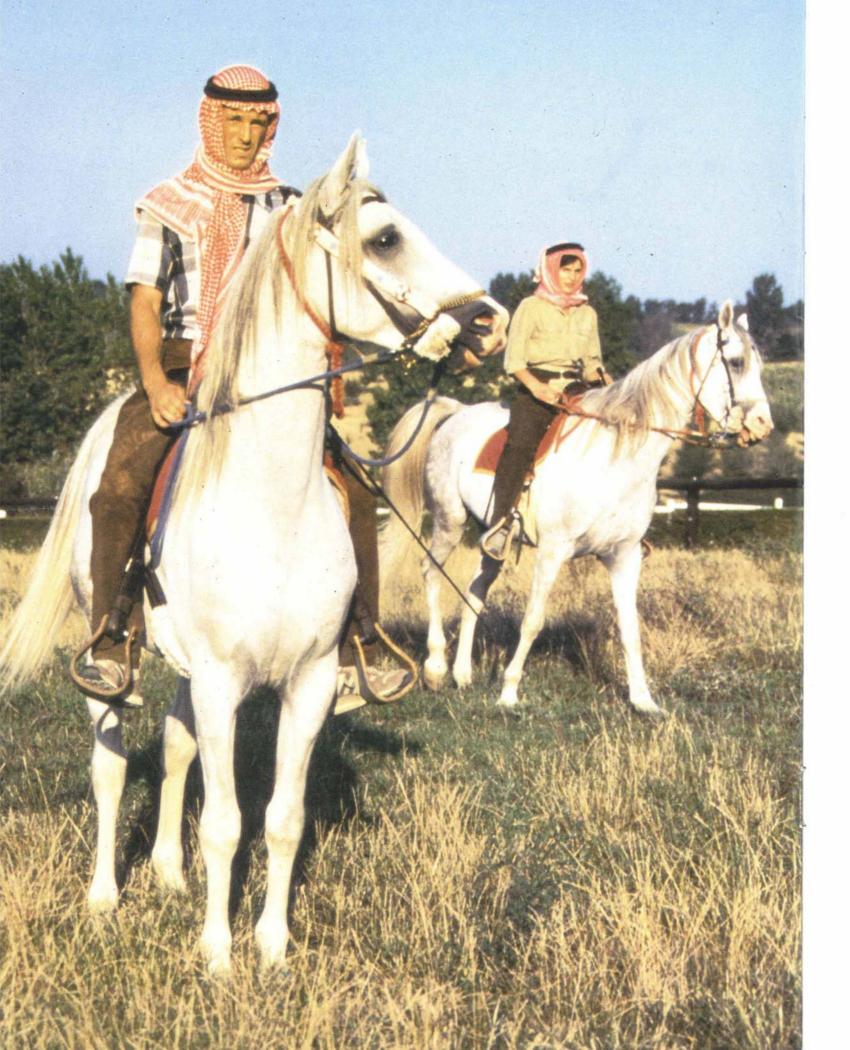
ARAMCO WORLD ARAMCO WORLD magazine

ARABS AND SPACE



# ARAMCO WORLD magazine

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### Elizabeth and the Sultan's Fete

By Malcolm and Marcia Stevens

"Soon after sunset, the palaces . . . began to be illuminated," wrote young Élizabeth Washburn as she started a vivid first-hand account of a historic fete for a sultan.



### ARABS AND SPACE



### A SPECIAL REPORT ON THE ARAB WORLD'S ENTRY INTO SPACE



### Arabsat – the Launch

By Yasar Durra

At 8:22 p.m. on February 8, an Ariane rocket blasted off in a ball of flame from the darkened jungles of French Guiana, carrying the Arab world's first communications satellite - Arabsat-A - into space.





### Arabsat – the Impact

By John Christie

The Arabsat satellite system could have wide-ranging effects on telecommunications in the Arab world and ultimately expand the reach and influence of Arab television and news agencies.





### A Ride to Arabia

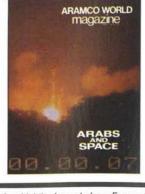
By Pascale Franconie

In 1982, Pascale Franconie and Jean-Claude Cazade mounted two Arab stallions in France and headed for Arabia – on a ride that would last two years, two months and 13 days.



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Cover: On February 8, seven seconds after ignition, an Ariane rocket carried the Arab world's first communications satellite into space. This and other launch photographs were reproduced from television film using a new process. The film was taken in French Guiana by Radio France Outre-Mer, transmitted by satellite to Paris and shipped to London by UPITN Productions. There, using a newly developed Dai Nippon Video Graphics machine one of only four in the world - editors selected frames for reproduction.



n the mid-1860's, an impressionable and artistic young woman named Elizabeth Washburn arrived in Istanbul to visit her brother, George Washburn, later president of Robert College (See *Aramco World*, March-April 1984). Elizabeth stayed several months in an old house in Kandilli on the Asiatic side of the Bosporus, some 11 kilometers or so (6-7 miles) from Istanbul. In those days, Kandilli was a charming village, replete with summer homes for those fleeing the heat of the city.

Scattered along the shores of the Bosporus, the beautiful waterway separating Europe from Asia and linking Istanbul with the Black Sea, lay numerous picturesque villages like Kandilli, nestled among tree-covered hills. Prosperous villas and elaborate palaces edged its shores. Flowers, fruit trees and stately dark green cypresses enhanced the exotic setting – more beautiful than anything Elizabeth could have imagined from tales of the Arabian Nights. Each evening, as all nature seemed to sleep, melodious tones of the elusive nightingale underlined the enchantment of her Eastern home.

Elizabeth spent much time sketching and day-dreaming in her private refuge among the ruins of an unfinished palace on a hill high above Kandilli, directly across the Bosporus from the village of Bebek, the site of Robert College and the scene of "the sultan's fete," an event she faithfully recorded in a vivid chronicle of her sojourn in Istanbul.

This first-hand account – of the kind of pomp and splendor now relegated to the annals of history – is at once charming and accurate, combining, as it does, a fresh breathless wonder with touches of humor, insight and detailed description.

The fete was hosted by Grand Vizier Ali Pasha, on June 25, 1860, the anniversary of the coronation of Sultan Abdul Mecid I, who ruled from 1839 to 1861. Although it was given in his honor, the sultan - by custom - did not attend. He might appear offshore aboard his stately barge - a splendid craft, long and sharp, richly carved and gilded, and rowed by at least two dozen athletic men in white robes, who stood and bowed ritualistically to the sultan after every stroke. The barge, covered by a royal canopy supported on gilded columns and covered by crimson curtains wrought with gold and silver flowers, presented its own glittering pageant. Beneath this magnificent canopy sat the sultan in all his imperial splendor, while Elizabeth, eyes alight, began to jot down notes...



"Soon after sunset," Elizabeth began, "the palaces, which line both sides of the Bosporus, began to be illuminated. As the soft twilight came on, one after another became a mass of twinkling lights. Then thousands of fire-flies seemed to cover the distant shipping. The vessels that were nearer were like floating kiosks.

"The little children, looking from the window, clapped their hands in delight, and then kept still in silent rapture.

"Soon, beautiful fireworks began to light up the dancing waves. And all the time the sound of the Sultan's band playing at the palace opposite added to the feeling of enchantment. Sometimes the music was the Sultan's favorite Turkish march, and again some bewitching waltz of Strauss."

Elizabeth, as she wrote, made it clear that, in the midst of such an Oriental scene, she found Turkish music preferable. "The harmony is good, and the curious repetition adds to the general dreaminess that even a Yankee feels after living... in the physical and mental atmosphere of this country.

"The crowning beauty of all this brilliant display was the palace of the Grand Vizier at Bebek. As I looked over the heads of the eager little children, just before we started, I could see it, like a palace of light, with gardens of light behind it.

"Back of the palace there are large and beautiful terraced gardens and every tree and shrub was illuminated with little stars of light. These made a faint shimmering across the water. A few hours after, when we were walking there, we were in a blaze of light."

To get from her house in Kandilli to the boat landing involved negotiating streets that were "steep and narrow, but well and cleanly paved." Elizabeth contemplated hiring an arraba, a highly decorated carriage drawn by oxen or horses, with cheerful red and blue cushions to sit on in place of the usual seats. Two long poles attached above the oxen were decorated with numerous scarlet tassels gently

fluttering in the breeze, and the animals themselves were adorned with shells and tiny bits of reflecting glass. Elizabeth also considered a donkey or a sedan chair. "But I think our feet served us better than either. I went down from our house...in my pink and white dress and white slippers...without soiling either.

"In democratic fashion we were about to call the first 'caiquegee' (boatman) we saw, when our English friends... called us and gave us seats in their own beautiful caique with its six oars."

The caique too, Elizabeth thought, was a magical form of transport. Light in weight, similar to a narrow wooden canoe with a long beak and lacking a keel, the caique was painted black, with a strip of bright red inside the stern. The interior was white as snow; an ornamented backboard protected the passengers as they sat comfortably on a Persian carpet in the bottom of the boat. Long paddles, broadened at the end were grasped securely by strong "caiquegees" in transparent shirts of raw silk and cotton trousers attached at the knee. And as they skimmed along in the moonlight, the Bosporus shimmering like molten silver, and many a sail dancing upon it, seemed enchanted.

At last they arrived at the grand vizier's palace. And you can almost hear Elizabeth's gasp of delight.

"I wish I could find words to describe the sensation I had when we entered the gateway! We were in a . . . courtyard where everything seemed to be pencilled out with lights; every railing, every flower bed and all tracery and carving wherever it might be. In the center was a fountain of light that played like water, and was in shape like those in front of St. Peter's at Rome.

"The bodyguard of the Sultan had been sent...as a personal compliment to the Grand Vizier. It is composed of a certain number of men from all the nations, tribes or countries that are subject to 'His Supreme Highness.' Each is dressed in his national costume. I have never...seen anything that began to be so gorgeous and beautiful as the grouping of these men. The Greeks and Arabians seemed the most imposing. Many of them were new and strange to me.

"There is one thing that to some minds adds a very great charm to beautiful costumes in this country – everything is real. Lace, gold, diamonds, whatever it may be, you may be sure it is (the best) of its kind. Even in the bazaars one seldom finds fine things imitated.

"These costumes may last a lifetime, and they are often all the wealth of the wearers. Many a woman, too, wears her fortune on her hand. Gorgeous as they were at this fete, they were equally fresh and brilliant when I saw them during the *Bayram* (holiday) early one spring morning.

"We passed through crowds of the Imperial Guard, servants in livery, and newly-arrived guests... scattered about in the lower halls. At the foot of the grand staircase several ushers met us. They led us through large and beautiful rooms to the chief salon. We found ourselves among hundreds of gentlemen, in ball and court dresses, and a much smaller

4

number of ladies in all sorts of evening costume. There is no such thing here as 'the fashion' except perhaps the national...dress of the Turkish ladies."

There was no formal receiving line. Those who made an attempt to reach the host were always greeted with grateful salaams. "Indeed, compared with Turkish politeness – or rather elegance – even some French manners seem rude, and I grieve to say, English and American might be classed by them as barbarian.

"There were some young Turks, fresh from Paris, dancing with pretty young 'Franks' or 'Christians' as they call all European nationals here. Their Papas were doubtless scandalized . . .

"We soon found ourselves in the midst of a crowd of friends. We had hardly recognized them at first, they seemed so a part of the bewildering scene. When we realized they were, like ourselves, plain 'Jones, Brown, and Robinson,' we were partly amused and partly chagrined, for really one begins to feel in such a fairy-like place as if they themselves might be somebody else.

"One cannot exactly analyze the fascination of these Eastern fetes. They seem to surpass everything else in the world in their exquisite combination of light and color."

While they were eating ices and bonbons, which were provided for "Franks" only, even though, said Elizabeth, they would have preferred Turkish dishes, someone came with an invitation for Elizabeth and her "Frankish" lady friends to visit the women's quarters.

"I had never seen a Turkish woman except veiled in public, and this was the last touch of 'Aladdin's lamp' for me." In a few moments she found herself before "a brilliantly lighted salon full of Turkish ladies, in their bright evening dresses."

In the salon, she went on, she was presented to "Madame Aali, ["Ali," the grand vizier's wife] who stood graciously receiving her friends, quite in French fashion. Her dress, or rather drapery, seemed a mass of soft blue silk and diamonds. She gave us her hand, because she knew it was our custom. I was a little in doubt whether to kiss it or not. It was gloved, however, and I thought it quite so well to 'do as we do at home,' as that seemed her wish."

Introduced to the daughter-in-law of one Fuad Pasha, Elizabeth called her "by far the loveliest lady in the room. Indeed, she is said by many people to be the

friend . . . we had quite a gay little chat. She is Circassian by birth, so she told me afterwards, and has the famous almond shaped eyes which are peculiar to her race. Her hair is dark and this evening she wore a crown of diamonds and emeralds. Her dress of rose colored silk was made like any French ball dress, except the skirt, which was a mixture of French and Turkish that was charming in its effect.

She wore a girdle of diamonds and

bracelets that matched her tiara and

looped up with a cluster of diamonds.

"There were other costumes in the room quite as splendid, but I did not notice them so especially, because none of the wearers were so pretty as Madame Cassim - and I did not talk with anyone else much. One truth was, I only knew about a dozen Turkish words, and they knew no English . . . The little I do know, I found of the greatest use, and they were charmed and no doubt thought it is a great joke to hear the wonderful number of times and ways I managed to say 'It is very the same expressions themselves a great deal, so I flattered myself my conversation was quite effective!

"The Turks consider stoutness a beauty, and the last thing a Turkish lady would dream of would be to try and give herself a small waist. Their feet, too, grow in natural freedom. When they sit down, they slip off even their embroidered slippers and tuck their feet under them. There are a few wives who do about what they like in dress, who buy and wear high colored

French boots, but this is exceptional."

they went out to inspect the gardens. "These gardens are in terraces that extend up the side of the hill behind the Grand Vizier's palace for about half a mile. I have spoken before about the very tasteful way in which every shrub, tree, flowerbed, was marked out with hundreds of little lights. In the midst of the garden is a large conservatory. This was lined with flowers whose rich perfumes filled the air. It was so arranged that quite a crowd could walk about in it without any danger of hurting the flowers. It was glass, of course, and so

lighted by the outside illumination, giving by its subdued light a refreshing relief from the almost dazzling light everywhere else. It seemed a pity some Romeos and Juliets should not have the benefit of it ...

"The supper was served in a gay pavilion built for the occasion, near the greenhouse. It was lighted by colored lanterns, and the tables loaded with French dainties! They were dainties, it is true, and it was absurd to sigh because one must eat boned turkey and chicken salad. But for days we had seen a most unusual amount of smoke pouring from the kitchen chimneys, and we knew a great Turkish feast was being prepared. But in mistaken kindness, and doubtless at enormous expense and inconvenience, the Sultan's guests must be served with a French supper. There had been a dinner in the afternoon thoroughly à la Turque. As they had over fifty courses, each supposed to be a little bit better than the last, I wondered the gentlemen who were favored with invitations to attend it, were able to move. But the Turkish feasts are so unlike English dinners they seem to have quite a different effect. It seems as if their cooking was so perfect that the food digested directly.

"When we had feasted . . . we went into the palace again . . . found our cloaks, and...went out the way we had come in a few hours before. We found 'here and there a traveller' instead of the crowds we passed through in coming in; for the Turks

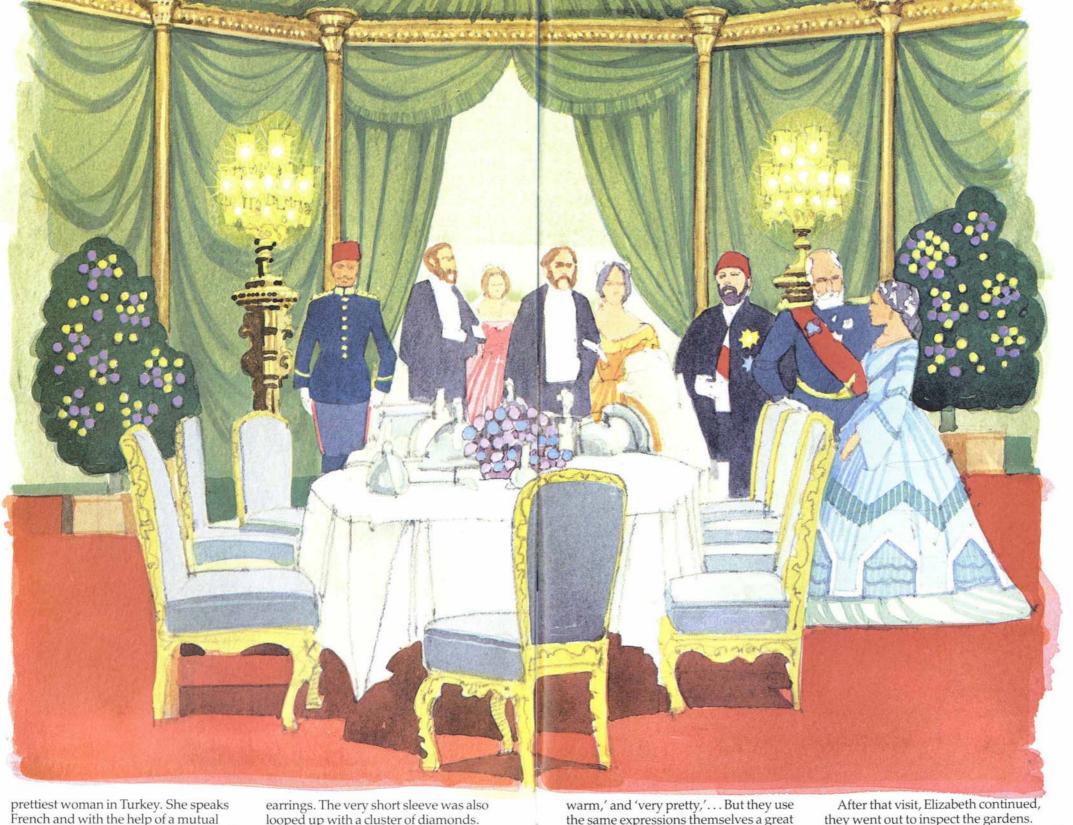
keep early hours. "When we reached the boat landing we had to wait awhile for our boatman to return from the opposite shore. We noticed that the village beyond us was quiet, except for the barking of various dogs. Some of the palaces were still illuminated, but the lights seemed fast dying out in most of them. The water, which had been quite crowded near shore with caiques and larger craft, was comparatively deserted. Nobody shouted as our 'caiquegees' rowed close in shore. We stepped in, with our slippered feet, without having a drop splashed on us.

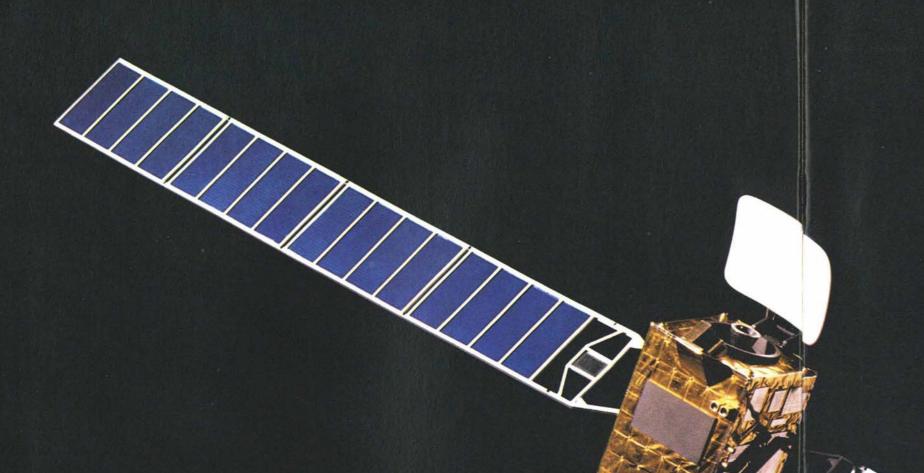
"We reached home by one o'clock . . . All the people on our side seemed to have 'turned in' and gone to sleep.

"So ended this gay and brilliant fete. It was given for the Sultan but enjoyed by the people." ●

(Permission to reprint excerpts from the Washburn letter courtesy of Mrs. Kathy Preston, a descendant of George Washburn.)

Malcolm and Marcia Stevens once lived in Istanbul and are writing a biography of Cyrus Hamlin, founder of Istanbul's Robert College.





### ARABS AND SPACE

#### FROM REPORTS BY:

YASAR DURRA, JOHN CHRISTIE, ARTHUR CLARK, DOUGLAS A. BOYD AND PATRICIA MOODY

### WITH PHOTOGRAPHS FROM:

RFO/UPITN/ VIDEO GRAPHICS, AEROSPATIALE, MEPHA, SUSAN GRIGGS AGENCY AND BURNETT H. MOODY

As this report on the Arab world's entry into independent spaceborne communications went to press, a NASA spokesman confirmed published reports that an Arab payload specialist is expected to join the American space shuttle Discovery for the launch of a second Arab telecommunications satellite later this year, probably in mid-June. He will be the first Arab in space.

-The Editors

### ARABSAT THE LAUNCH

WRITTEN BY YASAR DURRA PHOTOGRAPHS FROM RFO/UPITN/VIDEO GRAPHICS, AND AEROSPATIALE

t 8:22 p.m. on February 8, the massive engines of an Ariane launch vehicle coughed, caught and fired. Seconds later the great missile rocketed into the black skies above the jungles of French Guiana and on a tail of pulsing flame climbed into space with its vital cargo: Arabsat-A, the Arab world's first communications satellite.

Since then, Arabsat-A, commanding a swathe of the earth from the Strait of Hormuz to Mauretania from an altitude of 35,900 kilometers (22,308 miles) on the 19th degree of latitude, has passed its initial "In-Orbit Test" (IOT), and on February 28 the ground station at Dirab, in Saudi Arabia, began to receive Arabsat's first transmissions. To mark the occasion, a reception was held at the station with Dr. Alawi Darwish Kayval, the kingdom's Minister of Post, Telecommunications and Telegraph, and the director general of the Arab Satellite Communications Organization, Dr. 'Ali al-Mashat attending.

In effect, the reception celebrated an important milestone in modern Arab history. As Dr. Kayyal put it in French Guiana after the launch, Arabsat is "a success story in every respect," not only because 22 Arab countries agreed on a project of this magnitude, but also because it is a successful example of how modern technology can be European Space Agency (ESA), creator of transferred to the Arab world.

in communications are needed in the Arab world. As Dr. Kayyal said at a recent Shuttle flight from Cape Canaveral.

broadcasters' meeting, "the need for phenomenal speed in communicating information is a...feature of our age.

Telecommunication services in many parts of the Arab world simply have not kept pace, however, with rapid development in every other walk of life. At one point, not long ago, it was easier to place a call to New York than to a neighboring Arab capital.

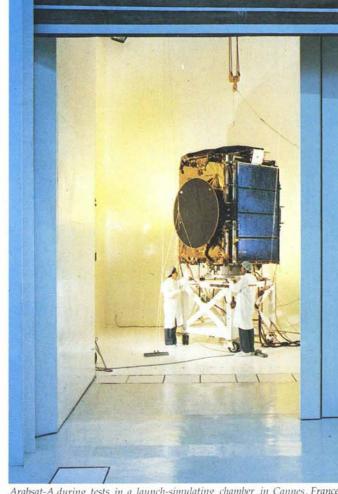
Arabsat, therefore, will play a key role in the future. According to Dr. al-Mashat, "...rapid economic growth, increasing cultural exchanges and the awareness of the Arab people of . . . their role on the international scene . . . have created the need for advanced, reliable communication systems capable of meeting the requirements of the various Arab countries, in terms of telephone, telegraph, Telex and information exchange in addition to television and radio requirements."

To a large extent the new system will meet those needs. Arabsat will provide all 22 Arab League countries with more than 8,000 telephone circuits and eight regional and domestic television channels - including a Community Television Channel.

Basically, the launch was engineered by Arianespace, the company responsible for the commercial operations of the 11-nation the Ariane rocket. A second Arabsat -There is little doubt that improvements Arabsat-B – will be carried into space aboard the United States' upcoming Space

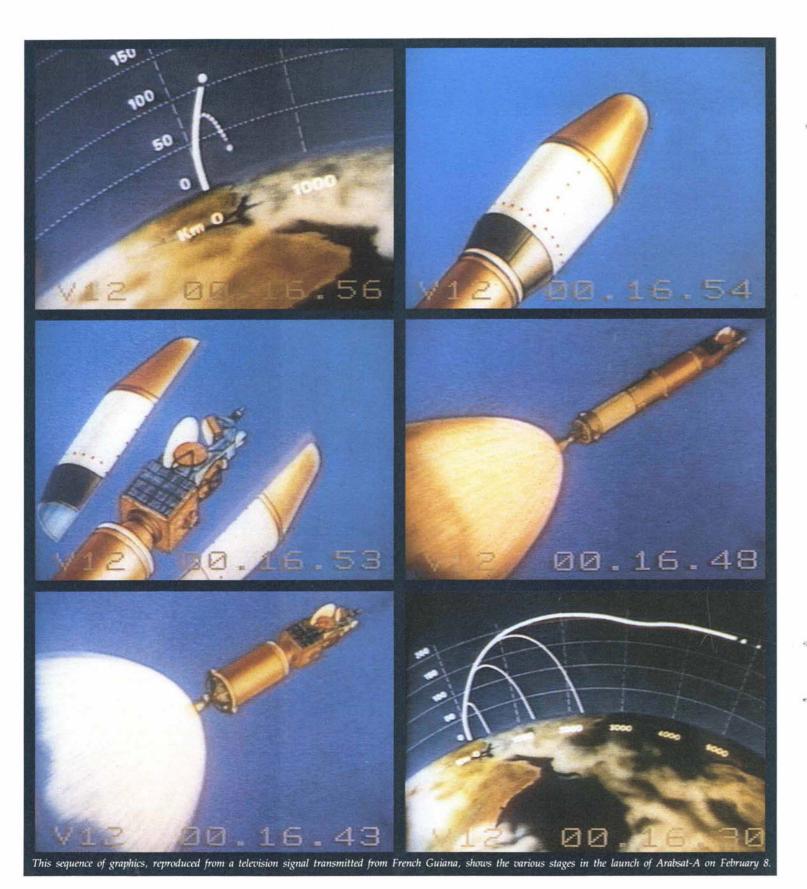


Arabsat-A undergoing rigorous pre-flight checks in France, where the satellite was assembled, prior to shipment to French Guiana for launching February 8. Power-providing solar wings being fitted to the Arab communications satellite.



Arabsat-A during tests in a launch-simulating chamber in Cannes, France.





Overall responsibility for the Arabsat, however, is in the hands of the Arab Satellite Communications Organization, set up by the Arab League in 1976 and headquartered in Saudi Arabia. One of Arabsat's goals was to encourage research in space communication industries, but Arabsat's capacity should also stimulate inter-Arab commercial activity and encourage the development and growth of pan-Arab companies. Indeed, the Arab businessman of the 1980's, with his microcomputers and instant communications, will soon be looking back with disbelief at the days when he had to stand in a long queue at the local post office to send a telegram. Instead he will soon be able to turn on, for example, a facsimile transmitter and send documents from Jiddah to Tunis in minutes.

Rural areas in the Arab world will benefit in a different way. Shortages of qualified physicians will be eased because sophisticated telephone and television services will enable remote areas to draw on resources in large medical centers such as slow-scan video and audio lines.

Arab universities are also interested in exploiting Arabsat benefits. As far back as 1977, the Union of Arab Universities sent out a questionnaire to investigate the potential uses of the Arab space network and, according to Sa'ud Dahlawi, director general of Gulfvision, many universities, hoping to stimulate the activities of universities throughout the Arab world, called for more studies to implement the idea.

Since such possibilities have excited communications ministries throughout the Arab world, there is a broad consensus among Arab policy makers that the new space network should be given all the support it needs. The minister of information in Iraq, Latif Naseef Jassim, emphasized Irag's support of the project when he spoke to a visiting delegation from the United Nations Educational, Social and Cultural Organization (UNESCO). "This is a national strategic project which realizes the national ambitions of the Arab people..." he said.

Tariq Almoayed, Bahrain's Minister of Information, made it clear too that his country expected a cultural and educational impact. "The new facility should be used for educational purposes despite the fact that such programs require urgent efforts," he said.

# **ARABSAT**

PHOTOGRAPH FROM RFO/UPITN/VIDEO GRAPHICS

or Dr. 'Ali al-Mashat and the Arab League space team, the February 8 launch of the first Arab satellite - Arabsat-A - was a dream come true, a dream they had worked toward for seven years.

Dr. al-Mashat, director general of the Arab Satellite Communications Organization, and the man who nicknamed the project "Arabsat", a name now applied to the satellites as well as the organization, was picked by the 22-state Arab League in 1978 to spearhead the project.

An Iraqi from Baghdad, with family roots in Makkah (Mecca) in Saudi Arabia, Dr. al-Mashat seemed a logical choice for director when the Arabsat organization was created in 1976. A professor of telecommunications at the University of Baghdad, he had served as chairman of the 1969 Arab League committee to study satellite usage in the Arab world and had organized the first Arab

Space Conference in Amman in 1972. Dr. al-Mashat was not the first Arab to make important contributions to the use of space. In the 1970's, Farouk El-Baz of Egypt,

a geology-trained space scientist, was the man who picked the exact spot where the first astronauts were to land on the moon (See Aramco World, November-December

Dr. al-Mashat and his 65-man team of engineers and technicians, all recruited from throughout the 22 Arab League states, are pioneers nonetheless. "Every day, even every hour, we faced new surprises and ... condi-World interview.

launch of Arabsat-A. Since then, Dr. al-world.

Mashat and his crew have focused their attention on such challenges as the upcoming Cape Canaveral space shuttle flight. Under a contract with the National Aeronautics and Space Administration (NASA) the famous Discovery is scheduled to carry Arabsat-B, the backup for the Guiana-launched satellite, and launch it into orbit too.

This kind of cooperation with NASA and the European Space Agency is important to a secondary Arabsat interest: the transfer

of technology from the West to the Arab world. It's a "benefit we depend on," Dr. al-Mashat said. "The objective is to make use of this technology to educate - technically educate - experienced engineers...We have sent people to be trained in Japan, France and the United States...and have training courses in the kingdom." And Arab League experts have been eager participants in the space shuttle and



Dr. 'Ali al-Mashat monitors Arabsat launch

ESA Ariane flights either "on the line" or at the launch site before, during and after every

This does not mean, Dr. al-Mashat said, that Arab League technicians will be able to build and launch satellites themselves in the immediate future. "One should be realistic," he said: "...even in Europe there are only two or three places which can manufacture satellites...

Nonetheless, Arabsat experience provided golden opportunities for Arab scientists and engineers. Indeed, Dr. al-Mashat and his staff have successfully handled technical tions," Dr. al-Mashat said in an Aramco problems that would have challenged the best scientific minds in the world, and the results The job, moreover, didn't end with the will be of immeasurable value to the Arab



Poised for flight in French Guiana: the Ariane rocket which carried the first Arab communications satellite into space.

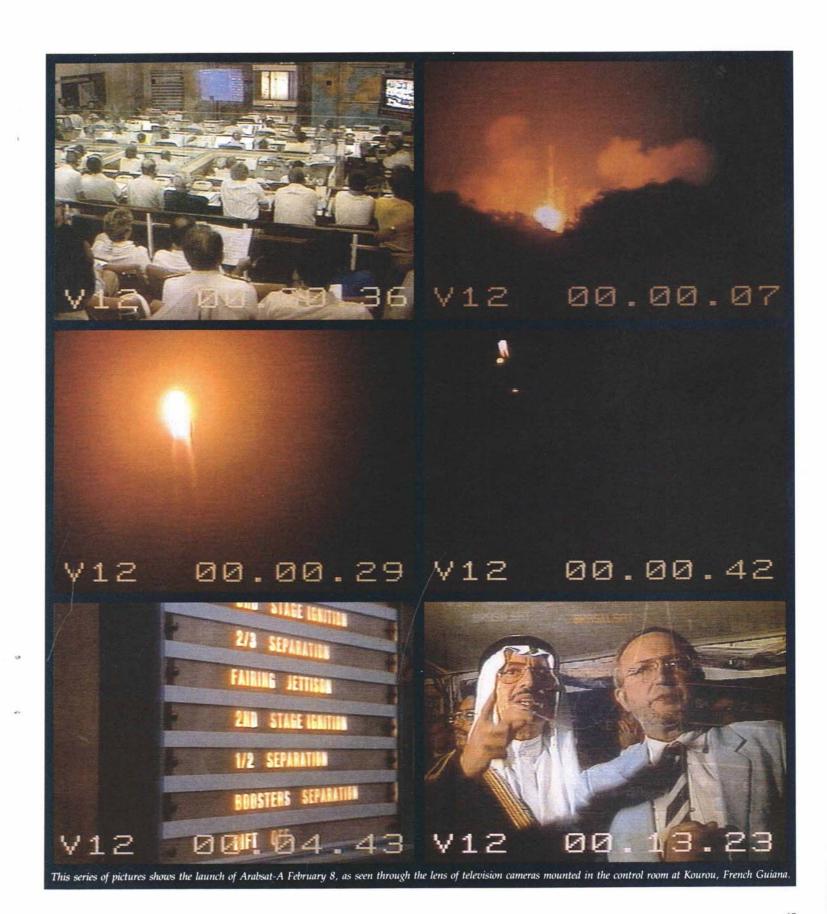
Similar enthusiasm regarding use of "community television" for adult education has been expressed by Musa'ad al-Rawi, the head of an Arab organization set up to cope with illiteracy and promote adult education. He proposed that new TV capacities be used to establish three "open universities" – i.e. televised classes open to all. The three would be the "Arab University, the Palestine University and the Gulf University," he said. Such education is urgently needed, he added, because conventional Arab universities may not be able to absorb the masses of high school graduates now coming along.

Dr. Sa'ad Labib, a veteran Arab broadcaster who currently runs a mass communication consultancy in Cairo, also calls for adult education on the community television channel. "Such programs," he says, "would concentrate on developing badly needed professional skills and highlight the individual's role in society."

Arabsat will also affect newspapers. As Sa'id Hammoudi, the editor of the Iraqi daily *Al Thawrah* and the president of the Arab Journalists Union said, Arabsat can be used to print different editions of Arab newspapers simultaneously in different parts of the Arab world. He said that *Al Thawrah* is exploring this possibility.

This, he continued, is not new in the Arab world. Algeria has been using the Intelsat network - the International Satellite Organization, a global satellite system used by Arab countries - to print editions of its national newspaper in different parts of the country, and the Saudi international daily Al Sharq Al Awsat prints editions in several Arab and European capitals simultaneously. Intelsat is a private, international and commercial venture which has been sending up satellites since the 1960's and most of the 22 Arab League countries have access to it already. The new technology will probably expand readership, he said, and also improve the quality of journalism as a whole since to competeon anational and international scale, Arab newspapers will have to broaden their coverage.

Arabsat's seven-channel television capacity could have an economic impact as well. It might save millions of dollars of expensive hardware needed to achieve full signal coverage in various Arab countries: the big, costly ground antennae that are still required to pick and read signals from



a satellite. Although land links will still be airline bookings - all on a large scale. crucial, Arabsat signals will be able to reach remote regions through small ground antennae to be constructed in rural or desert areas.

Large metropolitan areas will continue to use ground stations with large antennae: 11 meters in diameter (36 feet); they handle heavy trunk-route telephone traffic, and originate and receive television transmissions. Other urban ground stations, employing antennae of the same diameter, will serve smaller cities; they will handle telephone traffic, and receive, but not originate, television transmissions. In addition, mobile ground stations using antennae 1.6 meters in diameter (five feet) will be used for emergency communications.

Another type of small ground station will be needed for television reception in remote locations; the antennae of such ground stations will be four and a half meters in diameter (15 feet). For community television, what is called "down-link reception" will be provided by small, receive-only ground stations with antennae three meters in diameter (10 feet).

Arabsat's ground-control network consists of a satellite control center (SCC), where orbit-injection operations are carried out, and where the satellites will be monitored and controlled throughout their 11-year lifetime, plus the primary telemetry, telecommand and control ground station (TTC), which maintains permanent contact with both the SCC, via micro-wave links, and with the satellite via large transmitting and receiving antennae. Both stations are located in the Riyadh area, with a secondary TTC in Tunis; this station is capable of temporarily replacing the facilities in Riyadh.

Arabsat, it should be said will complement other satellite links rather than compete with them. The satellite, for example, will not be in competition with the Intelsat system, because Intelsat will continue in use for international - as opposed to regional - communications.

Arabsat can also be used to link microcomputers and main-frame computers, to facilitate library services, electronic mail, instant data retrieval, financial services,

Elation shows on the faces of Dr. Alawi Darwish Kayyal, the Saudi Arabian Minister of Post, Telecommunications and Telegraph, and his French counterpart M. Louis Mexandeau as Arabsat-A reaches its orbit.

Then there's science. With Arabsat, scientists in Arab countries will be able to undertake joint scientific research for the first time in centuries - as Dr. Muhammad Abdo Yamani, the former Saudi minister of information, reminded a media conference in Riyadh. Arabs, he said, should not forget the avant-garde role they played in developing the science of astronomy. "We must remember our pioneering role in ...astronomy and what our scientists

have contributed to . . . the general foundations of these sciences."

Dr. Yamani specifically mentioned Abul Husayn al-Razi, "who monitored more than 1,000 stars and presented comprehensive studies on them," as well as Abul Qasim al-Majriti, who excelled in mathematics and astronomy.

To design, build and launch the threesatellite Arabsat system, the Arab countries turned to an international consortium headed by France's key space contractor,

Aerospatiale, and including U.S., German, Italian and Japanese corporations and agencies: the Ford Aerospace Communications Corporation (FACE), McDonnell Douglas, AEG Telefunken, Nippon Electric Company, Ltd., Selenia Spazio, Bertin and NASA.

What the corporations came up with was a design derived from what is called a "body-stabilized configuration," a design more efficient and competitive than the "spin-stabilized" satellites. The body-

stabilized configuration, moreover, allows the most efficient and direct use of power generating elements, and the three-axis control system is totally autonomous - requiring no continuous interaction with the ground, thus simplifying the mission op-

On the ground, Arabsat weighs approximately 1,200 kilograms (2,640 pounds). It has two solar-drive assemblies with a wing span of 20.7meters (68 feet) and 20,000 solar cells to provide energy.

The Arabsat spacecraft is a medium size, multi-mission satellite. Called the "Spacebus 100," it is the first of a new generation of telecommunications satellites developed by Aerospatiale and its partners for regional and domestic systems.

The primary structure consists of a graphite-epoxy, honeycombed central cylinder, to carry the transponders and also house the propellant tanks. Equipment for both payload and service modules is placed on panels composed of light framing, with either light alloy or graphite-epoxy skins.

During the launch, the satellite was located at the top of the launch vehicle, but at the third stage, it was reoriented, with the solar array wings partially deployed and the spacecraft, through use of an earth sensor, was stabilized, while gyroscopes inside stopped it from rolling. The solar array is fully deployed in orbit.

With the first satellite in space and functioning - and a back-up satellite about to be loaded aboard a NASA space shuttle for an upcoming launch - the Arabsat organization has solved the most difficult of its technological problems. And though other problems - financial and administrative still await discussions and solutions before the full potential of Arabsat linkage can be realized, the future for Arab communications is promising. As the Economist Intelligence Unit put it, "With the launch of Arabsat, the Middle East is poised to join the West in the revolution in information technology that has characterized the past five years.

"Everything you can handle with telecommunications," Dr. al-Mashat said, "Arabsat can handle too - telephones, Telex, data transmission and television. Arabsat will complement all existing com-

What this means in specific terms is as varied as the people who will be affected the tens of millions of inhabitants spread across 13.7 million square kilometers (5.3 million square miles) - who have always been linked by tradition and now will be linked by technology too.

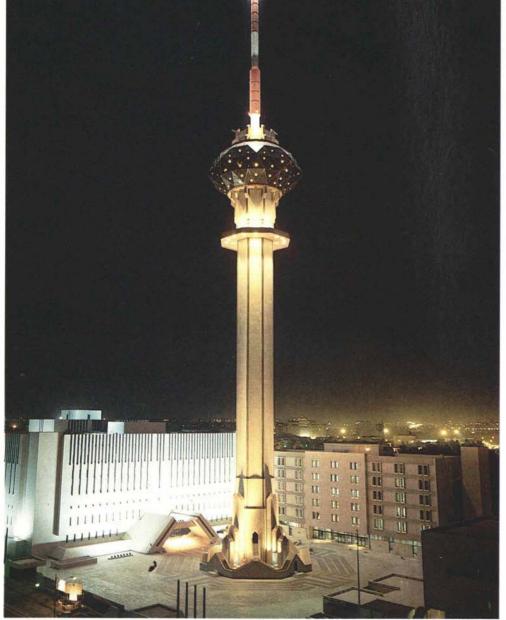
munications networks." Yasar Durra, an executive with United Press International Television News (UPITN), has followed the development of satellites for broadcasting for more than 12 years, and has produced several multi-origin programs using satellites. He is also involved in the development of news exchanges in the Arab world.



### ARABS AND SPACE

### ARABSAT THE IMPACT

WRITTEN BY JOHN CHRISTIE WITH PATRICIA MOODY AND DOUGLAS A. BOYD PHOTOGRAPHED BY JULIAN NIEMAN/SUSAN GRIGGS AGENCY, MEPHA AND BURNETT H. MOODY



The communications tower of the new television complex in Riyadh, Saudi Arabia – one of the most modern in the world.

nitially, the Arabsat satellite system will improve and extend regional communications and the transmission and receipt of data: telephone calls, Telexed messages, cables, faxed documents and drawings, and computer-to-computer interchanges. But at some point the new satellite will undoubtedly expand the reach and influence of intra-Arab television and Arab news agencies and newspapers too. In fact, it was Arab information ministers - rather than communication ministers - who first pressed for an independent Arab satellite.

Right now it is unlikely that the television capacity inherent in the Arabsat system - intra-Arab telecasts, for example will be utilized. For one thing, Arab League countries would have to have ground stations, and few of the league countries have even begun construction of stations. For another, most governments will hesitate to open up airwaves and television channels to material that might be offensive or objectionable.

Unquestionably, some intra-Arab programming will be encouraged. During the Olympics, Arab countries with athletes competing in the United States were openly upset when telecasts of events in which Arabs participated were either ignored by American producers or edited severely by regional producers who were sharing taped telecasts and satellite time with Arab countries. With Arabsat, any of the 22 Arab League countries would have been able to telecast and broadcast as much as they wanted of any event in which Arab athletes were competing.

Similarly, Arabsat will permit Arab countries to cover live on a pan-Arab scale the Arab Games and - an event of supreme importance to most Arab viewers - the Hajj, the Muslim pilgrimage to Makkah (Mecca).

To some observers, however, the real value of Arabsat's television channels is that they offer alternatives to present arrangements. One UPITN editor compared the launching of Arabsat to the establishment of a national airline.

"Most Arab countries could get along nicely using the international services of, say, Pan Am or British Airways. But if for any reason those airlines declined to fly into Jiddah, or Amman, or Bahrain, what would the Arab countries do? And with

Arabsat the same argument applies. Yes, they can get along nicely by using satellites like Intelsat, but what if the Western owners of Intelsat decided for any reason to shut it down, or use all its capacity themselves? What could the Arabs do? Arabsat is an alternative."

Arabsat, furthermore, will offer the 22 league countries the chance to utilize television's influence for science, research and education, since the existing networks and organizations, at least in the countries by the Arabian Gulf, have already charted a responsible course for television's growth.

During the 1970's, for example, Gulfstate ministers of information began regularly to discuss all aspects of the electronic media from frequency utilization to programming policies. In this spirit two organizations financed by Gulf governments were set up to foster specific aspects of broadcasting. One, Gulfvision, based in Riyadh, Saudi Arabia, and set up in 1977, coordinates television activities by organizing news exchanges, program competitions, and special studies.

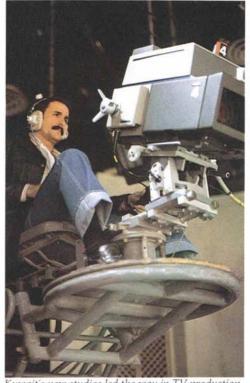
The other organization is the Arabian Gulf States Joint Program Production Institution. Headquartered in Kuwait, this group's main task is production of such programs for the region as the Arab version of "Sesame Street," Iftah Ya Simsim (See Aramco World, September-October, 1979). Other programs produced focus almost always on educational themes, dramatizing such culturally sensitive topics as the adjustment of a non-Arab wife to local conditions and the problems of a Gulf resident in the West.

In the late 1970's and early 1980's indigenous television programming had expanded swiftly so now, on all main channels, the trend recently has been away from European and American programming - and away from films and video taped programs from non-Gulf Arab countries. One reason is that most contemporary Western programs are unacceptable for Muslim viewers. Another is the belief plore problems relevant to the Gulf and do not use a dialect common to the area.

TV's technical standard for five Gulf countries is the Phase Alternating Line, or "PAL," system invented in Germany, and though Saudi Arabia uses the French Se-

tem internally, the kingdom also transmits in PAL color for viewers in neighboring

In the early 1980's, furthermore, long before Arabsat went up, the Gulf states had already made a new commitment to radio and television broadcasting. Radio broadcasting, for example, had become more sophisticated in terms of both technical quality and programming, and each country had begun to present programs of both Western and Arab music, drama, public affairs and news. In most cases, Gulf states



Kuwait's new studios led the way in TV production

also transmit programs in both Arabic and foreign languages via short wave for listeners in other parts of the world. (Conversely, there is widespread international radio listening among Gulf residents: 44 international broadcasters transmit to the Arab world in Arabic.)

Television, introduced in the 1960's, has also developed rapidly - in both technical that many of these productions do not ex- and programming terms. In Kuwait - one of the forerunners of television in the Arabian Gulf - for example, television had reached an advanced state of technical and artistic quality by 1978, while the new Saudi Arabian television complex in Riyadh, completed in 1982, is probably one quential and Memory (SECAM) color sys- of the most spacious and modern in the

world, with state-of-the-art equipment that is unmatched in most Western coun-

With those facilities and that experience, the Gulf countries are obviously prepared to take advantage of Arabsat's capacity when the completion of ground stations and solutions to administrative and technical problems permit Arabsat's full potential to be realized.

Arab news agencies are also well placednow - after a decade of intensive development - to make good use of Arabsat-A to further reduce the influence of international new agencies in the Arab world.

For many years the coverage and dissemination of news about and in the Arab East has been largely in the hands of outsiders. News agencies such as the Associated Press (AP), United Press International (UPI), Reuters, Agence France Presse (AFP) and the Soviet News photog-(TASS), plus correspondents, photographers and cameramen for the major newspapers, magazines, radio stations and television networks in America and Europe, provided 90 per cent of the world's day-to-day news. AP, UPI, Agence France Presse and Reuters alone send 34 million words a day chattering over teleprinters in newspaper offices, banks, boardrooms and brokerage houses, TV newsrooms and government offices.

But since these agencies tend to reflect the interests of their readers rather than the interests of the areas involved, coverage of many parts of the world tended to be incomplete, oversimplified, often inaccurate and, therefore, distorted.

Critics charged, for example, that by dwelling on crises, corruption and confrontation in the Third World, the international agencies make it difficult for poor countries to secure foreign capital and economic aid. Furthermore, it is argued, since AP, UPI, AFP and Reuters usually look at everything through the eyes of the Americans, British or French, Third World nations get little chance to get their views across - even to their own peoples.

In the late 1960's and the early 1970's, Arab governments in particular came to believe that they needed more accurate and reliable dissemination of news and information about events in their own regions. Simultaneously, a rapidly increasing domestic demand by the Arab media

CHING, THE STUDY MODED.

for foreign news began to develop. Because oil-based affluence had triggered a publishing boom in the Arab states, local newspapers, journals and magazines proliferated, and both television and radio networks were extended throughout most countries in the Arab world.

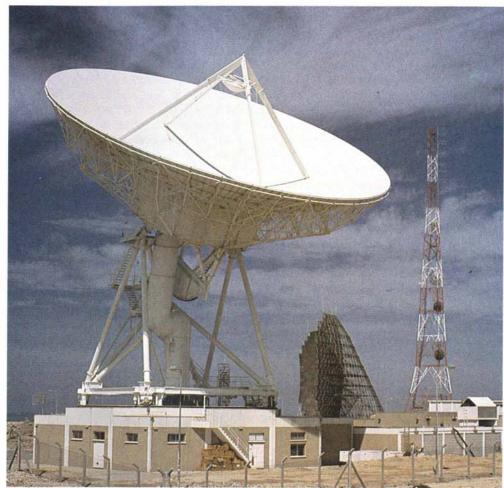
In response, Arab agencies began to push hard to fill the gap. Egypt's Middle East News Agency, for example, was transmitting 185,000 words daily to 25 countries. But none was able to muster the resources to rival the "big four," and despite growth, domestic demand still could not support a commercial news agency. Existing international press agencies were not only able to provide the local media with most of the overseas coverage they then required, but could do it inexpensively. Individual governments, therefore, began to set up their own national news agencies.

In setting up national news services, different Arab states, of course, had differing objectives in mind. The Saudi Press Agency (SPA), for example, covers Saudi Arabia for the world and covers the world – or key parts of it – for Saudi Arabia, particularly developments with any bearing on Saudi Arabia and its government.

SPA has overseas bureaus in Beirut, Sanaa, Cairo, Tunis, Ankara, Karachi, London and Washington – all filing news to SPA headquarters in Riyadh – plus staff correspondents in other Arab cities and countries. SPA's output for both its domestic and overseas subscribers originates in, and is transmitted twice daily from, Riyadh in Arabic and English to subscribers abroad – several thousand words a day, covering every aspect of the kingdom's day-to-day development considered newsworthy.

Formed in 1960, SPA now has a staff of about 400 and its output is required reading for anyone who writes, broadcasts or comments on Saudi Affairs.

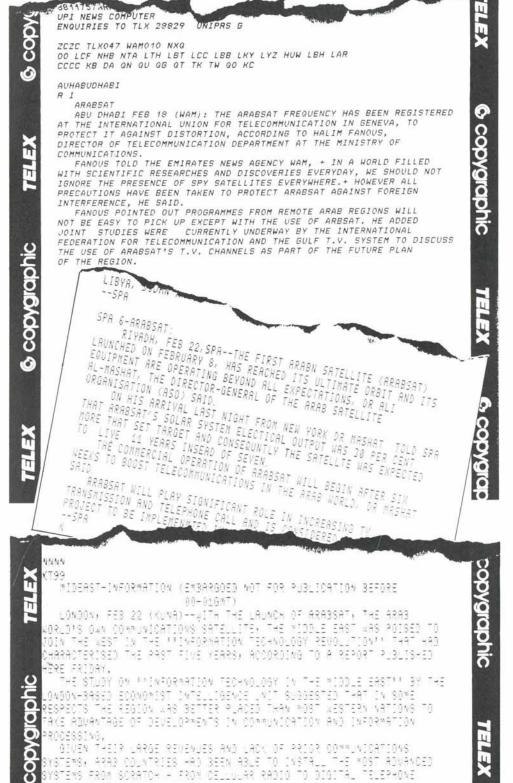
The Kuwait News Agency (KUNA) is another example. Following a highly professional news policy of balanced and objective reporting, KUNA's output is characterized by precision and speed: an average of 600 news items every day in Arabic and English, plus special reports and analyses and a separate bulletin sent daily to all Kuwaiti embassies and missions abroad. The agency's total daily out-



More tracking stations, like this at Jabal Ali, Saudi Arabia, need to be built before Arabsat can realize its full potential.



sions abroad. The agency's total daily out- A television studio in Kuwait, where, by 1978, TV had reached an advanced state of technical and artistic quality.



MOREOVER: NOW THAT TECHNOLOGY HAD CREATED THE PERSONAL COMPUTER:

OFTWARE HAD DEVELOPED SUFFICIENTLY FOR WORD PROCESSING SYSTEMS TO BE MARTED INTO ARABIC: IT POINTED OUT.

EUEN COMMERCIAL INFORMATION SYSTEMS HAD ADARTED THEMSELVES TO THE ECIPIC NEEDS OF THE ARAS WORLD: A DEVELORMENT OF PARTICULAR put averages around 50,000 words – one of the largest volume-output among the Arab agencies – and is transmitted on its own communications system throughout Europe, the first such system to be set up by an Arab wire service.

KUNA, which began its operation in 1978, opted from the first for the most sophisticated means of communications available. The agency already uses 16 direct satellite lines to carry and transmit its newscasts abroad and 24 high frequency waves to beam its English and Arabic services. KUNA has 15 foreign bureaus and its Kuwait headquarters, manned by 39 editorial desks, has exchange arrangements with 45 foreign news agencies. KUNA's plans for the immediate future include extension of the present 10-hour English overseas service to 18 hours a day and the local Arabic transmissions from 16 hours to 24 hours a day.

The smaller Arab agencies are not to be compared with the scale and scope of such larger operations as those sponsored by Kuwait and Saudi Arabia. Nevertheless, some have carved out reputations recognized outside their domestic borders. WAMPRESS, the official newsagency of the United Arab Emirates, for example, has won an acknowledged position for its expertise on the oil industry in the Gulf; its stories and coverage in this field are prime source material. And the Qatar News Agency (QNA), reaching far beyond its national horizons, was, some months ago, a leading sponsor of a major international conference in Paris concerned with media and information matters in the Middle

With regard to news, creation of the Gulf Cooperation Council (GCC), comprising the United Arab Emirates, Bahrain, Saudi Arabia, Kuwait, Oman and Qatar (see Aramco World, January-February 1984), has given an added dimension to the importance of local news agencies in the region. The council's vigorous efforts to promote economic integration and political coordination among these countries has heightened international interest in the area. The annual summit conference of the six GCC heads of state, for example, now attracts a large contingent of foreign journalists from all over the world - and increasingly they are turning to national news agencies, not only for information

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The London office of KUNA, the Kuwait National News Agency, is situated within minutes of Fleet Street, and another famous London landmark - the dome of St. Paul's cathedral



The news room at OPECNA, where its twice-daily, 2,000-word file is prepared from transmission around the world. KUNA's London office - one of its 15 foreign bureaus.

and news stories but also for organizational and service support: translations, photographs and background briefings. Bahrain, Doha and Kuwait have already hosted such summit meetings and this year it will be the turn of the Sultanate of Oman to host a summit. Thus OMAN-PRESS, the sultanate's official press agency, will find its resources at full stretch during the GCC conference next November.

Another news agency with extensive links with the Arab world – and one of the more interesting operations – is OPECNA. Though this is a specialized news agency of the Organization of Petroleum Exporting Countries covering the activities of all 13 member states, OPECNA closely monitors the affairs of the Arab world too. OPECNA takes dispatches from correspondents in the national news agencies of all the member states as well as from such institutions as the Kuwait-based Arab Fund for Economic and Social Development (AFESD), the Organization of Arab Petroleum Exporting Countries (OAPEC), the OPEC Fund and various United Nations agencies.

An international group headquartered in Vienna, OPECNA was launched November 14, 1980, the 20th anniversary of the founding of OPEC itself, and is, according to Gonzalo Plaza, the Venezuelan head of OPECNA since its inception, "perhaps the most extraordinary in- too. But though OPECNA informs the vears."

Because OPECNA must always considapproach in 13 separate countries – seven of them Arab countries - OPECNA coverage obviously must be balanced, Plaza

Originally, Plaza said, the decision to set up OPECNA arose from OPEC states' dissatisfaction with coverage by international journalists. To OPEC members, Western journalists seemed to misunderstand or misinterpret OPEC-states goals and moves, and to apparently favor the oil consuming countries.

What OPECNA does is provide newscasts, special features and reports; as of January 4, 1985, the agency had distributed 10,696 news stories - a total of 1,753,469 words written by its 12 reporters and editors in Vienna from dispatches filed by correspondents in member countries.

The OPECNA service is free and is sent to 23 national European news agencies for to more than 800 direct subscribers including The New York Times, The Wall Street Journal, The Washington Post in the United States and The Times and Financial Times in England, as well as West Germany's Die Welt and France's Le Monde. Altogether OPECNA serves 83 countries.

According to Plaza, one of the most important functions is to clarify facts. "If, for example, a news agency's report on OPEC or one of its member countries contradicts another agency's report, OPECNA can supply a clarification."

The agency also plays an important role in exchanging news among member countries - which will be a function of Arabsat



Editor at work in the Vienna headquarters of OPECNA

itiative in communications in the last few world on OPEC's behalf, it is not part of the Public Affairs Department of OPEC. OPECNA, moreover, is not the "spokeser the diversity of viewpoints and man" for OPEC. It is a news agency with a unique mission that was spelled out recently in an annual report: "to act as an effective counterweight to all-pervading news agencies of the West.'

> Although each national news agency does tend to stress the interests and points of view of its mother country, there are also genuine efforts to distribute good, accurate coverage of Arab affairs. Arab news agencies, moreover, through the Federation of Arab News Agencies (FANA), are building up a research capacity to supply background material, statistical data and information studies, in addition to news. In October 1984, FANA began a new ser-Agency - which compiles news and reports from all FANA agencies and then transmits them through its Vienna bureau

With respect to Arabsat, the first impact of the satellite will be technical; it will provide agencies with faster local links - and enable newspapers to print different editions simultaneously in different parts of the Arab world, the way the International Herald Tribune does now in Europe and Asia and U.S.A. Today does throughout the United States. In addition, the satellite will enable television newsrooms to send and receive direct pan-Arab telecasts of such events as the Hajj - the pilgrimage to Makkah (Mecca).

The president of FANA, Barges Hamoud al-Barges, who is also chairman and director general of the Kuwait News Agency, told Aramco World that Arab news agencies are eager and receptive to any new developments in the communications field which improve the transmission and dissemination of news to different parts of the world. The FANA president thought it very probable that Arab news agencies currently using other means of satellite communications would switch to Arabsat. The federation, which currently has 16 members, has functioned for just over a decade and has achieved considerable progress in helping to develop individual Arab national news agencies.

As Barges al-Barges told Aramco World, "Any consolidation of Arab efforts is a sign of strength. As such, the Federation of Arab News Agencies is one of the steps towards unification of Arab ranks and objectives. It also works as a preventive measure in the face of biased Western media, particularly the American one."

Since 1956, when Middle East News Agency was founded, Arab agencies have begun to establish themselves as an integral part of the 20th-century miracle of mass communication. The launch of the Arab satellite, Arabsat, and its utilization by regional news agencies gives a nice technological underlining to a classic Arab tradition, even now, not entirely lost: the inevitable question of the desert traveler, "What news?" Through the space-age electronics of Arabsat, the Arab news agencies will now be answering the question, with greatvice to Europe, through the Kuwait News er alacrity and a more substantive authority.

> John Christie, O.B.E., served 17 years as a British diplomat in the Middle East and now edits Middle East Newsletters.



# ARDETO ARABIA

WRITTEN BY PASCALE FRANCONIE. PHOTOGRAPHED BY PASCALE FRANCONIE AND JEAN-CLAUDE CAZADE.

ust a year ago, in April, 1984, two French riders named Pascale Franconie and Jean-Claude Cazade rode two Arab stallions called Merindian and Mzwina into the Gardelle Stud Farm at Lauzun in central France, dismounted stiffly and unsaddled sadly. For them, and for the horses, it was the end of a very special journey: a ride on horseback from the Dordogne in France to the Yemen border in Saudi Arabia and back – a ride of 21,070 kilometers (13,092 miles), not counting unavoidable lifts and detours via ship and truck.

For Pascale and Jean-Claude the trip was the realization of a dream that had fascinated them ever since Jean-Claude discovered the wonderful qualities of Arabian horses while serving in the French Foreign Legion in Djibouti.

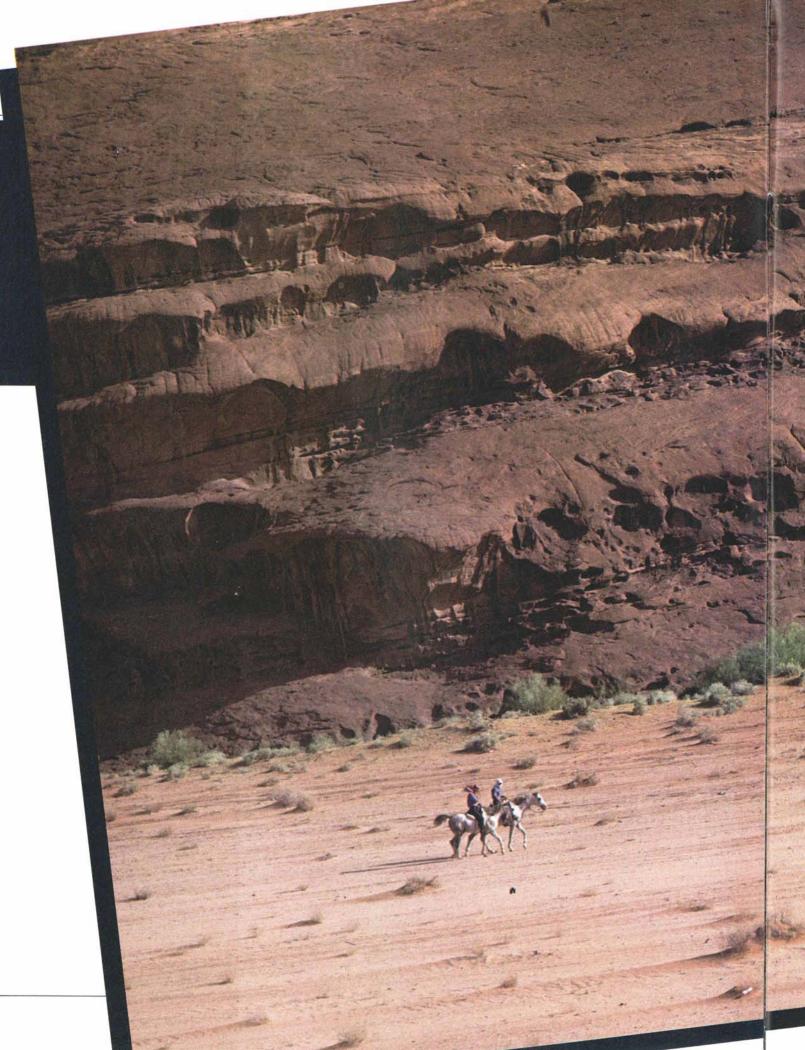
They rode alone most of the time, but are the first to say that their support from a variety of sources was vital. Josian Valette, owner of the Gardelle Stud Farm, one of the largest Arabian-horse breeding establishments in France, was one such source; he lent the horses to them to show that his Arabians could complete such a trip.

Other sources of help were Her Royal Highness Princess Alia and her mother Princess Dina of Jordan, Denis Letartre and the Randonnée Service which supplied all the equipment, veterinarian Ross Williamson, and Australia's Randwick Laboratories – which dispatched veterinary medicines and food supplements for the horses to each of the major cities they visited after Riyadh – French foreign service officers and, above all, representatives of the Saudi Arab government in Tabuk, Medina, Jiddah, Taif, Riyadh, Najran and Abha.

Even with such support, they said, the trip was always a challenge. The horses, for example, had to be re-shod every 20 days, on average, except in Saudi Arabia where they found horseshoes with tungsten points – so sturdy that the horses traveled 6,000 kilometers (3,728 miles) in the kingdom with only three changes. Another problem was the need for a continual supply of grain to supplement the meager grazing available.

As they rode, Pascale kept a rough diary of her reactions and impressions. This article is a summary of that diary.

— The Editors



n the dawn light, the whole world was pink and gold, the shapes of the rocks sharp and clear, as we rose and began to feed the horses barley, chaff and, a luxury on this trip, carrots and apples brought down to the frontier by friends in Amman...

The friends, Roselyne and Jean Felix, had come the night before - to see us across the frontier and, In sha'Allah, (God willing) into Saudi Arabia, the end of our quest. I remember the sun as a red circle, with purple clouds shredded on the surrounding mountains and the sky, later, as we slept in the sand, full of stars in a silence broken only by the sighs of a dreaming Mzwina...

While we got ready - while I scraped the saddle cloth with a sharp stone (to clean it) – I kept saying to myself, 'Today is the day ...today is the day...' - the day, after eight months of riding, when we got there ...

Finally we were ready. We had groomed the horses. We had saddled them. Now, with a last glance at the saddle bags carefully counterbalancing each other, and at the blue beads threaded into the tails, we girthed up, mounted and were off.

The sun was rising rapidly and a light breeze traced gentle lines in the sand and trembled in the sparse tufts of grass. The silence was broken only by the rhythmic breathing of the horses as, up ahead, a tall white cube detached itself from the background and slowly became the cistern at the Jordanian frontier post.

At the post, the customs officers were polite, but curious; obviously, French visitors on horseback were rare. But they stamped our passports – and, when we vigorously insisted, those of our horses too – and with a final offer of tea waved us into Arabia where, floating in the scription: "There is no god but God and him. Muhammad is the messenger of God." We had arrived. After two years of planning, and eight Saudi Arabia.

The date, I remember, was November 14, 1982. Eight months almost to the day after we had ridden out of the Gardelle Stud Farm and of Saudi Arabia – places like Turkey and Syria and, just yesterday, Jordan. Since then we had come a long way...tested our courage...and found that the ordeals had strengthened us...

In Italy, for example, we had been desperately worried when Mzwina had almost per wrote, because the Mafia wanted to wreak ous.

vengeance on the French, but because Mzwina had eaten grass sprayed with insecticide. It made us feel so helpless watching his eyes roll breeze, was the green flag of the kingdom with a and seeing his great body lying on the ground sword in white and, above it, the famous in- in agony until a capable vet came and saved

By Yugoslavia the horses were showing their mettle and a Croatian peasant offered us months of riding we had, enfin, arrived in headcollars made of plaited rope as a tribute to their courage; the peasant worked on them all night so that we could take them with us. We had covered 1,500 kilometers in a month (933 miles) at an average of 60 kilometers a day (37 headed for Italy, Greece, Yugoslavia and all the miles), sometimes doing as much as 80 kiloother countries between France and the border meters (50 miles) on good ground – such as the grassy banks of the Sava and the Morava rivers. And during this time the horses had no more than 26 buckets of corn plus some grass.

Controls by the Yugoslav militia were vexing – such as fines for riding on the pavement and, in Belgrade, a rule that made us tie up the died from poisoning. Not, as a Greek newspa- horses because they were considered danger-

From Yugoslavia, we continued south through Greek Macedonia, where we crossed Thessaloniki (Salonika), a town of two million people, on foot, leading the horses. It began to get hot, so we exchanged the wool saddle blankets for toweling. But there was nothing we could do about the horseshoes; their shoes were ill-adapted for the work they were doing on hard ground: crampons on the heels and nothing on the toes. A painful lack of balance. Still, it is better to wear tennis shoes than walk bare-

Crossing the Apennines in Italy during December 1983

s we went on, farther and farther, we discovered the limits of what we could ask from our horses. One day we left at 5:00 a.m., hoping to find a riding club in Kavala, Greek Macedonia where we could stop. But we were trapped between the bare and rocky mountains and the turquoise Aegean Sea and there was no water, no village before Kavala. No club there

either, so, though it was 5:00 in the afternoon when we got there, we had to go on. There was nothing for the horses to eat.

Night fell, and we let the horses graze for four hours in a wheat field, while we took turns sleeping on the ground. We continued to Xanthi. Nothing, Further on, we at last purchased some grain and spent the night in a field. We had covered 150 kilometers in six hours (62 miles), having already 4,000 kilometers behind us (2,485 miles) and too few memories of adequate rations...

By then, we were sliding gently from one civilization into another. In the north of *Greece*, as we approached the Turkish frontier, our eyes became accustomed to minarets...to intricately patterned carpets...and to men with long moustaches, fingering small beads of stone or wood. Then the world changed - softly -as we arrived in Istanbul and crossed the Bosporus; Europe was behind us, and we felt that now we were really starting our journey.

During the first week in Turkey, we were apprehensive, but found the people of the countryside to be open and friendly. They stopped us and invited us to share tea, apricots, water melons, sometimes a roof for the night. There were, though, the same problems of communications. People found it difficult to understand why we wanted to give 10 kilos of grain a day (22 pounds) to horses. We also faced our first really hot weather and, near Kirsehir, our first sandstorm.

In Tarsin, we began to cross Anatolia, a region which seemed particularly wild. There were flocks of sheep everywhere, shepherds dressed in sheepskin cloaks, and huge white sheep dogs wearing iron collars with sharp points sticking out. They resembled wolves, but were there to defend the sheep against real

Then we came to the Taurus Mountains, magnificent bare landscapes and sparse vegetation, with a wind that whistled through the passes. We rode along the edge of the road, accompanied by huge trucks with smoking exhausts. The last rain that we were to feel for many months reached us in the Tekir Pass, through which we descended to Adana on a cotton growing plain. Because of the humid heat, the horses began to sweat, and we had to fix pieces of sacking under their bellies to protect them from flies and mosquitoes.

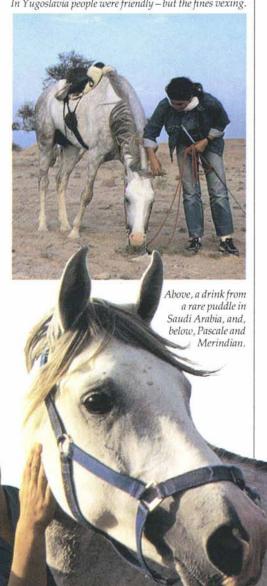
On again to Iskenderun, the frontier at last. Then the "Gate of the Winds," a sinister pass with dead car bodies scattered everywhere, and ruined fortifications. At the Syrian frontier post, everyone was speaking Arabic . . . and we went from one office to another, awaiting permissions from Damascus, for we were not expected. At last, at 9:00 p.m., a reply came: we were allowed in. But the barrier was already closed; we were blocked off until morning. So we tied the horses to a tree and lay down between them, with all our possessions under our heads. But then came a hellish din: 200-300 trucks, blocked like us for the night, had to keep their engines running to provide power for refrigerated perishable goods en route to the Middle East.

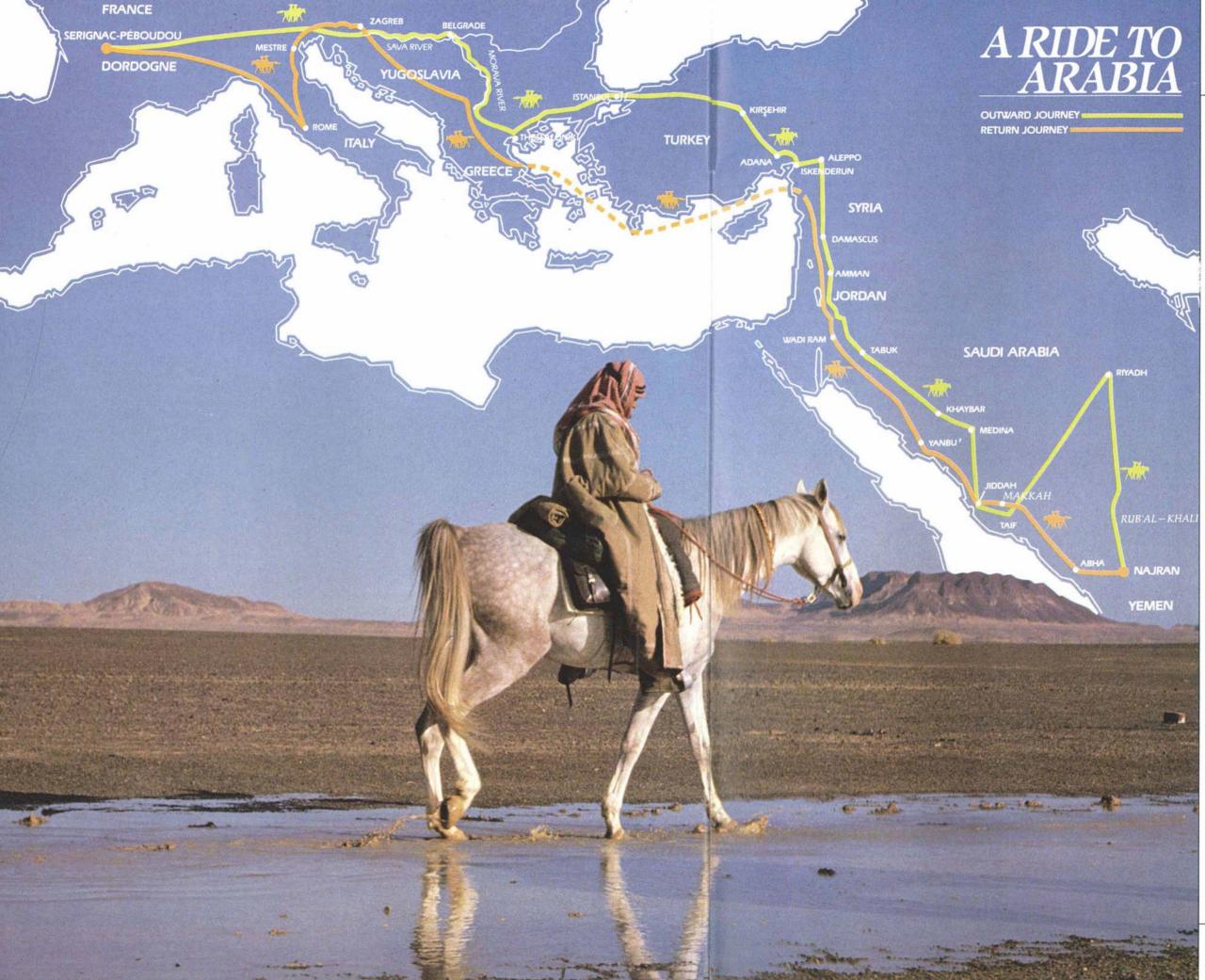
The first village in Syria, where we looked for corn, was a small, friendly community which offered us tea and expected lengthy conversation in return. We were able to wash, put on clean clothes, drink tea and eat fresh pis-

tachio nuts. Next came Aleppo, capital of northern Syria. We rested there for 10 days, recounting our journey thus far, and meeting our first Bedouins - who examined our horses learnedly: their height, width of the tail, the circumference of the cannon bit and to which families did they belong?



In Yugoslavia people were friendly - but the fines vexing







(This was a constant question in the three Arab countries which we were to cross. "Is this an Arab horse? But of which family?"). The Bedouins did not seem to be certain that our horses were asil (pure)...but, nevertheless, brought mares to them the next day.

In Aleppo, we marveled at the citadel and the suq, while Merindian and Mzwina recovered their strength. To help, we added bran, salt and two eggs to their rations of barley and chaff.

We also took them out every day in the Riding Club ring, where we met a Bedouin owner who came every day and was proud of his mare; she had won several races. His saddle was an ordinary cushion, with embroidered panels to cover the sides and croup, and a gaily-colored bridle decorated with shells sewn on it in star shaped patterns, and a chain noseband replacing the bit.

We had to continue, but now two new friends Bassam and Sarai decided to keep us company. How far? We did not yet know, nor did they. It all depended on their horses...

It was now very hot and our riding hours changed accordingly. We woke at 3:00 a.m., set off at 5:00 a.m., rode until 9:00 a.m. Then we took a siesta until 5:00 p.m., and went on again until nightfall. Bassam and his friend kept us company for two days, and then let us continue alone. At first we were welcomed everywhere – though everyone was astounded when they heard that we had ridden all the way from France.

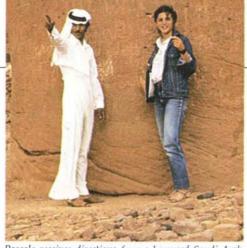
At last, we reached Damascus and found shelter at the French embassy. We recovered our energy and our stallions were introduced to more mares.

t the frontiers there were more problems; we did not have an exit visa. Some incoherence in the system. But at 9:00 p.m., finally, escorted by a French embassy spokesman, we got through the last guard post, passed one last armored car and saw the lights of Ramtha and the uniforms of the Jordanian Army.

In Jordan, our tensed nerves relaxed, but we had asked, through the French embassy in Damascus, for our visa to enter Saudi Arabia and in Jordan the answer gave us little ground for hope. We, however, continued as if we had it, because we believed that we would get it.

For us, the Hashemite Kingdom was a haven of peace and organization. When a police Land-Rover stopped beside us, it was only to offer help. But if those worries were over, so too was flat riding country; hill after hill led us towards Amman.

e passed Jerash, with its splendid and imposing ruins, and on September 23 we reached Amman. There we met other friends, Mano and Enrico Marchis, who were to shelter us for a long month and put us in contact with Princess Alia, the eldest daughter of King Hussein, Jean Felix of Reuters, the news agency, Roselyne, and Hani Bisharah who offered our two horses hospitality at the Royal Horse Club. We visited the city - spread out over seven hills - went to the French embassy, visand her mother Princess Dina; they were in- on.



Pascale receives directions from a bemused Saudi Arab.

terested in our adventure and promised to do what they could to help.

On October 24, our patience was rewarded. The Saudi Arabian consulate telephoned; we could go collect our visa. At the same time, we would be given a letter of introduction to the amir of Tabuk. We were also assured that the ited the roual stables and spoke to Princess Alia government wished to help us. And so we went

We took the King's Road, anancient Roman road followed by all invaders. We saw the Crusader Castle at Kerak, once the base for an incredible Crusader raid toward Medina: 300 knights against thirst, heat and the warriors of Salah-al-Din (Saladin). Then Shobak, the last Crusaders' rampart against the Muslim armies, Wadi Mujib, a huge split in the earth. full of bare black rocks, dust and heat, and Wadi Hissa, where for the first time we met the famous Desert Patrol (See Aramco World, May-June 1980). The patrolmen were small and spare, wearing khaki thawbs with red cartridge belts, a curved dagger on one hip and a holstered revolver on the other. The effect was quite breath-taking. And, a miracle, there was hay and alfalfa for our horses!

Further on, we came on a Bedouin encampment - in the famous black tents. Later, we also encountered rain, wind, fog and cold, and took refuge in a village more or less abandoned. The night was jet black, it was raining, and it was

as cold as the North Pole. We found a dwelling occupied by a Bedouin and his family and "Ahlan! Ahlan!" (welcome). We were strangers, appearing out of the dark and the cold, but even so, there was no hesitation: "Welcome." We shared the meager stew of cold beans in colder mutton fat. We all slept in the same room. Before falling asleep, I thought, "Is a lifetime long enough to repay all the kindness shown to us?"

a'an at last. We were invited to dine with the officials. Then off on the 130kilometer ride to Mudawarah (80 miles), with nothing to be found en route; we would carry six kilos of barley (13 pounds) for each horse, and a kilo of dates for each of us (2.2 pounds). What about water? It had rained during the last few days and we should find pools along the way. Yallah, sadik! Come along friends!

And then, as noted, we entered Saudi Arabia where, of course, customs regulations required an inspection. Mine took place in a hut set aside for women.

When I opened the door, there were sharp cries, a flurry of black veils and silence. I realized that I had confused everyone; because I was wearing riding breeches and boots I may have looked like a man. I removed my kufiya, the Arab headdress, so they could see me, and a woman came towards me. She saw that I too was female, but still had difficulty in recovering from the shock. She had apparently never seen a girl in boots and trousers, wearing a man's head covering, with short hair and no jewelry. She touched me to make sure and kept exclaiming "Ya Allah, ma besir!" (Good heavens, it's not possible!) In a corner, some young girls giggled and I had to laugh too.

Outside, all was in order. We spent the night there and young men came to look at the horses tied up on a grass plot, and, perhaps, take a closer look at this woman who was traveling on horseback from France!

We left the next morning. Once we were out of the town, the desert took over again; we rode across a long plain of black gravel on a sand base; farther off, red mountains barred the horizon. The road was not far away, and, judging from the number of cars which slowed down, we were obviously a puzzle. At Bir ibn Hirmas, the letter of introduction given to us by the Saudi Arabian consul in Amman was a veritable "Open Sesame." We were led to the house of an inhabitant and in his courtyard were two Arab horses and three salukis; only the falcon was missing.



uring that evening. I was asked about the families of our horses - a great honor, apparently, since horses and war are often subjects reserved for men. And what respect for out exception. The days had seemed much the stranger, the wanderer, the person arriving hungry and tired, was shown us! The moment for the meal arrived and, discreetly, we were left alone with a large tray placed on a carpet, containing all kinds of smaller dishes: fresh vegetables cut up, different kinds of meat and honey. We picked out morsels with the fingers of the right hand, or made spoons out of flat basin, a ewer, soap, a towel and scent for our Rub' al-Khali (the Empty Quarter), the ablutions after eating. A last glance at our emptiest desert on the face of the earth, and afhorses, and we fell into a deep sleep on the ter 23 painful, yet magnificent days, we armattresses placed on the floor, drunk with sun, light and space. Arabia Felix! (Happy Arabia!)...

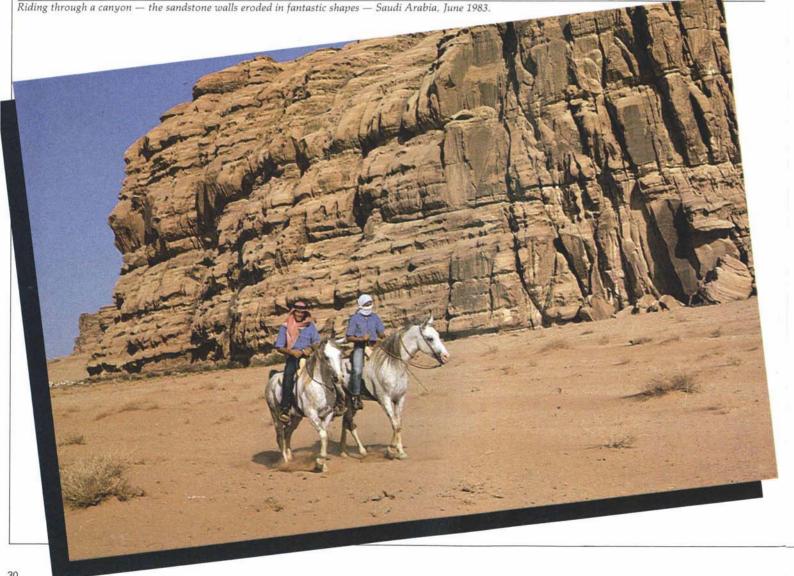
Now that we were in Arabia, the trip around and going home.

بنر ابن هرماس 79 كم تبسوك 1۲۵ كم Bir Ibn Hirmas 69 km 125 km Tabuk Saudi Arabia, June 1983 - the return journey had begun. We were, it turned out, at the home of a seemed to go by at an astonishing speed. We had collected an escort and it stayed with us as

years old. Khaybar, where the green palm trees stood out against the black lava enclosing this whole region; Badr, the site of the first victory by Muslim forces in their struggle with the pagans of Makkah (Mecca). Eventually we got to the Red Sea and Jiddah.

In Jiddah, we spent 10 days at the residence of the French ambassador, learning again, it seemed, how to sit on chairs, sleep in beds and eat with knives and forks after a month sharing the life of our guides, living in the sand and covering 50 kilometers a day (30 miles) withalike, the desert had no boundaries, no horizons: there was just the light and the wind.

Originally, we had planned to continue on to Yemen and Ethiopia, but now it was too difficult because of the famine in Africa. Instead, we went to Taif, the summer capital of the kingdom, crossed the Great Nafud Desert and saw al-Dir'iyah, a former capital destroyed by loaves of bread. In a corner of the room was a the Turks. From Riyadh, we went into the rived at Najran, an oasis of running water and coolness. Here we came to the farthest point of our ride; after that we would be turning





First, however, we joined, on horseback, the honor guard that welcomed the Prince of Abha, crossed a ford at Wadi Turabah, with water up to our horses' chests ... endured the strange feeling of helplessness in a sandstorm ... breathed sand ... ate mutton mixed with rice and, at last, got back to Jiddah.

From Jiddah, a National Guard truck escorted us to Tabuk. We also visited Yanbu', a huge new port on the Red Sea, al-'Ula, a pass where all the rocks are red and yellow, Madain Salih, a Nabatean site, with tombs and inscriptions hewn into the solid rock (See Aramco World, September-October 1965) — mute witnesses to a former age and a different civilization.

Nearby are the remains of a Turkish fort, an old station and a wrecked railway engine belonging to the Hijaz railway, which for a brief period linked Medina with Istanbul, and which made the reputation of the famous Lawrence of Arabia. Indeed, for the next 400 kilometers (250 miles) we were to follow the tracks of Lawrence and his Bedouins, and nothing much had changed. The rails are still there, torn up, twisted and broken; the carriages are lying on their sides, pocked with bullet holes. The stations and forts built to protect the railway are also intact, and the largest, Qal'at al-



Jordan's Desert Patrol, Wadi Hissa, November 1982.

Mu'azzam, still had a reservoir full of water, a windmill for pumping it from underground and a graveyard. To us, this bare and deserted settlement, where men had waited, fought and died, was a scene of sterility and death.

In Tabuk once more, we sensed that we were leaving the desert – and that we would soon awake from our dream. Then we rode through another pass, the prolongation of the Wadi Ram, a symphony of reds and oranges of shattered and eroded sandstone in fantastic shapes, and somehow, too soon, we were back in Jordan, our memories already fading, the magic gone.

The rest of the trip seemed to go by swiftly, yet it took days and was rich in adventure. We crossed Syria by truck, unwilling to run more risks now, spent two days at sea, arriving at

Volos in Greece, where people were on holiday and regarded us with total indifference. We then started back via Yugoslavia, appreciating now the fields of barley, oats and wheat, the water and shade, the mild and friendly sun. In Zagreb, we had to wait for two weeks to obtain permission to go through Italy in order to return to France, and at Grosupje, on a hill track with a 75 degree slope, Merindian did a somersault and cut his thigh. From Ljubljana onward there was snow.

**L** taly at last: Mestre, where we narrowly escaped an accident. Ravenna, where cold, rain, hunger and indifference made us waver. Christmas in the Apennines. Rome, and a welcome from the Italian National Association for the Arab Horse. In Rome, we also visited King Victor Emmanuel's saddleries, where 300 bits were displayed, one for each horse in the stable, and had an audience with the Holy Father at the Vatican. The next day Mzwina slipped in the stable, fell on me and broke my collar bone. Next, Merindian, while Jean-Claude was grooming him, reared and kicked open Jean-Claude's femoral artery. Jean-Claude was in agony for 15 days, before a correct diagnosis was made, and was saved in extremis.

At last, though, we returned to the Gardelle Stud Farm, dismounted and unsaddled for the last time. It was over.

As I said, the memories began to fade almost as soon as we left Saudi Arabia. But not quite. *In spite of the difficulties – the extremes of heat* and cold, the thirst, the frustrations - Arabia had hardened and toughened us and honed our horses. After six months there and 6,000 kilometers (3,728 miles), after gallops over all kinds of terrain, and treks of up to 60 kilometers a day, (37 miles) they were lean, finedrawn, well-muscled, their eyes were jewelbright, their ears pricked and mobile, their nostrils flaring, their muscles still taut, ready to carry us again into the unknown. Sometimes, in the evening, just before falling asleep, we would see them raise their heads and cock their ears as, perhaps they recalled the long gallop towards the horizon, the sun haloed in dust and the dunes rising before us.

Pascale Franconie, who has a degree in arts and a teaching diploma, originally planned to teach French literature, but would now like to breed and train Arabian horses. She is also writing a book on her journey. Jean-Claude Cazade, formerly in the French Foreign Legion, ran a riding and trekking center in the Pyrenees, but sold it to help finance the ride.

