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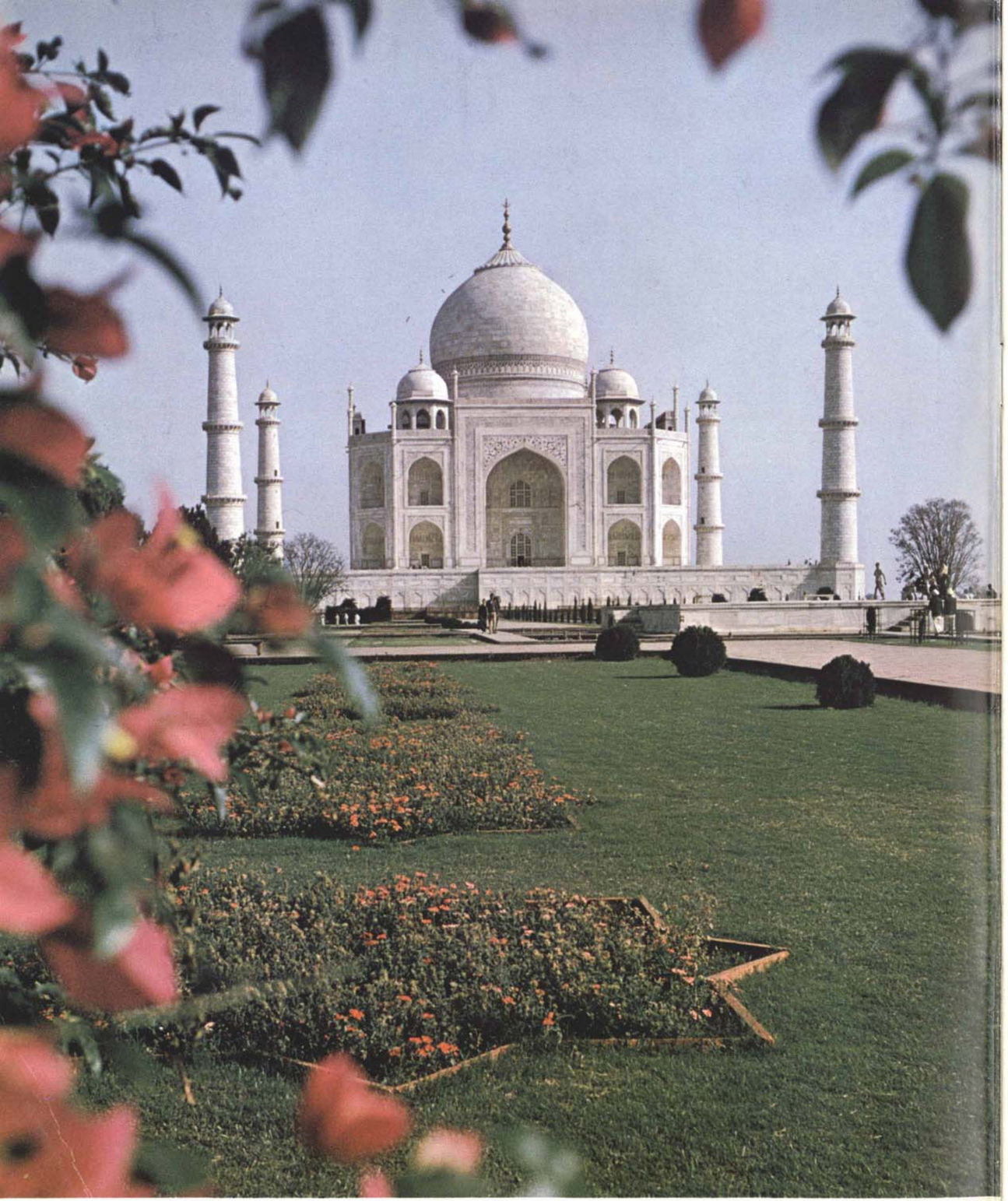
ARAMCO WORLD magazine

JULY—AUGUST 1968

A BOYHOOD IN RAS TANURA

Special in this issue: THE GREATER WAR by Majid Khadduri



In Agra, Shah Jehan, the Mogul emperor of India, erected a splendid mausoleum in memory of his queen—and a superb monument to their love—the incomparable Taj Mahal. Story and color section on page 28.

ARAMCO WORLD magazine

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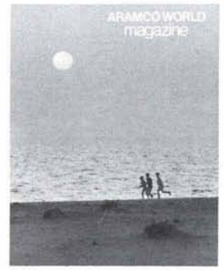


Cover: On the shore of the Arabian Gulf three Aramco boys, caught in this memorable photo by Burnett H. Moody, race through the sand with the exuberance and spontaneity of all boys, suggesting perhaps, that growing up in Saudi Arabia had all—and perhaps more of—the excitement and wonder of a boyhood anywhere. Story on page 16.

To explore the rugged mountains of southeast Turkey they set out ...

INTO HAKKARI

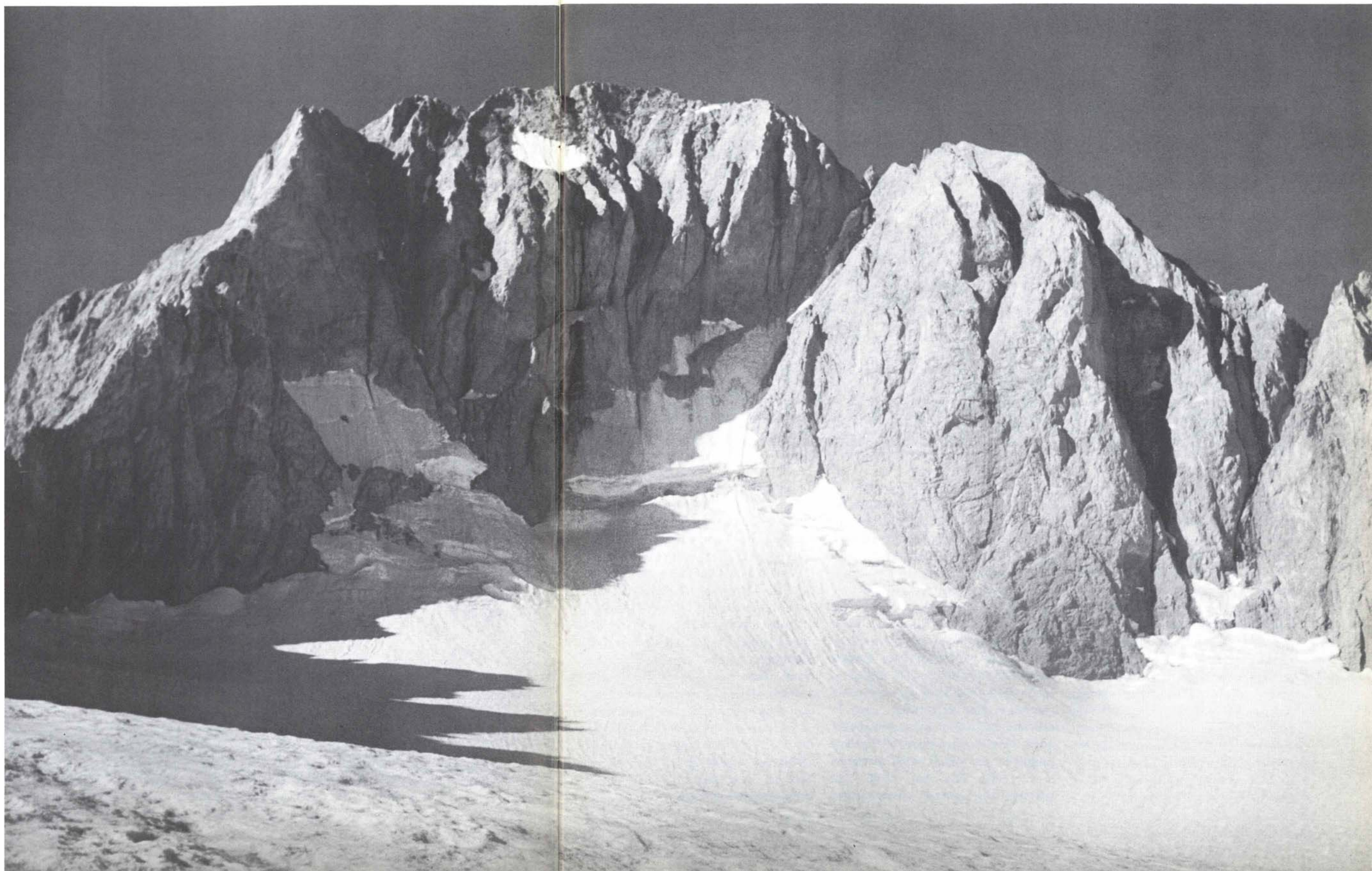
BY ROBIN FEDDEN / PHOTOGRAPHY BY PETER McCALL AND ROBIN FEDDEN

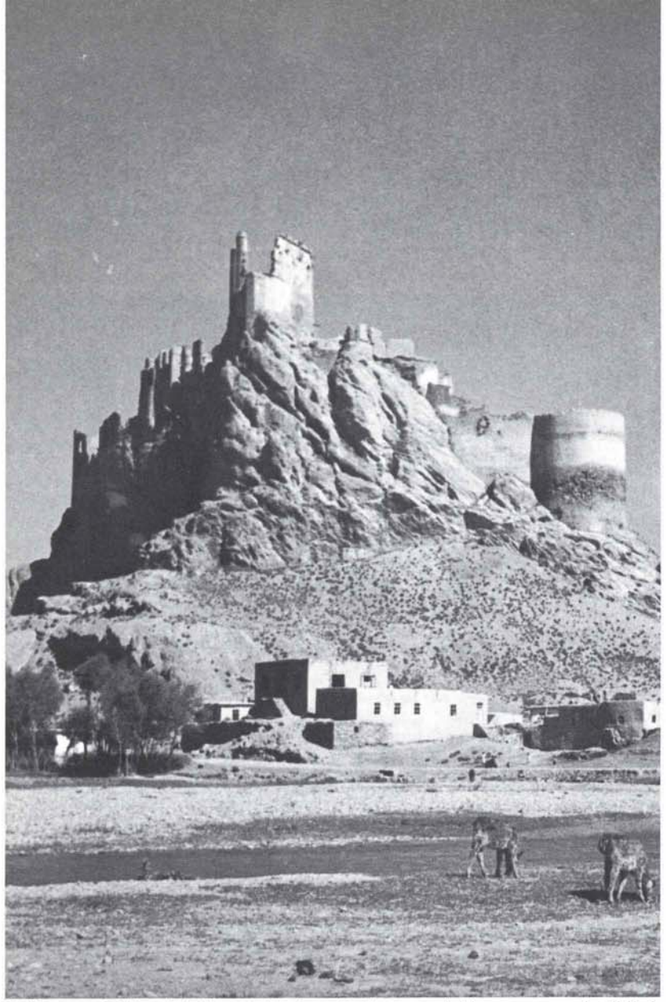
For travelers, Hakkari is the most alluring province in Turkey. Hidden away in the extreme southeast corner, barred to most foreigners for nearly 50 years, it has acquired the irresistible aura of a forbidden land, and stories of its exceptional beauty—of soaring peaks and murmuring gorges, of glaciers on the edge of the desert, and of a rich flora and fauna—have circulated among mountaineers ever since the visit of a German expedition in 1935. The stories have gained added interest from Hakkari's curious history and its long link with the unhappy Nestorians.

Thus, when restrictions were relaxed and the area temporarily opened to foreigners about two years ago, it was with more than usual enthusiasm that four of us set out to explore Hakkari, scale some of the higher peaks in the dramatic Çilo-Sat mountains and collect plants for the Royal Botanic Gardens at Kew. Above all we looked forward to traveling in the magnificent mountains of a little known country and to seeing something of the famous Kurds.

We started from Van, having first climbed the deserted citadel, examined the cuneiform inscriptions 4,000 years old, swum in the mild blue waters of immense Lake Van and visited the 10th-century Armenian church so wonderfully preserved in its isolation on the island of Aght'amar. It was a morning in late June, and we took the road southeast to Hakkari. It was empty country: a maze of hills and shallow valleys, with shepherds and their flocks beside the watercourses and a village perhaps every twenty miles.

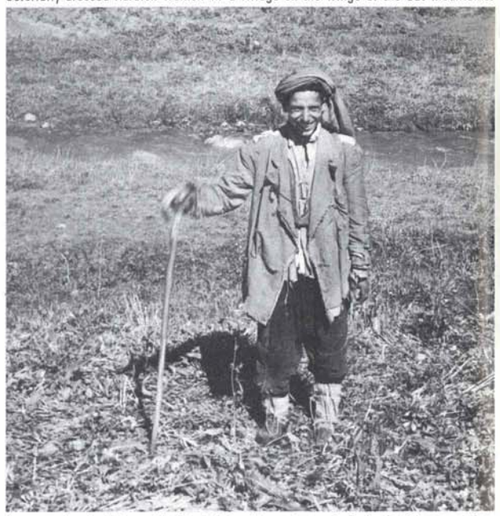
Our base, the road-head at Yuksekova, east of the Çilo-Sat range, was only some hundred miles from Van, but with a long halt at Hoshab it took us the best part of a day. Hoshab has a long history and its dramatic castle, raised on a formidable rock-bastion, once guarded the western approach to the Great Zab River and Hakkari. Antedating the vast





The 11th-century Seljuk castle built on a rock-bastion at Hoshab once guarded the western approach to Hakkari.

Colorfully-dressed Kurdish women in a village on the fringe of the Sat mountains.



A young shepherd boy with his staff beside a stream in Turkey's Çilo mountains.

In the spring, before moving into the towering Çilo-Sat, flocks water on the Gevar Ova, a green basin east of the range where level, marshy expanses lie at an altitude of about 6,000 feet.

Crusader strongholds of Syria, it is almost as impressive and assumed its present form under the admirable Seljuk builders of the 11th century. It still dominates the landscape.

About sunset we got our first breath-taking view of the Çilo-Sat mountains in the heart of Hakkari. They rose to the southwest beyond arid steppe and burnt foothills in a series of long white curves. In summer, barely a hundred miles from the warm Tigris, there was a quality of magic in such generous expanses of snow. Early next morning, with six ponies laden with supplies and two genial Turkish pack-drivers, we set out from Yuksekova to reach them.

The Çilo-Sat mountains, some 50 miles long and 20 broad, run roughly north from the Iraqi border. On the east they are flanked by a curious basin, known as Gevar Ova, a flat green plateau whose level, marshy expanses lie at some 6,000 feet. A deep divide, through which the glacier-fed torrent of the Green River carves its way westward, almost splits the range in half. Çilo, the northern half, is the higher, rising in Mount Reşko to 13,680 feet. Sat, the southern half, is nearly 1,000 feet lower, but the peaks have a dramatic quality suggestive of the Dolomites; there are small lakes cradled in the high valleys, and, in summer, masses of flowers: white hollyhocks and huge poppies, and yellow umbellifer and purple vetch that grow six feet high. Our tents on the high pastures were pitched among tulips, primulas, and gentians, and from our climbs we brought back a variety of drabas and other small rock plants growing sometimes at over 12,000 feet.

The wildlife is equally varied. Among birds we saw wheatears, snowfinches, smartly dressed black-headed buntings, and Alpine choughs. We flushed quail, partridge, and the cumbersome snowcock *(Tetrogallus Caspius)* more usually associated with Iran and the Himalayas, and saw eagles and vultures sailing on the seas of air between the peaks.

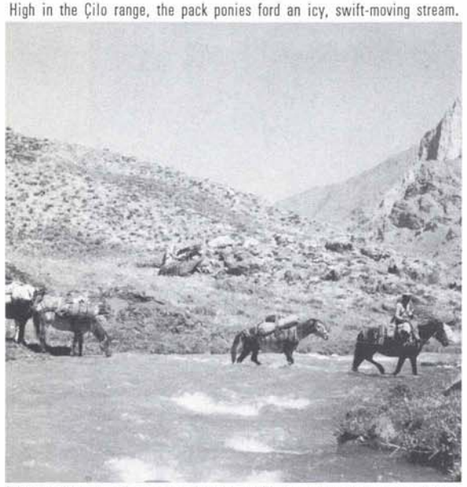
We also found mountain hares, ibex, and bears—both the brown bear and the little honey-colored Syrian bear—more than once at uncomfortably close quarters. There were so many, in fact, that we came to recognize their acrid smell, in time, fortunately, to permit us to give a wide berth to the places where they lay. On one occasion, in a narrow snow-filled gully between broken cliffs, a young Syrian bear, probably curious at the unfamiliar sound of human voices, appeared above us, lost his balance and slid on his back down a snowy couloir to land, visibly shaken, almost at our feet. In autumn the brown bears are a menace to the villages that skirt the range, coming down after sunset to gorge on the fruit and vines. Men and boys, scaring them off with rattles, make the night hideous until dawn.

It is from these villages that a local migration takes place after the long, snowbound winter. The villagers, semi-nomadic, bring up their flocks to pastures as high as 11,000 feet, and for three or four months establish their tented encampments in the heart of the range. The economy is almost wholly pastoral and before they move into the Çilo-Sat there are sometimes as many as 10,000 sheep, goats and cattle on the width of the Gevar Ova.

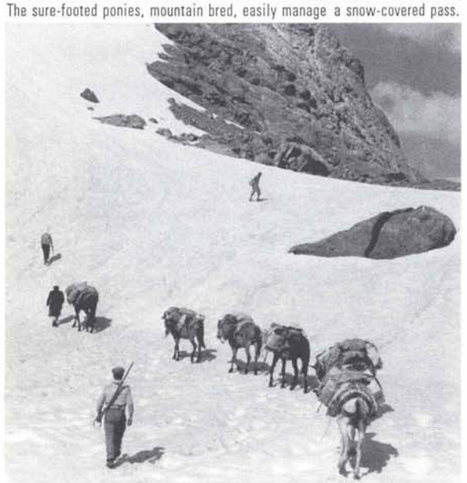
These shepherds, a branch of the Hakkari tribe after whom the province is named, arrived in the 14th century. Though their language has strong Iranian elements, they claim Arab blood and Abbasid descent and for centuries maintained a good measure of independence. It was only after 1925 that their feudal and tribal system began to disintegrate, and that they submitted to effective control of the government. They seemed reconciled to change and have shown little disposition to make common cause with the neighboring Kurds of Iraq.

When we had first set out from Yuksekova, the *kaimakam* had warned us against two things—mountain Turks (Kurds) and bears—and had insisted that our pack-drivers carry arms. "Kurds and bears," he said, "are unpredictable." Since he had been right about the bears —they stampeded our ponies several times—we were more than a little uneasy when, at last, we came across a Kurdish encampment. We approached warily, watching their huge, white, morose dogs out of the corners of our eyes. Our fears were groundless. The

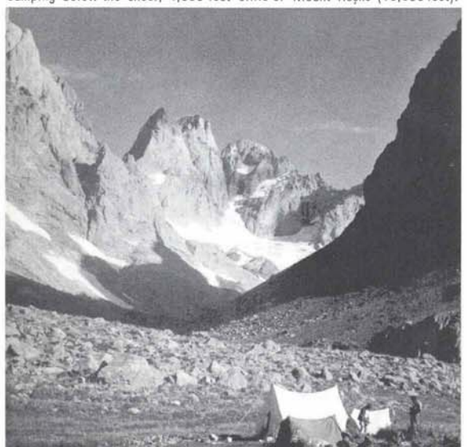
High in the Çilo range, the pack ponies ford an icy, swift-moving stream.



The sure-footed ponies, mountain bred, easily manage a snow-covered pass.



Camping below the sheer, 4,000-foot cliffs of Mount Reşko (13,680 feet).



men welcomed us and the women, dressed like peacocks in saffron, red, and indigo, their long skirts glinting with sequins, laid out a *kelim* for us to sit on and offered their simple fare: thin round loaves of native bread, onions, yoghurt, and *ayran*—the Turkish milk drink—chilled in a nearby stream. Though they were very poor, we found this unfailing hospitality whenever we chanced on their encampments, a hospitality that flatly rejected our offers of payment. We did give them chocolate, but even the children, who had never tasted it before, spat it out.

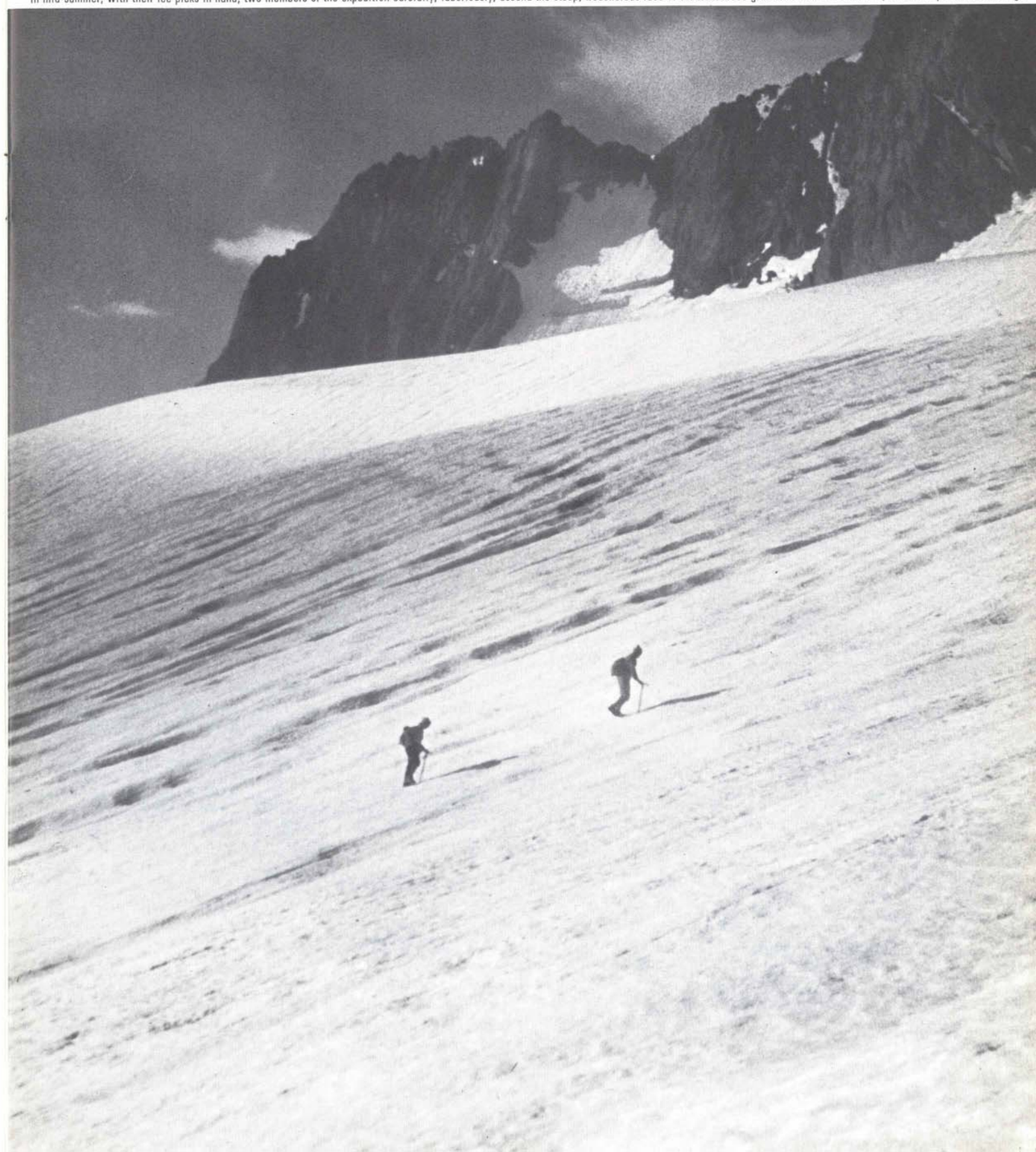
The Kurds usually camped in a wide semicircle. Some of their shelters were stone walls roofed with yellow umbellifer, but most were the Bedouin goat hair tents. In front of each hung a tripod from which they slung skins to churn milk in and cradles for the children. My inadequate command of the Turkish language inadvertently furnished proof of the kindliness of these shepherds. In the heat of noon one day my inept instructions dispatched our ponies and drivers to the wrong pass—along with our sweaters, anoraks, and all our provisions. Hours later, hungry and growing steadily colder, we reconciled ourselves to an unpleasant night in the open at 9,000 feet. As darkness fell, and we huddled together trying to keep warm, we saw, a mile or two away, the flickering fire of a Kurdish encampment. Then, as I was dropping into a chilly and fitful sleep, I felt a sudden sense of unaccountable well-being. Tactfully and silently, emissaries from the encampment had spread an immense palliasse over us. We slept warmly and well, and woke at dawn to find our benefactors crouched at a discreet distance round a fire brewing our morning tea. We drank it out of vessels whose traditional form the Seljuks would have recognized.

Strangely enough, the Kurds, though long established in the Sat, are relative newcomers to the Çilo. The fastnesses of the Çilo were for centuries the home of the Nestorians, in primitive days the most widespread of Christian communities. When the Nestorians were declared heretics, they found a retreat, with virtual independence under their patriarch, in this remote area, and developed it into green, productive farmland. For hundreds of years they divided the Çilo-Sat uneasily with their Muslim neighbors, but in 1914, encouraged by the Russian advance from the Caucasus, decided to throw in their lot with the Allies. It was a disastrous decision. The patriarch mobilized his people, but Russian help failed to arrive and the Nestorians were faced with annihilation. With no alternative but flight or massacre, the whole community withdrew—it seems to have been a brilliantly executed military operation—by forced marches through the mountains into Iran, never to be a united community again. Scattered groups still retain their religion and identity beyond the Turkish borders.

For more than 20 years the Çilo remained uninhabited and although in the last generation Muslim shepherds began to move into the old Nestorian territory, half this green terraced area is still uninhabited. In summer, however, Kurdish flocks now range the pastures of the whole Çilo-Sat, and the memory of the Nestorians with their stone-built houses and terraced orchards is rapidly fading. Though we regretted the passing of this ancient Christian minority, our contacts with their successors were among the happiest memories that we brought away from Hakkari. It will be some time before the West changes these simple and hospitable people. With its mountains, unlike the deserts of the Middle East, impervious to the motorcar and all it brings, Hakkari thus may retain its wild untamed character for years to come.

Robin Fedden has traveled widely in the Middle East, is the author of several books on the area including Syria and Lebanon *and* Crusader Castles *and now works with Great Britain's National Trust, helping in the care of historic buildings and collections.*

In mid-summer, with their ice picks in hand, two members of the expedition carefully, laboriously, ascend the steep, treacherous face of the Hendevade glacier in the Sat mountains, here nearly 12,000 feet high.

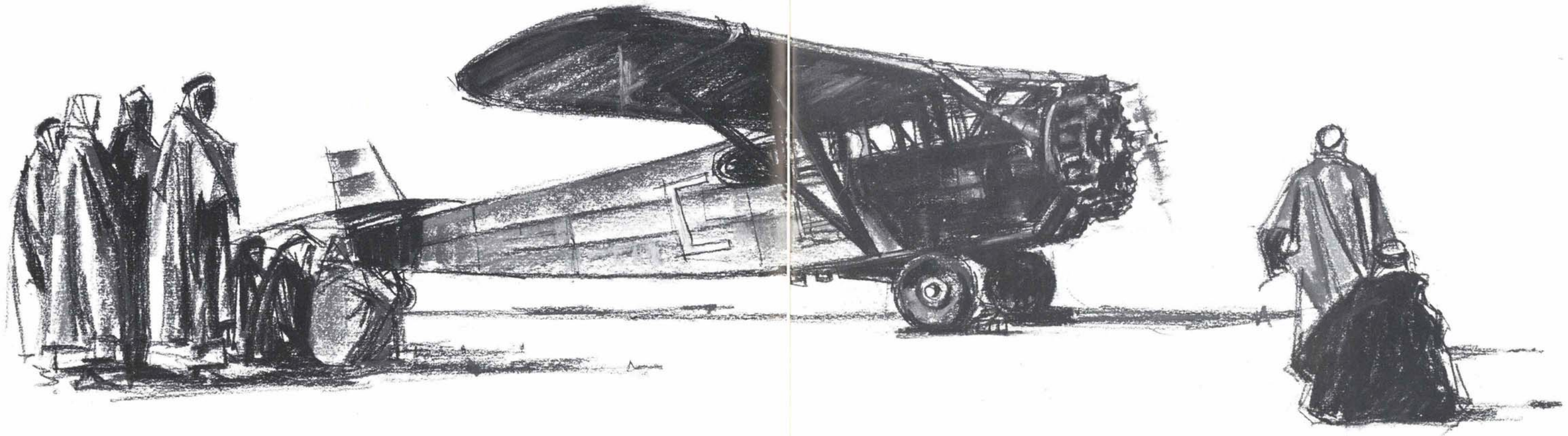


DISCOVERY!

the story of ARAMCO then

CHAPTER 4: THE PLANE

BY WALLACE STEGNER / ILLUSTRATED BY DONALD THOMPSON



SYNOPSIS: In the fall of 1933 two American geologists stepped ashore at Jubail on the Arabian Gulf. They were the vanguard of a ten-man beachhead that the Standard Oil Company of California, with the blessings and encouragement of King Ibn Sa'ud, was establishing in the eastern part of Saudi Arabia.

The preliminaries leading to that landing had taken many years: from the early 1920's when some British financiers formed a syndicate to deal in oil concessions, to the day in 1933 when Socal's land-lease expert Lloyd Hamilton wound up three and a half months of negotiations and cabled company headquarters in San Francisco that exploration of the concession area could begin.

During those years many countries, companies and individuals had played important roles: Great Britain, hoping to maintain its dominance over Middle East petroleum; the syndicate, which offered an American company its first opening in the Middle East; H. St. John Philby, the British explorer, and Charles Crane, an American philanthropist and Arabist, who helped King Ibn Sa'ud decide to go after oil; mining engineer Karl Twitchell who first assessed the Kingdom's mineral wealth, and Hamilton. Above all there was the King himself whose far-reaching decision it was to award the concession to develop his country's oil to the firm that for many years afterward would be called Casoc—the California Arabian Standard Oil Company. Finally there were the men who made the beachhead, men like Robert P. (Bert) Miller and Schuyler B. (Krug) Henry, down-to-earth, practical men handpicked for hard work and hard living.

One by one they straggled in, went to work, made friends, and, perhaps inevitably, began to introduce the comforts and luxuries which are common today but which in Saudi Arabia 35 years ago were still novel. In the meantime they traced out on their maps as best they could the features of this almost featureless land, waiting with a growing impatience for the airplane they had to have to do the job properly—the airplane that was only then taking shape in far away San Francisco.

Among the agreements worked out between Standard Oil's negotiator Lloyd Hamilton and the representatives of King Ibn Sa'ud, one of most important was the Company's right to use airplanes in its exploration work. The agreement was subject to strict but unspecified limitations, but the merest look at the map of the concession told Socal officials that they would need to use the right.

In September, 1933, about the time Miller and Henry were establishing the beachhead at Jubail, Clark Gester, Socal's chief geologist, called in a former employe, an ex-Navy pilot then conducting an air mapping business in Los Angeles. Gester knew Dick Kerr from a long time back, and knew him as a man peculiarly qualified for jobs demanding ingenuity, versatility, and imagination. Kerr was a graduate geologist from the University of California; he was a pilot and a mechanic; he was an excellent photographer; he boiled over with energies and enthusiasms. And if on a job he ran into something that he didn't know, he was the kind who would go without sleep for three nights in a row and come up knowing it. If you had tied his elbows he couldn't have talked.

Gester wanted him to frame a proposal to make an aerial geological reconnaissance, on a contract basis, do the necessary aerial photography, and provide air support for ground parties in Arabia. Kerr looked up Arabia in the atlas, obtained the general impression that it was covered with high sand dunes, and decided that a small plane would work better than one of the new Douglas models. He and his partner, Walter English, submitted a proposal, Gester and Doc Nomland approved it, and Socal ordered a special Fairchild 71 from the Kreider-Reisoner plant at Hagerstown, Maryland. It would have a hole in the bottom for taking vertical photographs, a removable window on each side for taking obliques, and in deference to the expected sand it would have the biggest tires they could find: 36×18's. Charley Rocheville, who would be Kerr's co-pilot and mechanic, designed an extra gas tank which left seating space for only four people, but increased the cruising radius to a safe 350 miles. Kerr bought all the equipment and supplies he thought necessary (including 5,000 gallons of aviation gasoline in 5-gallon cans), shipped them direct to Bahrain on the Socal tanker *El Segundo*, and headed for Maryland to give the makers of their plane some pointers.

In the midst of that the firecrackerish Kerr somehow found two weeks to tackle a major problem: how to get film that could stand up to Saudi Arabia's heat. He went to Rochester, New York, and there conducted a series of tests with the Eastman Kodak plant for the developing of aerial films in warm water, since, rumor said, even the drinking water in Arabia never got cooler than a slow boil. Between them, he and the Eastman Research Division found a process of hardening the film with potassium chrome alum, and succeded in developing film at water temperatures as high as 120°. By the end of the month Kerr had his photographic supplies taken care of, and was in New York buying electrical parts and water distillation equipment for his desert darkroom.

Kerr had arranged for the plane, due to be completed on February 1, 1934, to go as deck cargo on the *S. S. Exochorda* of the American Export Lines, sailing February 6, but it was not until the day before the *Exochorda* was to sail that the plane was delivered. Hastily, Charley Rocheville took it for a half-hour test flight to see if it flew—it did—and then, with Kerr, headed for North Beach, Flushing, now the site of La Guardia airport, where they had to land it on a foot of new snow. Next morning a crane set it, with its wings folded locust-fashion, on a barge, and an hour before sailing time the barge bumped alongside the *Exochorda*. The Captain, a man named Reyerson, was not pleased, and was not going to accept any airplane this late in the game. But Dick Kerr was a hard person to refuse; if he couldn't talk you down he grinned you down. At four that afternoon the *Exochorda* put out to sea with the Fairchild 71 parked on its afterdeck and Kerr and Rocheville frantically lashing it down and getting canvas covers over it.

Twenty-three days out of New York they pulled into the harbor at Alexandria, unloaded it from the deck and watched anxiously as it was ignominiously hauled six miles through the city with its tail skid on a donkey cart and about a hundred Egyptians helping to pull and push. North of the city, at a small private airport called ar-Ramlah (meaning "the sand"), they tested the Fairchild thoroughly, and made friends with Royal Air Force officers who gave them copies of the RAF flight maps to all the places they would stop at en route to Saudi Arabia: Cairo, Gaza, Rutbah Wells, Baghdad, Basra, Kuwait and Bahrain.

When at last they were ready to take off and fly the last leg, however, they found that they could not leave Egypt without a *triptyque*, a *carnet de passage*, and God knew what else. That meant explanations, forms, the posting of bond, little journeys from official to official, the discovery that they would have to move the airplane to Cairo to get clearance, long arguments with customs about the precise purpose of all the miscellaneous cargo aboard the craft. After two weeks of it they were about convinced that they would spend the rest of their lives in Cairo, but the RAF people did them favors and got them their permit. If it occurred to them that they would need permission not only to leave Egypt but to land in Saudi Arabia they did not let the thought bother them; with their Egyptian papers finally in their hands they went to the airport and looked aloft. A sandstorm was blowing, the visibility was about a hundred yards, their eyes and teeth were full of grit. But they had been in Egypt all they wanted to be; they climbed in and took off for Gaza.

Visibility upstairs was no better than down below; within a short time they had completely lost sight of the ground, except those parts of it which were flying in small fragments in the air. Acknowledging that they couldn't possibly find Gaza in the murk, Kerr turned back—and found that he couldn't find Cairo.

Eventually he did find the Nile delta, whose agricultural development held down the sand and permitted some low contact flying back up the river. With wheels practically scraping the housetops they located the airport and came down. There some displeased officials informed them that since they had now used up their permit to leave Egypt, they would have to obtain a second one.

That took most of another week. This time, when they took off, they waited for clear weather. Their friends the RAF escorted them to Ismailia in two fighter planes, partly out of friendship and partly to see that they crossed the Suez Canal at that particular spot and no other.

Gaza held them overnight. In the morning they left for Baghdad, with a planned fuel stop at Rutbah Wells, but they arrived at Rutbah Wells on the bumper of a brisk tail wind, and having plenty of fuel, decided to go straight on to Baghdad. Over the Euphrates they met another sandstorm that reduced visibility

and had them hedgehopping across the bald, barren desert. Expecting the region between the Tigris and Euphrates to be a Garden of Eden, they went straight over the mud town of Ramadi on the Euphrates, recognizing the river but not the town.

The country was so much more barren than their expectations that they thought they were lost. They decided to hold speed and course for one hour; then, if they had not found Baghdad, they would turn back to the Euphrates and hunt a landing place. They were about to turn to the river when they found themselves flying over a big town that turned out to be Baghdad. They were surprised. So were the airport officials, who chided them for not keeping to their announced schedule, pronounced *shedule*.

Again the Royal Air Force was friendly, entertained them, sent them on next day to Basra to yet another RAF mess and more entertainment. But the Basra RAF was emphatic about two things: under no circumstances should they fly over the Shaikhdom of Kuwait, and under absolutely no circumstances, no matter who told them it was permissible, should they try to land in Saudi Arabia. They should go to Bahrain and let the RAF there try to get them permission to cross over. To the RAF pilots, who had perhaps listened to too many exaggerated and fanciful stories about Bedouins, coming down in Saudi Arabia sounded, rightly or wrongly, like finding yourself afoot at night in leopard country.

It did no good for Kerr and Rocheville to protest that their outfit at Jubail had all the necessary permission and had already laid out a landing strip. The RAF could not be convinced, and insisted that the two should accept as a present a pair of .45 automatics. The thought that perhaps he had better cable Bahrain, and try to get a message to Jubail that they were arriving, entered Kerr's head, but it seemed a lot of trouble. And anyway, the plane could get there long before any message.

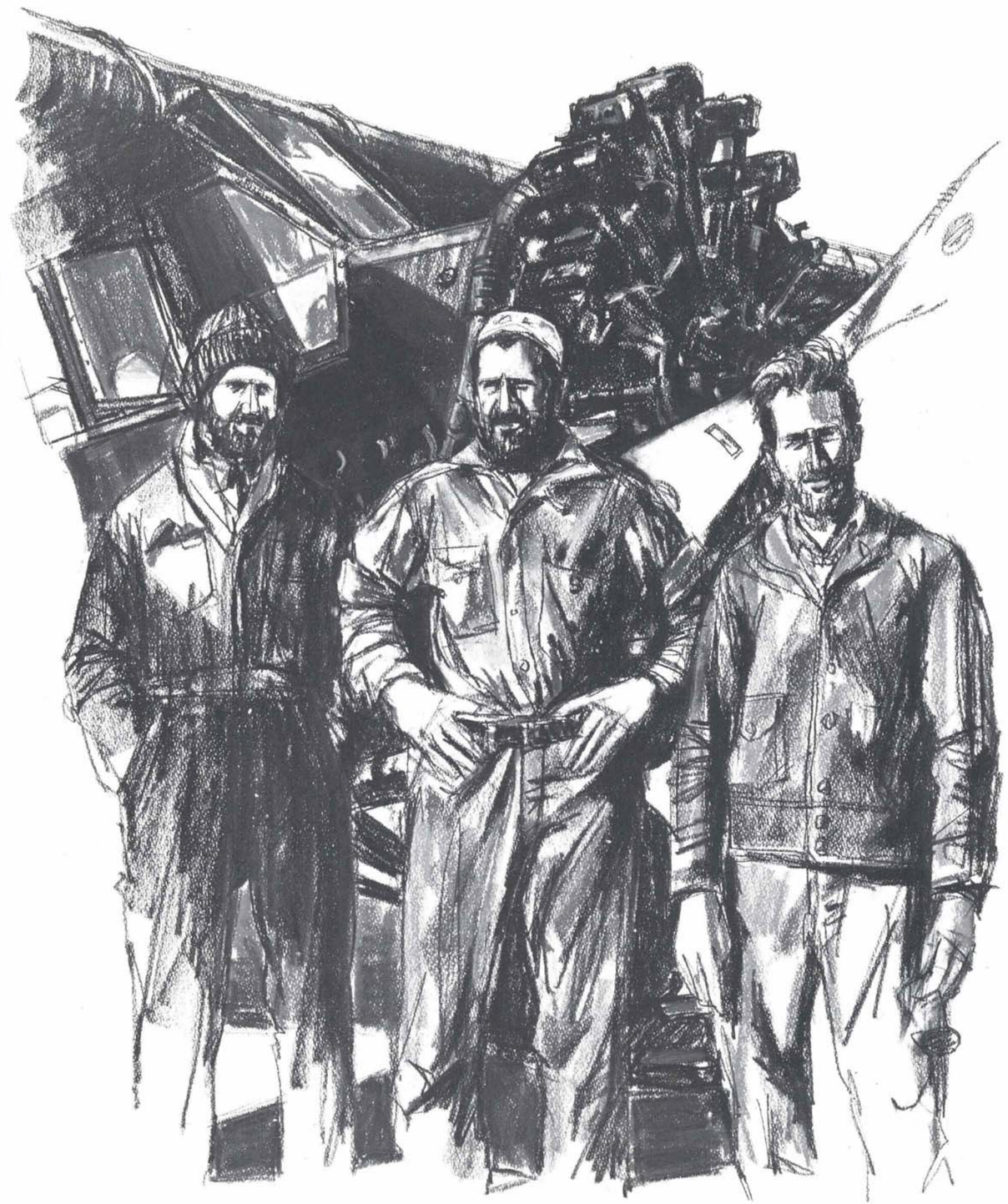
They did follow the advice about not flying over Kuwait, staying out to sea south from Basra until they were well past the Shaikhdom. Then they turned in to the Saudi Arab coast and flew down along it, rubbernecking at the occasional black patches of Bedouin tents, the improbable-looking palm gardens, the shoreline colored like changeable silk, with arrowy fishtraps pointing out toward deep water and an occasional dhow leaning across the wind and the cormorants thronging on bare coral islands.

Finding Jubail gave them no difficulty. They made one pass over it and saw an airstrip (Burchfiel and Dreyfus had dragged it the week before) and they saw people standing whose mixture of clothing said that they were not quite Arabs. Rocheville was flying the plane. He circled and brought her in, and because he was up in the nose he insisted later that he was definitely the ninth Casoc man to arrive in Arabia. Kerr, who was out of the plane first, disputed his claim. But Kerr achieved another distinction by his rush to put his feet on Arabian soil: he was immediately arrested by the Amir of Jubail for landing without permission.

The Amir was greatly agitated. Though he had heard from Miller, who had heard from Lenahan, that the plane was on the way, he had received no orders about it from his government. When he saw the Fairchild coming in, he rushed a detachment of soldiers to the field to protect it from the crowd. The crowd, hearing the plane and then seeing the scramble of the soldiers, rushed after. When the Fairchild came in, touched its wheels and bounced and rolled to a stop, and the door opened and Dick Kerr burst out to greet al-Hasa, the joy of the crowd could not be contained. They surged forward to meet him, the soldiers set upon the crowd with canes and camel sticks and scattered them over the desert, and the Amir, trembling with outrage, arrested Kerr and Rocheville and ordered the plane taxied to the compound and padlocked. No one was either to fly it or work on it. Two days later he said it should be taken to Tarut Island and there impounded under the protection of the Amir of Qatif until the Government sent some sort of instructions about it.

Miller, naturally, did not want the delay and nuisance of taking the plane to Tarut Island and leaving it there, possibly exposed to the fingers of the curious. He stalled by demanding that the pilots first be allowed to inspect the landing field on Tarut, to see if it was safe, and he had Burchfiel arrange donkeys to take them from the boat to the field, some distance inland. Kerr, though somewhat crestfallen at the effect he had created by his dramatic arrival, was not so crestfallen he was going to ride any donkey. He could make better time walking. So he suffered a second humiliation. The white donkey, its forelegs and ears stained with henna, took off and left him as if he were standing still: al-Hasa donkeys, he discovered, can out-walk, out-trot, and out-gallop a man.

The Tarut field they found short, bumpy, and dangerous, with the shells of old planes scattered



over it. Happily they reported to the Amir that they could not possibly set the Fairchild down there. Unhappily the Amir insisted; Miller said he would not order the plane to be moved: if the Amir wanted to have somebody take it over there, that was his responsibility.

In Jiddah, meanwhile, Lenahan was finding the airplane problem more difficult than the problem of customs duties. The King and Abdullah Sulaiman were both extremely angry about the unauthorized landing of a foreign plane on Saudi Arab soil, and half inclined to rescind the temporary general permission contained in the Private Agreement. There was a short, almost savage flurry of irritability: impetuousness of the Dick Kerr variety, innocent though the Saudi Government finally understood it to be, could be dangerous.

Suspicion communicated itself downward, too. The Government radio operator, during all the excitement, was sitting one day in the padlocked plane with the radio turned on, and heard the signal of Bushire, across the Arabian Gulf in Iran. Convinced that the oil men had been sending messages to Iran, he rushed to report, and neither he nor his superiors could be placated until it was demonstrated to them that the plane's sending apparatus was hopelessly broken down, and that no one could have sent a message if they had wanted to.

Eventually everyone *was* placated, and eventually it came out that Ibn Sa'ud had two very good reasons for being upset at the unauthorized landing: he was having trouble with the Imam of Yemen (trouble that was to break out into war the following May); and he was afraid that if they flew too low or too far in toward the Najd, the Bedouins might be tempted to try out their shooting eyes. Kerr and Rocheville kept discreetly to themselves the unheeded warnings of the RAF in Basra.

For those reasons the King insisted they use no radio, fly high and stay out of the interior. The prohibitions reduced the usefulness of the plane, but it was still better and faster than the car-and-camel caravans for reconnaissance. While Lenahan worked to get the restrictions lessened or removed, Kerr and Rocheville prepared the Fairchild, and on March 30, quite a while after they had leaped out to embrace the sands of Arabia and the Amir of Jubail, they made their first tentative air explorations. The first flight took them down the coast as far as Selwa, at the foot of the Qatar Peninsula, the second over the Ras Tanura sandspit, Tarut Island, and the Dammam Dome.

To achieve the most within the limitations imposed upon them, Miller proposed, and Kerr agreed to, a plan of flying straight parallel courses six miles apart, over any area to be studied, while geologists with drafting boards mounted by the windows sketched everything in the three-mile strip on each side. They noted everything—settlements, *ains*, palm gardens, physiographic details, caravan routes, and if they saw anything that looked particularly interesting they photographed it. The most interesting thing they had so far found, the Dammam Dome, they photographed very thoroughly from the highest altitude they could get the Fairchild to reach.

But it was aerial surveying against difficulties, and it strained their capacities for adaptation. For one thing, on top of the limitations imposed by the Saudi Government, Kerr discovered that he had a mild personnel problem. Felix Dreyfus, technically a mechanic, had come out to Arabia expecting to have something to do with airplane work, and his expectation was not unnatural. Back in Sausalito he had once built himself a homemade plane and got it to fly. Later he had been a pilot and mechanic for the Loening Amphibian Ferry Service across San Francisco Bay, and when Socal drilled a wildcat on Santa Rosa Island off Santa Barbara, he had flown the company plane back and forth across the channel there. Now here were Kerr and Rocheville taking over the whole air operation, and Dreyfus was disappointed. But his first disgruntled suspicion could not persist in the face of Kerr's good nature, and in the face of the fact that Kerr was not a company employee, but an independent contractor. Dreyfus eventually shrugged away his disappointment, and when Lenahan got the ban lifted against flights to the interior, and a little later got the restriction removed against use of the radio, Dreyfus turned his ingenious and multiple talents to the task of keeping the radio communications system running. He made no pretense of being a radio technician, but they had little "out-of-order" time.

With radio permitted, the field parties acquired ears, though not yet a voice. The only voice was that of the plane's transmitter, kept constantly busy sending messages and time signals to the ground camps, and reporting its position every half hour to Jubail. It had a good many positions to report, for now they were systematically coordinating air and ground work and getting Arabia onto paper.

They established a carefully-checked east-west baseline clear across the concession, from Jubail to the Dahana sands, and a north-south line from Jubail to Selwa. From these they worked out a net of aerial triangulation and tied it in with the map data, the ground traverses, and the astronomical stations of the ground crews. As fast as they got something new, Allen White transferred it onto his base grids.

Almost at once they found themselves correcting the existing maps, which were based primarily upon the data of a few explorers and upon camel traverses. Camels did not have speedometers, and explorers in Arabia had not had the advantage either of radio time signals or of chronometers that worked. All of the explorers, of whom Philby turned out to be the most dependable, had managed to get a reasonably good latitude fix by an observation on Polaris at upper and lower culmination without knowing the time, but establishing longitude required either accurate chronometer time or a radio time signal. Now, equipped with both, the Casoc parties found some points on the map of al-Hasa off by as much as 25 miles.

Through the good flying weather of April they were able to be in the air three or four days of each week. When they had photographed the coastal area they gave Henry, Hoover, Loch and Brown a helping hand by flying them over the regions they had been working with no higher point of vantage than the top of a dune, a truck, or a camel. Toward the end of April the plane established Henry and Hoover in a camp 160 miles west of Jubail, farther out in the desert than they had yet dared to go, and used that camp with its camel-supplied gasoline dump as a base from which to cover previously unstudied country.

It was fair country to fly in except when the sand blew, and after their experience in Egypt they watched the barometer very closely indeed. Landing was not the problem Kerr had feared. The large soft tires of the Fairchild, though they had a tendency to make the plane unstable and cut its speed by 15 miles an hour, permitted them to come down even in soft sand, and they could taxi across sand that the touring cars could not traverse. Most of the time they were within gliding distance of gravel plains or the coastal *sabkhas* on which they could have landed even with hard tires. The *dikaka* was the only kind of country that gave them bad dreams. Across these sandy plains, sometimes level, sometimes rolling, always closely set with tough runty shrubs hardly two feet high, the prevailing north wind had built little washboard ridges on the leeward side of every bush. *Dikaka* was no place to try to land an airplane.

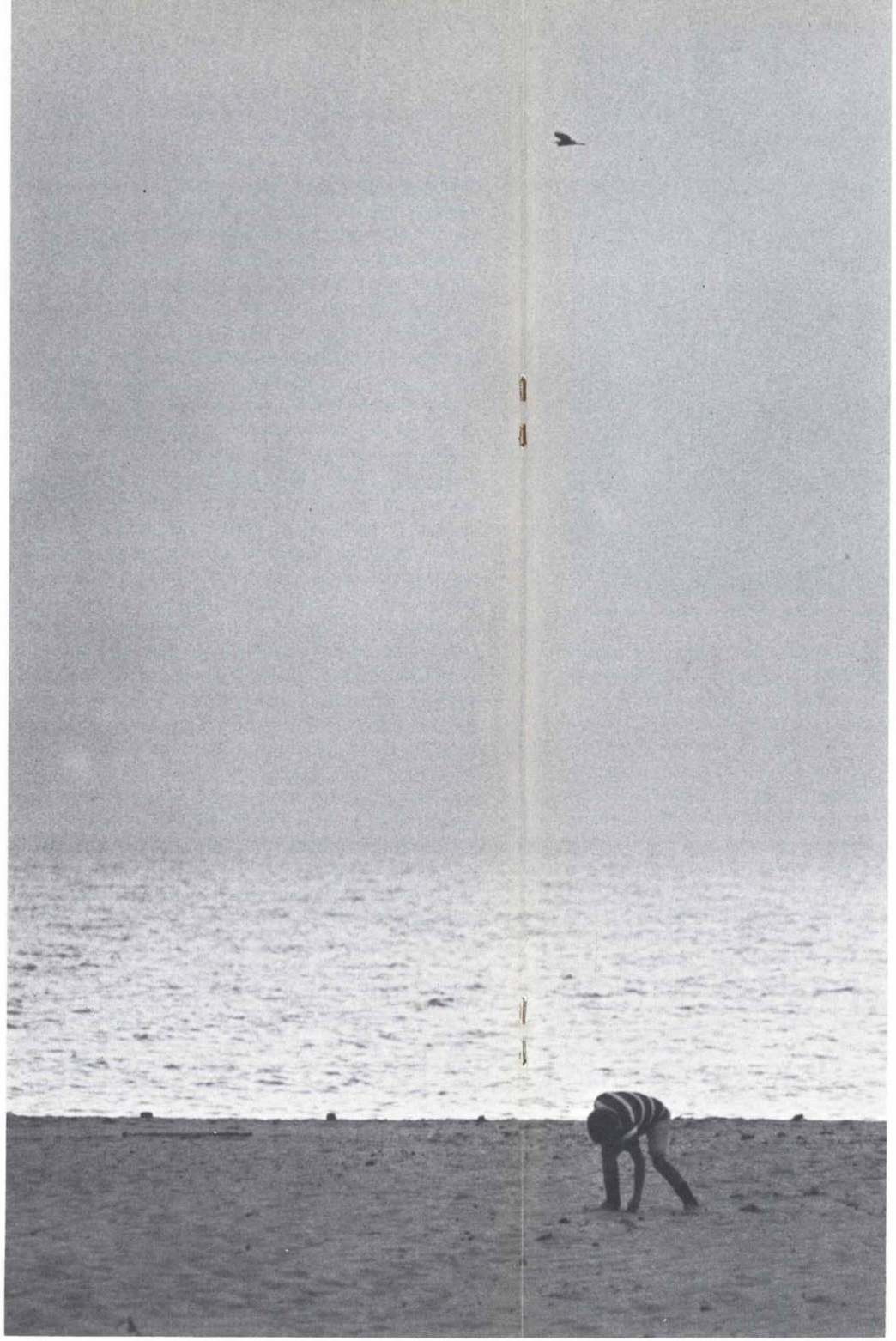
Quite apart from the terrain, they worried some during that first season about what might happen to them if they had to make a forced landing out in the empty desert. Even assuming that the Bedouins were well-disposed, how would they manage to survive heat, thirst, sandstorms, serpents, in a region without a tree or a settlement, with no human habitation except the occasional black tents of the tribes of Ishmael? Experience taught them that they need not fear. The Bedouins had a habit of seeing everything that went on; even in a region apparently empty of humanity, they had the knack that some of the Americans had observed among the Navajo. Beside a broken car or a stranger afoot or mounted, they could appear out of the ground. And the "Bedouin telegraph" worked magically: along its human transmission line messages moved swiftly and directly to Ibn Sa'ud. If they had ever been forced down, the Bedouins would probably have picked them up within hours, taken hospitable care of them, and turned them over as soon as possible to the nearest Government officials.

They learned ways of making use of the bareness of the terrain. When a field crew, depending on the plane for supplies, wanted to move to another location and, not yet equipped with radio transmitter, could not inform headquarters, they simply wrote their instructions on the earth. Sometimes they drove a car or pickup around and around until they had worn a plain circle into the ground and then across this they drove a directional arrow pointing toward their new camp. Above it they wrote in the ground with shovels the compass reading, and below it the number of kilometers to the new camp. Then they sprinkled the whole sign with gasoline and set it afire and burned it black against the face of the desert. It could be read from the air miles away.

With the plane, spare parts could be flown out on a day's notice, and the danger of car trouble or breakdown in the desert was reduced to practically nothing. What was more important, the infrequent mail that trickled in by launch or dhow from Bahrain could be delivered quickly. They might still be at the utter end of the world, but they were not out of touch either with the world or with each other. That, as the first year in the field wore on, would make a difference ...

TO BE CONTINUED

A BOYHOOD IN RAS TANURA



Boys are boys wherever they grow up ... only the adventures change ...

BY WILLIAM TRACY / PHOTOGRAPHED BY BURNETT H. MOODY

Model: Billy Flemming, 11, son of Mr. and Mrs. William L. Flemming of Dhahran

It always amused me to see people's reactions in the States when I told them where I lived. "Saudi Arabia?" they would say. "You mean in the desert?" And I would say, yes, in the desert, and they would say, "Well, gee, that must have been interesting!" Then they would hurry away to tell their friends about this oddball who grew up in an oil camp on the Arabian Gulf.

At the time I thought they really did consider it interesting. I didn't realize that to many people in the United States growing up anywhere but in America seemed more peculiar than interesting. "How," they sometimes asked, "can a boy grow up without, oh, football games on Saturday, snowstorms, ice skating, cutting the lawn in summer or burning leaves in the fall or going walking in the woods in the spring, or, well you know ..."

As it happened, I did not know, not really. I went to Saudi Arabia when I was only 11 years old. Oh, I do have vague memories of a few things in Illinois—frost on the windows, maybe, the smell of fresh cut grass, the Memorial Day parades, or the sight of tall trees against the sky. But for the vivid memories, the bright warm memories of boyhood, I have to go back to Saudi Arabia, to the night the plane from Cairo dropped out of the darkness onto the Dhahran airstrip, the night our new life in an old land began ...

It was 1946. The war was over —World War II, that is—and my mother, determined to join my father after a year's separation, had packed us off to New York and onto a freighter bound for Alexandria (it was called *The Black Warrior*, I remember). Then we took a train for Cairo and, after a week of false starts, a plane for Dhahran. When we landed we straggled across the airfield like a small untidy parade. My mother was first with my baby sister Sally cradled in one arm on a bulky WAC's purse. I was second, clutching her hand, and my brother Jimmy was last, trotting along at the end of a sort of leash with which, I felt, I had dragged him half way around the world.

It was terribly hot and very dark, I recall, and the loud speaker from the Dhahran Airfield was just broadcasting the beginning of "Inner Sanctum," one of my favorite programs at home. I remember the sound of the creaking door. And then I saw my father. He was standing on the apron waiting for us, a tall thin man, almost a stranger after our year's separation. He was dressed in white, I remember, and he had sunglasses strapped to his belt. We ran to meet him ...

Later, my father introduced us to the Snyders with whom we were to spend the night before going on to Ras Tanura, a new community where Aramco had built a refinery. One of the Snyders was a boy named Myles who was two years my senior and who, in the 15 minutes it took to drive to the Snyder house, became my closest friend.

"See those flames?" he asked in a low voice. I looked out through the darkness and saw the dancing lights of the gas flares from a gas-oil separator plant. "They're volcanoes," he said. "Live volcanoes, really!"

A few minutes later he pointed to the silhouette of twin minarets on a mosque near the road. "Cactus!" he hissed. "Saguaro cactus!"

And both times I believed him.

In the months to come, Myles was to teach me all sorts of new things: how to find green scorpions under driftwood on the beach, how to catch lizards behind the neck so that you weren't stuck with

... we made dribble castles on the beach, threw jellyfish at each other and ran barefooted ...

... looked for scorpions ... under driftwood ...

... since we lived on the shore, I guess it was inevitable that we should come to know the sea, the coast ... and all it had to teach us.

a writhing lizardless tail between your fingers. He was to introduce me to spiny-tailed "dabbs," meat-eating "warals" and suction-toed geckos; to desert hedgehogs and foxes, and even once—on a wilderness trip with a geologist—to a hunchbacked striped hyena. It would be Myles too who would, one year in Dhahran, lead me under the camp fence on daring hikes to distant flat-topped hills, and to the charred crater blasted by a misplaced Italian bomb. But that would come later. That first night he contented himself with making the new kid think that the flares were volcanoes. As I dozed off in the Snyders' living room, I heard his voice echoing in my head, "Live volcanoes, really!"

The next morning we headed for Ras Tanura in a four by four army surplus truck. We drove past Aramco's Dammam Seven, the company's first producing oil well, past pyramid-shaped Jabal Shamal on the left, and past the fishing villages of al-Khobar and Dammam. Later, we saw crystal white salt flats and scattered palm groves over which loomed towering dunes. As the truck drove along, occasionally shifting into four-wheel drive to push through patches of drifted sand, we saw flocks of long-haired black goats, clusters of low Bedouin tents, and the huge stiff-legged white donkeys of the Eastern Province, with spots of orange dye on their backs. We saw our first camel standing against the horizon and noted a sign by the road cautioning us that "camels have the right-of-way."

All this, which would become so familiar to us, was new that morning. Some of it, unstirred by centuries, had begun to disappear even then; all of it would change a little in the next few years. All except the searing heat and the scorching beige glare of the desert which reached halfway into the sky. Beside the road were the catalysts of the change; the high-tension power line, the flares of the gas-oil separator plants ("Live volcanoes," huh?) and the rows of pipelines with mounds of clay for the camel caravans to cross. Then the towers of the new refinery appeared beyond the long finger of Tarut Bay and we drove onto the narrow Ras Tanura headland to the house where we were to live.

We had one of the first group of 30 stucco family houses built in "American City," now Nejma. The houses, painted in brilliant colors as if to challenge the monotony of sand and sky, were arranged four deep along the shore. They had spacious yards of white beach sand, and patios of flat "faroush" stone taken from the bottom of the bay. From our dining room we could watch the changing moods and colors of the Gulf: misty silver and mirror-still at dawn, clear aquamarine and violet at mid-day, chalky green during a storm and washed lime-blue when the storm was over. It was unforgettably beautiful.

In Ras Tanura, in those days, most of the early facilities were located in temporary wooden barracks. There were a clinic, a laundry, a barbershop, a mail center, and a recreation hall in which were located a library, a snack bar, a billiard room and a bowling alley.

For the hard-hatted sheet metal construction workers, the recreation hall was the center of their off duty life. Here they balanced the day's sweat with a night of pre-prohibition beer drinking and high-stakes poker. Across the street was the Mess Hall which served all the bachelors, including married men whose families had not yet arrived, and "bachelorettes," the first few nurses and secretaries who had been persuaded to come out to Saudi Arabia. Nearby were flood-lit tennis courts (used by us kids surreptitiously for roller skating). There was also an outdoor theater, with straw mat sides to keep out the strong north wind. We went to the movies winter and summer, although in winter it meant wrapping up in blankets. But often on mild nights in the spring and fall the sky and its stars offered a better show than the one on the screen.

The refinery, I remember, had just gone "on stream," as everyone soon learned to say, and little Ras Tanura began to celebrate its ever-increasing post-war production with splendid holidays on the beach every time we racked up a 100,000 or a 150,000-barrel day. These were most often Employe Association picnics with donkey races (the big white ones were safe bets), buried coin hunts for silver riyals and Indian rupees, and, on very special occasions such as the 4th of July, feasts of watermelon from al-Kharj, southeast of Riyadh.

Other big occasions in those days were the monthly (or sometimes semi-monthly) arrivals of the refrigerator ships, for the ships brought fresh vegetables. I remember the sight of the women hurrying to the commissary carrying heavy canvas bags of clinking silver coins since paper money had not yet been introduced.

There was always construction underway and that meant lots of bricks and planks that enterprising boys could manage to "borrow" despite the efforts of the Safety Department to keep us at bay. Rightly or wrongly we considered Safety Department personnel and "Security" our mortal enemies. They discovered our board-covered tunnels beneath the sagebrush hillocks at the edge of town and bulldozed them under. They discouraged our long bicycle rides on the hard-packed beach at low tide by building a fence. They cut us off from the deserted coast where huge shells dried in the sun, where oar-tailed sea snakes warmed themselves on the sand and sand crabs tunneled below, leaving little castles by their front doors. We were never completely foiled, however, and swam outside the fence to walk as far as the magnificent sand dunes where we could somersault down to the bottom without harm, or play "king of the mountain."

Meanwhile, as we explored Ras Tanura and its environs, my mother was making a determined bid to tame the desert. In our first house the only garden we had was an accidental growth of tiny palm shoots that sprang up when dew dripped from the sloping roofs onto date pits left by construction workers who had made a habit of eating lunch in the shade of the house. But when we moved to a new house and when soil had been trucked in, Mother planted the beginnings of a garden and between the sandstorms which periodically swept across the beach wall, nursed it to life. First she planted a crop of alfalfa. Then she put in creepers of Bermuda grass which had to be poked into the earth one by one and painstakingly sprinkled with the hose each evening. Then she put in oleander bushes and tamarisk and acacia trees, buried dried seaweed and fish near the roots to fertilize them and, because of the wind and the shallow soil, tied them upright to sturdy poles. Some flowering plants could be obtained from the company's nursery: frangipani,

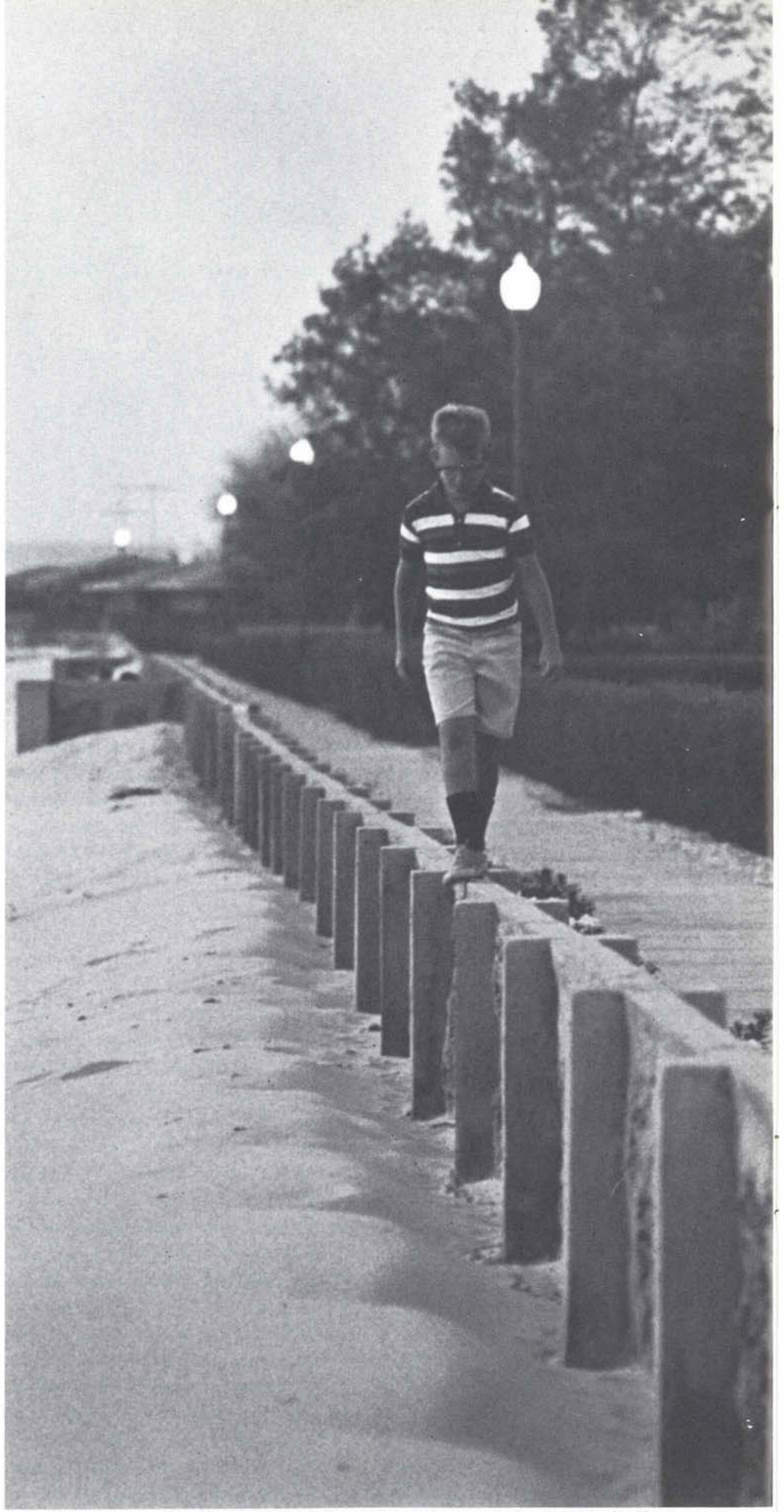
climbing red, orange and purple bougainvillea, hardy periwinkle, dwarf poinsettia, but there were also four o'clocks grown from seeds sent out from my grandpa's farm in Ohio. I remember how strange Ras Tanura looked the first year green trees began to poke above the roofs all over town, throwing circles of shade onto the ground and softening the skyline.

Before then we had spent a year in Dhahran. It was the year my sister Sue was born. We lived in a house on a hill from which you could see the smoke from the flares on the island of Bahrain. On the other side of the house in Dhahran, I recall, lived a boy named Jim McCarthy who introduced me to an intriguing little book about the facts of life. Another neighbor, Louella Beckly, lent me scores of Carolyn Keene's Nancy Drew mystery stories. They were both "big kids" like Phil Braun, who could swim faster on his back than most of us could crawl. But big or little, there were plenty of them since the families in Saudi Arabia were young and large. There was always a new wing under construction at the school and new faces on the bus or at the mail center. Since someone was always leaving for long vacation or going "outside" to school, there were also familiar faces disappearing too. Myles Snyder, for one.

After the year in Dhahran we moved back to Ras Tanura and I made new friends. One was Joe Studholm and the other a boy named Jim Mandaville. Jim was a genius of many talents, we all knew, because he threw shoes at his brother Jack (who could pinch you with his toes when wrestling), identified desert plants and fragments of pottery, rode horses, and built radios and model airplanes. He was a "girl hater" at the time and a party hater. To his chagrin, his mother helped organize the Teen Club.

Since we lived on the shore, I guess it was inevitable that we would come to know the sea and its inhabitants. Some of us, at least, like D.T. Gray, my cousin, and Miles Jones, with whom I ranged up and down the coast in quest of all that it had to teach us.

Miles lived in a house in the Marine Terminal area on the tip of the Ras Tanura peninsula. Because the house was the oldest in town it was infested with earwigs and centipedes and for some reason that I can't remember we were convinced that there was a mongoose in the attic which had escaped from one of the tankers from India.



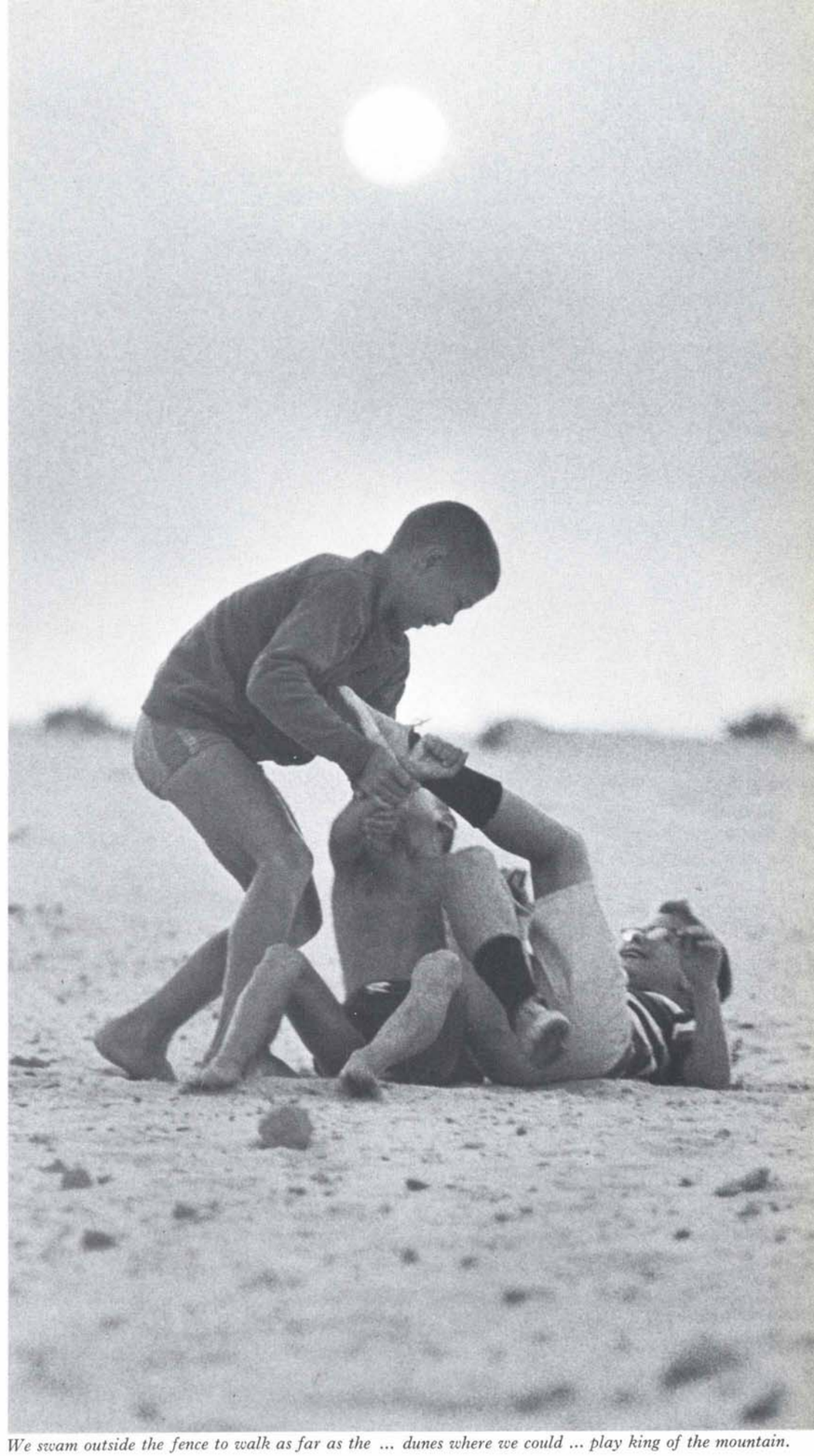
I recall how strange Ras Tanura looked the year trees began to poke above roofs all over town ...

When D.T. and I spent the weekend with Miles we would hike across the narrow sand spit to the abandoned arrow-shaped palm frond fish traps there, and wade cautiously in the slimy sand, watching for sand dollars and sea urchins and feeling mud sharks and skates slither across our nervous toes. We caught baskets of fish for fertilizer and great blue crabs, and quantities of huge pink shrimp which we cleaned and ate doused in tomato catsup. We also decimated the population of a certain snail which had the bad luck of shutting itself in with a dime-sized trapdoor of some beauty which we called cat's-eye. We held our noses as we boiled kettles of them, pried their protective seal from the sticky body, dried them in the sun, and bathed them in glistening olive oil. We ran our fingers through piles of them like misers. They were too chalky to be valuable, of course, but to us they were priceless.

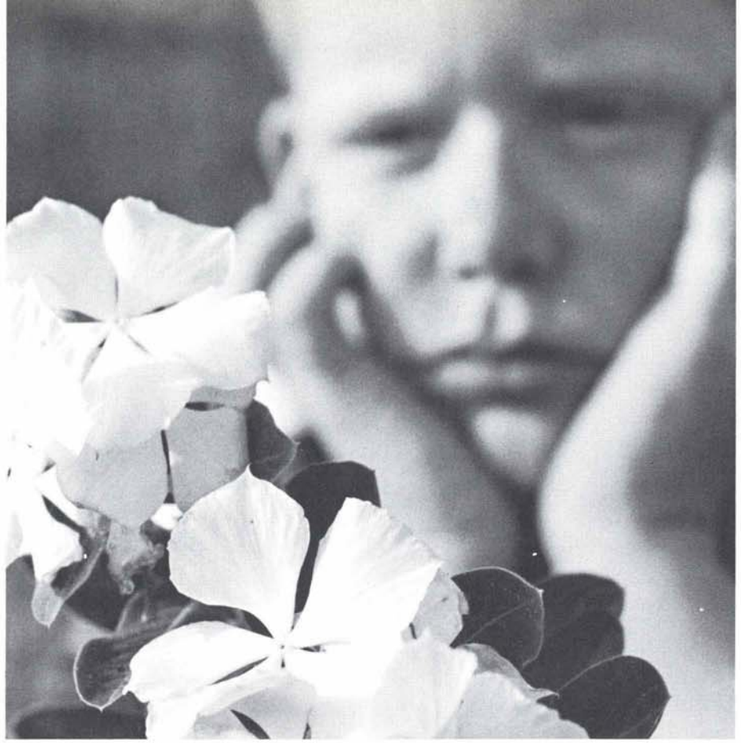
But great as it was, there was more to life than just leisure and mischief. There was also school. School then was held in a portable building on a steel frame that was hauled in on a truck and perched on four large concrete blocks. Sam Whipple was the principal but he was also our teacher, and our friend. He was short and balding and could run faster than any of the boys in junior high.

One day, when the seasonal wind had whipped around and under the school for several weeks, we felt a sudden window-rattling jolt and the building lurched. The sand had blown away from the base of one of the concrete supports. The Safety Department moved in at once and took precautions and put out bulletins, but we thought it had been great fun when all the volleyballs and baseball bats behind Mr. Whipple's desk began to roll lazily down to the far corner of the room.

In cool weather in our school we



We swam outside the fence to walk as far as the ... dunes where we could ... play king of the mountain.



Mother planted ... hardy periwinkle ... and seeds sent out from my grandpa's farm in Ohio.

frequently went out on excursions, sometimes driving all day on sand tracks to the Hofuf oasis with its maze of caves and eroded sandstone pillars, its hot springs, donkey drawn wells, covered *suqs*, and old walls. We took the three step journey by dhow, rowboat, and donkey cart to Tarut Island where thousands of tiny turtles lived in the irrigation ditches beneath jungles of palms. We climbed like lizards over the crumbling Portuguese forts in Dammam and Qatif, and visited the last of the great winter encampments of the Bedouins.

Like all American boys, of course, we had a Boy Scout troop, but although we learned our first aid and Morse and semaphore in the prescribed fashion, our company trips were quite different. We always had an extra truck loaded with firewood and water. No amount of woodsman's lore would have provided either in that territory. In Tarut Bay we camped on uninhabited Za'al Island which was separated from the peninsula only by a broad mud flat and narrow reef channel, but gave us a splendid feeling of freedom and remoteness when the water rose and the tidal current was running. There we skinny-dipped and hunted tern's eggs, and at night herded schools of needlefish onto the beach by sweeping a powerful three-battery flashlight beam along the dark surface of the bay.

Ras Tanura was so small that having a party meant inviting every kid in camp. The girl hater clique was not big on "scissors," "walking the plank," "sardines," "inchy pinchy," or "country club." They once fled from a party with Nancy Bradfield's birthday cake in tow. But I think even the girl haters were secretly impressed by Mary Beth Harrity when she floated on her back in the Gulf. Of course she was a "big kid" and only came to Ras Tanura during vacations from the American Community School in Beirut, Lebanon. She brought back unbelievable stories about boarding school which we all believed and could hardly wait to experience for ourselves. In the meantime, enjoying our last year at home, we made dribble castles on the beach, threw sun-dried stinging jellyfish at each other, ran barefooted across melting asphalt roads, and chased locust swarms from the gardens, knocking them down with tennis rackets.

We thought ourselves to be a special breed of kids in those days. And maybe in some ways we were. We spoke Arabic, we had met the famous King Ibn Sa'ud. We knew real Bedouins and all of us had been around the world at least once. Our thick green passports were gay accumulations of visas and permits from as many nations as there were pages, and our arms and inoculation certificates were both full of shots. We had, furthermore, lived through the incomparable excitement of watching a town come to life in what, to us at least, was a new and exciting land.

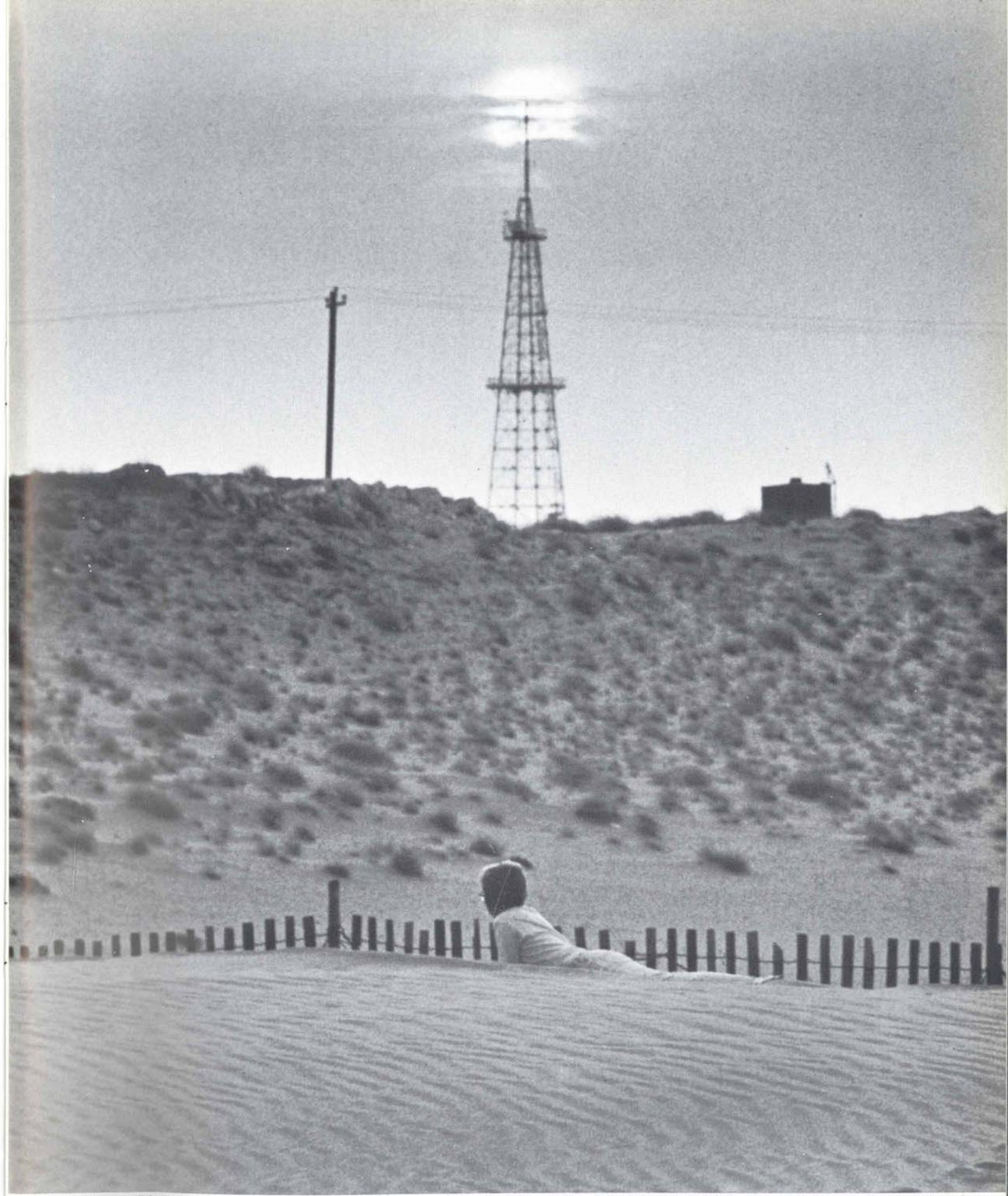
But now, suddenly it was time to leave again—off to high school in Beirut. It wasn't really very far and we were coming back every holiday, but still, when the special red and silver Kenworth bus headed out to the airport that day, there was more than one red-eyed mother and silent father aboard.

We drove, I remember, past the same dunes, and the same palm groves, and even, I thought, the same herds of goats that I had seen that first day when we left the Snyders' house. My father had become noticeably quiet as we passed the halfway coast guard house and as Jabal Shamal appeared on the horizon, he began to fidget uneasily.

"Er, ah, Billy,..." We bounced past the gas flares ("Live volcanoes, really!"). "Well, Bill ..." We jolted past the main gate of Dhahran and down past the twin minarets ("saguaro cactus") towards the airfield. It was 1950. Had it only been four years? "Son," my father gulped and looked around and leaned towards my ear. A gargled whisper: "Is there, er, anything you'd like to know about, er ...girls?"

Which is as good a place as any to end my memories, my bright warm memories of those, yes, innocent years growing up in Saudi Arabia.

William Tracy is now Assistant Editor of Aramco World Magazine. *His parents, Mr. and Mrs. Frank W. Tracy, left Saudi Arabia last February after more than 20 years with Aramco.*



I spent a year in Dhahran where we went under the camp fence on hikes to distant hills ... We thought ourselves to be a special breed of kids in those days.

Upon his return to Medina from a campaign, the Prophet Muhammad remarked: "We have just fulfilled the lesser jihad; it is now our duty to embark on the greater jihad."

"What is the greater jihad?" asked one of the companions.

"It is the struggle to save one's own soul," replied the Prophet.

The Greater War

BY MAJID KHADDURI

To anyone who heard Cairo's muezzins calling the faithful to arms during the 1967 war, it will be exceedingly hard to believe that Islam's dreaded "holy war" is not the frightful summons to massacre that the West has historically believed. Yet the truth is that *jihad*—holy war—is largely a religious duty aimed as much at spiritual salvation as the protection of the Muslim state.

It is ironic that the concept of holy war as a means of extending religious influence so alarms the West. It was the nations of the West, after all, that sent Cortez to convert the Aztecs, turned Simon de Montfort loose on the Albigensians and sent army after army storming into the Holy Land and called them Crusaders. Yet it is a fact that the West does recoil from the idea of jihad and has ever since, as Gibbon colorfully but inaccurately wrote, "Muhammad, with the sword in one hand and the Koran in the other, erected his throne on

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Professor Majid Khadduri, Director of the Center for Middle East Studies at Johns Hopkins University, was born and raised in Iraq and is one of America's foremost authorities on Islam. Among his numerous books are Islamic Jurisprudence: Shafi'i's Risala *(1961) and* The Islamic Law of Nations: Shaybani's Siyar *(1966).*

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the ruins of Christianity and Rome."

It would be dishonest to say that the fears have been without foundations. There *is* a violent aspect to jihad and recent attempts to discount the use of violence and to assert that the holy war was really no more than intensive "preaching" is hardly a balanced assessment. But the violence in jihad is not the whole story either and its role has been grossly exaggerated in western writings.

To understand the jihad it is important to understand that in the early days Islam was not only a system of religion. It was also a political community, one of two territories into which the world was divided: *dar al-Islam* "the territory of peace," where the faithful lived and *dar al-Harb* "the territory of war," where the unbelievers lived. Since Islam imposed on the faithful the duty to work for the ultimate establishment of *dar al-Islam* throughout the world, there existed—logically—a state of war between the territories. It was similar to the Christian concept of the *bellum justum*, the "just war," which permitted war for such "good" causes as conversion of the pagans. And in Islam the political instrument through which the faithful could discharge this obligation was the jihad: the exertion of power, either by peaceful or violent means, to achieve ultimately a religious purpose.

It was this endorsement of violence as a legitimate means of Islamic expansion that gave rise to the belief that "infidels" were compelled to accept Islam by the sword and that Muslims were obliged to wage physical war on non-believers, and that aroused such strong reactions in the West.

Warfare, of course, was not introduced in Arabia—or anywhere else—by Islam. What Islam did was to re-direct the Arab tradition of legitimate warfare —tribal raiding for economic reasons or revenge—from inter-tribal forays to the outside world. By prohibiting all kinds of war except war for religious purposes, Islam unified the military spirit of the various Arab tribes and focussed their attention on the territories of the unbelievers. But it did so in very specific ways. For although the ultimate objectives of Islam were to establish peace and order in accordance with Islamic justice within any territory brought under its jurisdiction—and to expand the area of that validity to include, ultimately, the world—Islam was still pragmatic enough to allow for two hard facts. One was the existence of communities outside Islam with which Islam would have to live either permanently or until they could be brought under Islamic rule. The other was the existence of peoples who had been conquered politically by Islam but who were not part of the *umma*, the community of believers endowed with a divine law.

This pragmatism took the form of carefully worked out rules and practices governing Islam's approach to such communities and peoples. No fighting could start, for example, until Islamic forces had first issued an invitation to the community to accept Islam or, if it could not accept Islam as a religion, to agree to accept political domination by agreeing to pay a head tax. Only when such invitation had been rejected or ignored could an attack be ordered:

"Whenever the Prophet sent forth an army or a detachment, he charged its commander to fear God, and he enjoined the Muslims who were with him to conduct themselves properly..."

And the Prophet said:

"Fight in the name of God and in the path of God. Fight only those who disbelieve in God. Do not cheat or commit treachery, nor should you mutilate anyone or kill children. Whenever you meet your enemies, invite them first to adopt Islam. If they do so, accept it, and let them alone ... If they refuse to accept Islam, then call upon them to pay the jizya *(poll tax); if they do, accept it and leave them alone ..."*

Furthermore the "state of war" between Islam and the rest of the world was nowhere near as uncompromising as it sounds. Even in its formative period Islam entered into peaceful arrangements with communities beyond its frontiers. And although continuous "warfare" was obligatory, it was not necessarily warfare in the sense of military combat. It was more closely akin to today's non-recognition among states. And even then it did not rule out direct negotiations or treaties. The Islamic "state of war", in fact, embodied many aspects which are now included under the term "conditions of peace."

As to the West's belief that every Muslim is obligated to wage war against unbelievers, this is also a misinterpretation. In fact the precise definition of a Muslim's duty with regard to the jihad has engaged Muslim scholars for centuries—as this long exchange between Shafi'i, one of the greatest Muslim jurists and the founder of a school of law, and one of his disciples shows:

The disciple asked: "What is the jihad duty?"

Shafi'i replied: "God has imposed the duty of jihad as laid down in His Book and uttered by His Prophet's tongue." He stressed the calling of men to fulfill the jihad duty as follows: "God has bought from the believers their selves and their possessions the gift of Paradise. They fight in the way of God; they kill, and are killed; that is a promise binding upon God ... So rejoice in the bargain you have made with him" (Koran: IX, 112).

"And God said: 'Go forth, light and heavy! Struggle in God's way with your possessions and yourselves. That is better for you, did you but know' " (Koran: IX, 41).

The disciple asked: "What does this mean?"

Shafi'i replied: "These verses may mean that the jihad, and the rising up in arms in particular, is obligatory for all able-bodied believers like prayer ... or they may mean that the duty of jihad is a collective duty different from that of prayer. Those who perform it ... will fulfill the duty and receive the supererogatory merit, thereby preventing those who have stayed behind from falling into error."

The disciple asked: "Where is the proof that if some people perform the duty, the others would be relieved of punishment?"

Shafi'i replied: "God said: 'It is not for the believers to go forth all together, (Koran: IX, 123). God has given precedence to those who fight with their possessions and their selves over those who sit at home. God has promised the best of things to both, and He has preferred those who fight over those who sit at home by granting them a mighty reward" (Koran: IV, 97).

Shafi'i continued: "When the Prophet went to battle he was accompanied by some of his companions while others stayed at home; for Ali ibn Abi Talib (the future caliph) stayed at home during the battle of Tabuk. Nor did God ordain that all Muslims were under obligations to go to battle, for He said: 'Why should not a party of every section of them go forth?' So He made it known that going into battle was obligatory on some, not on all, just as knowledge of the law is not obligatory on all men but on some, save the fundamental duties which should be known to all men ... If all men failed to perform the duty so that no able-bodied man went forth to battle, all, I am afraid, would fall into error (although I am certain that this would never happen) in accordance with God's saying: 'If you do not go forth, He will inflict upon you a painful punishment' " (Koran: IX, 39).

The disciple asked: "What is the meaning of this command?"

Shafi'i replied: "It means that it is not permissible that all men should fail to 'go forth' (jihad); but that if some go forth so that a sufficient number fulfills the collective duty, the others do not fall into error, because the going forth by some would fulfill the duty of 'going forth' (jihad)."

The interpretation of jihad as a community duty rather than an individual duty is very important. In the first place, it relieved from the obligation of making war those who could not or should not wage war: the crippled, the blind and the sick; women and children. In the second place, the imposition of the duty on the community rather than on the individual made it possible for the caliph—the head of state—to employ the jihad as a community or a state instrument.

All that, however, has to do with combat and the jihad as a religious duty was not to be carried out merely by fighting. In the Koran, God specified the salvation of the soul as the ultimate aim of jihad: "He who exerts himself (jahada), exerts only for his own soul" (Koran: XXIX, 5). And tradition is even more explicit on the need for the salvation of the soul. Upon his return to Medina from one of the campaigns, the Prophet Muhammad, in the course of conversation with his companions remarked:

"We have just fulfilled the lesser jihad; it is now our duty to embark on the greater jihad."

"What is the greater jihad?" asked one of the companions.

"It is the struggle to save one's own soul," replied the Prophet.

This was but one of the Prophet's utterances in which he stressed the object of the jihad to be as much the salvation of the soul as the achievement of victory in battle. Indeed, the literal meaning of the jihad is not violence, but the "exertion" of one's own power to achieve spiritual as well as material ends.

Since the 10th century, furthermore, even the attitude toward combat has changed. As Islamic relations with other nations changed, Muslim scholars began to modify the previous views on jihad. Some said, for example, that the mere preparation for the jihad would satisfy the duty. Others called for the suspension of the jihad and specified the period of suspension. And most seem to have tacitly admitted that the jihad as a permanent state of war had become obsolete and no longer compatible with Muslim interests. Since the jihad is prescribed by divine law, such changes could not imply the abandonment of the duty. But they did mean that the duty is in a dormant status. Muslims can revive it at any time they deem it necessary, the scholars said, but in practice most Muslims have come to think of the jihad—in the original sense—as permanently dormant.

Perhaps the most constructive interpretation yet offered by a Muslim writer is that of Ibn Taymiya in the 14th century. Ibn Taymiya made a clear distinction between offensive and defensive wars. He stated that the jihad was not prescribed by the sacred law for the imposition of Islam upon unbelievers solely for their disbelief. For, he argued, "If the unbeliever were to be killed unless he becomes a Muslim, such an action would constitute the greatest compulsion in religion," which would run contrary to the Koranic injunction that forbids forceful conversion. "No compulsion is prescribed in religion " (Koran: II, 257). But, Ibn Taymiya went on, unbelievers who attacked Muslims would be in a different position altogether. A distinction must be made he said, between a jihad in the *defense* of Islam and a jihad waged solely for aggressive purposes. The latter kind, according to Ibn Taymiya, is inconsistent with the spirit of Islam, which expressly stresses tolerance toward other religions, especially the "People of the Book": Christians and Jews. Ibn Taymiya's concept of the jihad, though offered to Muslims in the 14th century, is certainly consistent with the present Islamic attitude that the jihad is no longer a doctrine of offensive war, except in the sense that salvation of the soul requires a continuous struggle against the overwhelming forces of evil. ■

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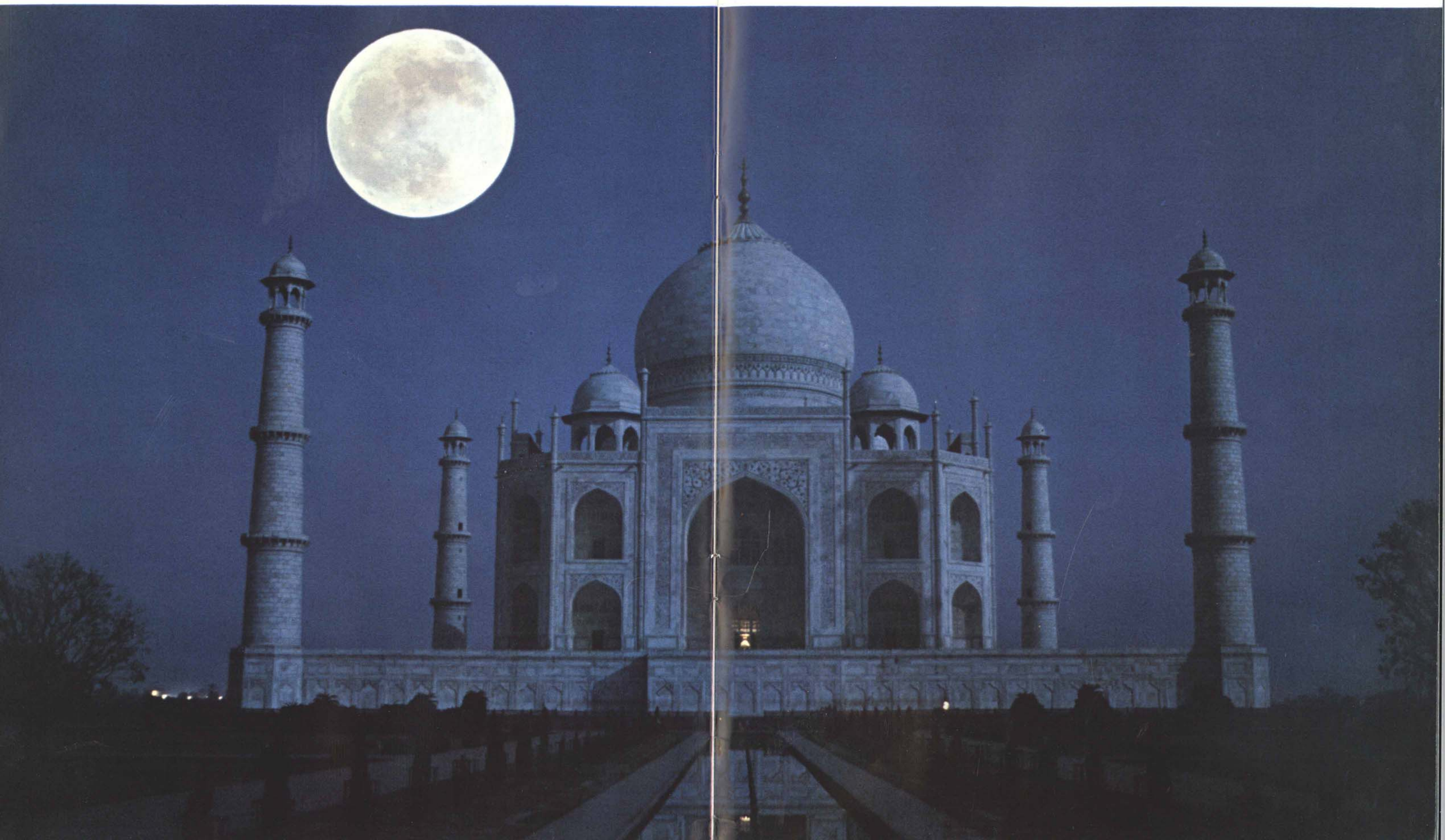
GEM OF GEMS



Arjumand Banu Begum was, according to her contemporaries, "the gem of India's gems." Her husband, Shah Jehan, who happened also to be the Mogul emperor of India, agreed, calling her Mumtaz Mahal, "the chosen of the palace", and the splendid mausoleum he erected in her memory—some say almost in her image—still stands as a monument to their love. It is the incomparable Taj Mahal.

Shah Jehan, born Khurram Shihab-ud-din Muhammad in 1592, was a descendant of the Mogul emperors (not the Mongols of further east) who swept down out of Afghanistan in 1526 to establish an Islamic dynasty which would rule much of India right up until 1857. As a ruler Shah Jehan was often ruthless. To gain the throne in 1627, he arranged for the elimination of most of his close male relatives and his reign was marked by oppression and cruelty. But as in many men of history there was another, sharply contrasting side to the man which grew stronger as he grew older. And it was developed largely through the influence of his adored wife.

In 1612, as a 21-year-old prince, Shah Jehan married a beautiful and compassionate girl of 19. His inseparable companion, she continuously urged her devoted husband toward legal reforms and more peaceful ways. Because of her influence, when Shah Jehan became emperor, scholars and poets came to be more welcome at his court than soldiers. Today his brilliant 30-year reign is remembered as the golden age of Mogul literature, art and especially architecture.

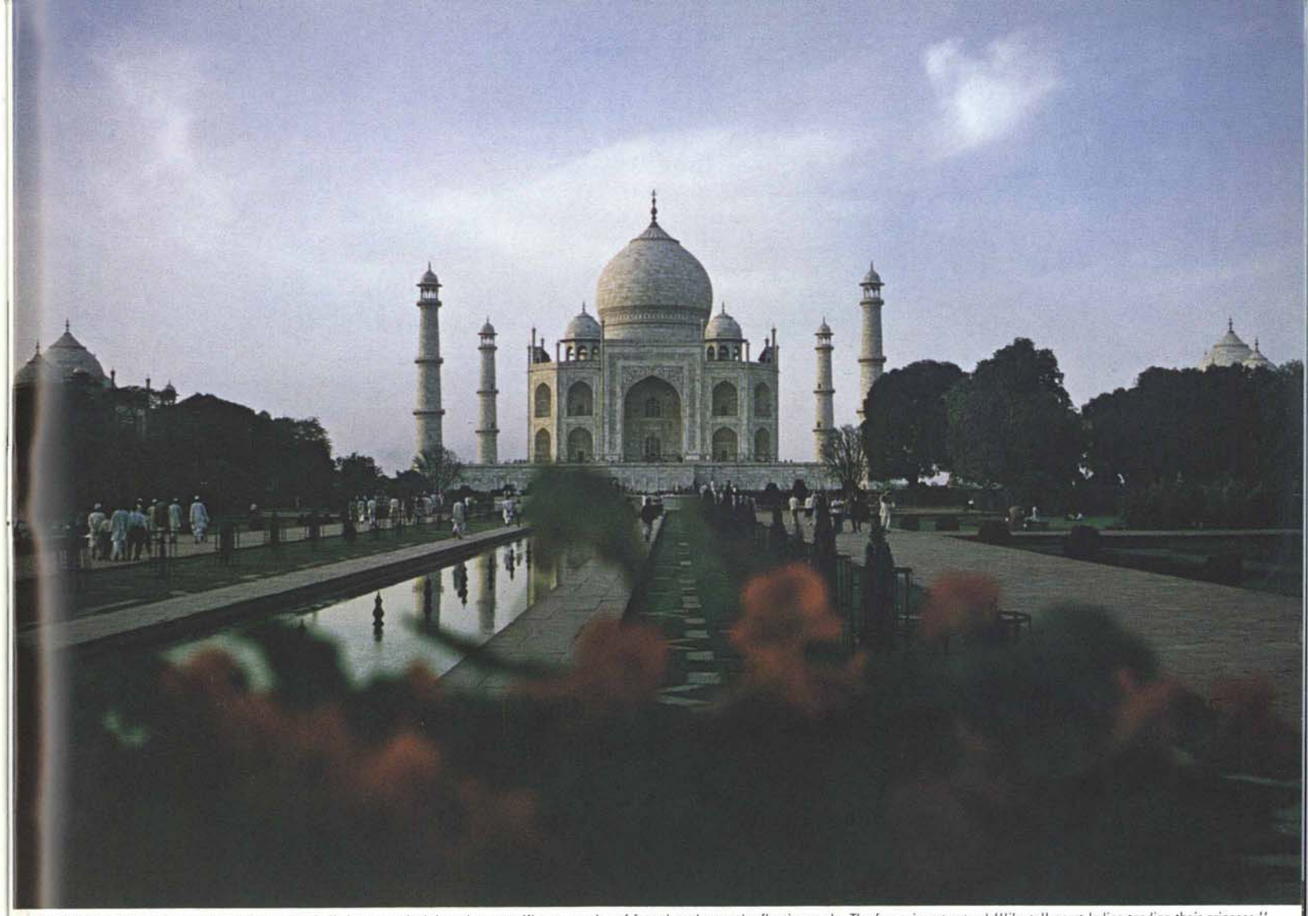
Mogul architecture, an Indo-Islamic style with strong Persian influence—seen in its bulbous domes, round minarets and pointed arches—attained its highest development during Jehan's reign, in buildings like the Pearl Mosque at Agra and India's largest mosque, the Great Mosque in Delhi, where he later moved his court.

There is a note of sadness, however, in the fact that the most beautiful example of all Mogul architecture—some argue even the most beautiful building in the world—was also due to the influence of the graceful lady on her loving husband. For the Taj Mahal, the mausoleum which bears her name, was inspired by his grief at her death at the age of 37. After 18 years of marriage and a few brief years of Jehan's reign as emperor, Mumtaz Mahal died in 1631, bearing her 14th child.

The stricken emperor and the entire Mogul empire fell into two years of mourning during which all music and festivities were banned. But Shah Jehan himself soon recovered enough to begin planning the project which would occupy his thoughts—and eventually over 20,000 artisans—for more than 20 years: the great Taj. From all over his empire in India, from the Middle East, all Asia and beyond, Jehan summoned artists and architects: an expert in dome construction from Istanbul, a stone cutter from Bokhara, a calligrapher from Baghdad, a master metal worker from far off Bordeaux. For materials he scoured the far corners of Asia. He wanted only the most translucent marbles, the finest inlays and rarest stones; jasper from Punjab, jade and crystal from China, turquoise from Tibet, lapis lazuli from Ceylon, coral from Arabia, onyx and amethyst from Persia. Cost was not a factor, obviously; the total would be about $10 million.

Planning—by architect Ustad Isa—was particularly important since Mogul custom permitted no alterations later. Thus the enormous complex of mausoleum, minarets, mosque, reception hall, service buildings, gardens, pools, walls and gates had to be planned and built as an entity—no mean feat since it took 22 years to complete.

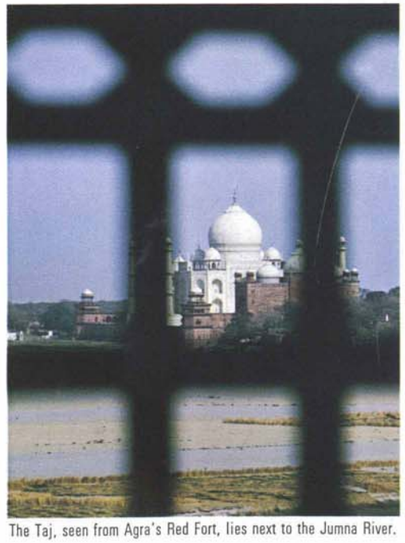
Even when the mausoleum was completed it continued to occupy Shah



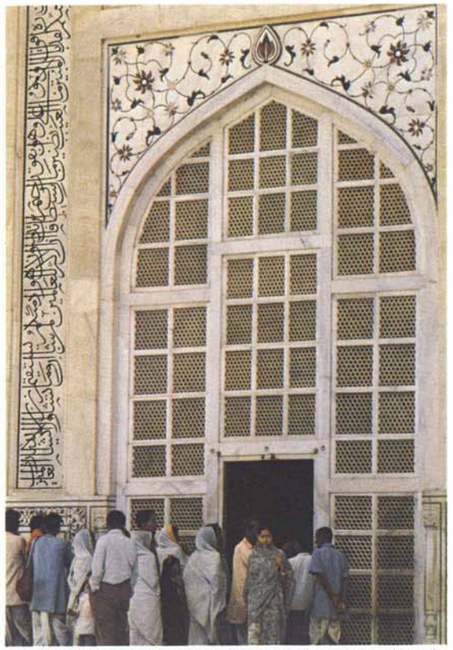
The Taj Mahal, with its mosque and reception hall, is approached through a magnificent complex of formal gardens and reflecting pools. The four minarets stand "like tall court ladies tending their princess."

Lilies in stone, a detail of one of the exquisite inlays of colored stone which cover much of the white marble surface.

Arabic script on its side runs up a portal.



The Taj, seen from Agra's Red Fort, lies next to the Jumna River.



A perforated marble screen all but fills one of the monumental portals.

Jehan's time and thoughts. He spent many hours beside his beloved wife's tomb on which he had caused to be engraved 99 names of love, and dreamed of building a second tomb for himself on the opposite bank of the river—of black marble and linked to the Taj Mahal with a silver bridge. But before he could, he fell ill—in 1656—and two years later was deposed by his youngest son. He died in 1666 and was buried by his wife's side. The masterpiece which he had built for her last resting place became his too.

Today, three centuries later, the Taj Mahal is still, as one British writer has said, "within more measurable distance of perfection than any other work of man." And the invitation on the monumental gateway bidding the pure in heart to enter the "gardens of paradise" is not entirely an exaggeration. For it is indeed a place, as one poet said, where "breath forgets to breathe."

The setting for the Taj Mahal in Agra, not far from Delhi in north central India, is a magnificent blend of soft red sandstone and cool water in a compound measuring 634 by 334 yards, oriented north and south towards the southern bank of the Jumna River. A garden 334 yards square occupies the center of this long rectangle, leaving two smaller rectangles at the south and north ends. The southern area holds the service buildings, stables, guard houses and the gateway. The central garden is bisected by a clear pool in which the reflection of the mausoleum can be seen. The mausoleum is in the northern rectangle next to the river, flanked by a symmetrically identical mosque and reception hall. Both are built of red sandstone as if to set off the glow of the white mausoleum which sits between them on a marble platform 18 feet high and 313 feet square. At each corner is a slender minaret 133 feet high standing "like tall court ladies tending their princess." The building is 186 feet square (although the corners are truncated) and each face is dominated by a soaring arched portal 108 feet high. The bulbous dome tapers to a point surmounted by the crescent of Islam more than 240 feet above the garden.

But it is not the size alone which is impressive. The proportions, within and without, are superb, and the details —arabesques and floral patterns inlaid in semiprecious stones in the marble— indescribable.

Inside, the octagonal tomb chamber is dimly lit by sunlight filtering through a double screen of pierced marble lattices high in the walls. And an interior dome 50 feet across forms a false ceiling 80 feet overhead. As one historian has written, the Moguls "built like Titans and finished like goldsmiths."

Although Shah Jehan and Mumtaz Mahal are actually buried in a crypt below the floor, this room contains two sarcophagi. They are surrounded by a perforated marble screen, itself a masterpiece of "incredible elaboration and delicacy." It is like the glow within a jewel, the final touch of near perfection which makes the Taj Mahal, like the queen for whom it is named, "the gem of India's gems."