

# HaRakevet

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הרכבת

A Quarterly Journal on the Railways of Israel  
and the Middle East  
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- 149:01 – New stock for Etihad Rail freight and passenger services  
(Photo Etihad Rail)

***'Progress in the Desert. While some countries seem intent on destruction and self-destruction, the Gulf State are building and expanding the Etihad Rail network. (Details inside.)***

# Editorial

149:02

This issue is being put together at the end of May - specifically the 25th - and because things are changing so rapidly in the Middle East at present a 'snapshot' only can be provided of what is going on. The conflict within the Gaza Strip continues, to the outrage of many observers and commentators who seem to have forgotten how it started, and why. Hatred. Diplomats shuttle to and fro, to Iran, to Qatar, to Egypt; Politicians in former colonial countries issue condemnations and conveniently forget their own obscure but grim histories. At the same time Israel continues, despite interior conflicts and turmoils, to build steadily a modern state with modern and modernised infrastructure - railways, tramways, metros, new electrification and signalling.

There are at present no railways operating in Sinai or in Gaza, none in Lebanon, none in Syria, none in Yemen; only occasional excursions run in Jordan. Yet further afield in Turkey, Iran, Saudi Arabia, the Gulf States and Egypt west of the Canal much progress is being made on new extensive and high-speed railway systems for both passengers and freight. This indicates to the Editor what COULD be done in the region as a whole if the effort, determination and expenditure poured for decades into hatred and warfare could instead be channelled into something more constructive and that links countries rather than seeks to destroy them. i.e. Building Railways.

In Central Asia (we have always been a bit vague about where exactly the area covered by 'Harakevet' reaches!) - new lines are being planned and built to enable goods to travel from East to West and it is perhaps relevant that much of the input for these initiatives is coming from a vast country which has neither a Jewish nor a Christian nor a Moslem identity. Which is not to say it is neutral - but at least it has a different perspective on how to progress its own economic interests without getting sidelined into endless fights about 'holy cities' and sectarian opinions and the like. China is acquiring ports in the Mediterranean - including in Haifa - and will be operating public transport in Israel. Will these developments change things in the longer term? We hope to live long enough to be able to wait and see.

Enjoy - the Editor

- While standing on Herford station on 27.05.2025 the Editor was taken by surprise when a class 111 Bo-Bo in 'Rail Adventure' livery rushed past with two Siemens IR double-deck carriages and two barrier wagons, clearly on their way from Siemens to Braunschweig. Here Rail Adventure operates a depot where new railway stock is stored and tested and prepared for onward transfer to their operators or to the ports for export.



149:04.

# News from the line

## (i). HERZLIYA STATION EXPANSION WORKS

On 27.02.2025 Israel Railways Ltd. announced on its website that project for upgrading and eventually doubling the size of Herzliya railway station would start on 06.03.2025 at 22:00 and continue until Friday 07.05.2025 at 16:00; While there will need to be additional dates for further works, these are being performed now.

The works cause the partial closing of Ayalon Highway 20, in the median of which the main Tel-Aviv - Haifa line runs, as well as closing the main line between Tel-Aviv Savidor/Central and Beit-Yehoshua.

The project includes: A new Terminal west of the current station, two overhead bridges linking between the station hall and the platforms to be extended, a new parking area for cars, bicycles and motor cycles, and a Bus Terminal, all fully accessible for people with restricted abilities.

Works to be performed: Erecting of steel beams of 45m and 80 tons each, and 26 concrete beams of 50 to 75 tons each.



- Above & below inset, computer-generated images showing the future terminal and station, provided courtesy of Mr. Matan Berkovich from the IR Spokesman Office; Credit for images: Peleg Kleinhaose Architects.



(ii). AAA

From a press release of 02.03.2025 by Israel Railways Ltd.:

"The rating company S&P (Standard & Poor's) Ma'alot has raised the rating of Israel Railways Ltd. and its bonds from AA+ to AAA."

iii). ELECTRICAL FAILURE

From a press release of 02.03.2025 by Israel Railways Ltd.:

"Due to an electrical power failure on the network around Lod, Be'er-Ya'akov, Rehovot and Ashkelon on 01.03.2025, traffic between these stations ended at 20:30 to enable repairs. On the following day this continued from 21:00, with services reduced to allow for repair crews to work.

(iv). MORE WOMEN TRAIN DRIVERS

From a press release of 04.03.2025 by Israel Railways Ltd.:

"IR has announced the opening of a dedicated train driver course for Women Only, who eventually will be integrated into the passenger trains fleet, joining three women drivers already working; the course is to last one year with at each stage in the course a filtering out, so that at the end only the best trained will become authorized drivers. The women will be exposed to the latest railway innovations and will thus have a wide general rail knowledge.

The Railways stress that all the jobs are open for men and women equally, adding that there are more than 40 women on the railways as engineers, inspectors, technicians, drivers, team heads, etc."



• A woman train driver. (Courtesy of Mr. Matan Berkovich from the railways' spokesman office.)

(v). PURIM FESTIVITIES

From a press release of 05.03.2025 by Israel Railways Ltd.:

"Today the Railways performed the annual Purim festival event with "Larger than Life Lobby" acting for children with cancer. The event included the "Smiling Train", the 25th celebration with a colourful show at Tel-Aviv Savidor/Central station, and then travelling to Be'er-Sheva station where a nice

• Purim Crew. (Photo courtesy of Mr. Daniel Fogel)



dinner was held for hundreds of children, their families and children entertainment artists."

(vi) PURIM EXTRA SERVICES

From a press release of 12.03.2025 by Israel Railways Ltd.:

"The Railways will strengthen passenger services on Friday 14.03.2025 and on Sunday 16.03.2025 due to the Purim holidays, as follows:

On Friday 14.03.2025, the following trains are added:

Train 9032 will depart from Lehavim/Rahat (north of Be'er-Sheva) at 11:00 and will call at: Kiryat-Gat, Kiryat-Malachi, Mazkeret-Batya, Ramla, Lod, all Tel-Aviv stations, Herzliya, Binyamina, Atlit, all Haifa stations, Merkazit-HaMifratz, Hutzot-HaHamifratz, Kiryat-Hajim, Kiryat-Motzkin, Akko (Acre) and terminating at Nahariya.

Train 9037 will depart from Nahariya at 12:16 and will call at: Akko (Acre), Kiryat-Motzkin, Kiryat-Hajim, Hutzot-HaMifratz, Merkazit-HaMifratz, all Haifa stations, Atlit, Binyamina, Herzliya and all Tel-Aviv stations, terminating at Tel-Aviv Hahagana.

On Sunday 16.03.2025 services between Tel-Aviv and Jerusalem will be strengthened:

Between Modi'in Central and Jerusalem Navon there will be 2 trains/hour each direction until about 00:30.

Between Herzliya and Jerusalem Navon there will be 2 trains/hour each direction until about 02:00."

Later: According to reports both by the Transport Ministry, Israel Railways Ltd., and the Jerusalem Municipality, the number of passengers on the A1 fast rail link to Jerusalem, during the Purim Holidays - 13.03.2025 to 16.03.2025 - was up by 500%!

Even the biggest opponents of rail had to admit that without the A1 line and to some extent the LRV, the traffic would have come to a standstill!

(vii). SIMULATOR

From a press release of 13.03.2025 by Israel Railways Ltd.:

"Israel Railways Ltd. and IWB ('Innovation Without Borders') held on 12.03.2025 an international conference which hosted dozens of diplomats, international economic advisors and representatives of commerce, economy, innovation and science at the Railways headquarters at Lod railway complex.

The conference was led by the Railways' General Manager Mr. Shiko Zana and there was an exchange of knowledge from both sides regarding railway innovation. The guests enjoyed driving through an ultramodern simulator."



(Photo Simulator)

## **(viii). LEVEL CROSSING REPLACED**

*From a press release of 12.03.2025 by Israel Railways Ltd.:*

"This morning, 12.03.2025, the last remaining level crossing on the Tel-Aviv - Haifa coast line has been removed and replaced by a grade separation. The site is just north of Atlit station (19 km north of Haifa) and includes a 210m long overhead wide road bridge, sidewalks for pedestrians and lanes for 2-wheel vehicles, as well as lighting and trees; It cost \$16.44M (NIS 60M); This will enable cutting of train times by removing the speed restrictions caused so far by the level crossing."

## **(ix) TRACK WORKS**

### **(a) NEAR NETANYA**

*From a press release of 17.03.2025 by Israel Railways Ltd.:*

"As an integral part of the infrastructures maintenance programme, there will be traffic changes on Friday 21.03.2025 only, during which vital works will be performed in the area around Netanya station; as a result, the stations of Netanya and Netanya Sapir will be closed and split services will operate between Ben-Gurion Airport and Beit-Yehoshua and between Hadera and Nahariya only.

Trains between Be'er-Sheva Central and Nahariya, and between Ashkelon and Binyamina will start/terminate at Beit-Yehoshua.

Traffic will resume on Saturday night 22.03.2025 at about 20:00.

The railways will provide alternative free bus shuttle services over the closed sections."

### **(b). NEAR BINYAMINA**

*From a press release of 23.03.2025 by Israel Railways Ltd.:*

As an integral part of the annual infrastructures maintenance programme, vital works are to be carried out on Friday, 28.03.2025 only around Binyamina station. As a result, the following traffic changes will take place:

Trains between Ben-Gurion Airport and Nahariya (night trains operating between Thursday and Friday) will operate in split mode; between Ben-Gurion Airport and Binyamina, and between Haifa Hof-HaCarmel and Nahariya only.

Trains between Be'er-Sheva Central and Nahariya will operate in split mode; between Be'er-Sheva Central and Binyamina and between Haifa Hof-HaCarmel and Nahariya only.

The station of Atlit will be closed. The railways will provide alternative shuttle bus services between the closed sections. Traffic will resume on Saturday night 29.03.2025 at about 21:00.

### **(c). A1 JERUSALEM LINE**

"In order to improve the readiness of the A1 tunnels for emergency situations on the section between Ben-Gurion Airport and Jerusalem Navon, there will be no services between Ben-Gurion Airport and Jerusalem Navon stations on Tuesday 25.03.2025 from 22:30 and until service end. The railways will provide alternative shuttle bus services between the closed sections.

Traffic will resume on Wednesday morning 26.03.2025 at about 05:00."

### **(d) PETACH TIKVA / B'NEI BERAK**

"Due to works upgrading the signalling system, the stations of Petach-Tikva Kiryat-Arie and B'nei-Berak will be closed on Saturday night 29.03.2025 only. As a result, trains between Ashkelon and Herzliya will operate in split; between Ashkelon and Tel-Aviv Savidor/Central and between Herzliya and Petach-Tikva Sgula only.

The railways will operate alternative free bus shuttle services over the closed sections. Traffic will resume on Sunday 30.03.2025 at 05:00."

### **(e). SHARON CIRCLE LINE**

*From a press release of 25.30.2025 by Israel Railways Ltd.:*

"The railways are upgrading and increasing services on the Sharon Circle Line stations and the stations of Holon, Bat-Yam and Rishon-LeZion Moshe Dayan.

With the start of the summer timetable on Friday 28.03.2025 the frequency at these stations will be 3 trains/hour each direction at the rush hours (06:30 to 09:00 and 15:30 to 19:00) only; during other parts of the day the frequency will remain 2 trains/hour each direction as usual.

Trains on all lines will run on Friday until 17:00, while on Saturday night traffic will resume at 22:00. On lines being electrified, traffic will end on Friday at 13:00 to minimize disruption for works."

## **(x) NEW FREIGHT TERMINAL AT KIYAT MALACHI**

Israel's National Council for Design & Building has approved the Transport Ministry's plans to build a freight terminal near Kiryat-Malachi on the line to Be'er-Sheva to support a switch of aggregates and sand traffic from road to rail; the ministry calculates that 16M tonnes will be hauled over the next decade.

## **(xi). 2024 FINANCIAL RESULTS**

*From a press release of 20.03.2025 by Israel Railways Ltd.:*

"On 19.03.2025 the railways published the results for 2024, which show a financial strength and stability:

The total Profit for 2024 was almost \$22M (NIS 79M) compared with a loss of \$13.6M (NIS 49 M) in 2023.

The total Income for 2024 was \$0.96Bn (NIS 3.48Bn) compared with \$0.93Bn (NIS 3.36Bn) in 2023.

In 2024 the EBITDA was \$29.9M (\$108M) compared with \$23.3M (NIS 84M) in 2023.

### **Passenger Section:**

During 2024 the railways carried 65.4 M passengers compared with 62.5M in 2023; the war has an influence. The 2024 daily average of passengers carried was 257,000 compared with 242,000 in 2023.

Income from passengers in 2024 was \$67M (NIS 242M) compared with \$78.4M (NIS 283M) in 2023.

The profit of Passenger Section in 2024 was \$37.1M (NIS 134M) compared with \$21M (NIS 76M) in 2023.

Average Punctuality was 96.5% in 2024 compared with 94.2% in 2023.

### **Freight Section:**

In 2024 the railways carried 6.15M tons compared with 6M tons in 2023.

Income from Freight in 2024 was \$44.9M (NIS 162M) compared with \$41.3M (NIS 149M) in 2023.

The Freight Section loss in 2024 was \$19.39M (NIS 70M) compared with \$15.5M (NIS 56M) in 2023."

**(xii). HAIFA PORT NEW ACCESS LINE**

"On 26.03.2025 a 5km new siding was opened between Haifa East and the new Haifa Bay Port, which belongs to China.

The new terminal includes four tracks with an overall length of 3km and the facilities enable the loading/unloading of up to three trains simultaneously.

At the opening ceremony a train with 17 containers of ZIM (Israeli Integrated Shipping Lines) headed by a GM/EMD diesel loco type G12 (one of the few survivors still in service) departed from the terminal.

Among the participants were: The Port General Manager Mr. Mihau Chiyang, Chairman of Israel Railways Ltd. Directorate Mr. Moshe Shimoni, Israel Railways Ltd. Deputy General Manager for Infrastructures operation Mr. Harel Even, and others.

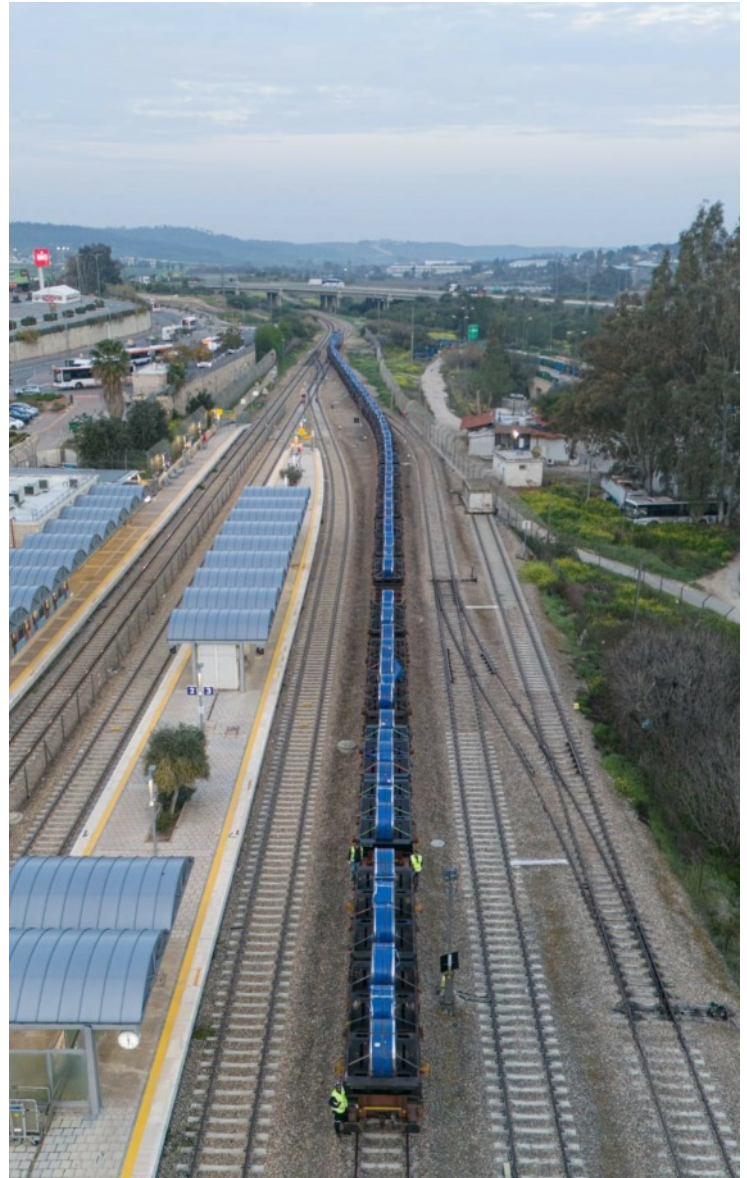
The siding has been opened four years after the opening of the port in 2021 and it was built thanks to a collaboration of Israel Railways Ltd., Israel Ports Company and SIPG."

(Information courtesy of Mrs. Hagit Hornstein from Haifa Radio 1075 FM and 99.5 FM).

"The railways have recently opened the renovated freight terminal at the station of Beit-Shemesh, and for the first time after 30 years a train carrying dozens of steel coils with a total weight of over 1,000 tons entered the terminal.

More freight trains have followed since, carrying also construction materials from the nearby quarries, aggregates, timber, etc."

- Aerial view of the train and of Beit-Shemesh station; by courtesy of Mrs. Orli Barami from the Transport Ministry; credit for pictures: Tal Video Productions Ltd.



- The first train prior to departure; credit for pictures: Mr. Ra'anan Cohen from Haifa Port

**(xiii). BUDGET PASSED (FOR NOW)**

*From a press release of 25.03.2025 by the Transport Ministry:*

"Transport Minister Mrs. Miri Regev has set an achievement, after the Knesset has approved the transportation budget of \$5.45 Billion (NIS 20 Billion) for the following projects:

Linking Israel: a high-speed network for both passengers and freight from Kiryat-Shmona in the north (near the border with Lebanon) to Eilat on the Red Sea; it will include also a high-speed line between Tel-Aviv, Ben-Gurion Airport to Be'er-Sheva and a high-speed line between Be'er-Sheva, Dimona, and Eilat.

Additionally, the LRV projects for Be'er-Sheva and Haifa - Nazareth are promoted as are the METRO lines for Tel-Aviv and Jerusalem.

Another budget of \$5.45 Billion (NIS 20 Billion) has been allocated for a BRT network between the planned transportation hubs.

The Ministry states that in 2024 a record number of 904 Million passengers used all modes of public transport."

**(xiv) FREIGHT TO BEIT SHEMESH AGAIN**

*From a press release of 01.04.2025 by the Transport Ministry:*



**(xv). FREE TRAVEL FOR SENIORS**

The Transport Ministry announced on 02.05.2025 that as from 25.04.2025 all 'Senior Citizens' over the age of 67 (compared with 75 so far) will enjoy the right to travel free of charge on all public services modes, which means 1.1M passengers; with the so-called "social justice" move another 1.5M passengers enjoying 50% price reduction.

**(xvi). JERUSALEM FIRST STATION WORKS BEGIN**

On 30.03.2025, the Transport Ministry and the Jerusalem Municipality announced that the preliminary works on the Jerusalem historical station quarter (used since 2005 as a recreation and leisure area) have started.

The project of 350 acres will include an underground Israel Railways Ltd. station linked with the Navon station, two LRV Blue Line stations, the first station of the cable car to link directly with the Old City, culture and business centres, 1,400 hotel rooms, and 1000m bicycle lanes.

The Railway Park - a walkway built on the historical railway line - will be temporarily diverted during the preliminary works, but the recreation and leisure area will keep its activities.



**(xvii). DEFIBRILLATORS**

*From a press release of 01.04.2025 by Israel Railways Ltd.:*

"During recent months, while preceding the legislation, the railways have started installing gradually 150 defibrillators on trains in addition to those already installed on 67 railway stations. This is a result of a long collaboration between the railways and The Red Star of David (the equivalent of the Red Cross) ("Magen David Adom").

The train was painted with yellow and red to be identified as one with the defibrillator installed on."



**(xviii). FOR THE HARD OF HEARING**

From a press release of 06.04.2025 by the Transport Ministry:

"The railways are upgrading the service for dozens of thousands of hearing-impaired passengers, and have started operating a service centre fitted and accessible for such passengers through an application called Sign-Now.

By pushing a button they will receive an immediate translation in real time with a personal translator who will translate the information into sign language. It will include names of all 67 passenger stations in sign languages."

**(xix). LET MY PEOPLE GO BY TRAIN!**

During Passover Holydays (11.04.2025 to 20.04.2025), the railways operated many additional trains, most of which ran in double formation (two trainsets coupled) in order to cope with the extra traffic;

**(xx) NEGEV PLANS**

Steve Sattler: "Until recently, the planned and accepted route of the future "high-speed" train to Eilat was to be from Yerucham to Eilat.

But, now - both the politics in Jordan and the earthquake potential of the Arava has made the most likely route - with several tunnels and bridges, - due South from Beer Sheba, to Eilat. Stops along the way will be Mitzpe Ramon, a new city South of Mitzpe Ramon (called "N", at this time (NUN in Hebrew,)) then the Ovda airport and into Eilat.

At a complex just North of Eilat, a set of 'night-traffic' train-tracks will swing East - for the new 'goods and container' traffic - route - into Jordan and then into Saudi Arabia.

(Saudi Arabia is planning an extensive network of trains both East - West, and for the Red Sea coast (Neom) and to Ashdod.)

By 2040 ?? ...We can expect to take the train from Tel Aviv to Dubai, across KSA. It will probably be a hotel-train with lots of food-options."

**(xxi). FIRES**

On 23.04.25 it was reported:

"Because of the extreme heat wave - up to 40° centigrade - there are fires along railway lines; Yesterday this happened near Beit-Shemesh and at the Na'an junction area. Today it happened again near Beit-Shemesh. Some suspect it was deliberate ignition, mainly Islamic terror. Traffic was disrupted."

**(xxii). SPECIAL TIMETABLE FOR MEMORIAL AND INDEPENDENCE DAYS**

On Wednesday 30.04.2025, the Day of Remembrance for the fallen soldiers of Israel and terror victims, and on the eve of the Independence Day (Thursday, 01.05.2025), trains operated following a special dedicated timetable:

Train No. 8032 departed from Be'er-Sheva Central at 10:41 and terminated at Haifa Central the 8 instead of Tel-Aviv Savidor/Central.

Train No. 8033 departed from Tel-Aviv Savidor/Central at 12:03 and terminated at Be'er-Sheva Central. Both trains called at all the intermediate stations.

On the Independence Day (Thursday, 01.05.2025) on most of the lines the frequency was supposed to be 1 train/hour, however, due to huge fires on the mountains around Jerusalem and Ben-Gurion Airport, trains to/from Jerusalem and Modi'in were put on hold for several hours; only

after 11:00 was there approval from all the services involved to resume services gradually.

**(xxiii). ELECTRIFICATION TO BEER SHEVA AND TO NAHARIYYA**

*From a press release of 27.04.2025 by Israel Railways Ltd.:*

"The traffic at Beer-Sheva station in the evenings and on Fridays will return to regular from Sunday 04.05.2025, thanks to completion of electrification at the station, and trains will terminate there instead of Ofakim and Lehavim/Rahat.

Simultaneously, service frequencies at the stations of Ashdod Ad-Halom, Yavne West, Rishon LeZion-Moshe Dayan, B'nei-Brak, the two Petach-Tikva stations, Rosh-HaAyin North, Kfar-Sava Nordau, Hod-HaSharon Sokolov, Ra'anana South and Ra'anana West will be increased to 4 trains/hour between 06:30 and 09:30 and 15:30 and 19:00.

The fourth train will provide a faster service by not calling at Ra'anana, Bat-Yam and Holon stations.

In the coming weeks the railways will commence an additional important milestone in the electrification scheme by starting to electrify the Nahariya - Akko section; as a result, there will be no trains at these stations from each Friday at 13:00 until the Sunday morning at 05:00.

The railways will provide alternative bus shuttle services between the closed stations."

**(xxiv). ELECTRIC UPGRADE**

*From a press release of 29.04.2025 by Israel Railways Ltd.:*

"From Saturday night 03.05.2025 and until Sunday 22.06.2025, the stations of: Holon, Bat-Yam, Rishon-LeZion Moshe Dayan, and Yavne West will be closed each week between Sunday and Thursday, between 21:00 and 05:00 on the following day, as well as on each Saturday night, During rush hours, traffic will run regularly. The normal service will resume on Sunday 22.06.2025 at 05:00 with the completion of the electric network upgrading."

**(xxv). BALLISTIC MISSILE**

As if the fire of 01.05.02025 was not enough, on 04.05.2025, a ballistic missile from Yemen which was not intercepted and hit the ground near Ben-Gurion Airport caused a suspension of train traffic to/from Jerusalem and Modi'in between 10:00 and 10:30.



**(xxvi). LOST PROPERTY**

From a press release of 05.05.2025 by Israel Railways Ltd.:

"After hundreds of thousands of passengers passed through railway stations during Passover and Independence Day during the last two weeks, the railways have started today an operation of returning as many as possible lost belongings to their owners. The railways' authorities have extended the hours of activity up to 19:00 at Tel-Aviv Savidor/Central where the store is located.

About 500 unclaimed items (such as sleeping bags, blankets, books, etc.) have been donated to soldiers of the IDF. Many passengers who had lost property came and reclaimed it.



• (Photo courtesy of Mr. Daniel Fogel from the railways' spokesman office.)

**(xxvii). TECHNOLOGY.....**

*From a press release of 15.05.2025 by Israel Railways Ltd.:*

"Three Israeli start-ups have been selected to work with the Railways in order to change the face of the Israeli public transport. The 3 startups are the finalists selected out of nine initiatives in the competition to promote improvements of the local public transport.

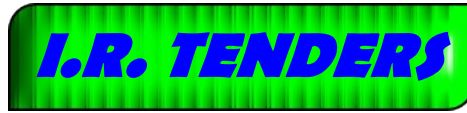
The three selected are:

AI-Axioma System Engineering & Integration, specializing in solutions of early forecast of failures.

Drones-Vestel Technology providing scanning of the electrified network to identify failures and obstacles, thus enabling the railways to employ predictive maintenance along the lines.

TREEDIS-Augmented reality providing creation of precise digital copies of physical environment, thus enabling virtual patrols and training for the employees in a simulated environment of working at railway sites."

- Passengers take shelter during a missile attack)



(i) **ALTERNATIVE FUELS** "Solutions for Fuel Alternatives – For Consumption, Train Transport, Logistics, and Operations: Challenge Tender No. 42235. Proposal Invitation

1. Israel Railways Ltd. hereby invites the submitting of proposals for applicable solutions and technologies for the challenge: "Solutions for Fuel Alternatives – For consumption, Train Transport, Logistics, and Operations" (hereinafter: "the challenge tender").

2. The challenge tender documents and any additional information can be obtained, free of charge, at Israel Railways website (tender.rail.co.il) as of 28.11.2024.

3. All responses must be submitted no later than – 24.12.2024 – to the e-mail address - startup@rail.co.il.

(ii). **RFI - Technological Solution of Train Gauge Measurement Gates**

4 December 2024. Israel Railways Ltd. ("ISR"), in accordance with its obligations under the Israeli Mandatory Tender Laws and its implementing regulations and the International Agreement on Government Procurement, wishes to request information for Technological Solution of Train Gauge Measurement Gates ("RFI").

1. RFI Documents are available for review and download at ISR's website at the following address: <https://tender.rail.co.il/?page=generalauctions>.

2. Any Request for Clarifications should be addressed in writing only to Mr. Dean S. Lipkin, International Procurement Coordinator, no later than December 23, 2024, by e-mail: deanl@rail.co.il. Bidders shall be responsible for verifying receipt by ISR of Requests for Clarification.

3. All Responses must be submitted no later than January 29, 2025 at the following address: Israel Railways Ltd., Procurement & Contracting Division, Yoseftal 1, Lod, 7136801, Israel To the attention of Mr. Dean S. Lipkin. ISR shall be entitled to postpone the deadline at its sole discretion.

4. RFI Documents and notices regarding ISR RFI are also published on the internet at [www.rail.co.il](http://www.rail.co.il) In case of discrepancy between any of the following: the terms of the RFI published in this publication, any of the publications on the internet and the RFI Documents, the RFI Documents shall prevail.

5. Respondents are advised to check for updates during the RFI process and before submitting proposals."

ISR requests information from potential manufacturers and suppliers regarding Technological Solution of Train Gauge Measurement Gates, in order to control the freight train profile (the correct loading measurement) before the train departs from large freight train yards and stations. Israel Railways has about 5 yards and stations that required the yards TGMG.

The objective of this RFI is to enable ISR to investigate the possible purchase of

TGMG, as well as to review and estimate the costs involved. Israel Railways Ltd is interested in obtaining various solutions to implement this task and to receive price offers for the proposed solutions.

The "Gate" has to recognize any aberrant Load outside the train profile. In case of detection, the system must send a warning signal to the train driver and the local signaller, with the aim of preventing the train's departure. The warning signal must remain active after the train passes the gate. During the Measurement process of the train, the cargo and the device itself must not be damaged...."

(iii). **Tender No. 42228: For the Manufacture and Supply of W14 Rail Fastening Systems**

General Terms and Conditions: Israel Railways Ltd., in accordance with its obligations under the Israeli Mandatory Tender Laws and its implementing regulations, wishes to obtain bids for:

The manufacture and supply of W14 Rail Fastening Systems for Universal Monoblock Concrete Sleepers ("Concrete Sleepers") with SKL14 Clamps ("Fastening System/(s)"), all in accordance with and subject to the terms specified in these General Terms and Conditions and the accompanying Tender documents.

1. Pre-requisites for Participation in the Tender:

1.1. The bidder must be the manufacturer of the proposed SKL 14 Clamps.

1.2. The bidder must be the designer, assembler and supplier of the proposed W14 Rail Fastening System.

1.3. The bidder has supplied at least 360,000 W14 rail fastening system sets (one set per one concrete sleeper) in accordance with EN13481-2 standard between 2019 and the Final Submission Date, and has manufactured the SKL 14 Clamps as part of such sets.

One Set per one concrete sleeper includes:

- Four Screws;
- Four Washers;
- Four Clamps;
- Four Angled Guide Plates;
- Two Rail Pads;
- Four Dowels.

(iv). **Tender No. 24.12.2024: Operating a Paved Area for Car Parking at Haifa Bat-Galim station:** The contract is for 24 months with optional extensions of up to additional 24 months. Latest date for submission of proposals: 22.12.2024.

(v). **Tender No. 240501: Permission for Removal and Purchase of Scrapped Equipment:**

The contract is for 24 months with optional extensions of up to additional 36 months. Latest date for submission of proposals: 25.12.2024.

(vi). **Tender No. 12056: Providing services of Purchasing and Maintaining all the Fire-Fighting Equipment at Railway Stations and Sites:** The contract is for 12 months with optional extensions of up to additional 48. Latest date for submission of proposals: 30.12.2024.

(vii). **Tender No. 124293: Occupational Physician for the Railways:**

The contract is for 24 months with optional extensions of up to additional 48. Latest date for submission of proposals: 14.01.2025.

(viii). **Tender No. 123257: Design, Supply, Installation, Assimilation and Maintenance of Display Equipment for Passengers at railway stations:**

The contract is for 108 months for the first agreement period and up to a maximum of 192 months. Latest date for submission of proposals: 13.02.2025.

(ix). Tender No. 42220: For Provision of Consulting Services for the Preparation and Implementation of a strategic plan for the Smart/ Digital Ticketing System

"Israel Railways Ltd. ... wishes to obtain bids for Tender 42220 - For Provision of Consulting Services for the preparation and implementing a strategic plan for the smart/ digital ticketing system.

1. Tender Documents are available for review and download at ISR's website at the following address: <https://tender.rail.co.il/?page=generalauctions>

2. Any Request for Clarifications should be addressed in writing only to Mr. Izik Adar, International Procurement Coordinator, no later than January 15, 2024, [sic!] by E-mail: [izika@rail.co.il](mailto:izika@rail.co.il). Bidders shall be responsible for verifying receipt by ISR of Requests for Clarification.

3. All proposals must be submitted between February 6th, 2024 to February 8th, 2024 between 8:30 to 13:00 (Israel time) in one main envelope into Tender Box No. 8 at the following address: Israel Railways Ltd., Procurement & Contracting Division, Yoseftal 1, Lod, 7136801, Israel. ISR shall be entitled to postpone the deadline at its sole discretion.

4. Tender Documents and notices regarding ISR tenders are also published on the internet at [www.rail.co.il](http://www.rail.co.il). In case of discrepancy between any of the following: the terms of the Tender published in this publication, any of the publications on the internet and the Tender Documents, the Tender Documents shall prevail.

5. Bidders are advised to check for updates during the Tender process and before submitting proposals."

(x). Tender No. 32501: Providing services of Supplying Furniture for the Railways' Offices: The contract is for 12 months with optional extensions of up to additional 48 months. Latest date for submission of proposals: 06.02.2025.

(xi). Tender No. 125297: Providing services of Cognitive Tests: Latest date for submission of proposals: 19.01.2025.

(xii). Tender No. 122191: Supply, Building, Assimilation, and Maintenance of Organizational Learning Systems for Israel Railways Ltd.: The contract is for 60 months with optional extending of up to additional 96 months. Latest date for submission of proposals: 17.03.2025.

(xiii). RFI For Rescue Trains. RFI Documents are available for review and download at ISR's website at the following address: <https://tender.rail.co.il/?page=generalauctions>. All Responses must be submitted no later than February 19, 2025 by e-mail: [deanl@rail.co.il](mailto:deanl@rail.co.il), To the attention of Mr. Dean S. Lipkin. ISR shall be entitled to postpone the deadline at its sole discretion.

(xiv). Tender No. 250101: Operating a Non-Food Sales Outlet at Jerusalem Navon station: The contract is for 36 months. Latest dates for submission of proposals: 20.03.2025.

(xv). Tender No. 123224: Providing services of Maintenance and Repair for Elevators, Escalators and Lifting Devices for people with Limited Ability at the stations of Southern Israel: The contract is for 12 months with optional extensions of up to additional 36 months. Latest dates for submission of proposals: 24.03.2025.

(xvi). Tender No. 124277: Providing services of International Shipping and Customs Clearances of Export/Import: The contract is for 12 months with optional extensions of up to additional 48 months. Latest dates for submission of proposals: 17.03.2025.

(xvii). Tender No. 124292: Providing services of Sewage, Draining, and Pressure Pumps for the Railways' various sites: The contract is for 24 months with optional expending of up to additional 36 months. Latest date for submission of proposals: 04.03.2025.

(xviii). Tender No. 250102: Operating a 16sq.m. Shop + a Store for selling Cellular Phones at Tel-Aviv Savidor/Central station: The contract

consists of up 4 months adjustment period and up to 120 months permission period. Latest date for submission of proposals: 10.03.2025.

(xix). Israel Railways Ltd. Tender No. 124279: Providing services of Training, and Apprenticeship of Theoretical and Practical Guidance: The contract is for 24 months with optional extensions of up to additional 36 months. Latest date for submission of proposals: 02.04.2025.

(xx). Israel Railways Ltd. Tender No. 241201: Placing and Operating of Automatic Machines for selling Drinks and Snacks at Railway Stations:

The contract is for 60 months with optional extensions of up to additional 2 months. Latest date for submission of proposals: 20.03.2025.

(xxi) Tender No. 225190: Services of supplying Electric Current to the Railways' various Offices, Stations, Workshops, etc.:

Notes: The railways intend to select up to two winning bidders only. The annual costs of electricity in 2024 were about \$24 Million (NIS 85 Million) by 185 internal consumers. The winner will have to supply and install the following: PV system, Electricity Storage Facility, and Power Generation Facility. The contract is for 60 months with optional extension of up to additional 60 months. Latest date for submission of proposals: 20.03.2025.

(xxii) Tender No. 124268: Operating a Catering System at the Railways' Headquarters and Depots of the Lod railway complex: The railways intend to select one winning bidder only. The contract is for 24 months with optional extending of up to additional 72 months. Latest date for submission of proposals: 18.03.2025.

(xxiii). Procedure No. 125302: Call for Institutes and Organizations to include the Railways in their Benefits Pools for Employees regarding: Culture, Welfare, Consumer goods, Electrical Appliances, Vacation and Enrichment.

(xxiv). International Tender No. 124272: Brake Testing Devices with Automatic Testing Procedure for locomotives and passenger coaches.

(xv). Tender No. 124272: A frame agreement for supply of Safety Shoes for railway employees: Preferably shoes produced in Israel. The contract is for 36 months with optional extensions of up to additional 12 months. Latest date for submission of proposals: 22.05.2025.

(xvi). Tender No. 224174: Performing Upgrading Subcontracting Works of Construction regarding Upgrading Structures all over the network:

The railways intend to select up to four winning bidders. The contract is for 12 months with optional extensions of up to additional 48 months. Latest date for submission of proposals: 21.06.2025.

(xvii). Tender No. 32502: An annual Frame Agreement for supply of Tablets for IR employees:

The contract is for 12 months with optional extensions of up to additional 48 months. Latest date for submission of proposals: 10.06.2025.

(xviii). Request for Information (RFI): Testing Equipment for ISR Fleets HVAC Systems.

"Israel Railways Ltd. ("ISR") hereby requests information from potential manufacturers

and/or suppliers and/or official representatives with regards to Testing Equipment for Heating, Ventilation and Air Conditioning ("HVAC") Systems ("Testing Equipment for HVAC Systems") in order to examine the variety of types available which meets ISR's technical and operational requirements,....

1.2. This RFI, as defined in section No. 14A to the Israeli Mandatory Tenders Regulations 1993, is a preliminary process initiated by ISR, solely for receiving information and conducting its initial internal evaluation and consideration of the subject matter. This RFI shall not,

in any manner whatsoever, to be considered as a request for proposals, nor as a tender.

1.3. Notwithstanding the aforesaid, ISR may, as a result of this RFI, at its sole and absolute discretion, approach one or more of the Respondents to this RFI and/or any other party, in order to obtain additional information.

2.1. Potential Respondents may include manufacturers and/or suppliers and/or official representatives of Testing Equipment for HVAC Systems.

2.2. ISR wishes to obtain technical and commercial as well as any other general information with regards to the Testing Equipment for HVAC Systems, subject to the requirements detailed in the Technical Attachment.

**Purpose**

2.1. Performing maintenance/ predictive maintenance and the ability to detect faults in HVAC Systems using dedicated Test Equipment (further TE).

2.2. TE shall include the ability of measurement, analyze, registration, and display of different parameters

of the HVAC, for comparison of tests at different times, and deviate in their performance for

monitoring, control and fault analysis. Inter alia, TE shall include the following features:

2.2.1. Consolidation of test data, creation of numerical and graphical reports.

2.2.2. Historical Bank Test for Analysis and comparison of parameter values and finding

deviations/faults.

2.2.3. Data storage and the ability to transmit the data examined in digital media.

2.2.4. Test the Humidity, temperature and other room parameters with working HVAC, imitating real life conditions in a train.

2.3. It should be noted that in addition to the stationary equipment, ISR request refers to a portable solution for testing the air conditioners on the wagons as long as such solution is available...."

(xix). Israel Railways Ltd. Tender No. 124252: Upgrading the interior of 150 series 2000 double-deck carriages: This upgrading is further to upgrading the interior of 150 double deck cars series 2000 recently completed. The contract is for 24 months with optional extensions of up to additional 48 months. Latest date of submission for proposals: 06.07.2025.

149:06.

**A. JERUSALEM**

**(i). OPENING OF EXTENSIONS:**

(a) From Aharon: "Although the extended Red Line was opened already in the evening of Thursday, 27.02.2025, for several trains only, and full services began on Friday, 28.02.2025, [which of course was a "short day"] it was not until Sunday morning 02.03.2025 that an official announcement by all those involved was published.

It was originally planned to perform a ceremony, but due to what has been described as "the security situation, particularly the tension due to the Islamic Ramadan holidays" there was no ceremony; Cynics said that Transport Minister Mrs. Miri Regev was too tired after a week-long visit in Morocco...

The line has been extended by 2.75 km north of Pisgat-Ze'ev and 4.5km south of Mount Herzl reaching the Hadassah Ein-Karem Medical Centre; 12 new stations have been added by the extensions."

(b) As if overcrowding, delays, etc. on the extended LRV Red Line were not already enough, the concessionaire Kfir announced on 08.03.2025 that trains would run on that day and the next only between Neve-Ya'akov in the North and Ora Junction in the south, and would not reach the Hadassah Ein Kerem Medical Centre, due to the Opening Ceremony with the participation of the Prime Minister, Transport Minister and many VIP's.

(c) On 25.03.2025 it was reported the Transport Ministry is considering imposing a penalty on Kfir - the Jerusalem LRV concessionaire - due to bad performance, including many delays in services, overcrowding and other complaints.

**(ii). IN THE SUMMER TIME.....**

Kfir, the Red Line concessionaire, announced that with the switch to Summer time on 28.03.2025 on Fridays the last train will depart from Neve-Ya'akov at the northern end to Hadassah - Ein Kerem (the southern end) at 16:29; In the opposite direction the last train will depart from Neve-Ya'akov at 16:31.

On and from Saturday night 29.03.2025 the first train from the north on Saturdays will depart at 20:33, running until midnight. In the opposite direction the first train will depart at 20:16, running until midnight.




• An LRV on the Red Line by courtesy of Jerusalem On Line.

(iii). POLITICS

The Jerusalem LRV project:

"The situation of the Blue Line can be described as a sort of political campaign:

For the present the winner for supplying the trains is CRRC. The rivals: Danya Cebus, Dan Bus company and PESA claim that financial closure took too long and that what is described as PESA's technical inferiority is not realistic: the other group consisting of Shikun U-Binuy, Egged bus company and Skoda also claim similarly; Both groups demand that the tender be re-opened.

Sources say that the complex situation is a result of the high pressure from the Trump administration to avoid doing business with China. If the tender is to be reopened, this may cause a delay of 18 months for opening the line."

But then: On 14.05.2025: Last minute news: "The Transport Ministry has just announced that due to removal of sanctions on trade with China, the concessionaire for the Jerusalem LRV Blue Line is indeed to be CRRC."

(iv). FURTHER ANNOUNCEMENTS AND SUSPENSIONS:

What my dear late uncle used to refer to as "the Buggeration Factor" makes itself felt:

a) Despite promises by both the Red Line operator, Kfir, and the Transport Ministry that after Passover services would return to normal, on 21.04.2025 there were two electrical failures which caused severe delays. The line's users complained that both bodies did not prepare alternative transport on time.

b). On the morning of 12.05.2025 a tractor with a digger attachment raised above profile hit the catenary; the service was stopped all over the line. Services resumed partially at 10:30 between Mount Herzl and Hadassah Ein-Karem Medical Centre; even at 14:30 the service was still only partial with the addition of the section between Neve-Ya'akov in the north and Central Bus Station; only much later were services resumed along the full line length.

(v). BALAGAN:

*CONFUSIONS REGARDING THE GREEN LINE*

For some weeks confusion has reigned concerning the works required for the future Green Line and the extent to which these will impact upon the existing Red Line. There have been many contradictions. To follow a sequence:

(a). On 11.04.25 Aharon wrote : "The extended LRV Red Line has recently been suffering from repeated failures, delays, etc. As if this is not enough, very soon and for three months the line will operate only partially, due to works of linking the line with the Green Line near the string bridge which will link the neighbourhood of Har-Nof (extreme Western Jerusalem) and the Central Bus Station."

(b) However on 23.04.25 there came:

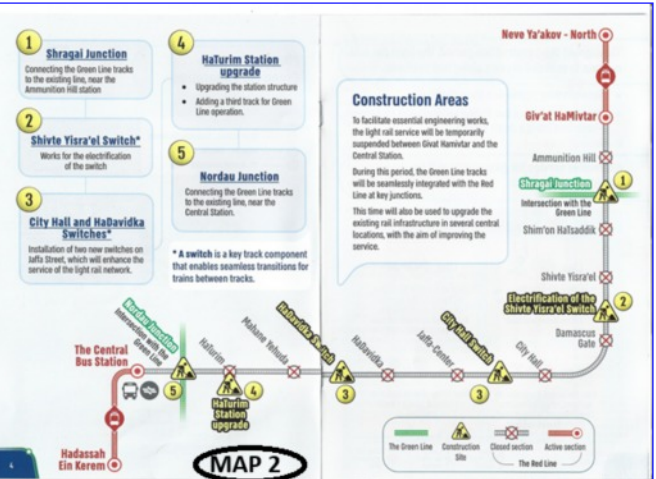
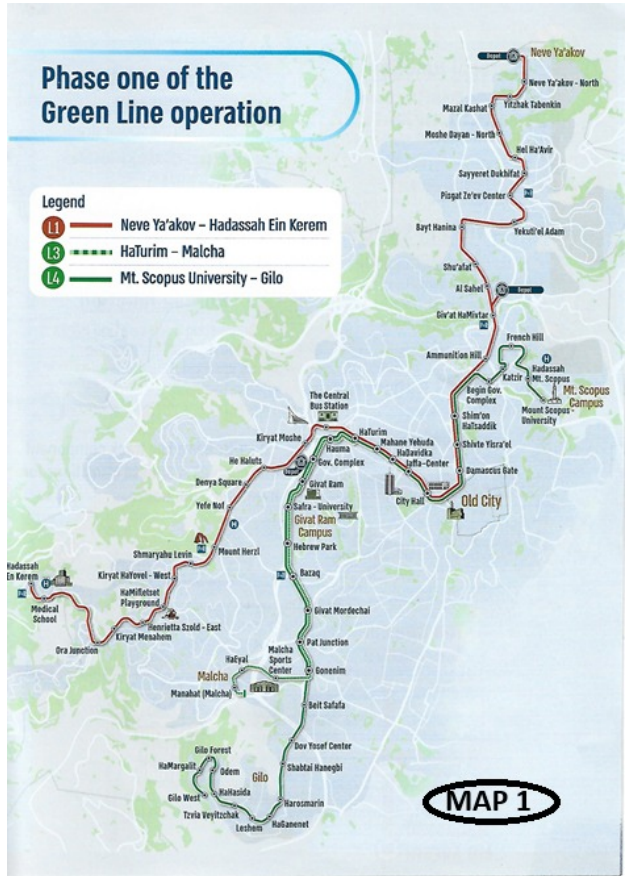
"The Transport Ministry's General Manager Mr. Moshe Ben-Zaken, has given a statement to the press, according to which there is no approval for the changes which had been recently published in the media regarding of partial closure of the Red Line, due to works to link it with the Green Line near the Strings Bridge; An in-depth examination and preparation works have still to be performed, to minimize the disruption for the public."

(c). On 06.05.2025, after very intensive discussions between the Transport Ministry, the Jerusalem municipality and the concessionaire of the Red Line - Kfir, it was decided that the line will indeed be closed partially from 21.05.2025 for about three months due to the works linking it with the Green Line; at least some of the passengers will be compensated by free riding on the northern section, while between the Central Bus Station and Hadassah Ein-Karem (the southern section) services will be provided by single trains rather than two-trains formation.

(d). To this Steve Sattler wrote: "The Jerusalem Red Line will be partially closed for 14 weeks, for the centre of Jerusalem section while the contractors re-design and build the Green Line that will run through the city centre. This Green Line will run at 90 degrees to the current Red Line and cross at Rehov

Strauss. Thus, the Tram only runs from the North (Neve Yakov) to Ammunition Hill and back... and from the South (the Central Bus Station and Navon railway station) to Hadassah Hospital.

The Municipality actually wanted the contractors to work at nights - for five nights and do the re-designing - but for budgetary reasons they refused. This central section of the busy tram line will therefore be closed for 14 weeks.



• Jerusalem tram map - Sybil Ehrlich

(e) Finally Sybil took the bull by the horns and, just before our press deadline, made an especial adventurous expedition:

"On Sunday 25.05.25 I went to the service centre of Kfir, the company running the light rail, to try and make sense of the various maps displayed on stops showing the construction work, since they are self-contradictory.

Maps 1 and 2 are scans of the relevant pages in the English-language booklet. Map 3 is a photo of a completely different map that I saw in the street.

According to Map 1, the Red Line (existing) and the Green Line (under construction) will run together in the central section.

According to Map 2, the Green Line will cross the Red Line at Nordau Junction and at Shragai Junction.

There is construction work for the light rail on Sarei Israel Street (which crosses Jaffa Road at Nordau Junction). And there were riots opposing the construction on Bar-Ilan Street. None of that makes sense if you look at Map 1, but makes perfect sense on Map 2.

Then Map 3 shows the Green Line running separately from the Red Line in the centre section, crossing it as shown on Map 2.

Since I could make no sense whatsoever of this, I did the obvious thing and asked at the Kfir service centre. Unsurprisingly, the young woman at the counter had no idea, so she went to ask someone else. You won't believe the answer, or maybe you would....

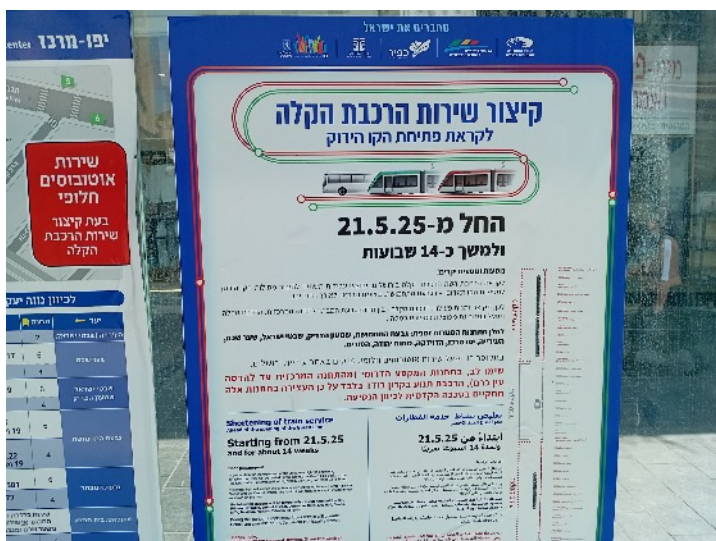
This is what I was told:

- In the first stage, the Green Line - call it Green A - will run on the "separate" section, north of the Red Line, and crossing the Red Line as shown on Map 2.

- In the second stage, the Green Line will run on the same tracks as the Red Line in the centre section - call it Green B - and the Green A section will be incorporated into another new line, of a different colour.

- Now, looking at online maps of the future network, it's not that at all. You can Google as well as I can...

I will believe all of it when I see it...."



- Sign on a Jerusalem tram stop

To which Steve wrote:

"Yes, the original plans

for the GREEN and LIGHT GREEN lines were to go through Ramat Eshkol, but at this time they will be running (in three years' time) down Jaffa Road and then on to Gilo.

It seems that they can finish this new line faster on this route than on the Ramat Eshkol Route. Jerusalem has so many 'bad' car congestions

that they want to get a new line working as fast as possible. Also, - they still have not made that final decision whether to build a tunnel under Bar-Ilan St. to Shamgar; or to run the tram along Bar-Ilan St.

I suspect that - soon, the CITY will publish a new and accurate map of the new 9 lines they are planning."

## B. TEL AVIV

### (i). NEW CONCESSIONAIRE CHOSEN

From a press release of 13.05.2025 by Keystone Israel Ltd.:

"The Infrastructure Investment Fund, which is also the controlling owner of Egged Group, Israel's biggest bus operator, has won the concession to operate the Tel-Aviv LRV Green and Purple Lines currently under construction, in addition to the Red Line already operated by Keystone Israel Ltd.- this line through the Tevel sub-contractor.

According to the contract, the operation terms are for 10 years with an option to extend it by another 10 years.

Egged/Keystone forecast for income during the first 10 years of operation (including the running period) is for \$0.947 Billion (NIS 2 Billion).

The Green Line, 39 km, is expected to carry 275,000 passengers/day and to link Herzliya with Tel-Aviv, Holon and Rishon-LeZion (north to south).

The Purple Line, 27 km, is expected to carry 256,000 passenger/day and to link Tel-Aviv with Ramat-Gan, Kiryat-Ono, Givat-Shmuel, Or-Yehuda and Yahud/Monoson.

Keystone Israel Ltd. Mr. Navot Bar said: "Winning the concession for the two lines is further proof of the company's solid status as the Israeli leading public transport company and its commitment to become also a major player in the LRV".

### (ii). NTA Tender No. 109/2025: Performing Apartment Acoustic Insulation for Buildings along the Green and Purple LRV lines under construction and for Buildings along the future METRO lines:

NTA intends to select up to 20 winning bidders as following:

Category A - up to 6 bidders for insulation of 150 apartments.

Category B - up to 7 bidders for insulation of 600 apartments.

Category C - up to 7 bidders for insulation of 900 apartments.

The contract is for 36 months with optional extensions of up to additional 36 months.

Latest date of submission of proposals: 19.05.2025.

### (iii). METRO WORK STARTS

From a press release of 31.05.2025 by the Transport Ministry:

"The Greater Tel-Aviv METRO project has entered into the actual phase, after the approval of the initial works to build the Metro depot at the Petach-Tikva Sgula industrial zone, near the LRV Red Line depot and Israel Railways Ltd. The depot will provide services to M2 Metro line of 25 km running east/west.

Line M1 will be the longest at 85 km from Herzliya in the north to Holon and Tzrifin in the south.

Line M3 will be a semi-circular one of 32 km linking the M1 and M2.

The cost of the three lines is estimated at \$40 Billion (NIS 150 Billion).

(iv). NTA Tender No. 001/2025: Providing Counting Services:

The services include: Traffic counting, Queue length, etc. NTA intends to select up to two winning bidders. The contract is for 36 months with optional extensions of up to additional 24 months. Latest date for submission of proposals: 11.06.2025

(v). METRO PARTIAL APPROVAL

On 06.05.2025 the Transport Ministry announced that the Tel-Aviv METRO LINE 1 has been approved, but unlike the Transport Minister's requirement it will run only within Israel's borders and will not continue into Samaria. It will be 38 km long. To this also, a press release of 12.05.2025 by the Transport Ministry: "The National Infrastructures' Committee approved today the '101D p 1' to which marks the completion stage of the METRO SYSTEM of Greater Tel-Aviv Area planning; it refers to part of the so-called Northern Arm of M1 to link Kfar-Sava and Hod-HaSharon with the other Metro lines to be built; this means a completion of the statutory design stage of the whole Metro network."

C. HAIFA - NAZARETH

From "Railway Gazette" 25.03.2025: "Work is under way on the Nofit interurban light rail line linking Haifa and Nazareth, which will run through complex terrain with gradients of up to 8%. Dan Shenbach, CEO of project promoter TransIsrael, discusses the state of progress with Benjamin Zelki.

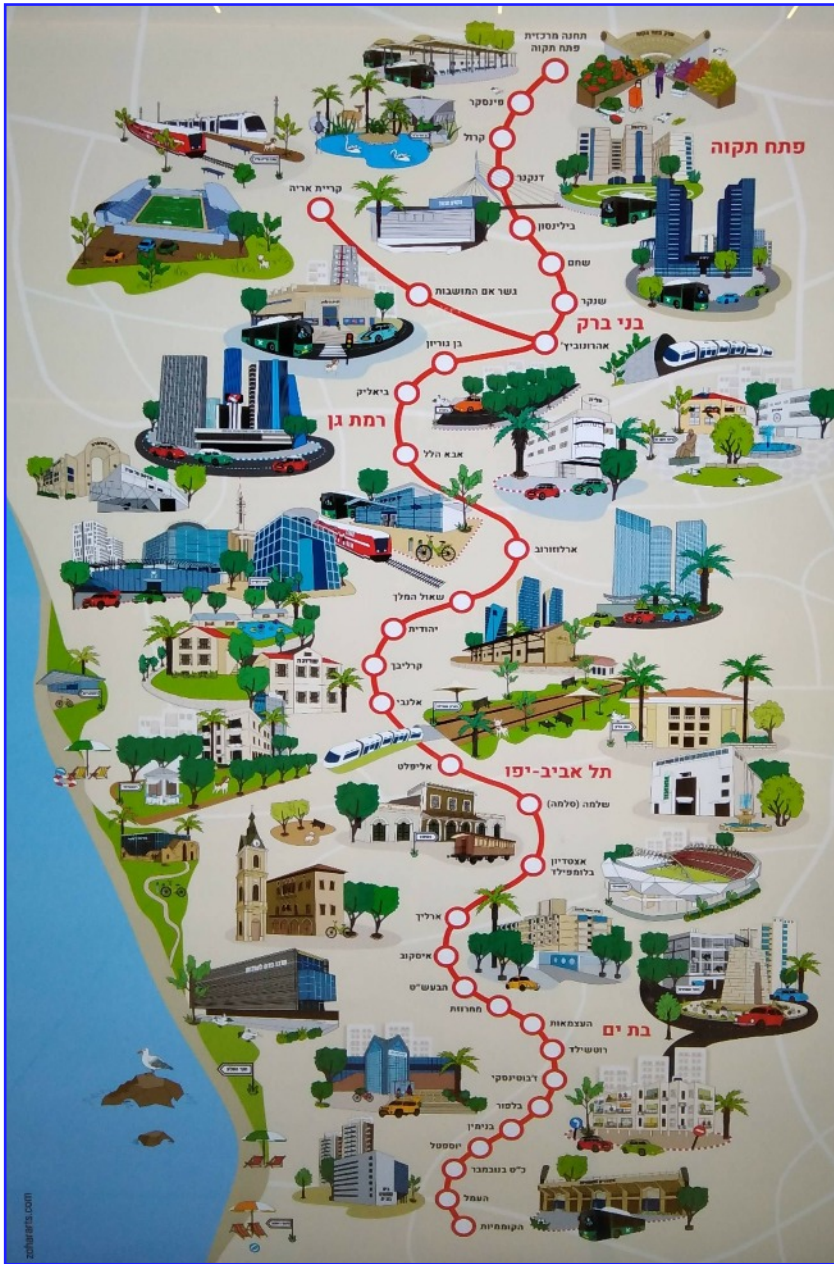
"I understand that construction is now in full swing on the Nofit light rail line between Haifa and Nazareth. Can you please provide us with an update on the project? When did work start and when is the line expected to open? Where has the financing come from?"

"The goal we have set for the Nofit line is to connect urban centres and their surrounding regions through a flexible transit offering. The project is being developed through a public-private partnership model, meaning that funding is being sourced from both government and the private sector.

The civil works package including land acquisition, earthworks and bridge construction is being financed by the national government. Contracts were awarded in 2020, and work is now under way along the entire route. Many major structures are taking shape, offering the public a first glimpse of the new railway.

Local contractors Y. Lehrer & Co, Rolider, Abraham Isaac and Brothers Anton Earthworks are building Section D, which is the 7km urban section

through Nazareth, from Har Yona to Taufic Ziad. Contracts A, B and C cover the 34km interurban section from Har Yona to Merkazit Hamifratz in Haifa; this is being built by KSMG Contractors, AMZ Shemesh, Olizki Infrastructures, Rolider and Y. Lehrer & Co.



The railway systems and rolling stock are being provided under a €1Bn PPP contract to design, finance, build, operate and maintain the line for 25 years. This was signed in May 2024 by TransIsrael and the HN Light Rail Line Ltd consortium of Alstom, Electra and Minrav. Alstom already has a subsidiary in Israel, and its collaboration with the two local partners will help to develop local expertise in this sector. Along with TransIsrael, the project is being overseen and facilitated by the Ministry of Transport & Road Safety. In my opinion, this blend of private investment and public oversight ensures efficiency and alignment with the wider public interest.

The 'HNRL' consortium is expected to begin work on its share of the project later this year; completion and the start of revenue services are envisaged by 2029. The line is projected to carry approximately 100,000 passengers per day, significantly improving public transportation in northern Israel."

"The Nofit light rail line line is being developed with a mix of interurban and urban sections. How will it be operated? Will the rolling stock be designed for a conventional light rail service or for more of a tram-train style operation?"

"We are looking to harness the advantages of both. On the interurban sections, the vehicles will run in tram-train mode with full CBTC. In both Haifa and Nazareth, the urban sections will be worked as a conventional tramway with the vehicles operating on line-of-sight.

The track alignment and signalling will allow for a maximum speed of 100 km/h, but the actual operating speed of the rolling stock is expected to be 80 km/h. The system will initially support 4min headways, but there will be provision to increase capacity in the future to support a predicted growth of the region's population.

Alstom will be supplying a fleet of 54 Citadis X05 light rail vehicles for use on the line. These will be single-ended vehicles, which will run back-to-back in semi-permanently coupled pairs 68m long. The vehicles will have comfortable seating and standing areas, ensuring a suitable environment for both urban and interurban travel.

The trams will be fully accessible and equipped with high-quality passenger information, ticketing and security systems. Each vehicle is designed to accommodate between 350 and 450 passengers, depending

on the final configuration and seating arrangement."

"Northern Israel is quite a hilly region. Do you foresee any challenges in delivering the project, and how are you preparing for them?"

"Implementing the Noflt light rail project does have several challenges, not least the complex terrain. The 41km route with 20 stops traverses a diverse landscape, requiring the construction of bridges, tunnels and elevated sections to maintain a consistent alignment suitable for efficient operation. The line must ascend 550m from sea level in Haifa to the highest point in Nof HaGalil, with continuous gradients of up to 8%. This will also pose a challenge for the rolling stock.

Another challenge will be to minimise disruption during the construction of the route, although to some extent this is inevitable for delivering such a large project in a relatively densely-populated area. We are working to overcome this by ensuring close involvement with the residents, offering opportunities for active community engagement. We are also working closely with more than ten local authorities and infrastructure owners. That also presents a significant logistical challenge, but we believe it is important for us to do as a responsible authority.

On the technical side, we need to ensure seamless integration of the electrification, signalling and communication systems. Again, that requires meticulous co-ordination with multiple stakeholders.

Finally, it is essential to mitigate the environmental impact of the project, both during construction and the subsequent operation. That requires adherence to strict sustainability practices and regulatory compliance."

"This is the first interurban light rail line to be developed in Israel. Have you been able to draw inspiration and experience from similar projects in other countries?"

"The Noflt project has drawn inspiration from several international tram-train systems that successfully integrate urban and interurban transit. The most notable has been the Karlsruhe Model from Germany. The Karlsruhe tram-train network



includes both street-running and light rail sections, while the vehicles also operate on main line railway tracks. It is a great example of integrated public transport provision for urban and suburban areas. We are delighted that the operator of Karlsruhe's light rail system is also involved in our project's operation & maintenance team.

Another good example is the TramTrain de la Vallée de la Lys in the Mulhouse area of northeast France. This also demonstrates effective regional connectivity. The benefits of linking urban centres through interurban corridors have also been well demonstrated in the UK. While the Manchester and Croydon light-rail systems repurposed former railway alignments, these corridors share many similarities with our route, which involves the development of a dedicated rail alignment along the median of Highway 79 within an existing transport framework."

"Are there plans for future extensions?"

"The current project consists of a single route. However, there are ongoing discussions and proposals for extending the Noflt line at both ends, running further into Haifa, as well as Nazareth and beyond."



**(i). MORE TO SMOSCHEWER & CO.**

In 'Lok Magazin' 04/2025 p.36 is an item on the completed restoration of a 60cm gauge 0-4-0T on the 'Feld- und Grubenbahnmuseum Fortuna' (FGF) at Solms (near Wetzlar). This was built at "P.W. Budisch A.G.", the armynised firm formerly Smoschewer & Co, in Breslau and was of the 'KDL 13' standardised 'Kriegs Dampflokomotiven' based on the Henschel 'Riesa' type. It came as Loco 2 to the construction firm 'Faber & Schnepf' in Giessen where it worked in the Giessener Braunsteinbergwerk (formerly the Fernie quarry) – in 1944 a total of ten of these locos were working here. Later in the 1960s it was one of several places in children's playground. In 1987 the FGF society was able to rescue it and has since spent many years in restoration.

Only three such Budisch locos survive – this one and another of 60cm. Gaug at the DDM Museum in Neumarkt-Wirsberg and a 75cm gauge example at the narrow gauge museum at Sochaczew in Poland.



130 – Ty 3 129 (Smoschewer 1930-708) am 10. März 1976 in Lobzenica (Lobsenz) Foto: Harriet Steinmetz, Höttingen

- 0-6-0 locomotive built by Smoschewer / Breslau. (Published by A. Askanas, Freiburg 1976, page 144.) (Thanks to Dirk Forscher) Ty3 129 (Schmoschewer 708 of 1935) at Lobzenica (Lobsenz) in Silesia on 19 March 1976

As a brief explanation: Some years ago I was involved in correspondence concerning a 4-4-0 60cm tender locomotive (!) that ran at a pleasure railway at Lunapark in Leipzig from around 1913 - and coupled this with an image taken at Moosbierbaum in Austria in 1956 of either an identical or the same loco that had somehow been used for military purposes in a Wehrmacht depot. It was by Zobel & Schmoschewer and apparently a Herr Brangsch was the agent who arranged the railway in Leipzig. All very complicated and with a lot of unknowns. At the time I had no idea that the constructor was Jewish!

**(ii). OBITUARY: URI BEN-REHAV**

Sad news of Uri's passing at the end of March 2025. Uri was one of the earliest railway enthusiasts in Israel and for decades a keen supporter of HaRakevet.

Uri was born in 1931 in Vienna with the name William Shwarz. When the Nazis came to power, Jewish children were thrown out of school. Houses and property were confiscated, and in the streets, they were subject to antisemitic abuse.

When he was 11 years old, he was sent with his mother, his brother and his grandmother to the Theresienstadt concentration camp. His grandfather and an uncle were sent to Auschwitz, where they met their death. Uri, with his mother and his brother, remained



HaRakevet page 15

in the camp until they were freed at the end of the war by the Russian army.

Uri joined a group which got approval to reach Israel and in 1948, he, together with his mother and brother, arrived there. He found work in a subsidiary of Teva, producing yeast. He later worked in Amcor in Tel Aviv in dishwasher manufacture. After reaching pension age, he worked in an insurance firm.

He joined the Israel Model Rail Club at its founding in 1988 and was a loyal member, both as an expert in building scenery and as a guide for visitors, including children. He was an authority on the history of railways in Israel from the Ottoman regime to the British mandate period. He also built a layout at home, with rolling stock and scenery based on knowledge of one of those periods.

He was beloved by everyone who knew him, including the members of the rail club.

Zecher Tzaddik Livracha.

**(iii). JERUSALEM OLD STATION PLANS**

From 'Times of Israel' 02.04.2025: "The city of Jerusalem is undertaking a massive expansion project around the First Station entertainment complex, creating a new residential, business, tourism and transportation hub that will include train stations and a controversial cable car to the Old City and the Western Wall.

The 350,000-square-metre (3.8 million-square-foot) complex, located between the neighbourhoods of Talbiya, Mamilla, the German Colony, Baka, Ramat Rachel and Givat Hananya, will include 180,000 square metres (1.9 million square feet) of low-rise residential construction, 1,400 hotel rooms, commercial and office spaces, public green spaces and bike paths, the municipality said.

"This is a project of international standards that will constitute a new tourist, business and cultural hub in the city of Jerusalem and the first modern transportation hub of its kind in Israel," said Jerusalem Mayor Moshe Lion.

Historical sites will be preserved, including the Khan Theater, built on the ruins of an ancient inn from the Crusader period, a spokesperson for the municipality said.

A new underground train station will connect Israel Railways lines with the southern part of the city. The Khan Station (named for the adjacent theatre) will allow travel to Tel Aviv in about 38 minutes, and to Ben Gurion Airport in about 23 minutes, the municipality said. Currently, there is only one train station in Jerusalem, the Yitzhak Navon station at the western entrance of the city.

There will also be two light rail stations for the Blue Line, a route under construction that will connect the Ramot neighborhood in northern Jerusalem to Gilo in the southern part of the city. Work on that line, which is expected to open around 2030, began earlier this year. A cable car station will also provide transportation to the Old City, taking riders over the Ben Hinnom Valley and Mount Zion, the municipality said. The controversial project was first proposed more than a decade ago, but has been opposed by numerous parties who argued that it is untenably obtrusive and politically irresponsible.

Authorities hope the 1.4-kilometre (nearly a mile) cable car will ferry up to 3,000 people per hour in up to 72 10-person cabins. It has been opposed by the Franciscan order that acts as custodian of Catholic sites in the Holy Land, among other religious groups.

The existing First Station entertainment complex and 'Park Hamesila' path will remain open to the public during the

ongoing work and construction will be phased to minimize disruptions, the municipality said. Preliminary work has already begun, including preparing the Khan complex for the light rail. Signs will soon be erected along the 'Park Hamesila' path, guiding visitors through the construction areas.

The current First Station complex, opened in 2013, is built on the location of the old Jerusalem railway station, which was constructed in 1892 to connect the city to Jaffa. The new project will be managed by the Jerusalem municipality through Eden, its economic development company.

#### Rebuilding Jerusalem

The announcement of the First Station complex project comes as Jerusalem prepares to approve a NIS 9.72 Billion (\$2.63 Billion) budget for 2025, eight percent higher than the previous year. Combined with a development budget of NIS 6.2 Bn approved last December, that would give the city a total budget of some NIS 16 Bn for continued investment in education, welfare, culture, transportation, employment and operations, the municipality said."

#### (iv). TEA CUPS

From 'The Mancunian' (Manchester Loco Society) Issue 230, Sept. 2002.

From 'GWR Magazine' 1936: "Serving teas into trains results in the loss of 240,000 cups annually. They travel to remote parts of the UK and have been found in soldier's kits as far afield as Sudan and the Khyber Pass!"

#### (v). OBITUARY - JOHN BLYTH

From 'The Mancunian' Issue No. 240. May 2004.

Old news, but relevant. p.58 "JOHN BLYTH We are sorry to hear of the death of John Blyth in hospital in Bangkok, Thailand on 23 December 2003 at the age of 80. John was born in Cornwall into a family with connections in the steel industry at Staveley. The family soon moved to Cheltenham and he was educated at Cheltenham College. On leaving school he joined the LMS Railway at Ashchurch. Progressing through the grades and a varied railway career he retired from a senior position in the Western Region Parcels Department at Paddington in 1978.

John's railway interests extended beyond the British main lines to industrial railway matters. He travelled widely overseas and was very knowledgeable on foreign railways. A long term member of the RCTS, he was one of the founders of its Cheltenham branch. As a member of the Stephenson Locomotive Society he held office as Editor of its Journal and subsequently as Chairman.

During World War 2 John served in the Royal Engineers in the railway operating side, attaining the rank of Major."

In fact John served in the RE in Palestine and was involved in some unpleasant incidents, as he rebuffed rather sharply a request to correspond about his time there! But this was his right in the circumstances.

#### (vi). TURKISH TRAVELS.

In 'The Mancunian' Issue 265 July 2008

p.87. GREAT RAILWAY JOURNEYS : ADANA TO KONYA OVER THE TAURUS MOUNTAINS (Turkish State Railways, T.C.D.D.). By Geoff Monks

"This was another L.C.G.B. trip and my first visit to Asia. The journey over the Taurus Mountains

in central Turkey was made on 21st May 1972 behind a German-designed, French-built 2-10-0 of T.C.D.D. class 56701 with another example initially double-heading and then banking.

Our mode of travel for much of the two-week tour was in a hired couchette/day coach, while a restaurant car with a chef and full crew had kindly been provided additionally by T.C.D.D. These two vehicles were attached to various service trains on our travels around the country and on this occasion we were travelling westwards between Malatya and Afyon (475 miles) attached to the through Kurtalan to Istanbul stopping train. This covered some 1,202 miles from end to end in 64 hours at an average speed of 15 mph. and in 1972, it was steam-hauled for most of the way. Our special coaches had been attached at Malatya on the evening of 20th May and we departed behind 56047, a large 2-10-0 built by Krupp in 1940. There were several rough shunts during the night as through coaches from other points were attached by various Prussian G8.2 type 2-8-0s, the movements being complicated by our own stock always having to remain at the rear of the train. Despite this, sleep prevented anyone from checking whether a different loco came on between 56047 and the 56701-class 2-10-0 56746, which we found on the front taking us into Adana the following morning.

Adana was surrounded by distant mountains and we had already come through a long tunnel beneath one range during the night. However, the real climbing came after Yenice, 15 miles west of Adana.

Two more 56701 class locos, 56702 as train engine and 56734 as pilot replaced 56746 at Adana.

At Yenice, 56734 came off the front and went onto the rear of the train as banker and we then experienced over three and a half hours of hard slogging from these two locos to Ulukisla, 67 miles from Yenice. Fire-cleaning was carried out surrounded by towering peaks in the middle of nowhere at Pozanti. As we passed through tunnel after tunnel, despite closed windows, the train rapidly filled with smoke which became rather unpleasant in the longer bores because of the slow passage. The banking engine was removed at Ulukisla, even though the summit still lay a short distance ahead.

Various French firms built the future T.C.D.D. 56701 class between 1944 and 1946 to the German Deutsche Reichsbahn Class 44 design and these became Class 150.X on the S.N.C.F. In 1955, 48 examples were sold to the T.C.D.D. where, in the early 1970s at least, most, if not all were based in the Adana area. They looked quite unlike the class 44s running in the two Germanys (of the time), having very short chimneys and no smoke deflectors. Following the dieselisation of the line through Adana in the mid-1970s, the class was withdrawn. My notes tell me that I rode on the footplate of 56702 between Bogecik and Ayranciderbent, a distance of 15 miles, mainly downhill after the summit. I remember that the ride was particularly hot, rough and noisy. 56702 was replaced at Konya by one of the famous Henschel 2-8-2s for the onward run to Afyon."

#### (vii). AN EGYPTIAN JOURNEY IN 1949.

by Bob Miller (in 'The Mancunian' Issue 269, March 2009 pp.46-48):

"I was still at school at the end of World War II but was called up for National Service in 1947, joining the Corps of Royal Engineers. In September 1948 I was posted to the Headquarters of the Middle East Land Forces at El Fayid, on the western shore of the Great Bitter Lake some two-thirds of the way from Port Said to Suez. I remember setting sail from Southampton in a captured German U-boat Supply Ship which had been renamed "Empire Deben" and we broke down twice on the journey to Egypt, which resulted in unscheduled stops in Gibraltar and Malta - but we were not allowed ashore.

As we left Southampton the last engine we saw was one of the American 0-6-0T shunters on the docks and the first locomotive I spied in Africa was another of exactly the same class on the quayside in Port Said. Indeed, when we disembarked next morning, on 1 October and boarded the special troop train it was another of the class, No.1155 (Vulcan Ironworks 4372/43), which hauled us as far as the main line station where No.9728 (NBL 21851 /18, ex LNER 6587) one of the Robinson '04' 2-8-0s, took over. Speed over the largely flat 70 mile journey to El Fayid was around 40 with a maximum of about 45 mph. Fayid was on a double-tracked secondary main line with plenty of freight hauled mainly by '04s' plus Stanier '8Fs' [2-8-0] and Egyptian

'Moguls'. [2-6-0] There were only about four passenger trains each way daily, again featuring the Moguls and the tank versions (both 2-6-2T and 2-6-4T) plus the occasional Atlantic [4-4-2]. Everything was oil burning with the resulting thick black smoke.

I had a couple of long weekend leaves in Cairo, going round the National and the Railway Museums and climbing to the top of the highest pyramid. However, I determined to save up for a more ambitious holiday, joining a package tour to Luxor and Aswan in Upper Egypt. Thus it was that on Saturday 12 February 1949 at 8.0am, straight after breakfast, I took all my kit to the stores (which took three journeys) and set off on foot to cover the one and a half miles to the main Canal Road, managing to hitch a lift when I was about half way. There was no suitable train due so I waited for the bus to Ismailiya, which came after only five minutes at about 10.0am. It was an RAF 'bus, a converted lorry with canvas sides (no windows) and entry afforded by climbing up into the open back; longitudinal wooden seats were fitted down each side and the fare was 10 piastres (or ackers, as we irreverently called them). Speed was about 40 mph and, with few stops, the 32 or so miles were covered quite quickly so I arrived at the YMCA, the starting place for the tour, at 10.45.

Ismailiya was a pleasant town in the French colonial style (the Suez Canal was French built) with wide tree-lined boulevards and with many of the buildings having first-floor balconies. After a walk round and a leisurely lunch it was time for the party (about two dozen of us, mostly male with about three ladies, all British, all white and all in civvies) to make our way to the station to catch the afternoon Port Said to Cairo express.

This set off at 2.42pm behind new Canadian 6' 0" 4-6-0 No. 345 (Montreal 75619/48) with tapered round-top boiler and, with three stops, arrived in Cairo (90 miles) at 5.0pm. There were eight corridor coaches, absolutely packed like sardines (I managed to stand by a door with a droplight) and with passengers clinging to the outside or lying on the roof; nevertheless we managed to get up to around 65 mph in places.

Engines seen en-route included Atlantics 15 (Baldwin 1920) and 30 (NBL 1925), 2-6-2T 1255 (St. Pierre 1926), 2-6-0 912 (NBL 1938) and double-framed 0-6-0 720 (Franco Belge 1905), whilst we were passed by the 12.30 Down express from Cairo hauled by new English Electric Diesel-electric No. 3002. In the distance at Zagazig I observed on the 75cm Delta Light Railway a 0-6-4T on a mixed train and a two-coach rail car (Sentinel?), too far away to read the numbers.

I thought the Egyptian Atlantics splendid machines, all very similar including those built in America, with plate frames, combined splashers, copper-capped chimneys and green livery. They were numbered between 2 and 80 (less 47, 59, 66 and 67); curiously I later noted an Atlantic numbered 81 in Cairo on 31 July and again in Ismailiya on 1 August, not listed in my 'ABC' so I presumed must have been one of the others renumbered. When Hugh Hughes' book on Middle East Railways appeared in 1981 I was disappointed to find no mention of this mysterious No. 81.

Also green were the new 4-6-0s and the twenty Moguls numbered 901-20 which all had domeless boilers, top feed, ACFI feed water heaters and Caprotti valve gear; mostly they were stationed in Upper Egypt. As we entered Cairo Main I noted 0-6-0s 701 and 731 (NBL 1904-5), 2-6-2Ts 1040 (Breda 1924) and 1213 (NBL 1927), new 350hp DE shunters 4010/14/15 (English Electric, just like the LMS ones) and new Montreal 4-6-0 No. 360. After refreshment in the station buffet (tea and biscuits - 7 piastres) I had a walk around that part of the city near the station as the train to Luxor was not due to depart until 8.0pm, and thus after dark. The Luxor and Aswan express consisted of 12 carriages of which five sleeping cars, one saloon and one dining car were all lettered "Compagnie Internationale des Wagons Lits de Express Européens" which somehow seemed incongruous in Africa. I was travelling in a second-class compartment in one of the ordinary side-corridors, upholstered and four-a-side but the stock is wider than in Britain.

At the front was new 4-6-0 No. 317 (NBL 26318/48), similar to the Montreal version but with parallel Belpaire boilers pitched somewhat lower and with lower running plates and shallow splashers Numbers

301- 20 were North British built and 341-60 by the Montreal Loco Works; all had top feed, 6' 0" wheels, 21" x 28" cylinders and were painted green. The first one, 301, had smoke detectors when I saw her five months later. I formed the opinion that the Canadian engines were slightly more free running. Nevertheless No. 317 was able to pull her load at up to 65 mph on the double-track section as far as El Minya (153 miles) but speed was much slower on the single line beyond and there were another 263 miles to go from El Minya to Luxor. Other engines seen as we left Cairo were Atlantic No. 41 (NBL 1925), another NBL 4-6-0 320 plus Diesel-electric shunter 4007.

I had dinner in the Wagon-Lits dining car with its loose (not fixed to the floor) cane-seated chairs, then sat up back in my compartment I attempted to get some sleep, but without much success. Engines were changed at El Minya, where another NBL 4-6-0 came on but I did not get the number.

Entering Luxor next morning I observed numbers 259 (4-4-0), 661 (2-6-0) and 911 (2-6-0), all NBL built in 1937, 1935 and 1938 respectively and all with Caprotti valves and domeless boilers. Arrival was at 6.55am, 5 minutes late, and engines were again being changed as I got off the train and was shepherded to a waiting taxi to transfer me to my hotel, the Savoy. This, I was pleased to find, was overlooking the east bank of the Nile. After washing, shaving and eating it was 9.30 and time to go by horse-drawn carriage to view the ancient temples in nearby Thebes and Karnak. Excavations were continuing at the latter site and a 2' 0"-gauge railway was in use worked by a couple of foreign-built i/c locos; one Diesel and one Petrol. Later I had an hour-long cruise on the Nile and watched the sun go down; then after dinner had a walk round the town and found that the shops were still open.

The following two days were mostly spent on the west bank of the Nile where there are more temples, the Colossi of Mannon, the Valley of the Kings and the lesser-known Valley of the Queens. I was dazzled by the fabulous gold treasures then still present in Tutankhamen's tomb, only being taken away to the Cairo Museum later.

On Wednesday 16 February 1949 I was due to catch the morning train to Aswan so early on Tuesday evening, before it went dark, I decided to 'do' Luxor shed, which was easily reached by walking off the south end of the main Up platform. There were about 30 engines then allocated to Luxor but at that time there were only 9 locos on shed, 6 of them North British-built Moguls.

These latter were 654 (1935), 657/59 (1936) and 901/10/20 (1938), all but the first the type with feed water heaters, domeless boilers and Caprotti gear. In contrast 654 had a domed boiler and Walschaerts valve gear. The other engines consisted of Atlantic 23 (Baldwin 1921), new 2-4-2T 1147 (Bagnall 2887/48) and double-framed 0-6-0 738 (NBL 16879/05) which was posing in the low evening sun outside the shed taking water so I naturally took a photograph.

It seemed but only a few minutes later that I was pounced on by two Egyptian policemen who seemed unable to speak any English and was hauled off to the police station. I was locked in a cell and it seemed ages before an English-speaking officer arrived to interview me, then I was returned to my cell. Around midnight I was told I was to be taken to Qena, some 75 miles to the south, to see a representative of the British consul, being escorted to the station and taken onto a train of about five coaches hauled by Atlantic No. 39 (NBL 1926); this time travelling third-class on wooden seats in an open saloon with a central aisle. Qena, in the small hours, seemed a pleasant town with a wide main street lined with palms. In due course I was taken back to the station for a return train to Luxor, also Atlantic-hauled by 64 (Linke Hoffman 1926). It was still dark and around 5.0am when we got back to Luxor but I managed to note 2-6-0s 909/14 /21 around the station.

My escort spoke English and he autographed my notebook which contains the entry "Constable Saad Aboud, Luxor Police Station". I was then returned to my cell and left alone; after about an hour or so I tried the door and found it unlocked and the corridors beyond deserted - so I walked out to freedom and back to my hotel. I am convinced that I had become an embarrassment and the police had deliberately kept well out of sight as it would save much paperwork if I was not formally

released. Of course, over the years, I have tended to slightly exaggerate the story so that it developed into how I made a daring escape from an Egyptian jail! These were, incidentally, the only journeys I made behind Egyptian Atlantics.

Anyway, I had time to wash, shave, have breakfast (my first food since lunch the previous day) pack (minus camera which had been confiscated) and get to the station for the Aswan train, which consisted of 11 carriages hauled by NBL Mogul 639. Also in the station was another 1935-built 2-6-0 No.654, which I had seen at the shed the previous evening.

It is a 130-mile single-track journey to Aswan but I don't seem to have recorded any times. Aswan is a terminus but there is no loco shed here, still I noted five engines around plus three more at nearby Komombo; all were the ubiquitous North British Moguls - 625, 631, 649, 673, 904 and 907 plus 911 and 914 seen previously.

Aswan was quite different in character from Luxor and the people were different too, being Nubian, largely Christian (Coptic Church) and much darker-skinned; also very friendly. I cannot imagine the Aswan police arresting me!

1949 was well before the modern Russian dam was built, but there was still an impressive earlier dam then existing, however for me one of the most interesting visits was to an ancient quarry near Shellal from where the stone for many of the finest monuments was cut, including Cleopatra's Needle and a partially-cut, even bigger, obelisk which unfortunately cracked (no doubt accompanied by many ancient Egyptian oaths) and was abandoned.

My visit to the antiquities of Upper Egypt was over all too quickly and at 4.58pm on Friday 18 February 1949 I was aboard the express as it pulled out of Aswan station bound for Cairo 546 miles to the north: The train was 11 carriages long and was again hauled by Mogul 639. At Luxor engines were changed and Caprotti 661 (NBL 1936) took over; by now it was dark and the four other engines I noted had all previously been seen earlier in the week.

Somewhere on the single line and in the open country we came to a halt and did not move for about 12 hours; it transpired there had been a derailment ahead. Unfortunately, the door at the end of the corridor had been locked so I was unable to access the dining car. Next morning, as soon as it was daylight, the local population came to the rescue and I was able to purchase bread and hard-boiled eggs through the window. Eventually we set off again and pulled into Sohag (126 miles from Luxor) where Montreal 4-6-0 No.343 took over the train. Being now daylight, observing was much easier and I noted Atlantics 68 (Linke Hoffman) and 78 (Schneider, both 1926), and Moguls 670, 905 and 908, plus 659 seen before on Luxor shed. At Asyut Atlantic No. 9 (Baldwin 1920) was passed. No less than 19 locos were seen at El Minya, at the end of the single line, but engines were not changed. These were Moguls 542, 543 Baldwin 1921 with 5ft. 0in. whereas the other Moguls had 5ft. 6in wheels), 596 (Armstrong/Whitworth 1928), 605 (Borsig 1931), 648, 658, 667 (all NBL 1936, the last two domeless and Caprotti), 690 (Henschel 1912); Atlantics 7, 8 (Baldwin 1921), 45, 75 (NBL and Linke Hoffman 1926); 4-6-0s 346, 350; 2-6-2T 1249 (Cockerill 1927); 2-6-4T 1311 (Breda 1929); Bagnall 2-4-2Ts 1121, 1131 (1948 and 1936); and Robinson 2-8-0 9729 (ex LNER 6610). Around Beni Suef and El Wasta further observations included Moguls 533 (Baldwin 1920), 546, 579 (both NBL 1928) and 588 (AW 1928); 2-6-2Ts 1204, 1223, 1235 (NBL 1926/47); 2-4-2T 1128 (Skoda 1928) plus Clayton two-coach steam railcars 5000 and 5003 (1928).

We finally rolled into Cairo Main at 3.48pm, just failing by 10 minutes to have taken 24 hours over the journey. Around Cairo I noted 4-6-0s 308, 309, 310, 313 (all NBL 1948); Atlantics 48 and 53 (NBL 1925-6); 2-6-0 603 (AW 1928); 2-6-2Ts 1108 (Breda 1925) and 1217 (NBL 1927); 2-8-0s 850 (8F, BP 6998/41) and 9713 (ex-Great Central 382, built Gorton 1913) plus 350hp Diesel shunter 4012.

Catching the Port Said express as far as Ismailiya, I was hauled by Montreal 4-6-0 No.357, seeing 54, 58 (NBL Atlantics of 1926), 238, 247 (NBL Caprotti 4-4-0s of 1937), 344 (4-6-0), 516 (Baldwin

1920), 4009 and 4011 DE shunters) before it got too dark to observe. Arrival time at Ismailiya was not recorded, nor how I returned to my camp in El Fayid; I was probably too tired to care.

Thus ended what for me had been a most eventful week, one I shall never repeat.

There is a Sequel: Over three months later an Egyptian policeman on a motor bike rode into camp and went to see the Adjutant. He in turn summoned me and I was handed back my camera, together with the developed film, and asked to sign a form which appeared to be covered with

shorthand writing but this was evidently Arabic script. I note that the next photograph I took was dated 5 June 1949."

#### (viii). NOTES ON EGYPT

*From 'The Mancunian' Issue 276. May 2010*

p.62. 100 Years Ago: Carriage Grease and Castor Oil

"The Earl of Cromer, speaking at the Great Central Railway Company's annual dinner in 1910,

said that when he first went to Egypt there were single lines and no signals in existence. A train would start off on the off-chance of no other train coming in the opposite direction.

At the time great expense was incurred by the railway authorities in Egypt on grease, and this went on for some time, until the authorities suspected that the employees were eating it. An ingenious official stopped the expenditure by mixing with the grease large quantities of castor oil." (From the 'Railway Magazine' 1910).

In 'Backtrack' in a brief biography of Col. Marindin, the Board of Trade Inspector for Railways until April 1900, noted that in 1887 he had been sent out to inspect the Egyptian railway system and found it to be "not as bad as we had been led to expect."

#### (ix). 'LOST CITY': AMSTERDAM TRAMS DURING THE HOLOCAUST

From 'Jerusalem Post' 29.03.2025. By Barry Davis. "Lost City tells the story of the trams that were used to transport Jews to Amsterdam train stations, from where they were shipped to death camps.

Willy Lindwer is a man on a mission, actually several missions. I met the 78-year-old Dutch documentarian at his home in Jerusalem's Abu Tor neighborhood primarily to discuss his latest film, 'Lost City', which is due to be screened at the Jerusalem Cinemathèque on Holocaust Remembrance Day, April 24.

The Holocaust and digging into its whys and wherefores have informed the Emmy Award-winning filmmaker's personal timeline and, subsequently, professional life from the off. His filmography incorporates over 50 titles, with around half devoted to various aspects of the Holocaust and Dutch Jewry. He has also put out several works that panegyricize Israel and some of its blue-chip characters, such as Vienna-born Jerusalem mayor Teddy Kollek and Yitzhak Rabin.

Lindwer is justifiably proud of his Israeli portfolio. He rolls off a list of some of the topics he has portrayed in the country he settled in just over 20 years ago.

"I came here in 1995, but only partly, because I had my company in Holland, and we finally made aliyah in 2004," he said.

He may not have set up permanent shop here at the time, but he dived headlong into the thick of Israel's political, historical, and social fabric, profiling some of our most prominent figures on the way. "Between 1995 and 2004, I made numerous films here," he said. "The first one was my biography of Teddy Kollek. It was just after he left office."

Curiously and, no doubt, unrelatedly, Lindwer recruited Aliza Olmert, an acclaimed artist, to write the script for his paean to Jerusalem three millennia after its founding, a 1995 three-part series called 'Jerusalem: Between Heaven and Earth'. Olmert's husband, Ehud, succeeded Kollek as mayor of the capital in 1993.

The Lindwer oeuvre also features films about Africa and the Far East, and about art, but the Holocaust has always been central to his professional and personal ethos. Considering he is only here with us thanks to his Polish and Ukrainian-born parents managing to find a safe hideaway during the Nazi occupation of the Netherlands, that makes perfect neat sense. They were among the estimated 25,000 to 30,000 who survived the Holocaust out of a total pre-World War II Jewish population of 140,000 to 150,000.

### Death Machine Tram

'Lost City' tells the story of the trams that were used to transport Jews to Amsterdam train stations, from where they were shipped to death camps.

The film includes a substantial amount of footage of Lindwer and his lifelong non-Jewish friend Guus Luijters traveling on a vintage tram, similar to those that were in satanic Nazi service during World War II, talking about the deportations and the role of the Amsterdam public transport system, and other atrocities committed against Dutch Jewry.

Lindwer also recruited an array of Holocaust survivor interviewees for the film, including now-107-year-old Jerusalem resident Mirjam Bolle-Levie, who served as secretary of the Jewish Council of Amsterdam during the war. And there is Ina Groenteman-Rosenthal, who relates how her family's Dutch neighbours burgled their home while the family was being detained by the Nazis.

Luijters was not just Lindwer's "friend of 60 years," as he put it. Luijters, who recently died, was an acclaimed writer and journalist. Inter alia, he had devoted seven years of his life to co-writing 'In Memoriam'. The book contains painstakingly-accumulated information about around 20,000 children who were killed during the German occupation of the Netherlands.

I ask Lindwer whether he thought, or perhaps knew whether, the tram that he and Luijters rode in the film had been used as part of the Nazi death machine.

"Correct!" he exclaimed. "I was very emotional when I picked the tram out [for the documentary]. I told Guus I've made many films about the Shoah, but I've never made a film about Amsterdam [in the context of the Holocaust]. I wanted to make a film about Amsterdam and what happened to these 80,000 Jews! How is it possible to deport, in a little over a year, such a huge number of people? How do you do that?"

Lindwer didn't rein in his feelings during our conversation and was patently emotionally engaged with the subject matter. His personal backdrop fuelled his eagerness to get the film done, and that goes some way toward explaining the fire in his voice and demeanor as he sits next to Luijters on the vintage public transport carrier.

### Indictment of a Nation

'Lost City' is not just about the crimes the Germans perpetrated against the local Jewry. It is also an indictment of Holland as a nation and its conduct during the war. We know that Germany had the full support and active cooperation of locals in many of the countries it invaded. Estonia, Latvia, Lithuania, Hungary, and Ukraine certainly did their part to assist the Nazis with their murderous work. Lindwer said that it applies equally to the Dutch.

"How many [German] Nazis were there in Holland? Not many – around 200 to 300. They worked only with collaborators. Like they murdered my [paternal] grandmother in Ukraine in 1941, by the Einsatzgruppen (Nazi paramilitary death squads), with the help of the Ukrainians."

Lindwer's father fled the antisemitism in Ukraine in 1931 and had hoped to bring his mother to safety in the Netherlands. Lindwer's mother had experienced pogroms and other antisemitic violence in Poland. That had a catastrophic effect on their families but also made Lindwer's parents keenly aware of the warning signs and ultimately led to their own survival.

"My parents went into hiding in 1942," the documentarian noted. "Because my parents came from Eastern Europe, they knew what antisemitism meant. When they started to deport Jews [from the Netherlands] in July 1942, my mother said, 'We are not going anywhere; we're going into hiding. We know what is going to happen.'"

"They were Eastern European Jews – not like the Dutch Jews, who thought they were Dutch, so nothing would happen to them. My parents had a long history of persecution and pogroms, which didn't happen in Holland. That's why they immediately ran out of Amsterdam. They returned in 1945, and I was born nine months later."

Hence 'Lost City'. "That is why I wanted to make this film," Lindwer continued. "I wanted to know what happened to all those other Jews from Amsterdam who did not survive."

In the film, Lindwer skillfully puts the dark past in the here-and-now from the outset as colour footage of contemporary Dam Square, the historical centre of Amsterdam, seamlessly dissolves into an archival black-and-white scene of the same spot, showing the invading German Army striding into town as locals look on. I got the impression that the Dutch faces expressed a mixture of bemusement and shock. Lindwer sees it differently.

"You see the archive footage on the streets of Amsterdam, how they were all standing like this," he said, raising his arm and imitating the "Sieg Heil" Hitler salute. "Not all," I interjected. I'd watched the film a couple of times by then. "No, they were all standing like that," he came back at me.

### Pivotal Invoices

Lindwer's angst and Holocaust baggage – and, hence, his motivation for making 'Lost City' and the rest of his Holocaust-themed filmography – are palpable.

"There were all those Dutch people who loved Hitler," he continued, adding some documented beef to his claims. "The archives were opened in January, about all those who helped the Nazis. There are 500,000 people in that archive! That's a lot!" he declared.

He said that made things a lot easier for the Germans and paved the way for the mass transfer of Jews to the concentration camps. "There were only a few hundred, maybe a thousand, Nazis in Amsterdam. There were not 10,000 German soldiers in Holland." So, I posited, they knew they could rely on the local population. "Of course," Lindwer said. "that was the whole system."

Lindwer has the tangible fiscal black-and-white evidence of the Amsterdam tram company's collaboration with the Nazis, and doing its damndest to assist the Germans in deporting and murdering as many Jews as possible, in the quickest and most efficacious manner. "I discovered 23 invoices for this story. Nobody has ever seen them before, except for one researcher who told us about them.

"Here are all the invoices," he said, referring me to a pile of papers, "every month, how many Jews, from which places, wherever they took them to the train stations on their way to the extermination camps."

The discovery of the invoices also helped Lindwer tie up a loose end he'd left hanging for close to four decades. That also brings us to his biggest official kudos to date, which sits proudly in a glass cabinet in the corner of his office in Abu Tor.

"I discovered the last invoice, of August 1944. I discovered it because I did the film 'The Last Seven Months of Anne Frank' in 1988, when I received the [International] Emmy Award. Here it is," he said, pointing to the fetching trophy in the glass showcase with understandable and

justifiable pride. “And here’s the Golden Calf [award]. That’s the big prize of the Dutch film industry. That one I got for Jewish children in the war.” That film was called ‘Child in Two Worlds’, a 1993 documentary about Jewish war orphans who were raised by Christian families.

Back to Anne Frank. “At that time, I analyzed what happened to the Frank family from the moment they were taken out of the rear house [better known as the ‘secret annex’]. They were brought to the Nazis there, who were in two terrible buildings in the city. You see them in the film. And from there to the prison.

“But I could not make a reconstruction of what happened from the prison to the train station. How did they go? By foot, by bus, by truck? I found it here!” he exclaimed. “I discovered it, in the last invoice [of the 23], from August 8, 1944, that is from the prison to the central train station. That is the day Anne Frank and her family were taken away. I discovered they went by tram. Here’s the proof.”

There it was, in plain typewritten columns, the names of Annelies M. Frank – the posthumously celebrated young diarist’s full name – along with her sister, Margot, and parents, Edith and Otto.

Lindwer feels that the Netherlands, as a country, has a lot to answer for with regard to the Dutch people’s actions, and inaction, while the Holocaust unfolded there.

That came as something of a surprise, considering the large number of Righteous Among the Nations titles awarded to Dutch people by Yad Vashem. Holland is second only to Poland on the international list. But, when you weigh the 7,280 recipients from Poland against a total Jewish population there of around 3.5 million, and compare it to the number of Dutch laureates – 6,066 – who helped some of Holland’s far smaller Jewish community, of 140,000, that logically leads one to conclude that the Dutch were, by and large, far kinder to the Jews.

“That is a wrong conclusion,” Lindwer stated. “Why is it wrong? Out of the 140,000 Jews in Holland, 102,000 were murdered. 80,000 lived in Amsterdam. Out of those 80,000, some 62,000 were murdered, and 48,000 were brought by tram out of the Jewish quarter and [subsequently sent] out of Amsterdam to the concentration camps,” Lindwer asserted.

That could not possibly have happened, the filmmaker stressed, without robust local underpinning. “As I mention in the film – and this is a very important element of the film – the Nazis were able to take out 62,000 of the 80,000 Jews in a little over a year without anyone in Amsterdam lifting a finger to help them. On the contrary, the Dutch police played a horrible role.”

Lindwer pointed an accusatory finger in that direction when he was a fledgling filmmaker. “My first film on the Holocaust was about the Dutch police in 1969. I was at film academy at the time.

“What I show in this film, ‘Lost City’, are all the invoices that were sent by the Amsterdam tram company to the Nazis for every month bringing away so many thousand Jews.

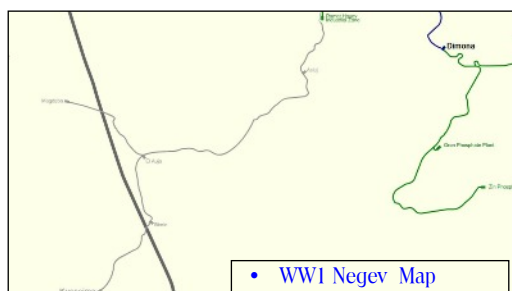
“Do you think I can conclude that the Dutch were so good?”

**(x). RAILWAY CONSTRUCTION IN THE SINAI**

(a). Translation by Sybil Ehrlich of an article published in “In the Footsteps of the War” by Eran Tirosh, historic photos from the collection of the Australian War Memorial.

**“Railways and water installations**

At the beginning of March 1917 the Turks retreated slightly eastwards from the Nahal Besor channel, straightened their line and prepared a defensive line between Gaza and Beersheba. Immediately afterwards, at the end of March and the middle of April, the British attacked Gaza twice and were defeated.



The front line between Gaza and Beersheba was stabilised for about six months, during which time the two sides constructed fortifications and logistic installations.

The channel of Nahal HaBesor, which the British called “Wadi Ghuzze”, that’s to say “Wadi Gaza”, because of its plentiful sources of water, was a very important asset. The British engineering forces invested considerable effort in developing the region and the Shellala area (as the British and Australians called the entire region), which is today Eshkol National Park. Railways were laid from the main front line in Rafah southwards, and slightly west of Eshkol Park the railways divided – one branch went to the Shellal wells and the other beyond Bir Gamli (south of Tel Sheruhen).

In the region as a whole was a logistical centre and extensive water supply, and the Shellal area (as already said, today Eshkol Park). In the middle of this area a concrete dam was constructed across the wadi to form a large reservoir, and additional water was brought by pipes from Rafah. On both banks of the wadi were separate drinking installations for soldiers, horses and camels. The drinking points were labelled in the Latin alphabet and each had a marked entrance and exit, to prevent “traffic jams” and to maximise effective use of the water. A special installation was erected for filling water containers in the form of tin cases, and these were transported to the forward troops by camel caravans. A few remains of the concrete dam can be seen in Nahal HaBesor, next to and parallel to today’s Road 241.

During the long period when the British were in the area the railways were extended eastwards, from Shellal via Imara (Urim) beyond Karm (southwest of Ofakim) and from Bir Gamli beyond Khirbet Khasif. Here and there can be seen remains of the railway embankment. The railway bridge that crossed Nahal HaBesor, where Eshkol Park was later established, has been partly restored and can be visited on both sides of the wadi: on the eastern side in the park, and the western part is one of the points on the “scenic Nahal HaBesor route”. ”

(b). To this we have received from David Galim some historical information signs -

from : <https://www.flickr.com/photos/39631091@N03/6015046646> - the Photos seem to come from different sources and at least some are ‘Collection Gunter Hartnagel’.



• Ezuz, Be’erotajim (Bir Birein). Ottoman Railway Bridge.

The name ‘Be’erotajim’ (Bir Birein) derives from the two ancient wells. The railway bridge is used as a dirt road today.

In January 1915 the Ottomans built a military railroad from the Hejaz line (connection Afula/Sileh to Dera’a) to Be’er Sheva in order to support the supply for the Axis troops’ preparations to attack the Suez Canal.

The military railway had reached the newly-built Asluj station (some 30km before Hafr el-Auja direction Sinai) in March 196 and the station was inaugurated by Enver Pasha during his visit to the region. The line reached the station



British forces in the area of El-Arish, Magdhaba and Quseime (Kuseima). Hafir el-Auja and Bir Biren (Berein) were chosen as base during the four weeks expedition.

At about the same time, Allied troops such as the Camel Brigade and C Squadron, 11th Australian Light Horse Regiment, destroyed sections of the railway line between Hafir and Asluj as well as the station building at Asluj during a one-week demolition raid. It is unclear if they also destroyed the station buildings at Hafir during this raid.

De Nogales and his men left Be'er Sheva and expelled the British irregular troops from Hafir on May 15th. They started talks with local Sheikhs in order to regain back their "loyalty". The word spread about their presence and the British sent troops but were unable to localise de Nogales and his Arabs. With the pressure and limited resources, de Nogales knew his days were counted and his men started sabotage attacks, British railway lines at El Arish were blown up and wells at Magdhaba. The Allied response came quickly. At the end of May, large numbers of regular British troops started searching for the men, forcing de Nougales to retreat to Be'er Sheva. De Nogales and his Arabs were the last Ottoman troops on Egyptian territory."

#### (xi). HISTORY OF THE IC3 UNITS Part 2

From "Eisenbahn Geschichte" No. 128, 1/2025: By Garrelt Riepermeier. (Trans. by Editor) Part 2 of a series.

"From May 1993 the DSB introduced the IC3s to the international trains to Hamburg – sets 5076-5092 were fitted with the German Indusi system and radio. Trains took a little over five hours including the ferry. From June 1997 the link with tunnels and bridges between Korsør and Nyborg allowed much through traffic and all freight to go via Flensburg, Padborg and the new route and the line via Puttgarden was used solely by IC3 units – though the transition from analog to digital GSM radio in Germany caused many problems.

At the IVA Exhibition in Hamburg 1988 the new 'Supertrain' had gained widespread attention and there were hopes of export orders. These were however barely realised. In Spring 1992 sets 21 and 53 were modified for Swedish climate and winter tests were carried out. From 1991 to 1996 a total of 20 sets were sold to Blekinge Länstrafik and other smaller regional railways where they were classified Y2. In 1996 ABB and Daimler combined their railway divisions under the new name Adtranz. In 2001 Bombardier absorbed the Scandia factory and interest in further developments was lost.

From 1992 to 1997 a total of 41 sets were sold to Israel Railways, a customer which also had requests for modifications to suit the local climate. By the end of the millennium increasing electrification meant some 14 sets were now free in Sweden and for sale; the DSB acquired four from the Blekinge Länstrafik AB, a fifth set that had been badly damaged was used for spare parts and the other nine were now acquired by Israel.

Talks with potential customers in Germany, Iran and Thailand led nowhere and eventually some of the patented rubber-ringed cab section units alone were sold – to Belgium for the AM96 3-car emus and to Spain for the CAF Class 594 2-car dmus. In the meantime at ABB at Randers plans were drawn up for a wide variety of new IC3 versions with additional centre cars, luxury fittings, more room for children, night train versions etc. but none of these were built. DSB went over instead to what turned out to be a disastrous, traumatic mass order for IC4 dmus from Ansaldo Breda in Italy which were a catastrophic failure. (One of these was diverted to Gadhafi in Libya!)

By 2023 the IC3s were withdrawn from Hamburg services but remained essential for much internal traffic. Spare parts became a source of concern. On 23 Jan 2021 the Dutch ship "Hedwig" docked at Grenaa with three IR units from the first series. Set 7007 was sent to the JP Group at Viborg to be decked out in new foils and to act as a showroom and conference room; sets 03 and 08 went to the DSB for spares, at the Augustenborggade works at Arhus. Remaining sets in Denmark are being overhauled and fitted with ETCS for a few more years' service until the next generation of DSB stock can take over."

Hafir el-Auja in May 1916. Despite these efforts, the efficiency of the line from Afula to Hafir was rather low. The line was further laid out and reached as far as Quseime (Kuseima) in Egypt.

At Bir Brein (Be'erotayim) a water refilling station for the railway was constructed as well as a railway bridge. In addition, a German truck unit was stationed (in tents) at Bir Birein supporting the second advance against the Suez Canal by transporting materials to Quseime, Maghdaba and Nachl.

The second advance under Kress von Kressenstein with some 16,000 men in July/August 1916 did not reach the Suez Canal as the Allies had extended their defense positions effectively. The main result for the German-Ottoman effort was the concentration of large Allied forces (Battle of Romani). Among the German-Ottoman troops were 1,600 German soldiers, part of the Imperial German expeditionary forces (Asienkorps).

The Allied forces with superior number of troops, material and supply gained more and more ground (conquering Sinai); El Arish was abandoned by Ottoman troops in mid-December 1916.

The Allies started to attack Gaza in February 1917. In order to stabilize the front line (Gaza - Tel Sheria - Be'er Sheva) Kressenstein drew his remaining troops from Hafir back to Be'er Sheva in March 1917. Irregular British troops, Bedouins paid by the British, occupied Hafir soon after. According to Kressenstein, certain sections of the tracks of the railway line from Hafir to Quseima were dismantled while the Allied troops were advancing and reused to build a new line from Et Tineh (Kiryat Malachi) to Huj in order to stabilise the supply to the Axis troops in Gaza. By the end of April 1917 the outpost-garrison of Hafir el-Auja was abandoned by the Ottomans.

On May 8th 1917 the Venezuelan adventurer Rafael de Nogales [1879-1937] became Ottoman military governor of the Ottoman Sinai region. He had been serving in the Ottoman army earlier in Eastern Anatolia and the Iraq. By that time, the Ottomans had given up on the Sinai region. He was assigned an experienced group of Arab camel riders (Hedjin-Suaris), a kind of elite troop, plus an irregular volunteer regiment from El Arish. The regiment was commanded by the Bedouin Sheikhs Hassan Erkieharb and Selim who did not want to submit to the British forces in El Arish. The Ottoman target was to restrain the

[Incidentally the Romanian firm Ferotrans TFI which has purchased the Israeli sets has also purchased 22 class Z2000 2-car emus from CFL, the Luxembourg State Railways. These were built by a consortium De Dietrich / ANF / Alstom between 1990 and 1992 and are being overhauled in Luxemburg then delivered in April 2025. Ed.]

**(xii). 'THE COLONEL'.**

In the 'Railway Observer' April 1943 is a report on industrial locomotives at the yard of J. J. Johnston at Park Royal, including: "The

from Leonardo Michelletti, in regard to correspondence regarding a narrow-gauge horse-worked line:

By [https://www.kisvasut.hu/view\\_cikk.php?id=1454](https://www.kisvasut.hu/view_cikk.php?id=1454)

**Kónya horse-drawn railway**

From Italy, Vittorio Formigari sent our site a short experience report about his visit to the Konya light railway in 1941.

"From 1940 to 1942, I lived with my family in Budapest, as my father worked there, as the director of the Italian School. In the spring of 1941, the University of Debrecen invited my father to give some lectures on Italian literature, so the family spent about a week in the city. My father's lectures were attended by a wealthy lady who had tobacco plantations in the Kónya area. This lady invited my father to stay with her family at her house on the estate. So one morning at the Debrecen MÁV station we boarded a train (which was made up of typical, small two-axle, open-platform cars at the time), and after about an hour's journey we arrived at the small station in Kónya.

Leaving the square opposite the station, we were surprised: a small railway line ran here on a farm road, which ended in a double-track terminus, on one of the tracks there was a vehicle, which was certainly designed for passenger transport, and was pulled by a horse. This was the aforementioned lady's own railway, which undoubtedly played a role in connecting the estate to the main railway network (I must

note here that despite my young age - I was 14 years old at the time - I was already quite informed about railway matters). In the small car we found only a bench placed lengthwise, which could accommodate a maximum of six or eight passengers at a time, so that their shoulders touched (at least that's how I remember it). The car ran restlessly on its small track, the gauge of which could not be greater than 600 mm, and it looked as if it had been assembled from Decauville-type sections).

After what seemed like a long journey, we left the tobacco fields and arrived at the lady's house, which looked wonderful. My interest, however, was more captured by the railway, whose track ran behind the house, where countless sidings branched off to serve the



• Above, Former ISR IC3 set at Viborg and below one held for spares



only other engine was 'The Colonel' , Bagnall o.c. 0-4-0ST, (works 1703, Dec. 1902). This engine was a mass of rust and not a speck of paint anywhere. All the engines have been at work on a Dam in the Sudan & 'The Colonel' fell off & lay at the bottom of the Nile for some time, hence 'his' condition."

**(xiii). A HORSE-POWERED TRAMWAY IN HUNGARY.**

At first sight this has little to do with our specific interests, but when one reads of the fate of the line's owner this becomes clearer. This is

## Other Middle East Railways

agricultural buildings. Countless two-axle horse-drawn cars stood on the tracks, while the rest were either pushed by hand or pulled by horses. I imagined what it would be like if the network were electrified.

In the afternoon, we got back in the same car we had arrived in. Our host joined us to check out his property. That's how we got back to the MÁV station, and that was the end of my first (and perhaps only) visit to Kónya.

Since that day more than 70 years ago, I have thought a lot about this little railway, the big house and the lady who lived there and I don't remember her name (but maybe I never knew). But I can provide some details that might help in tracing the family: she was the widow of a judge and of Jewish descent; she was arrested during the Szálasi government, and then committed suicide a few years later. Two additional observations: after the proclamation of the People's Republic, the area was converted into a TSZ (Towns and Railways) and the horse-drawn railway continued to operate until about 1983. If anyone ever travelled along this line, they had to get off the train near the big house and the surrounding farm buildings. It would be interesting to see what remains of this farm today."

### Comments

Imre Torok (2011-07-08)

"Kónya is a railway stop between Balmazújváros and Hortobágy. Unfortunately, the light railway has disappeared. The current status can be viewed at the link below.

<http://www.vasutallomasok.hu/allomas.php?az=knya>

There is a fairly detailed aerial photo of the area on Google Maps. Here, Kónya railway stop is mentioned as "Other railway stops in Hortobágy". From here the railway went to the farm marked as "Kónya" on the map:

<http://maps.google.com/maps?q=Balmaz%C3%BAjv%C3%A1ros.>

### (xiv). DERAILMENT AT RAMLEH

I was sent recently by Reinhard Dietrich a German translation of a memoir concerning the old J&J:

"A Scottish clergyman who travelled with a pilgrim train from Jaffa to Jerusalem in 1896 and who had to endure a derailment was already cast into some doubt by his first view of the train. "It was the most fragile-looking railway that I have ever seen", he wrote. After a short while his fears were to be realised. "Everything went well until we reached Ramle. Here the locomotive left the tracks and went its own way. The entire population of the region gathered around the locomotive, standing there and speculating and discussing and staring in amazement. It never seemed to occur to them that the locomotive was to be replaced on the track." (John Lamond. 'Modern Palestine or the Need of a New Crusade.' Edinburgh 1896).

149:08.

### A. U.A.E.

#### (i). PAKISTAN AND ETIHAD RAIL SIGN DEAL

From 'I.R.J.' 9.3.2025: "Pakistan Railways (PR) and Etihad Rail, the national railway of the United Arab Emirates (UAE), have signed two Memoranda of Understanding (MoU) with the aim of working together to enhance the operational efficiency of Pakistan's railway network.

The MoUs were signed by PR CEO, Amir Ali Baloch, and the CEO of Etihad Rail, Shadi Malik, during a visit to Pakistan by the Crown Prince of Abu Dhabi, Khaled bin Mohamed bin Zayed Al Nahyan, on February 28.

Under the MoUs, the two railways will study opportunities to enhance Pakistan's existing railway network as well as the development of a new railway project. Etihad Rail says the collaboration aims to strengthen connectivity, facilitate mobility and contribute to Pakistan's economic growth.

The signing of the MoUs follows an agreement signed by the governments of the UAE and Pakistan in January 2024 for the UAE to invest more than \$US 3Bn to support the development of railway infrastructure in Pakistan.

Under the agreement, the UAE will fund the construction of a new 50km freight line from the port of Karachi to Pipri marshalling yard. The agreement also envisages the construction of related logistics and terminal facilities, which will be led by Dubai-based DP World."

#### (ii). ETIHAD RAIL PREPARES FOR PASSENGER SERVICES IN 2026

From 'I.R.J.' 19.05.25: "Etihad Rail has confirmed that passenger services will start next year on the national railway network that it operates in the United Arab Emirates (UAE).

In a social media post, Etihad Rail said that earlier this month a delegation from the company, led by CEO Shadi Malak, met with Sheikh Hamdan bin Zayed Al Nahyan, the ruler's representative in the Al Dhafra region.

During the meeting, the Etihad Rail team provided a comprehensive update on the ongoing development of the network, which currently runs for 250km from Abu Dhabi to Al Dhannah, with a particular focus on the new passenger service.

This is intended to provide a safe, reliable and efficient travel option, connecting urban and regional centres, and complementing the high-speed network that is also under development in the UAE.

Earlier this year Etihad Rail announced that the first four stations to open on the conventional network will be in Abu Dhabi, Dubai, Sharjah and Fujairah, providing interchange with metro and bus networks to create "a comprehensive and interconnected transport network." The new stations will feature lounges for business-class passengers, retail outlets and amenities for families.

Freight operations began on the Etihad Rail network in February 2023, followed in January 2024 by passenger services for employees of national oil company Adnoc, running between Abu Dhabi and Al Dhannah.

In January 2023 Etihad Rail signed a contract with CRRC Qingdao Sifang for the supply of three 200km/h passenger trains, each comprising a diesel power car, five coaches and a driving trailer, with an option for 20 more trains. (See Cover)

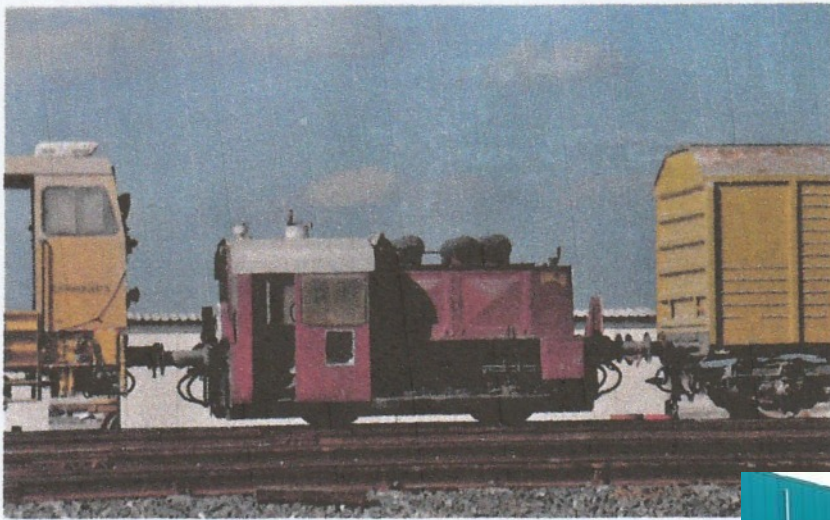
CAF was awarded a Dirhams 1.2Bn (\$US 326.7M) contract by Etihad Rail in June 2022 to supply and maintain an undisclosed number of push-pull trains with a maximum speed of 200km/h, each able to accommodate over 400 passengers."

#### (iii). GERMAN KLEINLOK IN THE DESERT

In 'Lok Magazin' 05/2025 p.100f in an article by Andreas Kabelitz about the last 25 "Köf II" small shunting tractors built by the Deutsche Bundesbahn is stated that

No. 323.354 built in 1965 was withdrawn on 30 April 1984 and in 1985 was sold to Italy; in 2003/4 it was acquired by the Italian construction firm Salcef which ten years later then used it in the UAE during construction of the new lines for Etihad Rail!

EMU has a capacity for 1,000 passengers, including 206 seated and with two spaces for wheelchairs. There are 16 double-leaf doors on each side, 42 passenger information screens and interior and exterior cameras. The black and gold livery is inspired by Gaziantep's baklava pastries.



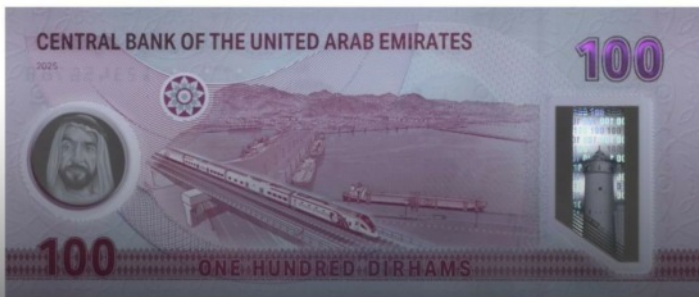
Around 70% of the components are manufactured in Turkey, including the motors, controls and traction equipment developed by the Tübitak Rail Transportation Technologies Institute and Tirasas. &

'With the national suburban trainset produced for the Gaziray project, we aim to meet Turkey's suburban transport needs with domestic technology to reduce imports, and also to increase efficiency by facilitating maintenance and repair processes and reducing maintenance costs', said Minister of Transport & Infrastructure Abdulkadir Uraloglu. 'At the same time, we aim to contribute to our country's economy by exporting the trainsets produced.' "

(ii). RIGID CATENARY FOR NEW HIGH-SPEED TUNNEL



(iv) MONEY!



**UAE releases polymer Dh100 featuring Etihad Rail project**

**B. TURKEY**

(i) New National Train Set

From 'R.G.I.' 4.4.2025: "The E39000 'national suburban trainset' was unveiled by state-owned manufacturer Tirasas at its Sakarya factory in early March. Eight four-car electric multiple-units are being built to increase capacity on the Gaziray suburban network launched in Gaziantep in November 2022. Deliveries are scheduled to be completed by the end of October. The 90 km/h aluminium-bodied 25 kV 50 Hz

From 'R.G.I.' 12.04.25: "Electrification contractor RESA Yapi Elektromekanik has awarded Alstom a contract to supply rigid overhead catenary for a 7 km tunnel on a new alignment which will enable 200 km/h running on the route between Istanbul and the Bulgarian border. The new alignment is being built by a consortium of local construction companies Gülermak Agir Sanayi, Yapi & Yapi Insaat and Tasyapi Insaat.

Alstom's Rigid Overhead Catenary System will be installed in the twin 8.5m diameter bores of a tunnel under residential areas and Lake Küctikcekmece.

The company's electrification equipment factory at Valmadrera in Italy will design and supply the components, with Alstom Algeria participating

in installation design. ROCS uses an aluminium conductor profile paired with a copper contact wire. Announcing the order on April 9, Alstom said the compact design offers ease of installation, low maintenance and fire resistance, and can integrate easily with existing lines and accommodate different supply voltages."

### (iii). WORK STARTS ON NEW HIGH-SPEED LINE

From 'R.G.I.' 25.04.25: "Work has started on the first section of the planned high-speed line between Kirikkale and the Black Sea port of Samsun.

Construction of the 120km Delice – Sungurlu – Corum section began on April 15 with the opening of a project office by a consortium of Yapi Merkezi and YSE Yapi which won the contract awarded by infrastructure manager TCDD. The consortium's bid of TL75-3Bn came in lower than the estimated project cost of TL85-1Bn; the highest bid received was TL84-5Bn.

The initial section of the route will connect the existing Ankara – Kirikkale – Kayseri high speed line with Corum, which is roughly halfway between Kirikkale and Samsun. It will include seven bored and three cut-and-cover tunnels, 26 bridges and viaducts, 12 overpasses, 72 underpasses and 185 culverts, as well as stations at Sungurlu, Corum Industrial Zone and Corum.

Opening of the mixed-traffic line is planned for January 3 2030, with passenger services to operate at 200 to 250 km/h.

Tenders to build the second phase between Corum and Havza with two stations at Mecitözü and Merzifon are to be opened later this year.

At Havza the new alignment will connect with the recently upgraded Sivas – Samsun line. Once complete the route will offer passengers a journey time between Samsun and Ankara of around 2h 45 min, compared to over 7h by road."

## C. IRAN, TURKEY... & KAZAKHSTAN

From 'Rail Group News' 10.03.2025: "Kazakhstan Railways (KTZ) has announced the start of a new container route between China and Europe, that avoids running on the Russian network. Operated by its subsidiary KTZ Express and China Railway Container Transport (CRCT), trains are routed via Kazakhstan, Turkmenistan, Iran and Turkey.

The first train left Chengdu in China loaded with television components, according to KTZ. The expected transit time to Lodz in Poland is 40 days.

KTZ Express recently met with Yiwu Timex, which it says is one of the largest logistics operators in China, specialising in moving freight from Zhejiang province to Europe and Central Asia. The Yiwu Timex terminal in the city of Yiwu dispatched 1, 700 container trains to Europe in 2024, of which 73 ran via the Trans-Caspian International Transport Route (TITR).

Also known as the Middle Corridor, TITR runs via Kazakhstan, Azerbaijan, Armenia, Georgia and Turkey. It is the shortest route by rail between China and Europe, and its attractiveness as an alternative to the northern route via Russia has increased following the invasion of Ukraine.

As well increasing use of the TITR, potential joint projects discussed by KTZ Express and Yiwu Timex included upgrading port and railway infrastructure at the Caspian Sea port of Aktau in Kazakhstan, where consignments are transferred from rail to sea for onward movement to Baku in Azerbaijan. They also considered the possibility of building new ships to increase capacity across the Caspian Sea.

KTZ Express has also met with Shandong Hi-Speed Group of China to discuss increasing the volume of agricultural products carried on the TITR, and to examine the possibility of operating double-stack container trains to improve efficiency.

### New terminal

During the general meeting of the TITR Association in Baku on March 4, KTZ signed a Memorandum of Intent with PTC Holding to build a container terminal in the city of Poti in Georgia. Total investment in the project would be \$US 30M.

The new terminal on the TITR would have capacity to handle over 80,000 TEU a year. "Particular attention is paid to attracting investment and resources which will increase the capacity of the route, optimise logistics processes and strengthen the region's position in the international freight transport market," KTZ says.

The general meeting heard that the Caspian Sea ports of Kazakhstan and Azerbaijan handled 3.3 million tonnes of freight in 2024, 20% up the year before. At 56,500 TEU, container traffic was up by 176% on the year before. The number of container trains dispatched from China in 2024 increased by a factor of 33 compared with 2023, according to the TITR Association."

In "Railway Gazette Intl." there is a slightly different travel time given: "KTZ Express and China Railway Container Transport Co have launched a container service between Chengdu in China and Łódź in Poland via Kazakhstan, Turkmenistan, Iran and Turkey with a travel time of 52-60 days. The first train carried television components."

And - from 'I.R.J.' 13.05.25:

"The national railways of six countries agreed to develop container traffic between China and Europe during a meeting held in the Iranian capital Tehran on May 12.

The meeting was hosted by Iran's deputy minister of roads and urban development, and director general of Iranian Islamic Republic Railways (RAI), Dr Jabbar Ali Zakeri. It was also attended by China Railway (CR) director general Sun Xude, a delegation from Kazakhstan Railways (KTZ) led by the company's deputy chairman of the management board for logistics, and the deputy heads of the national railways of Uzbekistan, Turkmenistan and Turkey. KTZ says that the meeting was an important step in strengthening cooperation to develop an effective rail transport corridor connecting China with Europe via Kazakhstan, Uzbekistan, Turkmenistan, Iran and Turkey.

Clear confirmation of demand on this route has been demonstrated by the recent increase in container traffic moving between China and Iran via Kazakhstan, which between January and April was 2.6 times greater than during the same period in 2024, according to KTZ.

In March KTZ announced the start of a new container service along this route, operated by its subsidiary KTZ Express and China Railway Container Transport (CRCT). The scheduled transit time between Chengdu in China and Lodz in Poland is 40 days.

During the meeting in Tehran, the parties to the agreement confirmed their readiness to provide comprehensive support for promoting the corridor in the international transport market. They also approved "competitive tariff conditions" and agreed key parameters for organising traffic, including maintaining approved end-to-end transit times."

## D. NEW LINE FROM TURKEY TO AZERBAIJAN

From 'I.R.J.' 10.4.2025: "Work has started on a 224km new electrified double-track line between Kars in northeast Turkey and Nakhchivan in southwest Azerbaijan, running via Igdir. When the line is completed by 2030, the journey time between Nakhchivan and Kars is expected to be reduced by 1h 25min.

Five new stations will be built in Turkey, at Digor, Tuzluca, Igdir, Aralık and Dilucu, with plans for additional stations also under consideration.

According to project lead Osman Beserk, as reported by Baku's 'Report' news agency, the new line will be integrated into the existing Baku - Tbilisi - Kars (BTK) railway, which is expected to open up new opportunities for rail freight moving between central Asia and Europe.

The new line will have three viaducts, extending to around 2.8km, five tunnels with a combined length of 11.3 km, 10 bridges and 480 culverts. It will become part of the Zangazur Corridor, connecting Turkey and Azerbaijan with other key cities and destinations within the wider region."

## E. IRAN

### (i). THROUGH SERVICES TO TURKEY RESUMED

From 'I.R.I.' 10.03.2025. "The passenger subsidiary of Iranian Islamic Republic Railways (RAI), Raja Passenger Trains Company, has reintroduced a direct cross-border service between Tehran and Van in eastern Turkey.

According to Turkey's minister of transport and infrastructure, Abdulkadir Uraloglu, the first train was due to leave Tehran on March 9 and the first service from Van on March 10. The end-to-end journey time is 22 hours.

Two services are operated in each direction every week, departing from Tehran at 12.35 on Sunday and Wednesday, and from Van at 20.00 on Monday and Thursday. The train comprises seven couchette cars, each able to accommodate up to 40 passengers.

Before its suspension in the wake of the Covid-19 pandemic, the Tehran - Van service was carrying around 10,000 passengers a year.

"Railway cooperation between Turkey and Iran is of great importance in terms of strengthening regional transport and increasing tourism," Uraloglu says. "The resumption of Tehran - Van services will further strengthen both economic and cultural ties."

### (ii). LOCOS FOR STEELWORKS



From 'R.G.I.' 28.03.2025: "Iranian manufacturer Mapna has completed delivery of 50 MAP24 3,000 hp diesel locomotives to Mobarakeh Steel of Esfahan. The steelmaker's CEO Saeed Zarandi said it is investing to increase its use of rail, because 'in addition to reducing costs, this measure will reduce road traffic and the risks arising from it'.

### (iii). INVESTMENT IN FLEET RENEWAL

From 'I.R.I.' 25.04.2025: "Iranian Islamic Republic Railways (RAI) has reportedly signed two public-private partnership (PPP) investment deals with private companies which aim to substantially upgrade its passenger and freight fleets.

Local media report that, under the first deal, Avan Rail Passenger Trains will invest \$US 713M in 600 tank wagons, 300 DMU cars and 50 locomotives. The second agreement with Pars Ofogh Hashtgerd will help to finance the procurement of 650 wagons for bulk freight.

According to the 'Tehran Times' the financing agreements involve international lenders. However, Jabbarali Zakeri, head of RAI, declined

to name the countries involved, noting that the private sector has been directly engaged in the foreign financing arrangements.

Zakeri added that solving current challenges - particularly in rolling stock - would enable Iran to meet its Seventh National Development Plan targets, including increasing rail's share of national transport to 30% and boosting annual transit freight capacity to 40 million tonnes. "This includes the addition of 950 locomotives, 300 passenger coaches and 3,000 freight wagons," Zakeri says.

Shortly after taking up his current role in September, Zakeri said he wanted to foster a closer relationship between the state-owned railway and the private sector, which he says can help to resolve traction shortages, with just 50% of the country's locomotives considered operational.

Nouroollah Beiranvand, RAI's deputy for investment and transport economy, says that RAI is hoping to attract \$US 6.4Bn from the private sector for rail development.

"77% will be allocated to rolling stock and the remaining 23% to infrastructure," he says."

## F. SYRIA

### DAMASCUS AS IT WAS

This is a short meditative article by Matthias Koch in "Eisenbahn Klassik" No. 16, Spring 2025 pp.8f. Translation by the Editor.

"Syria - for many years one heard almost nothing from this country apart from repeated reports of warring conflicts from the beginning of the Civil War in 2011. Now the country is once more at the centre of attention following the surprising end of the 50-year dictatorship of the Assad clan and a phase of peace is now announced. The family al-Assad (Arabic for "The Lion") ruled in Syria since Hafiz al-Assad became President of Syria in 1971 and established an authoritarian state under the control of the Baath Party. Following his death in 2000 he was followed by his son Baschar, who officiated until he was toppled in 2024.

Syria was once one of the most attractive destinations for railway enthusiasts. Whoever was interested in modern traction could find in the North almost two and a half thousand kilometres of standard-gauge network. Since the mid-1960s the Syrian regime had been concerned to construct a modern system of high capacity to aid the economic growth of the country and with lines reaching into Lebanon, Turkey and Iraq.

But most railway enthusiasts preferred to go to the south of Syria, to the Hedjaz Railway, the old, original narrow-gauge line with its unmistakable oriental charm.

'Hedjaz' is the name of a mountain range along the Red Sea, in which lies the city of Medina, a Moslem pilgrimage centre and the end of the 1320km main line of the Hedjaz Railway. The ultimate destination, the holy city of Mecca, was never reached... Construction began on 26.10.1900 but did not really get going until the engineer Heinrich August Meissner was called in - in 1906 he even received the honorific title of 'Pasha' - and on 1.9.1908 the entire line could be opened.

After only seven years of normal operation the line became involved in the conflict of the First World War...

But with the beginning of the Civil War came the end of railway operations. How often did I think, on hearing the reports, of journeys I had made here in 1989 and 2000 and memories of the railways and railwaymen.

For example the Cadem Workshops in Damascus, where dozens of steam locomotives and wagons stand and rust and a few of these should be kept alive. Of railwaymen like the steam loco expert Assiz al-Kassem, who once learned his trade at the DB workshops at Köln-Nippes and proudly led us through the halls of the museum. In the middle of the

2020s a short video sequence appeared on the Internet from Cadem. One could see and hear fighting going on, filmed with a mobile phone from the shops to the traverser outside, with shouts and the sound of machine pistols. Later the situation seemed to have become calmer and in 2019 a Spanish visitor reported on a forum about the stored locos.

I recall a scene with the Loco 51 of the Hedjaz Jordan Railway, an elegant tender loco built by Jung in 1955. She rolled gleaming in from Amman into the border station of Deraa, where our elderly 262 (Hartmann of 1918) is standing. The Jordanian engine driver hands to his "poor" Syrian colleague a can of cylinder oil – In spite of the repeated political quarrels between Syria and the Kingdom of Jordan the railwayman hold together...

In Deraa the revolt began in 2011 and since then there has been extensive fighting there. On satellite photos one can see the destruction of the tracks and the buildings. The tracks in the city area – northwards to Damascus, southwards to Amman – have been dismantled or tarred over. Nevertheless some goods wagons stand motionless since 2010 in the station.

As reports now came in of the liberation of Syria and for the first time pictures appeared on the 'News' I recognised the view from a bridge over a broad road. In old slides one sees a steam train smokily making its way across the road – but this must be a different bridge. The old city section ran from the Hedjaz station to Cadem, in a photo of 2013 one can see just a large hole and building site where once the tracks ran – this section was closed 2007.

But what has happened to the standard-gauge network?

From 2012 all traffic has stopped on the largely-destroyed railway. The Islamic State declared Railways to be "Immoral" and recommended as the correct form of transport donkey and horse! But in 2016 traffic resumed between Latakia and Homs to supply a power station and on the line Tartus – Damascus a freight train loaded with grain could run once again in 2020. A Syrian travel journalist reported – as at April 2025 – that there is a further section with passenger traffic – a short section from Aleppo to Jibrin, near the Aleppo airport, where a train runs daily at 07.15 and 15.15.

The Chemins de fer Syriens (CFS) are reported to have begun work before the end of the Assad regime on modernisation of the signalling equipment along the lines Tartus – Latakia and Aleppo – Qamishli. Even if there are hopes for the resumption some time in the future of a modern railway network, it is to be hoped that the old Hedjaz line does not get completely forgotten..."

## G. IRAQ

From 'R.G.I.' 04.04.2025: "Dr Mohamad Jawad Al-Quraishi, Chargé d'Affaires at Iraq's embassy in Switzerland, visited OTIF on March 11 to discuss Iraq's membership. Iraq has been a member state since 1965, but was suspended in 1997 owing to the absence of international rail traffic caused by 'exceptional circumstances'. Membership may be restored by unilateral notification from Iraq as soon as international rail traffic resumes."

## H. GULF RAIL

(It will be noted that this topic occurs sometimes under individual countries, sometimes as a joint project. One hates the over-used term 'Mega' almost as much as 'MAGA'. Ed.)

From the 'Daily Express' 29.05.2025. By Brian Dillon.

"Amazing new £193Bn train line that will make the Middle East far richer

"A new mega project in the Middle East will see a huge rail line built which will add billions to the economies of the six countries it plans to connect. The Gulf Rail Mega Project was first announced in 2009 and it has been a long road to get it to where it is now, with much more still

to be done before it is completed. Countries that are separated by vast deserts will be easily connected with people being able to move through them with ease and comfort.

The impressive mega project aims to connect the six member states of the Gulf Cooperation Council (GCC), which are Saudi Arabia, the UAE, Qatar, Kuwait, Bahrain and Oman. It will stretch to a staggering 2,177 kilometres (1,352 miles). The project was announced in a bid to reduce reliance on road vehicles and to facilitate the movement of goods and passengers. This will have the knock-on effect of promoting regional economic integration, officials say. While there have been many setbacks since the project first began, it is expected to be completed by the year 2030.

The GCC's website states: "The GCC rail project will represent a significant leap in connectivity and integration in the Gulf region, yielding direct positive impacts on intra-trade and the freedom of movement for citizens and residents among the Council states.

The cost of this mega project is expected to be up to \$167 Billion and \$250 Billion (£193 billion). The original expected date of completion was in 2018. However in 2016, this was pushed back to 2021. It has since been pushed back to 2030, 22 years after it was first announced.

As of last year, the project was still in its design stages. Each GCC member is responsible for building the portion of the railway within its borders. This kind of cross-nation collaboration can bring up a number of issues, as it has with the Gulf Rail. There have been obstacles along the way, however. Oman announced that it was putting the project on hold with the country's Minister of Transport Ahmed al-Futaisi saying at the time: "There was a challenge among countries with the pace at which the project was being implemented. Some countries started, but some others did not follow the design. So this was a challenge for Oman. Even if Oman finishes its part, it cannot connect because other countries have not yet started their work."

Additionally, low oil prices have affected investments in the project, presenting further delays and difficulties. Meanwhile, Helmut Scholze, partner at Roland Berger Middle East, has said that countries such as the UAE and Oman delayed building the railway due to lack of clarity as to when Saudi Arabia would complete its part.

But in 2021 the project received a major boost when the six member nations established a centralised authority to co-ordinate construction efforts. GCC Secretary General Jassem Mohamed Albudaiwi said in an October 2024 meeting: "Efforts continue in collaboration with the General Secretariat and the GCC Railways Authority to advance the phases of the railway connection project among the Council member states, which promises to significantly enhance Gulf connectivity and integration, resulting in direct positive impacts on trade movement and on the freedom of movement for citizens and residents throughout the GCC."

The project is expected to have huge economic benefits for the region. In Saudi Arabia alone, the project is expected to generate \$40 Billion (£30 Billion) through job creation and trade between the six countries."

## I. KUWAIT.

### CONSULTANCY CONTRACT FOR GCC NETWORK

From 'I.R.I.' 07.04.2025:

"Kuwait's Ministry of Public Works has signed an engineering and consultancy services contract worth Dinars 2.5M (\$US 8.1M) with Turkish firm Proyapi Mühendislik to support planning and design of its 111km section of the Gulf Cooperation Council (GCC) railway network.

The agreement encompasses design and engineering studies, soil testing, route mapping, and the preparation of tender documents for the construction phase. The new line will run from a new 200ha main station at Al-Shadadiya, Kuwait City, adjacent to the international airport, to Nuwaiseeb on Kuwait's southern border with Saudi Arabia. Once the

design work is finalised, Kuwait will proceed with inviting bids for construction contracts.

The contract was signed by Kuwait's Minister of Public Works, Nora Mohammed Al Mashaan, and chairman of the board of directors of Proyapi, Murat Koru. The Turkish ambassador to Kuwait, Tubanur Sönmez, also attended the ceremony.

The contract award is considered a key step in development of Kuwait's portion of the 2,177km GCC network, construction of which is already underway in Saudi Arabia, the United Arab Emirates (UAE) and Oman. The new network will also serve Bahrain and Qatar.

The Kuwait government confirmed earlier this year that seven tenders have been issued for the project, covering project management and control, project implementation and project supervision services for the design and implementation phases, along with the establishment of Kuwait Railways Company, and construction of the main station."

'Railway Gazette' 11.04.25 reported thus:

"Turkish engineering group Proyapi Mühendislik ve Mühavirlik has been awarded a contract to design Kuwait's section of the planned Gulf Co-Operation Council railway corridor.

The US\$8.1M contract awarded on April 7 covers an 111 km electrified line running from the Al-Shadadiya area of Kuwait City to Nuwaiseeb on the southern border with Saudi Arabia. The number of stations is to be decided during the one-year design process. Kuwaiti officials have stated that the estimated cost of construction will not be known until the design process has been completed.

The line would form the northernmost section of the long-planned GCC Railway from Kuwait to Oman via Saudi Arabia, Bahrain, Qatar and the UAE. The project was approved by the six GCC member states in December 2009, when completion was planned for 2018, but it is currently envisaged for 2030.

Each country is responsible for developing the section of the planned line within its own territory, which has led to questions being raised over the commitment of some participants. The UAE's existing Etihad Rail network would form part of the corridor, and it is working with Oman Rail through the Hafet Rail joint venture to develop an extension via Al Ain to the Indian Ocean port of Sohar."

## J. SAUDI ARABIA

### (i). METRO PROJECT PRAISED

From 'I.R.J.' 10.04.25 : "IRJ's Top Railway Projects 2025 - Riyadh Metro Yellow, Green and Purple Lines.

Delivery of Riyadh's six-line metro network for the start of revenue service at the end of 2024 proved to be one of the world's most challenging but impressive recent transit projects.

Country: Saudi Arabia

Type: transit - new construction

Project owner: Royal Commission for Riyadh City

Lead contractor: Fast Consortium, led by FCC Construcción

Lead engineering/design firm: WSP, Hill International and Louis Berger

Other notable participants: Samsung C&T, Freyssinet, Tyspa and Setec

Start: 2016

End: June 28 2024

Value: \$US 9Bn

As a member of the Fast consortium which on a turnkey basis designed, built and commissioned the Yellow, Green and Purple lines of the Riyadh Metro, also respectively known as Lines 4, 5 and 6, Alstom has acted as rail systems integrator. It has managed all aspects from preliminary design through detailed design, interface management, supply, installation and integration to testing and commissioning of rail systems, including a fleet of 69 driverless trains. Alstom also supplied depot equipment and platform screen doors. Adding the three new lines to Riyadh's Metro network involved the construction of 29 stations, as well as 64.5km of double track, 30km of viaduct and two new depots.

The project faced several challenges, including technical complexity, stringent deadlines and logistical constraints.

The tender specification was functional, requiring Alstom and its consortium partners to develop preliminary and detailed designs to achieve and demonstrate the required performance. The Yellow and Purple Lines share a common section, complicating timetable management, while the rolling stock Maintenance Depot for both lines is on a branch of the Yellow Line rather than at the terminus, further complicating procedures for bringing trains into and out of service. The Covid-19 pandemic caused disruption to equipment procurement and the availability of skilled personnel. Continued investment in local expertise, bringing specialist capability into Riyadh, significantly enhanced capacity to support the customer and deliver the project effectively, backed up by hundreds of Alstom employees around the world.

Advanced solutions were instrumental in delivering the project on time and within budget, while ensuring long-term operational efficiency and sustainability. This included the deployment of the Appitrack mechanised slab-track construction system, which enabled installation at four times the speed of traditional methods. This was vital to adhering to the demanding construction schedule while maintaining stringent safety and quality standards. In addition the Alstom Urbalis CBTC signalling system improves line capacity by 30%, reducing headways to 90 seconds and enabling high-frequency operation, while reducing the need for trackside equipment which reduces both cost and energy consumption.

Alstom is also providing maintenance services for the Yellow, Green and Purple Lines, including track, rolling stock, platform screen doors, the third-rail traction power supply system, substations and depot equipment, as well as signalling, telecommunications and low-voltage systems. The HealthHub system has been deployed to enable condition-based and predictive maintenance, continuously monitoring asset health to maximise reliability and availability, while optimising life-cycle costs. From the preliminary design phase, reliability growth processes were implemented, setting reliability benchmarks and identifying specific tests to detect defects early on."

### (ii) LANDBRIDGE PROJECT

From 'I.R.J.' 23.4.25: "Saudi Arabia Railways (SAR) has issued a tender for lead design consultancy services for the long-awaited Landbridge project.

The contract will cover the concept design and options for the preliminary and Issued for Construction (IFC) design stages of the project, which aims to provide a direct link from Jubail Industrial City on the Arabian Gulf to King Abdullah Port and Yanbu Industrial City on the Red Sea, north of Jeddah, via the Saudi capital Riyadh. The deadline for bids is May 15.

The centrepiece of the estimated \$US 7Bn project is the construction of new 950km railway between Riyadh and Jeddah. The Landbridge project will also involve approximately 600km of additional new construction and upgrades to existing lines. A consortium of Italy's Italferr, Sener, Spain, and Hill International were selected as the preferred bidders for a project management services contract in December 2023.

The Saudi China Landbridge Consortium (SLCC) signed a memorandum of understanding (MoU) to implement the project under a public-private partnership (PPP) in October 2018. However, with SAR issuing the tender directly, the Middle East Economic Digest (Meed) suggests that the Saudi government is considering other options alongside the Chinese proposal to develop the Landbridge.

In a separate tender, SAR is seeking contractors to build a new freight terminal and railway from Damman's Second Industrial City to the existing 559km Damman - Riyadh line.

The project is expected to take three years to complete and is estimated to cost Riyals 720M (\$US 192M). The project will support SAR's objective to boost rail freight capacity on its network.

### The Landbridge project

Construction will be split into six sections.

The first section comprises the upgrade of the Jubail Industrial City internal network, which is currently under construction, and will require the construction of 10km of new track.

The second is the upgrade of the existing Jubail - Dammam line, which is also currently under construction and will require 35km of new track construction.

The third section will involve an upgrade of the Dammam - Riyadh line, which includes the construction of 87km of new track.

The fourth section, the Riyadh bypass, will connect the existing network in the north of the city to the south. It is split into two packages: the first has 67km of track and the second has 35km.

The fifth section is a new 950km link from Riyadh to Jeddah, which will continue for 146km to King Abdullah Port. The Riyadh - Jeddah section will have three intermediate stations at Jamuma, Moya and Al-Doadmi.

The sixth section is the new 172km line from King Abdullah Port to Yanbu Industrial City. The project will also include the construction of seven logistics centres at Jubail Industrial City Logistics Centre, Damman Logistics Dry Port, a relocated Riyadh Dry Port, King Khalid Airport Logistics Centre in Riyadh, Jeddah Logistics Dry Port, King Abdullah Port Logistics Centre and Yanbu Industrial City Logistics Centre.

Plans to develop the Saudi Landbridge project were originally announced in 2004 and were revived in 2011, with progress relatively slow since then. Nevertheless, it is one of Saudi Arabia's most eagerly-awaited infrastructure projects, with Crown Prince Mohammed bin Salman bin Abdulaziz al-Saud confirming the government's commitment to the scheme in June 2021, when he launched the National Transport and Logistics Strategy."

## K. LEBANON

On 12.04.25 the following appeared on Facebook: "The Ambassador of Italy Fabrizio Marcelli, AICS Director Marco Rusconi and H.E. Minister of Culture Ghassan Salameh toured the historic Mar Mikhael train station and were briefed on the site's unique cultural and historical significance under the Industrial Heritage Park Project.

As part of UNESCO's #LiBeirut initiative, this project - funded by Italy - will rehabilitate and adaptively reuse the landmark 19th-century Mar Mikhael Train Station, damaged by the 2020 Beirut Port blast, transforming it into a vibrant space for cultural exchange, creativity and community interaction.

## L. DUBAI

*From "Tramways and Urban Transport" May 2025.*

Dubai: "The Roads & Transport Authority has issued a Request for Proposals for the construction of the planned 30km (19-mile) Blue Line Metro linking Al Ghubaiba and Dubailand via Business Bay. It is hoped that work can be complete in 2029. The new line will require 28 automated trains."

## M. JORDAN



With thanks to Lorenz Degen: On 27.04.2025 this appeared (in German) on social media. "A Train Journey from Amman to Al-Mafraq reaches the Reha Region. Today, Saturday, the first journey with the Hedjaz Train left the main station of the Jordanian Hedjaz Railway in Amman to the town of Reha in the administrative district of Al-Mafraq. 250 passengers participated. The journey included a bus from the station at Al-Mafraq and in Reha there was a parade of local inhabitants with musical bands; the tourists were taken on by bus to visit important local sites and walked past old churches with rare mosaics and memorials as well as markets where craftsmen displayed their traditional wares and the beloved locally-produced foods. The head of the Jordanian Heritage Dr. Zahi Khalil said that the organisation works to link Jordanian citizens with their heritage and to encourage the tourist movement in the region. For his part the Mayor of Reha, Akram Al-Harahsha, proposed more cooperation between the public and the private sector to ensure more positive effects on the local community. The participants expressed their joy and gratitude for this opportunity to see their civil and cultural heritage."

[Photos show a lengthy diesel-hauled train.](#)

On 24.05.2025 this came from the same source, which indicates these excursions are to run more frequently

"In connection with the 79th Independence Day Al-Hijazi Railway Foundation and the community of Um Al-Jamal arranged a special family excursion by train. 250 participants made their way from Amman to





Last month, Kazakhstan and Afghanistan signed a Protocol of Intent for the construction of a 780km line from Towrgondi, on Afghanistan's border with Turkmenistan, to Spin Boldak on the border with Pakistan. Kazakhstan has pledged to invest \$US 500M in the project.

Under the first phase, the governments of both countries agreed to sign an accord for the construction of a 115km line between Towrgondi and Herat and to establish a joint transport and logistics undertaking in Herat.

"The project is of particular importance for Kazakhstan in terms of expanding regional transit connectivity, strengthening transport and logistics links between Central and South Asia, and providing access to Indian Ocean ports," says the Kazakhstan government.

The new line will become a key link in a future cross-border corridor passing through Afghanistan and providing the shortest route for freight heading for Indian Ocean ports, according to the government.

#### Trans-Afghan Railway

The protocol with Kazakhstan was signed just weeks after authorities in Russia and Uzbekistan announced the start of work on the Trans-Afghan Railway, a 573km line through Afghanistan aimed at connecting landlocked Central Asia to ports in Pakistan. In 2021, the parties estimated the cost of the project at \$US 4.8Bn.



One of two Trans-Afghan Railway branches is expected to run through

Al-Mafraq station and then by buses to the archaeological sites at Um-Jamal in an atmosphere of great joy and creating good memories that combine the past and the present.

On arrival at Al-Mafraq station the participants were transported to see archaeological sites in the Om Jamal area to learn their ancient history in a pleasurable manner, combining their heritage with tourism. The journey was a wonderful opportunity for families to enjoy the experience of the Heritage Train and to connect to the beauty and history of the district of Al-Mafraq. The participants emphasised their joy at the experience and confirmed how important it is to organise such excursions, which strengthen the feelings of identity and loyalty and introduce new generations to the rich history of their country. The participants were greeted at the festival site also with folk bands and a bazaar where local families could display and distribute their local products."

Herat, allowing the formerly-independent projects to benefit from potential synergies. "The establishment of a transport and logistics centre in Herat will create cargo flows from Pakistani ports and allow their distribution in the direction of either Turkmenistan or Uzbekistan," says Trans, a Moscow-based logistics consultancy. "In the reverse direction, Herat can handle the transshipment of cargo sent for export from Central Asian countries through Pakistani ports."

Russia and Belarus could also benefit from the new lines, as Belarus has lost access to ports in Lithuania and Latvia and Russia is looking for new logistics routes."

## N. AFGHANISTAN

From 'I.R.J.' 07.05.2025: "Kazakhstan and Uzbekistan have independently embarked on plans to build new lines in Afghanistan, seeking access to ports on the Indian Ocean. The new lines are set to interconnect in Herat, in western Afghanistan, potentially creating an important logistics hub.

## A REHABILITATION PROJECT IN THE SUDAN OF ONE ENGLISH- ELECTRIC LOCOMOTIVE.

By Cliff Walker

(Source: *The Mancunian*, Newsletter of the Manchester Loco Society.)

"In 1992 I heard that an electrician from Crewe Works had been sent to Atbara Works in the Sudan to show them how to rewire a control cubicle for one of their locomotives lying in the desert.

In August 1992 I was transferred to the Overseas Sales Office to familiarise myself with the wiring of the Sudanese Locomotives. A Project Leader with a Diesel Engineer, me to look after the Electrical side and a welding expert would be included. The Project Leader would convert the locomotive from vacuum to air brakes. The drawing of the locomotive bogies was in the Drawing Office and new brake brackets to hold the new air brake cylinders were well advanced. These were being manufactured in the Plate Shop in the Works. The containers were being packed with boxes of components and were being dispatched to London for shipping from Tilbury Docks.

The electrician, who had been in the Sudan since the beginning of 1992 rewiring one of the control cubicles for the English Electric locomotives, was back in the Works before the Project Leader, the Diesel Engineer, welding expert and I flew out to Khartoum to begin the contract to rehabilitate the locomotive.

At the beginning of September 1992 we flew to Khartoum International Airport and were picked up by a driver from the British Embassy. We were taken to the Hilton Hotel for our evening meal, a game of bowls and a nice clean bed. After breakfast we collected a Land Rover from the British Embassy and visited the Sudanese Railway Headquarters to obtain the necessary work permits. We fuelled up the Land Rover and went to get some supplies from the warehouse, purchasing dried potatoes, dried milk, dried carrots and various other foodstuffs. When we got outside there were about twenty men banging on the side of our Land Rover demanding cigarettes. Each of the men had no left hand. None of us smoked so they were all disappointed.

We drove off with a sketchy map and a compass and had been told to drive north with the River Nile on our right and the railway on our left. We got as far as Meroe where the pyramids stand and stopped to have a look at them. The tops had been removed by robbers many years ago and the Italian teams were rebuilding them. These pyramids were built by the Kushite Kingdoms in the years from 300 BC to 300 AD.

We were walking around the pyramids when an Indian came to us and asked if we could help him with his truck stuck in the soft sand. His family were very happy to see us. We carried a chain and soon had them on their way. We later found out that until 1920 this area had been the main area for teak exports. The pyramids must have been built in a forest of teak; but as the trees had all been felled, the Sahara Desert had travelled to the River Nile.

Shendi was the half-way point where we got out our primus stove for tea and some food to keep us going. We set off at 2pm and arrived at Atbara at 6pm. We were met by Mr John Tate, the World Bank Manager who showed us to our bungalow by the side of the Nile. We made a meal and were in our beds by 9 pm. The television would not pick up any signals, being so far from Khartoum, but there were plenty of tapes.

We left the bungalow at 5am each morning to walk down to the Works just as the sun was rising. The gate keepers were wearing two jackets, a thick scarf, two overcoats and two pairs of gloves. We wore short trousers and short-sleeved shirts. The Works fitters and electricians would stand outside in the sun to warm themselves up before beginning work.

Inside Atbara Works, built in 1909, we found that one bay was set aside for our rehabilitation work, the adjacent bay was still full of old steam locomotives. In our bay was locomotive 1029, having been brought in some days before for cleaning all the sand out. The World Bank Manager had arranged for two locomotive stands to be made. The bay was equipped with two new 40-ton capacity cranes installed some weeks before we arrived. The locomotive was ready for lifting so the lifting cables were attached to each side of the locomotive at each end. On the second morning we brought the cranes over the locomotive and attached the cables to each crane hook. The traction motors had already been disconnected so the crane 'up' button was pressed and as the crane hooks took the weight the brick arches under the crane rail began to crumble slightly. The Arabs ran out of the workshop. The cranes slowly lifted the locomotive and the new stands were positioned under each end of the locomotive body.

The diesel engine was next to be lifted over to the Diesel Engineer's section and the main generator was separated from the engine. After walking around the Works, I noticed that wherever I went there were auxiliary generators half buried in the sand. Sudanese Railways must have purchased many spare auxiliary generators to replace the burnt-out ones. I had been told that the auxiliary generators were underrated and we were to replace the exhauster with two Davies and Metcalfe compressors which would add an additional load on to the already overloaded auxiliary generator. The bogies were being modified with the substantial brake cylinder brackets by each wheel and when the brake cylinders were fitted and the bogies painted they would look fine.

The main generators had seen little use and it was easy to clean out the brush gear. New brushes had been provided so these simply had to be bedded into the commutator which was also in a very good condition. The auxiliary generator commutator was well-worn and had to be skimmed in a lathe. The auxiliary and main generators were re-assembled and I pressure-greased the main generator bearing.

By this time the diesel engineer who had rebuilt the engine was asking me if the generators were ready so that he could fit them to check the crankshaft alignment of his engine.

It was about this time that we had to travel from Atbara to Khartoum to sort out some paperwork at the British High Commission. We travelled by Land Rover and arrived at the Hilton just after it became dark. After a good meal and a game on the bowling alley, for which the Hilton is famous, we were soon in bed. In the morning we met the High Commission staff to sort out some paperwork and these papers had to be sorted out with the Sudanese Railways straight afterwards. By the afternoon we were free and stayed a further night at the Hilton. The Hilton grow all their fresh vegetables on the highly fertile soil on the banks of the River Nile. All their meat is flown in from Europe. The Hilton, in 1992, was the only hotel in Khartoum nearing UK standards

After breakfast we fuelled up the Land Rover and set off north. The journey seemed endless and we were running into small, jagged rocks. I wondered how the tyres could stand such punishment but they seemed to be unaffected. We arrived back at the bungalow as it was getting dark.

In the morning one of our men tried to start the washing machine but it would not work. I was called out of the lounge to have a look at it. After checking the fuse, I took off the back to find that while we were away in Khartoum a rat had eaten all the cables around the control switches. I went back to the Works and brought a drum of 2.5sq.mm cable out of the stores to rewire the washing machine. It took about two hours with connectors joining broken cables while some

cables were replaced completely. After this work the washing machine was re-assembled and plugged in to find it worked perfectly. The question was - "Where was the offending rat?"

At work the next morning I built the biggest rat trap you could imagine with the spring of a reverser switch. It was tested but fingers had to kept well clear. It was taken home and baited with smelly cheese. The rat apparently did not like cheese. The next morning a strange smell came from the large American cooker, I took off the steel cover over the connections and there was our offending rat. It had tried to eat the rubber mains cables feeding the cooker and was electrocuted on the main terminals.

I extracted the rat and took it into the Project Leader's bedroom while he was still in bed and showed him the, now dead, rat. I had never seen anyone get out of bed so quickly. He could not bear to have a dead rat in his bedroom.

When we arrived in Atbara it had not rained for two years and our water supply came from the River Nile. There were two large water pumps, lower than the minimum level of the Nile, which flooded our lawn each Saturday and provided a stream along the main tarmac surfaced roads, behind the trees. They must have provided water for the, now defunct, steam locomotives. The pumps were installed by the British Engineers when they ran the Sudan.

The Works staff had their water held in 7ft tall, ceramic urns over which was placed sacking and this was kept wet to keep the water inside the urn cool. The job of filling the urn and sack wetting was left to the labourers. There were similar urns between each column supporting the roof. Our drinking water was first filtered through a coarse filter to get rid of most of the mud and then put through an osmosis filter which produced clear water. This was boiled and, when cool, was stored in our fridges. The insulated water container was carried into the Works each morning and was left in the centre of the bay on some cable drums.

Along the opposite side of the Nile, which was half a mile wide, were a row of single-cylinder diesel pumps built in India and these were used to lift the River water up to the allotments. They were thumping away all night, every five seconds. The soil was pretty good quality, being the result of Nile flood water. They could grow potatoes, melons and fowl beans. One of our Electricians offered us some potatoes for one Sudanese pound. He brought us 5Kg of potatoes in a sack and these were a great deal better than our dry powdered potatoes.

I was asked by the CMEE if I would sit for about half an hour each Friday with his two sons who were learning English. It was surprising how soon they learnt the language.

The locomotive body was being rewired and Abass, the Electrical Foreman who spoke good English, mentioned to me that they had never been able to rewire the 2in conduit which ran from one cab floor terminal box through the locomotive floor to the other cab terminal box. In the morning I asked Abass if he could provide a ball of string which was laid down the workshop. The end of the string was brought into the cab. A small ball of cotton waste was wrapped in the string and an airline blew the ball of waste with the string attached into the other cab terminal box. Abass was delighted and hugged me.

A single cable was attached to the string and pulled back through the conduit to the other terminal box. A bunch of cables dictated by the old English Electric drawings was attached to the single cable, it was covered in powdered chalk and hauled through the conduit. The wiring went on unabated and it was surprising how soon and quickly the body wiring progressed. The engine unit was installed the next day and the generator heavy cables were attached. The governor plug was rewired along with the fuel pump.

The painters came along before we were ready and began priming the bodyside. The bogies were fitted with the traction motors which I had repaired in the Traction Shop at Crewe Works, these Class H insulated traction motors were probably better insulated than when they

were new. They were still painted blue from the Crewe Traction Shop painters

The cubicle which the electrician from Crewe had begun some months before was still not finished and I had to reconnect many of the installed cables. I asked Abass if he could provide a board 10ft by 10ft and paint it white. He came straight back to me and said that he had no timber. I said "You have many wooden packing cases from England, use them". By the next day the board was on the floor and Abass had painted it white. I asked Abass if he could take two electricians with him to remove one pair of harnesses out of the locomotives standing in the desert nearby. This was soon completed and the pair of harnesses were carried back to the Workshop and laid on the board. Each section of the harness was laid out carefully and each of the separate cables were identified and a box of terminals and tallies was mounted near the board. I told Abass to leave each cable 2in too long. Each cable was outlined with a black marker pen. The following morning each cable was identified.

By the next day the harnesses were mounted in the cubicle, terminated and connected to their respective relay or contactor. The frame of the cubicle was painted and the wiring completed.

As I was completing the last connections on the terminal bars in the cubicle base there was a row going on down the Workshop. The Team Leader had six Arabs around him with tears running down their dusty cheeks. I realised that something serious had gone wrong and we would hear more about this soon.

Two days later we were asked to pick up the Crown Agents Railway Chief, the BREL Overseas Sales Manager from Derby and the Overseas Sales Manager from Crewe from Atbara station. The following morning at 10am we were called to the CM&EE's Conference Room. There was the biggest teak table I had ever seen, the World Bank Manager sat at the end of the table with the CM&EE. All the American Tactical Advice Team sat around the right-hand side of the table and the BREL team sat at the opposite side of the table with the Sudanese Seniors along the left-hand side of the huge table. The Project Leader stood up and spoke for forty minutes without a break. I was asked by the World Bank Manager about the auxiliary generator and I explained that with the blower motors taking most of the power from the auxiliary generator I felt sure that the blower motor could be connected in series and the traction motors were insulated to Class H and were acceptable. The CM&EE asked me if I was prepared to return during the summer to test the locomotive.

With this agreed we were given a severe telling-off for not respecting the Sudanese workforce. I walked back into the workshop and was met by Abass; he said "Whatever is the matter, Cliff". I replied that we all expected to be sent home. Abass said that the Assistant Works Manager was leaving tomorrow and was having a party tonight and he wanted me to attend. "Try to borrow the Land Rover tonight and pick me up at 6pm, I will show you where he lives". I asked if any of the others had been invited. "No Cliff, only you have been invited."

I picked up Abass and it was only a short trip to the Assistant Works Manager's house. There was a goat being cooked over an open fire and I was seated on the floor. Later I was given a chair to sit on which was much more comfortable. The goat was split up and I had a well-cooked piece of meat and it tasted very good.

The party was finished by 9pm and I wished the Assistant Works Manager all the very best of luck for his future. I then took Abass home. The Assistant Works Manager spoke quite good English. We came home for our breakfast at 9am each morning which consisted of fresh bread rolls with Swedish cheese in a tin with a label saying 'Free food for the people of Sudan' although we paid for it.

I asked Abass if he knew anyone who fished in the Nile and could he bring in a fish. The next day a man came in to the Workshop on his bicycle with a fairly big fish. It cost about £1 but when we got it home no one would cut it up. I was left with the job and managed to get four big steaks out of it. They were washed and put into our freezer.

One Friday we were walking round the Souk when we saw a butcher with a long steak all covered in flies. We bought it off him and took it home. They tried to make a shepherd's pie but the meat would not mince, we tried it with blue onions but our commercial mincer would not tackle it. It had to be pressure-cooked for two hours before we could mince it.

The Brown Boveri Power station which fed the Works and our house shut down at 2pm every day and in our bungalow yard was a 27kW diesel generator which I started each day and this fed the cooker, the air conditioners and the TV. Some of the electricians had allotments on the opposite side of the Nile and the four of us were invited to see them. The next Friday we drove up to the ferry. It was rope hauled and we joined six goats and several hens for our trip across the Nile. We walked along the path to the allotment and I noticed the dozens of weaver birds building their nests alongside the path. There were bright red birds about the same size as our blackbirds flying about. We came back with a bag full of potatoes and a large cabbage.

The Chief of Police's brother was making aroke which is distilled coconut milk. We put half an inch in the bottom of a glass and filled it with Pepsi Cola and none of us could drink more than four without becoming drunk.

The lads usually prepared the dinner each day but I prepared the puddings, usually with powdered custard brought from the UK. We found some tinned pears in the store in Khartoum and we bought many of them at each visit.

I had a walk around the stores with Abass and in one section we found boxes and boxes of red, amber, green and white 40watt signal lights. These were no longer required because the trains were all controlled by radio and all the signals had been taken down. At the bungalow the flat lawn had to be mowed, it was a very strenuous job to mow each week, in the heat. I spoke to Mooser the houseboy who had a donkey. I asked him if we could borrow the donkey to chew the grass. Mooser agreed and the donkey was tethered in the centre of our lawn. In a few days the lawn was beautifully fertilised and the grass was short. The only time the donkey was removed was when the lawn was flooded.

One morning, at 5am, we opened the back door and a spitting cobra was on the path. We kept well away as the cobra spat at us trying to get spit into our eyes. We warned Mooser about the cobra and when we arrived back at 9am for our breakfast the cobra was curled up in a grid. When we arrived home at 2pm the cobra had gone.

The Sudan Railway Commercial Manager had five daughters and one had a birthday coming up soon. The Tactical Advice Team Manager's wife spoke to me and told me about the forthcoming birthday. If she made the cakes could I put some coloured lights under the trees near the darts club? I asked Abass to requisition four boxes of each colour light bulbs from the stores and I would couple them up to a roll of single-core cable. The old lamp holders replaced in the locomotive fitted the lamps and the next weekend the ladders were up the palm trees and cables and lamp holders were equally spaced around the darts club. When the coloured bulbs were fitted and the cable coupled to our generator, through a switch, the area was floodlit by the temporary lights.

The following Friday we had the most wonderful party with a barbecue laid on. The girls were delighted with the effort we all had made.

The following Friday we went for a drive into the desert. We soon found the outline of the trenches from the war when Winston Churchill was a young lieutenant in the British Army. The young Arab lads were trying to sell us the spent bullet cartridges they had dug out of the dry sand. On the way back, we found a tent about three miles from the Nile with a family living in it and a donkey tethered nearby.

The locomotive, now complete, was driven out of the Workshop and left at the Test House. As it was fully tested on a resistor (load bank), and I had put a temperature probe on the auxiliary generator casing,

it soon became apparent why the auxiliary generators were failing at so high a rate. The machine was getting up to near 280°C so I had the engine stopped and had a good look at the blower motor terminals to find that the connections were side by side, so I disconnected the two blower motors, after all with the traction motors disconnected for the load test the blowers were not required. The auxiliary generator, with the tremendous air drawn through it by the main generator, soon cooled down.

When the test was completed we drove the locomotive to a low bridge where we could check everything under the locomotive, we could check the new brake rigging, the traction motor cables and check for any oil and air leaks. I drove the locomotive back into the Works and a crowd of men came to see the rehabilitated locomotive. The locomotive was travelling at 20mph and the Works staff ran because they knew that the locomotive would not stop, but with the new air brakes it stopped in about 25 yards.

The locomotive was refuelled and we were told that it was derailed. By the time we got back to it the following morning the Civil Engineering crew had arrived and jacked it back onto the track. All the works staff were so surprised to see one of their older locomotives running again after standing in the desert for ten years.

The Works Manager asked if he could use some of the tyres for one of the brand-new Japanese locomotives which had been driven at full power and full brakes at the same time. No driver training had taken place.

During the evening the 1936 buffet car was coupled in the centre of a goods train ready to go up to Summit Station. During the evening, just after it went dark, I thought that if the traction motors can withstand the pull up the banks 3,000ft in 60 miles to the Summit Marshalling yard, with the limited cooling air, they would continue to Atbara.

The Works Manager asked for a meeting with me and he explained how he had lowered the load on the auxiliary generator by limiting the power of each blower motor. I went on to explain that one type of British Rail locomotive had the same problem of an overloaded auxiliary generator and by reducing the power of the blowers it cured the problem.

I then asked him "Why do they take off their left hand when caught stealing?" The Works Manager looked straight at me and told me that they need their right hand for wiping their bum.

The following evening we were asked to go with the locomotive to Port Sudan with a goods train. The train would have a flat wagon on the rear to hold our Land Rover with its handbrake fully on. The train would be heavily loaded and half a mile long. Sudan Railways had marshalled a 1936 Metropolitan Vickers-built buffet car in the middle of the train. After we had started off it was not long before the auxiliary generator was reaching its burn-out point. I stopped the train and reconnected the blower motors and restarted the train. The traction motors remained cool and the auxiliary generator cooled quickly.

The World Bank Assistant was with us and wanted to know why the auxiliary generator was still running. All the BREL team kept quiet and the train was only stopped at 3pm. I walked down the sand in the shade of the train and climbed into the locomotive cab. Everything was as it should be, the brakes were on the locomotive and the controller off. I looked through the opposite cab window to see all the train crew were kneeling on their prayer mats, all facing Mecca.

After half an hour the train was restarted and off they went, the traction motors would be cool after the stop. After two full days we came to a stop at Haiya Station where there was a Rail junction and we had to let a train pass. The distance up to Summit Station, where the main marshalling yard is situated, was about thirty miles. This area of the Railway is about 3,000ft above sea level and the distance to Sinkat is about 20 miles down the bank from Summit Station. There were many bad bends through Sinkat where many derailed vehicles were down by the river, having come off the track at the severe bends. Near Sinkat is a flat plain in the mountains, by the track, where the British troops

were stationed many years ago. Their battalion names were laid out on the mountain side in stones, 'The Staffordshire Regiment' was one of them and they are still readable today.

We eventually arrived in Port Sudan after our three-day trip. The locomotive was taken off the train for refuelling and we had a walk around the Port. The huge go-downs which Bob Geldof had raised funds to purchase some years before to feed the starving children should have been full of grain but Sudan Railways had no wagons to transport it south.

When the train reached the steepest stretch of the climb I told the driver to stop. The driver said the train would roll back down the hill. Abass said that we have to test the brakes and with that the driver got up and I sat in his place. He stopped the train on the locomotive air brakes and it held. I raised the main generator current to 3,500amps on the meter and then slowly released the brakes. The locomotive slipped and the fitters jumped down onto the track and put sand under the wheels. The locomotive pulled away and the driver came back when the train got moving again.

The traction motors must be pretty warm by now but I knew that they were insulated to 150°C. A bit further up the bank I was listening to the diesel engine with a screwdriver placed against the cylinder head and the screwdriver handle against my ear. I could hear the diesel engine missing a beat now and then. I informed the diesel engineer and he asked for the engine to be stopped. The diesel engineer unclipped the fuel filter to find it full of sand, he washed the filter with clean diesel fuel and reassembled the filter. The engine was restarted and gave no further trouble up to Summit Station.

They stopped at Summit Station for some time while the goods train was extended. I had known for some time that there was a fault with the traction motor weak field circuit. They had not needed it up until now but going downhill slowly to Atbara they should be able to speed up if only the weak field circuit could be resolved. I suspected the controlling relay to be wrongly wired but Shavvy, my trusted electrician, was convinced that the locomotive wiring was correct. I told Abass to tell Shavvy that he must connect the bottom connection to the top and the top connection to the bottom. When we restarted the engine, it worked extremely well indeed. During the night as we neared Atbara, I was awakened by the wind. Abass came to see me and told me that as there was a sandstorm, the instruction was to shut down the diesel to prevent sand entering the turbochargers. I got dressed and went to the locomotive with Abass. The track was built up with sand and the engine was restarted but the locomotive was not allowed to run on built-up track, so out came the shovels. I would take one and a Sudanese fitter took the other shovel. The two of us worked in the headlight of the locomotive from 3am until 6.45am when we went back to bed and awoke for breakfast.

By this time, we were not too far from Atbara. The locomotive now worked perfectly. It was not far from the end of our contract and when we had stabled the locomotive and checked it over it was nearly evening again. When we got back to the bungalow the houseboy delivered half a gallon of aroke which we did not know what to do with. We had a party for the children around the bungalow and I got the chip pan and produced a mountain of chips for the children to eat and a pudding of peaches with English custard which went down very well.

We put the aroke in the fuel tank and filled it with diesel from the depot nearby. We always kept a 40 gallon tank of diesel in our garage in case things blew up in Khartoum and we would have to drive up to Wadi Halfa on the Egyptian border. I must say that the Sudanese Railway depot were always very willing to give us diesel for our generator and Land Rover. The next morning, we planned to leave at 5am. The Chief Sales Manager from Derby was with us so with the Project Leader driving, three in the back and me sitting in the front on the right of the driver, we left about 5.10am. We drove south across the desert till about 8.45am, we then drove into some very soft sand. The Land Rover swung left and turned over finishing on its roof; the windscreen came out. I managed to open the front right-hand door and helped the other lads to get out through the windscreen. The

Project Leader who had been driving was stuck behind the steering wheel. I helped him out but he was sore around his left hip. All the engine oil drained out but the fuel tank was intact and no fuel was lost. After half an hour a short back truck was seen about three quarters of a mile across the desert. He must have thought it strange to see a Land Rover with its wheels in the air with five people wandering about.

The Indian driver came over to us, he took the three off the back seat back to Atbara with a message to bring two gallons of engine oil when they returned. I managed to get the Project Leader's leg going again and sat him by a large stone. I unclipped the jack from the rear door and began jacking up the Land Rover, packing with stones and readjusted the jack to jack again and slowly the Land Rover was righted and again on its wheels. I found a spanner to short the starter motor contacts, so in first gear the Land Rover moved forward out of the broken glass, blood and engine oil. The Land Rover did not seem too bad but the roof had become detached from the windscreen surround. The two of us waited in the heat of the desert till 2pm with no water, just two bananas to keep us going.

One of the American TAT team arrived with plenty of engine oil and as soon as the engine was refilled with lubricating oil it started straight away. The Project Leader struggled to get into the cab but we soon got going back to Atbara with me holding the roof down while the Project Leader drove. It took three hours to drive back to Atbara with the TAT team Pagero by their side. When we arrived back we could not understand why everyone was photographing us walking from the damaged Land Rover. We were both covered in grey dust from head to foot, they could not see my glasses. One of the TAT team came over to me and said "Bring your case into our house and have a shower". I said that it may block his drains but he insisted that I had a good shower. After undressing the problem was hair, absolutely matted with dust. I finished my shower and was surprised that the TAT wife had produced scones and tea for afterwards.

That evening everyone had known of our problem and the CM&EE had arranged to put the 1936 buffet car amongst the goods train bound for Khartoum. We loaded our cases into the buffet car and said our goodbyes again as the train left at 10pm.

By 6am the train had only got as far as Shendi where they knew that a bus could take us to Khartoum. After waiting for half an hour, the bus arrived and after loading our cases on and paying the fare we soon arrived in Khartoum where we made our way to the Hilton for a good meal and a game of bowls.

I had kept 400 Sudanese Pounds to pay the Hilton bill but when I came to pay for the stay the Hilton cashier would not accept Sudanese pounds. I objected and said that this was Sudan. The cashier said that the Sudanese pound had devalued so much they could not accept them. I had an American Express card issued at Derby. "Will you accept this?" I asked, "Yes" came the reply so 389 Sudanese pounds was charged to American Express and the stack of Sudanese pounds was left in the Hilton safe.

The following morning we were told that British Airways did not have a service to Khartoum any more since a bomb had been thrown into the forecourt of the Hilton Hotel some weeks before. We showed our flight tickets to Air France but they could not help. We next tried Lufthansa but they could not help either. We next called in at the KLM office and they promised to fly us all out the next evening. After settling up at the Hilton we got a taxi to the airport.

We flew out on one of the worst nights we could have with heavy snow forecast for Europe. We arrived at Schiphol the next morning, the pilot had said that it was the worst weather conditions he had ever flown in, with heavy snow. So, after leaving the heat of Khartoum and arriving in the snow, the plane was stuck on the airport apron because the plane in his port had not left. In the end they brought a mobile stair to our plane and we walked to the airport behind a KLM girl through the snow.

We got our transfer to Manchester and were home within one hour to unpack our cases full of Sahara dust, all my clothes were washed to

get the dust out and they were soon back to normal. The spares for our Land Rover were ordered and when they were delivered they were quickly repacked for the High Commission in Khartoum, for their Technical Students to rebuild the Land Rover as part of an engineering degree course.

I got some traction motor characteristics from the maintenance manuals and made up a file showing the characteristics of Stirling Varnish's MK 495 which all the Sudanese motors were vacuum-pressure impregnated with, and a batch of Thermax thermocouples and a master 48-way Telemax switch. All this was to check the temperature of each traction motor coming up the severe banks from Port Sudan to Summit Station, with an ambient temperature of 58°C.

I worked in BREL House offices until my return to Atbara in June 1993. The Project Leader and I flew with KLM and were picked up by the High Commission driver and dropped at the Hilton Hotel.

In the morning I walked down to the Railway Headquarters to get two work permits. The Director General's door was open and he invited me to sit down. He offered me a glass of very strong coffee, in fact stronger than I had ever seen before. The Director General then said "You drink that or you will not get your work permits". I gulped it down, the taste was grim. The work permits were obtained and I met the Project Leader back at the Hilton. We picked up our cases and were back at the railway station by 11am to catch the passenger train to Atbara. The train got hotter and hotter the further it got into the desert. We did not know that in the end of the next coach was a freezer containing ice creams until we arrived at Atbara station that evening.

We booked into the Atbara Rest House and climbed the stairs smelling of diesel oil (they paint the stairs and bannister with diesel oil to prevent vermin living in the building). The bathroom was filthy, the bath had been white but was a deep brown. The bedding was not clean but we were so tired that we lay on the sheets and were soon sound asleep.

The very bright morning arrived and the World Bank Manager had arranged for two beds in his office for the Project Manager and I to sleep in the next night. In exchange the World Bank Manager wanted the exhaust of his generator to be repaired. A short piece of pipe from the Works soon sorted the generator and its exhaust.

The World Bank Manager's wife made a wonderful meal for the two Crewe engineers. In the office bedroom was the most interesting cooler. It was like a car radiator lying on its side with a narrow water tank across the top. From this tank water droplets ran through the fins down to the bottom tank where a small pump pumped the water back to the top tank. A small fan drew hot air through the fins and the air coming into the office was relatively cool.

The locomotive was out hauling a train when we arrived so we asked if we could have the locomotive when it next came to Atbara. I had been in the Works to see Abass to tell him how we were planning to fit the thermocouples in each traction motor. I accidentally left my new AVO meter on the bench in the Works. We were asked to go with the locomotive for a trip north and we would be back the next day. When we got back I went to see Abass to collect his AVO meter to find that a Sudanese fitter had slept with the AVO to prevent any theft. The temperature probes were fitted in each traction motor brush arm and probes to detect the air temperature coming in to cool the motor and probes to check the leaving air stream temperature. All the leads were brought back to the Telemax switch in the cab. The locomotive was taken to the low bridge where all the connections could be checked. The locomotive was fuelled and coupled onto a Port Sudan goods train.

That evening we set off in the 1936 buffet car. I checked the readings right up to Summit Station but nothing seemed unusual and everything seemed normal. We stayed for most of the day at Summit Station before we took an even longer train down the steep track to the harbour of Port Sudan, the two compressors held the long train down the most severe bends. We had our breakfast of fowl beans and stale cheese with brackish coffee.

We had another look around Port Sudan, during the afternoon the goods train was being prepared which we had to haul up the banks to Summit Station. We did not know what we were hauling under the sheeted-up wagons but it was a heavy load. We left at 4pm as it was going dark. As we met the steepest banks the traction motors began to warm slightly. The Telemax instrument was checked each hour and I stopped the train on the steepest bank to really test the traction motors. While stopped I looked under the sheeted-up wagons to see what we were hauling. It was large calibre field guns.

The air during the night cooled down but the traction motor current and temperature rose as they climbed the steepest banks. By 6am the traction motors had reached 80°C but when we arrived at Summit Station the traction motors very soon cooled down. I recorded all of this. One of the traction motor brush arm thermocouples had disappeared. We started at 2pm with a longer train to Haiya Junction. We stopped at the junction to let another train to pass, then we were off to Atbara. When I got back to the World Bank Manager's house I plotted the characteristic of each traction motor, which showed the maximum limit of 150°C while the heaviest loads only created a temperature of 82°C and when I presented the graphs to the CM&EE and explained the details to him he was delighted and thanked me for all my help with his two sons who were both getting on with their English studies.

The Project Engineer and I said our farewells to the Works staff and caught the evening passenger train to Khartoum. We stayed in the Hilton Hotel. The following day the lady doctor who had looked after our cuts and bruises in Atbara was invited, with her husband, to have dinner at the Hilton Hotel with us. After the dinner I walked with them across the Hilton's dimly-lit car park to their car and I shook her husband's hand. After thanking her for all the help she had given us, I kissed the doctor on her cheek. Immediately a gun was pushed in to my neck. She immediately said "don't speak to him, I will talk to him". For twenty minutes the gun was in my neck until he eventually took the gun away.

As I walked back to the Hotel, I passed the guards sitting in the dark by the hotel wall and I threw them a packet of Polo sweets. All the time I had been in the Sudan I had written to my wife, Jane, each week and always included two or three Jasmin flowers in the envelope and, after ten days in transit, the scent from Jasmin flowers was still evident by the time the envelopes reached home.

The only other plants which seemed to grow well in the heat and shade were aubergines...."



- 149:10 'Siemens multiple units for Israel stabled at the Rail Adventure depot at Braunschweig awaiting transfer to a port for export. May 2025. See also 140:03. (Photo The Editor).'

