down to Beersheba from here, which has become important since that biblical site has increased its population from about 500 to 70,000. From Na'an the Jerusalem line swings east and starts to climb, easily at first and then in more determined style. The country is rough and stony, with many goats on the farms, and at Nhal Soreq station, not much more than a halt, there are still people about. Six miles further on, another stop, the last before the capital, is made at Hartuv, some 600 feet up in rugged country. If on time, and Israeli trains

are exceptionally punctual, it will be 6.32 p.m. The last fifty-two minutes are spent labouring up through defiles and cuttings, round sharp curves and through utter wilderness, effecting the transition from a hot land to a cool mountain-top, the real transition to Jerusalem. To the Turks must be given every credit for the engineering of this difficult line seventy years ago.

The diesel roaring, the train manages twenty to twenty-five miles an hour as it grinds and squeals round violent curves, often with the locomotive at right angles to the last coach - and there are only five on the train. The gradient is between 1 in 50 and 1 in 60, a very hard task but a spectacular one in steam days. This is the real Judaeen Wilderness, and at night pairs of eyes are readily seen from the carriage windows as jackals and other creatures dart amid the rocks. Even in daylight the linely arid country is broken by the sight of dog-like creatures, for this waterless region is not settled and in any case lies in what is called the 'Jerusalem Corridor' with Jordan closing in on both sides. At one stage the border is only inches away from the tracks on the right-hand side of the train. By day the views are tremendous; at night there is little to see until a glow appears in the sky above and in front of the train, not unlike a volcano about to erupt (which it did in June, 1967!), which is the great city of Jerusalem with all its lights and neon signs.

Clawing itself out of the last of the wilderness, the stopping train from Haifa, now moving at thirty miles an hour through dry cool air - which in winter can be sharply cold - canters through the suburbs of the capital and at 7.26 in the evening comes to a halt at the small and rather dingy terminus which is Jerusalem Railway Station, in a part of the New City about a mile from the barbed wire marking the rigid 'No Man's Land'. It is the last passenger movement of the day in the station, which now sleeps until two hours after sunrise, an uneasy sleep in the quiet part of the studious city, while beyond the barbed wire in the Old City Jordanians and tourists (for the Old City has most of the religious sites) stay up at late movies or visit night-clubs until the small hours of the morning."

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98:10 The line out of Istanbul Haydarpasa station was originally built to Izmit in 1100 mm gauge. The CFOA bought this railway and regauged the line as part of its network in 1893/94. An ex-CFOA third class car for suburban trains is preserved in the railway museum in Ankara. (Paul Scheller.)

