What's On

Best way to ease homesickness and stress

BIKE group bikes for health, fun and friendship



Bikers in Kuwait Encounter (BIKE) members pose for a picture.

Failaka

Sweat, pain and thrill recalled

Water supply: Engineering feat retraced

Matthias Bertram was living and working in Kuwait in 1976 during the construction of the Water Supply System to Failaka Island. This article is a short version of article translated into English from the German original written by Matthias Bertram. Original article link is www.http://ahr.eifel-rhein.de/seiten/reisen/1976_Failaka

_Island_Water_Supply.pdf
This is the last part in a series of articles on Water Supply System to

articles on Water Supply System to Failaka Island.

By M. Bertram

German Water & Energy Engineering Solutions Email: mbertram@waterandenergy.de

Continued from yesterday

They conducted tests to renovate the tests in order to show the load capacity of the pipes, but without any effect. Finally not only the client but also the project management was convinced that it was not possible to lay the pipes with this concrete. The client demanded to coat the concrete in a jetcrete procedure and reinforce it with chicken wire, the normal procedure in the field of offshore pipe laying. The Ekofisk pipeline, the previous reference project of Northern Offshore, was also built in this way. Therefore, it was necessary to dismantle the 25 kilometer long concrete coating without damaging the corrosion-resistant layer. The project team of Northern Offshore developed a cutting machine that cut the concrete mantle from two sides in order to detach it in two shells. The pipes were shipped to Sharjah, at the other side of the Arabian Gulf, in order to be concreted as requested by the client and to be reshipped to Kuwait. The Joint Venture Partner Company L. Freytag sent a concrete specialist from Canada to Sharjah in order to supervise the project

exactly and continuously.

Shortly after the first pipes were reshipped to Kuwait, the client refused the pipes again. He criticized again the existence of cracks in the concrete as well as the fact that the concrete mantle didn't reach the required thickness. Mr. Kalotti was ready to accept the thickness, but not the cracks. Indeed it was not possible to bend the concrete on the rigs of the pipe yard or to hold it in the tensioner without the cracks becoming wider or the concrete structure dissolved completely.

In order to solve the problem as a whole, the team decided to coat the concrete mantle with additional three layers of fiberglass reinforced plastic mesh and to reach by this method the required thickness and to prevent further cracks and the dissolving of the concrete. At the pipe yard 25 kilometers of pipes were wrapped and coated with a winder. First tests at the pipe yard with the wrapped pipes showed that they were able to withstand the load and the transport to the barge.

the barge.

But: When the team started laying the pipeline on the barge for the first time they realized that the tensioner was not capable of transferring the necessary pull load into the pipestring. The surface of the wrapped pipes was too smooth, too slippery. The pipe slipped through, the surface hadn't the required roughness. This problem was solved by adding sand into the upper layer of epoxy resin what led to the required roughness. The MEW accepted the pipes, it was time to start the laying procedure.

Pull-in landing point Failaka

The discussions about the concrete were still going on when the Baas Kobus was located 500 meters off the coast of Failaka. Additionally to the captain, Walter Adler, a German-born American joined the offshore team; he was responsible for the offshore laying of the pipe.

Walter looked back to an interesting past; he told us: during the Second World War he was a captain of a submarine boat until he was captured by the French. Later he tried to get from there as a stowaway to a cargo ship going to the Caribbean. When the crew found him he was left in Haiti where he was put into jail. There he got to know friends of Francois Duvalier who became shortly after this president of Haiti (Papa Doc). Walter belonged to his first government working as a counselor for the agricultural sector. After this he went to America where he began to work for the offshore contractor Brown & Root.

The flat west coast of Failaka is completely covered with mud. And beneath the mud there was coral rock.
Additionally to that, the Kuwaiti government had dumped sand onto the coast. It was not possible for the Lay Barge to get to the landing point; because of this, the contractor dug a 500 meter long ditch throughout the sand, mud and coral rock, using a small pontoon equipped with four anchors.

Then, it was necessary to get the pipeline from the laying barge to the island, but there were no big winches available with that this could have been done from the island. So they used the winches installed on the Lay Barge. At the landing point an anchor point was dug in that served as fixed point of a diverter pulley for the pull-in procedure of the pipeline.

The twelve meter long pipes were welded together at the pipe yard in order to get fifty long pipes that were shipped by a transport barge to the Baas Kobus. The pipes were put onto the ramp of the lay barge and in the welding station the pipes were connected to one long continuous pipestring; the area of the welding seam was x-rayed, coated and filled up with a fast-binding epoxy-sand mixture. After this the pipestring could be pulled another fifty meter towards the Island by means of the winches and the anchor point at the Island. To keep the pipestring afloat during pull-in, oil drums had been attached as buoys. Soon the first part of the laying procedure in the shallow water offshore Failaka was done.

During the laying of the pipe in the shallow water, the preparations on the other side of the route, at the landing point in Salmiyah, were going on.

Shore approach to landing point

Salmiyah
In contrast to the Island the beach at

In contrast to the Island the beach at the mainland near Salmiyah was sandy and therefore used as bathing beach for the male youth.

The engineers had to conduct some security measures during the construction period. They dug a ditch from the landside using an excavator of the type O&K RH14. It was planned to dig the rest of the ditch from the waterside, using a locally rented pontoon carrying the excavator. Therefore the pontoon was equipped with three new and one used dual drum winch in order to stabilize the pontoon with anchors. In order to get as close as possible from the waterside to the land the pontoon carrying the excavator was positioned during high tide, around three or four o'clock at the night. The tugboat Waddenzee had to anchor in deeper water, since parts of the shore was falling dry at low tide. A small boat pulled the pontoon the last meters and anchored alongside. The low tide was already starting, when Andres and Matthias advised the local employees how to use the winches and keep the

They were demonstrating this when the excavator started to dig and the driver of the excavator hit the bucket into the coral rock for the first time. Expectedly the traction went from the pontoon via the anchor ropes to the anchors. But the winch, where they were demonstrating the steps of the work procedure to the

labourers could not stand the load. The handle of the winch turned back abruptly with full speed andthrowed Matthias to the side.

It took some time until the team realized what had happened: The safety catcher of the winch hadn't work

because it was corroded and got stuck. Immediately after the accident, chaos broke out on board of the pontoon. Only Andres Attema remained calm. Matthias, dazed but conscious, laid with two big bleeding wounds on his right arm on the floor of the pontoon. He heard that his colleagues feared that he would bleed to death as well as they contacted the site office in order to get a doctor.

Bandaged

The crew of the Lay Barge off the coast of Failaka was just having breakfast when they heard the chaotic radio traffic through their loudspeakers on the barge. The only thoughts of Matthias were: Oh my God, shall I die here? I don't want to die here. In the meantime Andres had bandaged the arm in order to stop the bleeding. Although the beach was only 200 meters away from the pontoon, it was not possible to carry the seriously injured man to the mainland crossing the water with the sharp coral rock. Hence, he was laid onto the mattress of a local worker and carried to the small boat laying alongside the pontoon. In the deeper water he was put onto the Waddenzee that went to the port of Ras Al-Arad. His colleagues Rainer and Hartwig were waiting there with a car. They had asked for an emergency doctor, but no one came and there was not time

They laid the injured on the rear seat of the car and brought him to the hospital close to Salmiyah. The doctors were already informed and therefore they were prepared to start the operation immediately. In addition to the injuries at the arm, where one of the aortas was laid open, but - thank god - not damaged, the doctors treated the broken nasal bone and the broken middle finger of the left hand. The medical treatment in the hospital was excellent. In addition for safety reasons the colleagues of Matthias had asked a Syrian physician who had studied in Germany to visit and check him in the hospital from time to time. Matthias was most happy about the visit of his two colleagues at work from the pipe yard Mohammed and Hanoun, two Kurdish men from Iraq.

The healing process was good, and after ten days it was possible to fly him to Germany for further treatment. On his trip to the airport he just went to the beach of Salmiyah waving to his colleagues on the pontoon.

Now they continued the pipe laying works without Matthias, a colleague from Germany came in order to conduct some of Matthias tasks.

They planned that he should return — after staying a few days in the headquarters in Oldenburg and Hanover — to Kuwait not later than mid-October. During this time his colleagues had laid the pipeline in the flat water off the coast of Failaka as well as they had done the mainland shore approach in Salmiyah. They were just turning into the deeper parts of the route in the area where the

shipping channel had to be crossed. Two days before Matthias returned to Kuwait the project manager called him in Hanover: During a storm the pipe was broken — before it was let down in a secure way - and sank unsealed to the sea ground. Additionally to that the catamaran of the Baas Kobus carrying the electrical power supply of the Lay Barge had sunk. Bad news. Fortunately, no people were injured. The same day Matthias and his technical line manager went to Kuwait. The first task in this chaotic situation was to secure the pipe that had filled up with salt water and to hope that the client would be ready to accept the pipe. With the help of a local diving company (Adel Al- Hamad Sub Sea Services Kuwait) that was mandated by the client to check the quality of the offshore pipe, the water-side of the break-

age of the pipe was closed with a plug. After this, fresh water had to be pumped into the pipe until the salt water was replaced completely. It was not possible to continue laying the pipe with the Baas Kobus. An heavy offshore crane 00 tons) had to be found in order to ge the catamaran out of the water that could have been an obstacle to the ships in the shipping channel. Regarding the laying of the last ten to twelve kilometers of the pipeline, negotiations were conducted with the American contractor McDermott. The company was engaged at this time in the United Arab Emirates and was ready to conduct the laying of the pipe in the shipping channel for a daily amount of 40,000 US-Dollars (100,000 Deutsche Mark at this time) with the barge McDermott DB 9. The crew of the barge (ca. 60 men) was working day and night in two teams,

each of them working twelve hours. **Defining**

The team of Northern Offshore only had to conduct special tasks (X-Ray, ultrasonic examination, defining the Route, isolating, coating ...). The Project Manager was supervising the group working at day, Matthias the group working at night. Pipe laying and also the welding were conducted by the crew of the DB 9. Most of the crew of the barge were Filipinos, but the captain, his deputy and the persons responsible of steering the barge were Americans.

There were some other critical situations, for example when some ocean going ships didn't notice the lay barge and its anchorage during the works in the shipping channel so that it became possible that the anchor rope are cut what would result in the inability to navigate

But in the end everything was going well and after two weeks it was possible to weld the Tie-In, i.e. the connecting weld between the two pipestrings. These two sealed pipes laying on the sea floor were lifted, the position of the connection weld was marked, the pipes were cut, the ending sections were prepared, a socket was welded on one end, in order to connect the two ending sections, before laying the whole pipe on the sea floor.

In the night before Christmas 1977, the pipes were connected successfully. However, the problems didn't end although most of the employees left Kuwait visiting their families.

pipeline. Failaka and its water supply As it was proposed in the development study conducted in 1965, Failaka was finally connected to the water system of the mainland of Kuwait, through an offshore pipeline. This was at this time the offshore pipeline with the highest technical standard in the world, at least in the opinion of the captain of the Lay Barge McDermott DB 9. The Japanese had installed three high voltage current cables, while the Koreans had built some of the housing units in the south of the island. Well, in principle there was nothing that could hinder the realization of the aims of the first planning phase: There was plenty of water, the power supply was secured, houses for the tourists were built and a marine hovercraft guaranteed a quick connection

Matthias spent only a couple of days

with his family until he returned to

tions of the laid pipeline.

day later.

scan sonar.

Kuwait. During his absence Al-Hamad

had analyzed the quality and the condi-

Bill the chief diver in the team of Al-

in the evening. He explained that he

Hamad being asked to come to his office

would show him in a confidential way a

film that he would give to his client one

In the course of time a common base

of mutual confidence had established that

helped each other if necessary. Thus, the

Northern Offshore team had helped Al-

Hamad to localize the flow meter that

they had lost in the sea, using their

trisponder measuring system and side

The film showed that there were

many free spans between the pipe and

the sea floor because of the coral riffs.

Although there were only 10 to 15 cen-

timeters of space between pipe and sea

floor, it was possible that the strong cur-

rent (0,8 to 1,0 m/s) causes a response

acceleration what would be a great dan-

response acceleration. Al-Hamad showed

this film in advance so that the Northern

Offshore team could prepare for the fol-

They decided to fill the empty pipe with

fresh water in order to reduce the danger

of response acceleration. The subsequent

might occur some problems if the length

of free spans proceeded twelve meters in

length. Thus, Matthias decided to put jute

sulphar resisting cement between all free

bags filled with a mixture of sand and

spans longer than ten meters. This pro-

After a couple of days and several

convinced and he agreed. Thus, the free

spans were treated by the divers of Mr.

Unfortunately, a diving accident hap-

pened to Bill, the chief diver, a strong man and a Mormon from Salt Lake City.

He stayed to long under water, and after

it became clear that putting him into the

decompression chamber didn't solve the

problem he was brought to Aberdeen /

Scotland in order to be treated profes-

sionally. Presumably he never worked

station in Salmiyah, the installation of

After the construction of a pumping

cathodic protection system, the construc-

tion of a pig launching station in Failaka

and the final examination of the pressure

of the pigging of the pipeline, the con-

struction works were completed and it

became possible to start operating the

again as diver after this day.

Al-Hamad in the approved way.

tests with this system, Mr. Kalotti was

posal was forwarded to Mr. Kalotti.

lowing consultations with the client.

calculations demonstrated that there

ger. The film showed some signs of a

served the goals of the project. They

Soon after his return he was called by

But in the beginning, the tourists didn't come as it was supposed in the development planning. Meanwhile Matthias hopes to come back to Failaka one day to see the place where he did one of his first engineering Projects and survived some critical situations with God's help.

from the mainland at Ras Al-Arad to the

new small port of Failaka.

Concluded

By Michelle Fe Santiago
Arab Times Staff

Thank God it's Friday! All of them always look forward to a fun Friday as they conquer the road on their bikes.

As the summer heat sizzles, members of the Bikers in Kuwait Encounter (BIKE) converge as early as 5:00 in the morning every Friday near the towering KPC building in Shuwaikh to wait for their colleagues who are clad in colourful biking suits and helmets.

As they take a stride on their bikes and clip into their pedals, the group start moving out of the assembly point to the highway, cycling to their destination, first in two lines and finally in a single line. Each rider pedals at his own pace as each look after each other along the road, ensuring that everyone is safe

The Bikers in Kuwait Encounter (BIKE) founded in 2000 is one of the most active biking groups in Kuwait mostly composed of Filipino riders and a few expatriates of various nationalities and professions.

"We have formed our small group of bikers way back in the late '90s but it was in 2000 that we formally formed our group," shares Romeo 'Boyong' Mangunay, one of the founding members of the BIKE. He explains that they formed the group to ease their homesickness away and at the same time, to keep them physically fit.

Benefits

"Biking has a lot of health benefits. It keeps you fit and healthy especially when you age, you have to exercise and biking is the best form of exercise," he quips. He adds that aside from the health benefits, biking also promotes friendship among the members. "We bike for fun and to be away from the hustle and bustle of work. This is the best stress-buster for me," he points out as he introduces another founding member, Capt Cyril Mansueto who still finds time to bike whenever he is not busy at work, sailing along the Arabian Gulf.

"Thanks to biking I've been healed from my diabetes and I don't have to take medicines anymore. I encourage everyone to try biking for a healthy life," points out Benjie Santos.

Every Friday, BIKE members cover a distance of 42 kms from Shuwaikh to the Doha Port area and vice-versa. They bike at their own pace but as they near the destination, some try to increase their pace to the maximum until they reach the resting point — an old Bakala (store) near the Entertainment City. The Bakala serves as a haven for the bikers where they buy water, fruit juices, milk and chocolates as they exchange pleasantries and stories for the week.

"This group is amazing. It's more like a family to me. Look at them. We're just one happy family. I always look forward to Fridays," says Safwan Ahmad Natafi, a Syrian cyclist. Just like Safwan, Yousef Busafar, a Kuwaiti cyclist cannot wait for Friday to come. "I'm always happy to be with them. Everyone is friendly," he shares.

Meanwhile, French cyclist Jose Stevens recounts the day when he joined the BIKE. "It was purely by chance, when I saw one of the members, Jun, who was biking along the Gulf Road then he invited me to join the group and my Friday has never been the same again," he shares.

The group usually rests for about 15 minutes as they wait on the other cyclists who sometimes head all the way to the Doha Port area. "This is a fantastic group. How I wish everyday is Friday. It's always fun to be riding with the group," says Nic Jacobs, a South African cyclist.

Competition

After the banter and some photo shoot, the group heads off to Shuwaikh for the most awaited part — the group breakfast. "Just like everyone here, I always wish that everyday is a Friday because I always look forward to this delicious traditional home-cooked Filipino breakfast. I'm very thankful to the group for accepting me to be a part of it. It's been seven years now that I've been riding with them. I'm very happy and it's indeed fun," says Luciano Birla, a Romanian cyclist who enjoys eating Arroz Caldo (rice porridge with chicken) and vegetable Lumpia (spring rolls) for breakfast.

On the other hand, Filipino triathletes Reggie Esguerra, Jonathan Batusbatusan and Rodel Argo have been biking with the group as part of their training and preparation for the triathlon competition that they will be participating in the Philippines on Aug 4 this year.

"Biking is really fun but aside from the fun factor we should also take into account its technical aspect on how one can maximise the riding experience. So we share to the group some tips for a safe, healthy and enjoyable ride," shares Esguerra who along with Batusbatusan and Argo will be representing the BIKE group in the upcom-

ing competition.

Regardless of age, body type, height and colour, they are all one in their love for biking as they discover the beautiful scenery of the Kuwait countryside along the way. "You are all welcome to join our group. Make your Fridays more fun and start the day biking with us," invites Capt Manuseto.



Trench and shore approach offshore Failaka.