Winter brought freak weather and torrential rains to widely separated parts of Saudi Arabia in mid-November.

Three main pump stations—Qaisumah, Rafha and Badanah—and their adjacent towns bore the brunt of the raging storms and floods which left incalculable damage behind, including a major pipeline leak, pipeline road washouts, flooded basements, bursting banks, dragged along cars and carried away furniture and supplies.

The ground floor of the company hospital and the Government Relations office at Badanah pump station were flooded with several inches of muddy water and the hospital patients had to be evacuated.

A deluge of 3.1 inches of rain was reported to have fallen in the six-day period extending from Nov. 14 to the 19th in the Qaisumah area. Total rainfall registered during the same wet period at Rafha and Badanah was 2.55 and 1.8 inches, respectively.

The average annual rainfall figures for the three localities rarely exceed four inches.

It was under such very severe weather conditions and torrential rains that a pipeline leak at Km. 517, between Rafha and Badanah, occurred on Nov. 16.

Under normal weather and constant operating conditions, a major pipeline leak may cause a sudden drop of pressure and increase in flow at the pump station upstream. In rainy weather, however, a shower of rain on a pipeline section between two stations may produce a similar effect.

At about 1100 hours on the morning of Thursday, Nov. 16, the Pumphouse operator at Rafha reported to the Beirut Oil Dispatcher a sudden reduction of about 50 pounds per square inch in the discharge pressure of the Uwaigilah Auxiliary Pumping Unit, and an increase of flow of about 300 barrels per hour. The Rafha discharge pressure also dropped by about 25 pounds per square inch.

The Beirut Oil Dispatcher immediately investigated whether any pressure adjustments had been made at Badanah which might explain this sudden change. As no immediate explanation was available, the Tapline aircraft which happened to be on a flight to Qaisumah, was alerted to look out for a possible leak between Rafha and Badanah.

At about 1500 hours, the Tapline aircraft reported a large pool of oil at a location about 60 kilometers east of Badanah. Immediate access to the leak site was impossible due to the fact that the unprecedented heavy rains had created several road washouts on both sides of the leak location.

A "Beaver" aircraft, capable of carrying five passengers and of landing on a relatively short strip, was thus requested from Aramco to assist in the repair operation.

The "Beaver" arrived in Badanah at about 1400 hours on Friday, Nov. 17, and continued several
SPOTLIGHT
Retired Painter Khalaf Suleiman receives his annuity card from Badanah.

One of the key elements in successful retirement planning is to ensure a comfortable and financially secure future. For retired Painter Khalaf Suleiman, who has now transitioned to retirement life in Saudi Arabia after 17 years of company service, the process of transitioning to retirement can be difficult and disconcerting. However, Suleiman, who became in November the first Saudi Arab employee to retire from Tapline, does not think so.

Located in Turaif, the Tapline station is home to many of the employees who are dedicated to ensuring the smooth operation of the pipeline. Throughout his tenure with Tapline, Khalaf was involved in maintaining the system and ensuring that it remained operational. His hands-on approach to the pipeline operation has helped to build a strong foundation for future success.

The first case is between Kuwait and Japan where the Suez Canal is involved and an estimate is given for an 80,000 deadweight ton tanker which is the extreme largest that can transit the Canal fully loaded. Plans for deepening the Canal in the future are not anticipated to be available.

ZCC Holds First Banquet
The Zahrani Country Club sponsored a township banquet at its clubhouse on Oct. 21 for the presentation of awards to winners of its 1966 golf tournaments and monthly medal competitions. The trophies were awarded by Mrs. E. Greenwood.

The second case is between Kuwait and Rotterdam. Here the canal both ways is involved and an estimate is given for an 80,000 deadweight ton tanker which is the extreme largest that can transit the Canal fully loaded. Plans for deepening the Canal in the future are not anticipated to be available.

Four Tapliners earned three-year pin recipients in November for chalking up 15 continuous years of company service.

Seven other employees completed 10 years of service each during the same period. The 10-year pin recipients were:

- Badanah
- M. E. Abou
- M. A. Hammad
- M. H. Sharmah
- M. S. Al-Kamal
- M. S. Al-Kamal
- M. S. Al-Kamal
- M. S. Al-Kamal
- M. S. Al-Kamal
- M. S. Al-Kamal

During the banquet, the ZCC presented awards to winners of its 1966 golf tournaments and monthly medal competitions. The trophies were awarded by Mrs. E. Greenwood.

Tuberculoid also intends to continue to live in the capital of the north—Kuwait in order to supervise the collection of the goods who are collected in governmental schools in 'Aira'.

The general subject of the new economics of tanker size and cost was covered in the November Newsletter of 1967. Further and more detailed information is now available, although it is emphasized that the figures are only approximations because up till now only one tanker larger than 200,000 deadweight tons is in operation. At this time, there are 130 huge tankers that have been ordered.

The first five rates show progressive reductions in the cost per ton. After 1,000,000, the cost is reduced to 1.38 per ton. The last item is the cost for 500,000 tons, which is reduced to 1.11 per ton.

In the conclusion, it is stated that there may need to be an adjustment in the basis of transportation cost for each increase in size. Such a saving, however, would not be fully realized since the saving in transportation costs for each increase in size, such saving, nevertheless, is becoming progressively smaller.

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The ground floor of the company hospital and the Government Relations office at Badanah were flooded with several inches of muddy water during the mid-November deluge.

Aerial view of rain waters sweeping through Badanah (foreground).

Air view of the huge pool of black, oily water at the leak site at Km. 517, between Rafha and Badanah.

For a change, and quite a change it was, rain water replaced sand along the pipeline and the adjacent pipeline road between Rafha and Badanah during November storms.

Road washouts and culvert bridge near Badanah.

Drowned section of the road at Km. 401.

Stranded vehicles on pipeline road can be seen in center foreground. Pipeline is seen at left.

Washed-out culvert pipes littering the pipeline road.

Arid desert transformed into a sea of rain waters at Km. 16, just outside Qaisumah. Note emerging pipeline kilometer marker in background.

DELUGE IN THE DESERT
Badanah's flooded storeyard.

Company vehicle splashes its way through water, heading toward Badanah's main gate.

Turaif

E. C. Glenn returned here in early November from a one-week business trip to Beirut.

Rita D. Copty and a group of Lebanese ladies hosted a farewell party in honor of Anna Sireen, who has left the field permanently. Ms. Sireen was presented with a Morsadu watch by her farming partners. As one of our most faithful and better bridge players, Ms. Sireen will certainly be missed by the Turaif Bridge Group.

F. M. Kelberer reported on a short trip to Beirut and a visit to Spain and an extended stopover in Amman enroute to Turaif.

Mrs. C. Scharn is back in Rosquist on Nov. 9.

Capt. and Mrs. N. Oleynick entertained a group of members of their family at a dinner party at their home Nov. 8 on Nov. 10. Capt. and Mrs. N. Oleynick and R. E. Marsh. The Oleynicks served a dinner for their friends and guests of the L. T. Kruyts on Nov. 16.

The H. L. Krapps were the dinner guests of the W. A. Mabrouk. During their stopover in Amman enroute to Turaif from a short trip to Beirut, is off to head—line following the 'Line. J. L. Koenreichs entertained a group of Kuwaiti officials on Nov. 17.

The J. L. Koenreichs hosted a successful dinner for their friends and guests of the L. T. Kruyts on Nov. 26—27 weekend in Sakaka as the guests of the L. T. Kruyts on Nov. 26.

Duplicate bridge winners on Nov. 1 and 10 were, respectively, Captains H. Janet and H. D. Lambert and Mrs. and Mrs. S. Stechkin. Mrs. A. M. Christman and Mrs. J. H. Bouquet finished second on both days.

Turaif's golfing star Ahmad Mabrouk has announced his engagement to petite Denise Abi—Nader. An engagement tournament has been organized at the Tap—along the line.

Birthday celebrations in November were Gene Christman, Richard and Judith Moore, Mrs. H. L. Crosswhite, Mrs. C. Scher, Mrs. W. A. Kreyt and Aida Naar. Celebrating their wedding anniversary during the month were Mr. and Mrs. J. Koeckel. Duplicate bridge winners on Nov. 1 and 10 were, respectively, Captains H. Janet and H. D. Lambert and Mrs. and Mrs. S. Stechkin. Mrs. A. M. Christman and Mrs. J. H. Bouquet finished second on both days.

Vice President—Government Relations R. M. Henry and Dr. A. Ghabra have returned from Beirut Dec. 1 on a business visit which will extend until Dec. 4. They will be joined in the Snack capital by R. E. Marsh.


J. W. Brud has been appointed Consultant—Government Relations, effective Nov. 1. Mr. Brud's former status as Advisor—Middle East Affairs has been consolidated into his new assignment.

The following changes in the Engineering Department have been, respectively, effective on Nov. 1:

Mr. D. L. Kelberer has been appointed Consultant Engineer. Mr. Kelberer will report to the Chief Engineer. Mr. Kelberer has been appointed Consultant Engineer.

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Mrs. M. A. Kearney in early November for the annual vacation included Ab—dallah Khalaf, Hmood el—Nazha, and Mrs. Muhammad Mansoor on the birth of son Mansoor and to Mr. and Mrs. Yehya B. Jassim on the birth of daughter Linda.

The list of Qaisumah vacationers in November included Ab—dallah Khalaf, Hmood el—Nazha, and Mrs. Muhammad Mansoor on the birth of son Mansoor and to Mr. and Mrs. Yehya B. Jassim on the birth of daughter Linda.


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Rafha

The list of Rafha vacations includes Ibrahim Badal, Salih Akram, Abdul-Rahman Rashid and S. Khalaf.

Emile Azer is born from Badanah on a relief assignment at the Rafha hospital.

Wedding felicitations are due to Humei Husseini, of Rafha’s nursing staff, who celebrated his marriage Oct. 27 while on holiday in Beirut.

Congratulations to Mr. and Mrs. George Mourad on the birth of son Raymond.

Twenty-five guests attended the surprise party given by Hans Stokken on Nov. 9 in honor of his wife Yonnie’s birthday.

Vacations are over for Saif Abid, Abdullah Sukman, Saad Dabbas, Mohamed Dweh and Saad Thari.

Sidon

A firebird’s nest ariel is visited Mourning Master and Mrs. E. E. Greenwood left the terminal permanently in early November. Prior to his departure, he called to the Qaisumah Community join in extending their sincere condolences and deepest sympathy to Shift Foreman Muhammad Hamza on the recent death of his mother.

Badaan

Welcome aboard to Mrs. Louise Meyer and daughters Sondra, Rancha and Sheila who joined our Supervising Technician, Diesel Gas Turbine C. B. Meyer in late October. The A. Funders and other families in the station have entertained the newcomers.

Another ashis on ashis is extended to Dr. Raymond Matter, who has joined our medical staff as a surgeon. Dr. Matter is a 1987 graduate of Cairo University. He completed his postgraduate studies in England, where he became a Fellow of the Royal College of Surgeons. He served in Egypt, Lebanon, Kuwait and England before joining Tapline. Dr. Matter and his Irish wife are the proud parents of three boys—George, Patrick and Sherbel. Dr. Matter and Mrs. Greenwood were entertained by the H. Jensens and Samir Ballas, both of A.U.H.’s resident staff, completed their assignment in ‘Turaif.

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HEAVY RAIN FLOODS SWEEP STATIONS

Tapline’s repairmen had gotten tired of the worst problem. They still had to weld the band in place and dispose of the hot crudes.

On Sunday, November 19, with a large part of the oil drained by an impressive equid of carthwre—
cracking equipment or pumped away, the rest blocked off by solid bars,—
to the pipe and the emergency job was over.

The repair crew has been condemned for an excellent job acce—
plished under extremely hazardous conditions.

Pumping had been maintained in the Rafha-Badanah section on the 16th, 17th and 18th of the month at only a slightly reduced rate in order to ensure maximum possible Sidon receipts during the temporary repair period.

Leading operations at Sidon continued normally throughout this period.

Crisle has is estimated at 130,000 barrels and throughput issues at 200,000 barrels—a total of 320,000 barrels or an average of about 12,000 barrels per day for the month of November.