Jeddah Field Report

Harrison Price Company
JEDDAH FIELD REPORT

Prepared for:
Rogers, Burgun, Shahine & Deschler
July 8, 1982

Prepared by:
Harrison Price Company
876 South Bronson Avenue
Los Angeles, California 90005
(213) 937-3457
MEMORANDUM

DATE: July 8, 1982
TO: Harrison Price
FROM: Lewis A. Redgate
RE: Saudi Marina Company

Upon arrival in Jeddah on Saturday evening, we were met by Ahmed El Gindi, Project Coordinator for Saudicorp, who drove us to the Sands Hotel and said he would be with us for the visit. He arranged to pick us up the next morning.

Upon arrival at Saudicorp on Sunday, June 20, we met with Amr Fouad, Managing Director, Saudicorp.

Amr Fouad said that the Coast Guard, the Mayor of Jeddah's office and the Planning and Development Office for Jeddah would probably control the project.

He stated, the site for the marina was north of the Jeddah port, immediately south of the Intercontinental Hotel that Saudicorp was building for Sheik Abdulaziz Al Sulaiman. A site with a 500 meter frontage was available from the city and the extension of the marina into the Red Sea was dependent upon the size and design of the marina.
He said that he was responsible for the organization of the project and answerable to the partners Sheik Sulaiman and Prince Muhammad, the Chairman of Al Bilad, a Saudi company headquartered in Riyadh, and that if we went to Riyadh to seek information we should see Dr. Fahad El Sumait who was the prince's right-hand man.

We discussed the type of information we needed and he said it would be available from the Jeddah Department of Planning and Development. Also he had contacted Captain Barry, who was the skipper of the Mobil cruiser which was anchored in the creek about 20 kilometers north of Jeddah, and Captain Barry would discuss the boats on the Red Sea, etc. This meeting was set for Monday, June 21, and that Ahmed El Gindi would drive up to the creek that day so that we could view the area there.

Mr. Fouad said that the marina for which they were forming a new jointly owned company to operate was, they hoped, the first of several in Saudi Arabia and possibly the world. He said it must be financially feasible and that they had no reservations about its viability, but they needed the figures to prove out its optimal size—it could be 250 or 400 slips—but they did not know.

Mr. Fouad said that they preferred to build in such manner as to be able to build a duplicate unit or units. He said it should have a catering facility and boat repair yard, as no such yard now existed in the Red Sea.
Also, the marina should have facilities to take boats out of the water together with shops for the various functions associated with a marina such as a scuba diving shop, fishing shop, etc.

We asked about seeing the Coast Guard for a registry of boats in the Red Sea—but Fouad thought this was premature and discouraged visiting the Coast Guard. He said that we must provide a facility for the Coast Guard at the entrance (Red Sea side) as the Coast Guard had to check in and out each boat.

We suggested that a visit to Riyadh might be necessary to collect demographic information and he thought we should try to get the information in Jeddah although he was sure that it was not available in the Planning Ministry in Jeddah. This opinion was in accord with Redgate's opinion that information would be difficult to get from the Ministry of Planning in Jeddah.

Mr. Fouad said that it was proposed to sell memberships in the marina to a "Founders Club", say 100 members at $50,000 each. He said this would not provide ownership in the marina as the ownership would be solely that of the Saudi Marina Company.

Eventually, the management of the new marina would take over the new company and it was not decided, at this time, what would then be his role. At this time, however, he was responsible for the marina in behalf of the two partners and that Hussein Shahine was responsible for the design matters and that the French engineer and Harrison Price Company were responsible to Hussein Shahine who in turn, on behalf of
Rogers, Bergun, Shahine and Deschler, was responsible to Saudicorp through him.

Amr Fouad left no doubt that Hussein Shahine was the man in charge.

At this time he said that Richard Moon of RBSD would arrive on Sunday, June 27 and be in Jeddah until June 30. Rene Gallea, the French engineer, would arrive in the area Tuesday, June 29 and be in Jeddah through July 1, 1982.

Amr Fouad exposed without comment a photograph of an architectural model of a marina. Amr Fouad then arranged for and escorted us across the street to the compound containing the office of Sheik Sulaiman, to meet with the sheik.

Sheik Sulaiman said he did not want a report full of statistics. He knew the marina would be successful and it was the size that needed to be determined—he wanted it to be designed for unit expansion. He thought a 250 to 400 slip marina as the first increment was quite possible. He expressed strongly his indifference to the model as shown in the photograph. He specifically stated:

1. He did not want the white concrete appearance. He wanted the material to be wood similar to a marina he had seen in Maui.

2. The marina must have the ability to be flushed out as he did not want debris from the port of Jeddah to be driven into the marina.

3. At least two tennis courts should be provided and also some enclosed squash courts.

4. The marina should be designed for auto parking adjacent to the slip to minimize walking.
5. Sheik Sulaiman restated several opinions expressed by Amr Fouad.

6. We should not spend time trying to survey existing marinas in Saudi Arabia, as in his opinion, no marinas existed. Individual boats were anchored in the creek but no organized marina.

7. The marina was a business proposition and must be financially successful and of that he had no doubt.

After leaving the sheik's office we made a visit to the creek in the vicinity of the Mobil compound which is located on the south side of the creek. On Monday, June 21 we were driven by Ahmed El Gindi to the Jeddah Office for Planning and Development which is concerned with the master planning and zoning of Jeddah. It is staffed by personnel from Sert Jackson and Saudi Consultants.

After explaining the information we needed we were told that the information was available in the office but that it could not be released to foreigners without an official letter.

We returned to Saudicorp's office to meet with Amr Fouad who said the meeting with Captain Barry was set for 12 noon or shortly thereafter. Amr Fouad said that if the information was available at the Planning and Development Office, he would make a phone call and arrange for us to get the information. A discussion then ensued in which Mr. Prehn asked about certain guidelines for the development of the financial data.

Amr Fouad said to figure a 20% maximum equity with an 80% loan at about 12% to 14% interest. Also figure seven (7) years as the loan payout period as he did not think that
the agency would want to go longer. Certainly not 20 years as might be the practice in the U.S.A.

He said that Larry should test "what if" -- What if the costs increased 10% above the planned costs! What if the income was 10% less than planned! Mr. Prehn stated that once he had the basic pro-forma established, it was his intention to test same with different premises, but first he would establish the baseline data.

Amr Fouad, together with Ahmed El Gindi and ourselves, drove to the creek stopping at the Al Bilad Hotel which is owned by the prince. The hotel is not yet officially open and is situated about halfway to the creek on the shore of the Red Sea north of Jeddah. Subsequently Dr. Fahad El Sumait stated that the memberships in the athletic club were completely sold out before the hotel was completely opened.

We met with Captain Barry in the recreation room of the Mobil compound at 12:15 p.m. He said the Mobil boat was a 52'-0" long flying bridge Chris Craft. Also said the creek was home to the following:

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Length (Feet)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>72'-0&quot;</td>
<td>boats</td>
</tr>
<tr>
<td>2 to 3</td>
<td>58'-0&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>2</td>
<td>53'-0&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>1</td>
<td>55'-0&quot;</td>
<td>Chris Craft</td>
</tr>
<tr>
<td>1</td>
<td>43'-0&quot;</td>
<td>Bertram</td>
</tr>
<tr>
<td>4 to 5</td>
<td>40'-0&quot;</td>
<td>Range</td>
</tr>
<tr>
<td>Several</td>
<td>25'-0&quot;</td>
<td>Boats</td>
</tr>
</tbody>
</table>

Many boats of the 20'-0" to 25'-0" range are brought to the
creek on trailers, although no boat launching ramp is available—the bottom is quite hard and permits launching.

The captain said several Hatteras boats were on the creek—most boats have fiberglass hulls and are U.S.A.-built boats.

One Chinese junk is in the creek.

Most boat owners are Saudi—while most foreigners (individuals) have boats in the 20'0" range brought to the creek on trailers.

Captain Barry said that he had doubts that any boats would move to the marina from the creek.

He said that a marine railway should be provided for the large boats but that it could be tied up with one boat and he said a mobile crane must be provided with a variety of cradles for various size boats.

He said to provide a shed for shopwork with storage if space allows. A quality parts store is needed with care in selecting the parts and the shelf life must be taken into account.

A paint shed should be provided with controlled temperature—he considered that such a painting facility could attract business from outside the marina.

Captain Barry stated the marina repair facility must provide for three services:

1. Engines
2. Hull & fittings
3. Electronics, radar & electrical
Barry considered that Detroit Diesel would probably be interested in some arrangement in regard to the engine shop -- as they now service boats in the creek which require sending a service shop on wheels to the creek or transporting the engine to Jeddah. He said the current arrangement was quite cumbersome and costly as no facilities existed for removing the engines from the boats at the creek. Evinrude has a repair and sales agency in Jeddah.

Captain Barry stated that the Coast Guard was reluctant to allow radios on the boats and he suggested that a one channel radio-telephone system be requested of the Coast Guard--in such a case the authorities could monitor the channel. He doubted that a multiple channel system would be permitted.

He stated that the wind for 90% of the time came from the north-west, but storms came from the south-west in the winter and the Coast Guard Station for checking in and out should be situated accordingly. Also, a fueling dock should be provided at the marina entrance and should be located so as to permit the boats to refuel on each side of the dock with the boats headed into the wind. He considers that these characteristics are a must for a fueling dock.

Barry stated that the Coast Guard Station should be situated so as to permit the boats to "put in" on the protected side away from the wave action of the Red Sea. This is not the case at the creek and Barry says it can be quite dangerous to the boats.
Barry said that at the dock electric power should be sufficient for refrigeration, electric stoves, lighting and air conditioning when at the dock. Also at the dock should be provisions for water, telephone and TV cable.

The question of securing competent management for the marina was discussed and Captain Barry had no opinion except to say that a source of information could be the various boating magazines and directories available in Europe and the U.S.A. Previously Amr Fouad had stated that he was interested in the report addressing management possibilities for the marina.

Barry stated that most boats run out about 10 miles to the north where a series of islands exist, although the large boats run about 100 miles to the south to Al Lith and anchor there overnight to fish and swim.

On Tuesday, June 21 we visited the office of Saudicorp to review in general the status of our work and discuss the need for information, and it was agreed that before visiting Riyadh we should once more visit the Jeddah Office of Planning and Development to secure information.

On Wednesday, June 23 we met with the chief at the office where we had previously been refused. This time instructions were quickly issued for the information to be provided. Larry Prehn has the actual copies of information received.
It was stated that as of June 1982 Jeddah had a population of about one million with the distribution about 50% Saudi and 50% foreign.

It was stated that the income information should be treated as minimum as many Saudis had two jobs. Also most of the data was from 1978 although the population projections for 1990 and 2000 could be used to modify the 1978 statistics.

It was stated that they considered the university-educated Saudis were the most likely candidates for slips at the marina.

We expressed thanks for the information which appeared to be adequate for the purpose.

At this time it was decided a visit to Riyadh should wait until after discussion with Richard Moon and Rene Gallea as to the information they might make available to Prehn and Redgate.

Thursday and Friday, June 24 & 25 was spent analyzing and assessing the information which had been collected together with rewriting the notes taken into a more comprehensive form.

Saturday, June 26, 1982 we met with Amr Fouad at Saudicorp and reviewed the status of the project.

Mr. Prehn exposed the basic elements to be covered in the report and it was agreed the pro forma was the most important part and needed careful evaluation to establish the size, contents and cost of the marina.
Amr Fouad stated he considered the report should be translated into Arabic for the use of Saudi authorities.

Mr. Prehn discussed the oral presentation of the report to Amr Fouad in New York during late July and Mr. Fouad stated he would attempt to delay his visit to the U.S.A. so as to receive the preliminary report during the last week of July or first week of August. The matter was left for further discussion.

During the evening of June 26, 1982, Ahmed El Gindi called to say that a meeting had been arranged with Dr. Fahad El Sumait. This meeting took place in a conference room at Sheik Sulaiman's at about 11:15 p.m.

Larry Prehn reviewed the status of the project and the proposed method to be used in developing the size of the marina. A discussion ensued concerning our anticipation of securing information from Messrs. Moon and Gallea as to current construction costs.

Dr. El Sumait had some firm opinions regarding the marina:

1. We must make adequate provisions for the fishermen now occupying the site as the marina must not get the reputation of a rich man's facility. The fishermen had used the site for several generations. At least they should be given the option of occupying space to continue their fishing.

2. In response to Redgate's question as to size of the site, Dr. El Sumait said he considered the company would secure the amount of land frontage needed to provide a first class marina. He thought that as many as 1,000 slips might prove to be needed.
3. He saw no need for tennis courts and squash courts.

4. Concurred that the report should be translated into Arabic.

5. Coast Guard Station to be provided but did not see a problem in securing permission for radios. Dr. El Sumait was quite informed on the kingdom's requirements in this regard.

6. Stated that all facilities at the marina should be under one management. Did not consider that concessions should be awarded for the various facilities.

7. Requested we look into and comment on type of management the marina should have.

8. Scuba diving shop was a must as was adequate boat repair facilities.

Amr Fouad stated in response to a question from Mr. Prehn that in his financial computation, inflation should be ignored. Dr. El Sumait agreed that the pro forma statement was most important and must show a money making operation.

The meeting broke up after a session of some 1 ½ to 2 hours.

Sunday, June 27, 1982, Amr Fouad and Ahmed El Gindi went to Riyadh this day and we did not meet with them. Met briefly at the hotel with Richard Moon of RMSD, who had arrived from Tokyo after a 17-hour flight.

Monday, June 28, 1982, visited site with Ahmed El Gindi and paced off the shoreline. It appears that the site is 500 meters plus about 100 meters used by the fishermen. It would also seem the fishermen could be left undisturbed and the repair facility moved to the north of the site to form a barrier between the fishermen and the marina.
Mr. Moon was busy in other work this date and we met briefly to agree to a meeting at Saudicorp Tuesday with Rene Gallea.

Tuesday, June 29, 1982, meeting took place at Saudicorp with the following participants:

Amr Fouad  Saudicorp
Ahmed El Gindi  Saudicorp
Richard A. Moon  R.B.S.D.
Rene Gallea  Renardet Engineering
Larry Prehn  Harrison Price Co.
Lewis A. Redgate  Harrison Price Co.

The meeting commenced at 10:30 a.m. and Rene Gallea arrived at 11:10 a.m.

A general discussion of a schedule ensued and it was determined that Haj officially begins on September 18 and the official holidays were from September 21 to October 2 inclusive.

Amr Fouad expressed the belief that William Tabler (architect for the new Intercontinental Hotel at Jeddah) was a member of the boat club at the marina at Maui and was accompanying Sheik Sulaiman when he recently visited Maui and saw the marina, the design of which the sheik would like to see in Jeddah.

Richard Moon suggested a schedule with a proposed lump sum bid package for the entire project by July 1983. Amr Fouad thought that too long a time.

Moon stated he would like to provide upon his return to New York, a schedule on paper showing the time planned for each
element of the project and then submit the schedule to each participant. Richard Moon stated all documentation should be sent through him in New York. Redgate said that in view of his trips out of New York, that he should arrange to have the material distributed by a deputy when he was out of town. Moon stated this would be done.

Mr. Prehn said that his proposed schedule would be to have a review of the report figures during the first week of August and finish the final report in the middle of September.

Mr. Gallea arrived and quickly entered the discussion -- he stated that he had a meeting later on in the day with people to secure information. At this time he had no specific information. He stated that before he could do any real work, he would need a hydrographic survey. Amr Fouad demurred at this point, saying that such an effort would be sufficiently costly that it would not be considered at this time.

Mr. Gallea, in response to a question, confirmed the wind direction and storm direction as stated by Captain Barry. Also, that the maximum variation of the tide was less than one meter--more like two feet. He considered the wave action was quite small and that a breakwater two meters above the water level would be adequate.

In response to a question Mr. Gallea considered that the coral bottom of the Red Sea was about ten feet thick on average but added it could be less close to the shore and that the
actual thickness needed to be determined by tests. Gallea said that the cost to be figured for a cutter dredge for coral would be 25 Saudi Riyals per cubic meter. For a suction dredge the cost would be 8 Saudi Riyals per cubic meter. Note: Subsequent unit costs from Mr. Gallea were sent to Mr. Moon by Mr. Redgate and are enclosed hereafter in Exhibit A.

Gallea stated that the minimum depth of water in the marina at the shallow part should be four (4) meters. He said that silt would not be a problem as the reefs immediately offshore would prevent sand action. Also, access through the reefs would not be a problem due to deep water beyond the reef. He thought a channel may not need to be dredged through the reef. But again he cautioned that this would be ascertained by a survey of the area, when the survey was made.

Mr. Gallea thought the top of the breakwater would need to be about six (6) meters wide with side slopes of three vertical to four horizontal -- two meters vertical above the water at a water depth of six (6) meters.

The fill for the breakwater would need to be imported from land and a top six (6) meters wide would permit trucks to deliver the material according to Gallea. This would be accomplished by connecting the breakwater to the land on the south side of the site. Also, Amr Fouad considered that as the north side of the site was in close proximity to the better class villas in the north, the ship repair facility should be on the south with the fishermen moved to the south
In response to a question, Mr. Gallera said that the 5 or 6 big boats could be unmoored from the city.

The option that the full width of the area, some 1,000 metres, that we should not feel restricted to 500 metres as he was of the opinion that the full width of the area, occupied by some 50 fishing boats, Dr. El Summit said the site was 500 metres with another 100 metres at the north.

Mr. Pihal reported that he and Redgate had paced the site and

prints did not control the design of the proposed marina.

These prints did not control the design of the proposed marina. It was agreed that these prints showed a layout for EU and a marina. It was agreed that these prints and a general discussion ensued with Mr. Gallera Plus Dr. El Summit. At 5:30 p.m., the meeting commenced with the same participants.

at 5:30 p.m., the meeting broke up after it had been agreed to meet at 5:30 p.m. at the Sands Hotel with Dr. Pihal and Mr. Gallera.

Mr. Gallera said he had a meeting arranged to secure some further action of water to cleanse the marina.

through the land link breakwater would provide some flushing.

Also, underwater conduits of sufficient size would prevent port trash from being blown in during a storm into the marina. It was agreed that a land link to the breakwater on the south side of the marina. These elements would then be closer to the port of Jedda.
A discussion of schedule ensued and Dr. El Sumait said he would be in Santa Barbara in August but would want to sit in on the review of the preliminary report.

Mr. Moon and Mr. Fouad suggested a meeting at the end of July at a location to be selected--New York was suggested. Either October 1 or September 1 was suggested as the date for delivery of the final report--presuming the preliminary report was approved. Haj, it was stated, would have an effect on what action would be taken in relation to the result. It was finally agreed the sooner the final report was delivered it would permit action to be started and September 1, 1982 was the tentative date.

Mr. Redgate commented that with the unknowns we know exist at this time, that August 1, 1982 for a preliminary report would be tough to accomplish while September 1, 1982 for a final date would be easier.

Dr. El Sumait stated that a good valid report was needed and he would rather wait than rush the report. He commented that some consultants had used the reason of too little time allowed in relation to some reports and he did not want this to happen.

Mr. Moon repeated his wish to set up a formal schedule upon his return to New York. It was finally agreed that a meeting in Santa Barbara was possibly the best opportunity and it was left to Mr. Moon to contact all parties and organize the meeting.

Mr. Prehn asked if anyone objected to a bulkhead at the shore side to retain the landfill and no-one objected.
Dr. El Sumait said that he thought a 1,000 boat marina was feasible. Mr. Prehn said that, at this time, he knew a 250 boat marina was quite feasible and a more detailed review of his information would possibly move it to 400 boats.

Rene Gallea produced the two prints for Dr. El Sumait's perusal, but neither print was too helpful. Mr. Gallea said he hoped to have more information on Thursday, July 1 at noon and it was arranged for this possible added information to be sent to Richard Moon in New York by Ahmed El Gindi. Mr. Moon would then photocopy and distribute the information.

After returning from Riyadh on Saturday, July 3rd, Ahmed El Gindi met Redgate and exposed the information secured by Rene Gallea. Redgate was requested to carry this material to the U.S.A. and send it to Richard Moon. This has been done.

After a request by Richard Moon for copies of the rough notes taken by Prehn and Redgate, Redgate responded that Harrison Price would no doubt submit a copy of his (Redgate's) narrative report to Mr. Shahine.

Amr Fouad cautioned that in visiting Riyadh to secure unit costs, care should be taken not to reveal the project. Redgate likewise respected the confidentiality of his information sources in Riyadh.

In Riyadh Redgate secured various cost figures based on October 1981 and these are being reviewed with a view to
providing Mr. Prehn with information upon which to base the construction cost.

Redgate left Jeddah on the originally scheduled date of Sunday, July 4, 1982.
EXHIBIT A

The following unit rates were provided by Rene Gallea on July 3, 1982:

<table>
<thead>
<tr>
<th>Unit Rates</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dredging</td>
<td>20 SR per M$^3$</td>
</tr>
<tr>
<td>Mobilization of Dredge</td>
<td>SR 1,500,000</td>
</tr>
<tr>
<td>Sand Fill</td>
<td>SR 20M$^3$</td>
</tr>
<tr>
<td>Quarry Fill Rock</td>
<td>SR 40 M$^3$</td>
</tr>
<tr>
<td>Armor Rock Fill</td>
<td>SR 90 M$^3$</td>
</tr>
<tr>
<td>Concrete</td>
<td>SR 350 M$^3$</td>
</tr>
<tr>
<td>Reinforcement</td>
<td>SR 315 M Kg</td>
</tr>
<tr>
<td>Formwork</td>
<td>SR 80 M$^2$</td>
</tr>
</tbody>
</table>

Gallea said in relation to the drawings that zero level was +0.80 above mean sea level.

Reliability?