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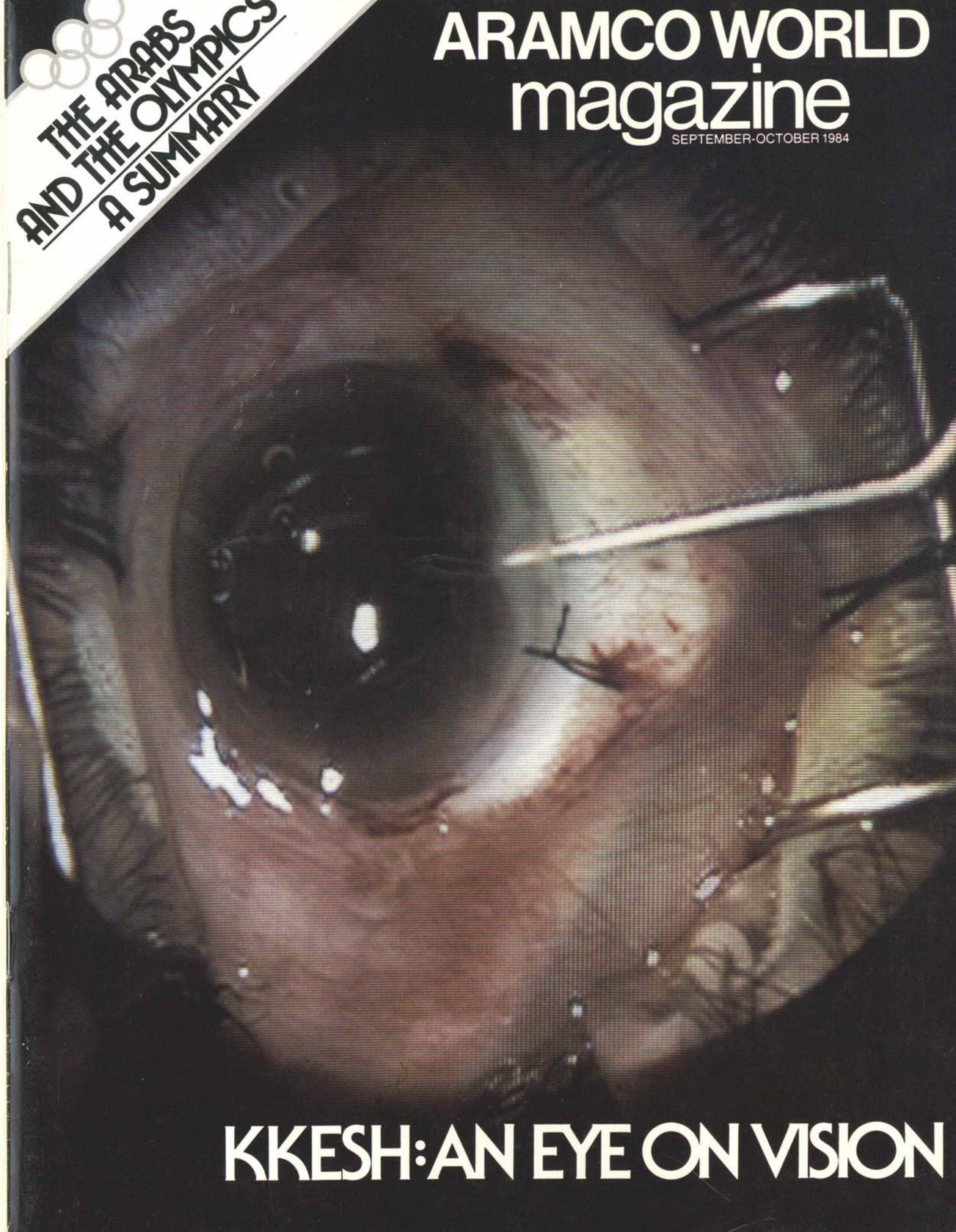
SEPTEMBER-OCTOBER 1984

THE ARABS AND THE OLYMPICS: A SUMMARY



KKESH: AN EYE ON VISION

ARAMCO WORLD magazine

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Cover: This startling photograph by M.S. al-Shabeeb is a televised image sent to a monitor screen from a TV camera mounted on a Zeiss operating microscope while King Khalid Eye Specialist Hospital surgeons position an intra-ocular lens in a patient's eye following cataract removal. The "prongs" are part of a "Sinsky lens hook." Back cover: Nawal El Moutawakil, the first Arab woman to win an Olympic gold medal. Photo by Allsport.

◄ Although the first Saudi Arab Olympic soccer team won no medals in 1984, the Saudi ability and strategy won praise from such opponents as Brazil and Morocco.

The Fairchild Flies -Again...

WRITTEN BY MARY NORTON
PHOTOGRAPHED BY S.M. AMIN

To Soak Hoover and the other geologists exploring the vastness of Saudi Arabia in the 1930's, the first airplane assigned to the search was a "magic carpet" (See Aramco World, *May-June 1984). It permitted them to examine the terrain rapidly, map it accurately and photograph it thoroughly. It made it possible to deliver food and mail to the field parties. It enabled the field parties to relay information to headquarters more rapidly and to get back themselves more often for needed breaks in their lonely schedules.*

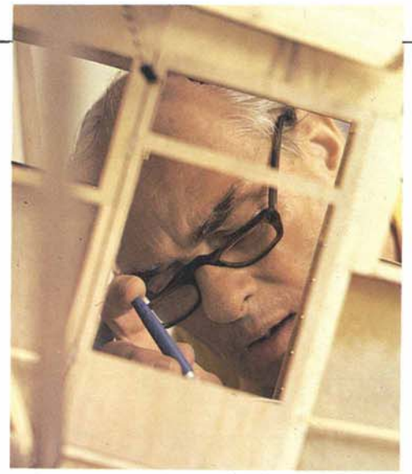
In negotiations with King 'Abd al-'Aziz, Socal – Standard Oil of California (now Chevron) – had pressed for permission to use a plane. Knowing the size of the concession area – the area that Socal was permitted to explore – Socal's spokesmen pointed out that a plane would be vital. And as soon as the king okayed the idea, Socal assigned a man named Dick Kerr to find a plane, equip it with an aerial camera and get it to Arabia.

To Kerr, a geologist, a mechanic, a photographer and a pilot, it was a made-to-order challenge and he met it; in March, 1934, he and co-pilot Charlie Rocheville, after braving desert sandstorms, Egyptian officialdom and Royal Air Force warnings, brought just the plane they needed to Arabia. It was a Fairchild 71 with special sand tires, an extra tank for gasoline, removable panels and windows to permit geological photography, a 50-foot wing-span (15 meters), a nine-foot propeller (2.7 meters) and folding wings.

An aircraft with that sort of background is, of course, a natural for model airplane buffs, so it was no surprise when John Goodrich of Aramco set to work building a model to mark the 50th anniversary of the search that catapulted Saudi Arabia into the oil business and, eventually, into the forefront of the world's oil producing countries. — *The Editors*

From a lifelong interest in aviation and in modeling historical aircraft, John Goodrich was familiar with Aramco's famous Fairchild 71 long before he went to work for Aramco. But it was only after he joined Aramco and read Wallace Stegner's *Discovery!*, the tale of Aramco's search for oil in Saudi Arabia, that Goodrich learned of the vital role played by the Fairchild in mapping the kingdom: some 35,000 miles (56,327 kilometers) of aerial reconnaissance photography. And it was not until Aramco began to celebrate its 50th anniversary that Goodrich decided that the Fairchild should fly again.

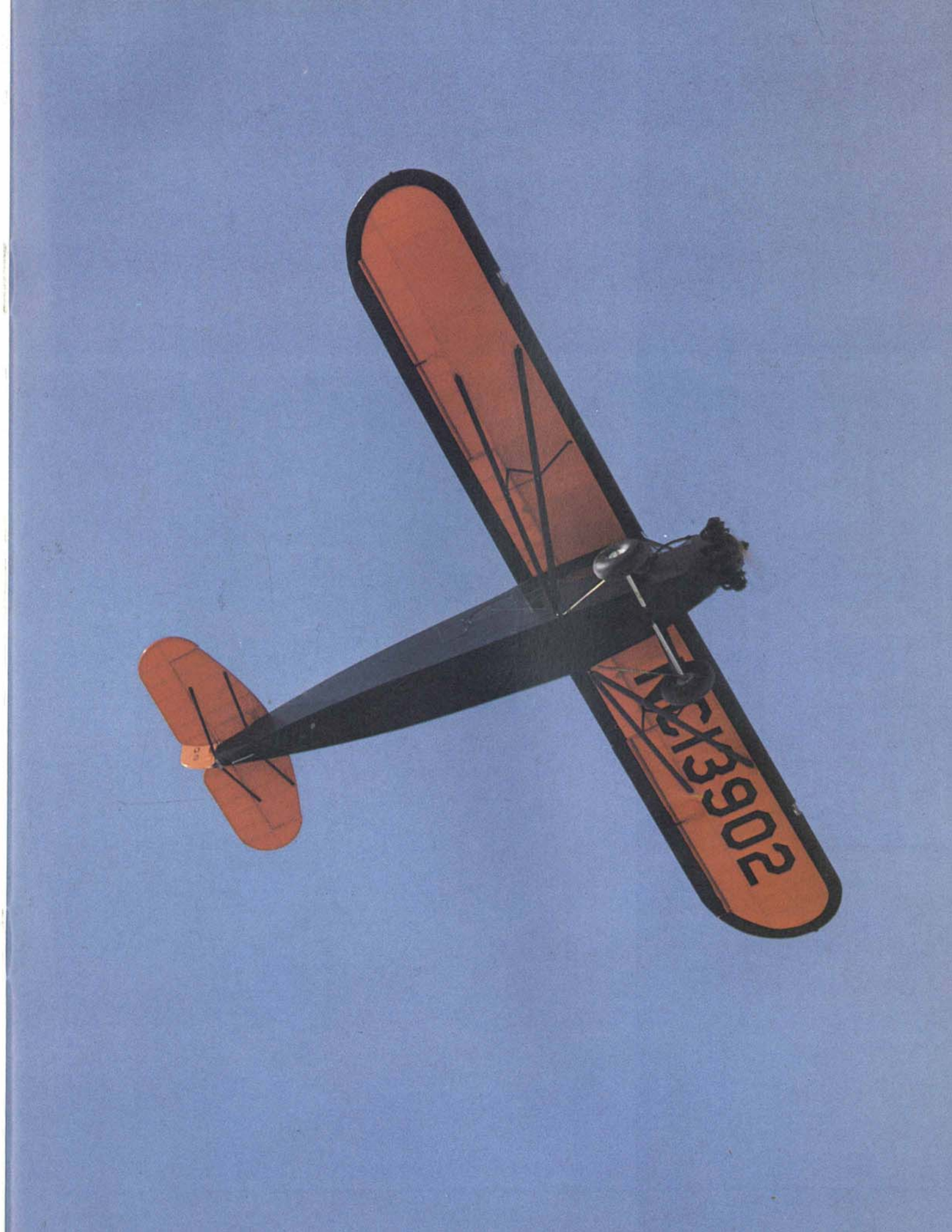
In model aircraft competitions, two schools of scale model building co-exist: the "standoff" scale which requires that the model look like the original from a judging distance of 30 feet (nine meters), but need not be authentic in detail; and the far more rigorous standards applied by the Academy of Model Aeronautics (AMA), which demands that both scale and authentic detail be exacting. Goodrich, though lacking blueprints and details of the Fairchild 71's structure and properties, elected to adhere to AMA standards, a challenging task.

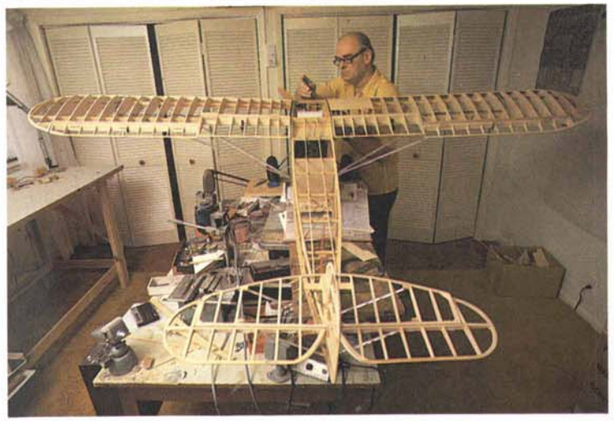


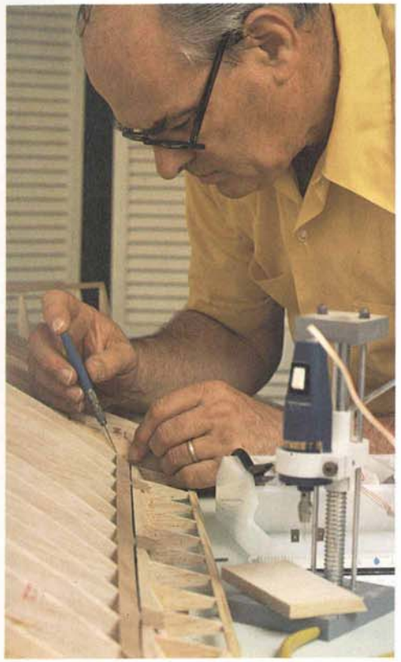
Above, John Goodrich, and right, the model he built.

In the 1930's, the "Golden Age of Aviation" attracted an enormous following in the United States – the daring exploits of aviators and aircraft firing the imagination of thousands of schoolboys who linked themselves to this magical world by building model planes. "In those wonderful days of my early modeling, 10 cents would buy a rubber-powered model kit, including plans and all materials – balsa wood, tissue to cover it, glue, and paint to paint it with," said Goodrich.

During World War II, Goodrich himself was a U.S. Air Force pilot – flying B-25 bombers over Italy. And after the war, when he returned to the University of Vermont to work toward a degree in mechanical engineering, he kept right on tinkering with models –



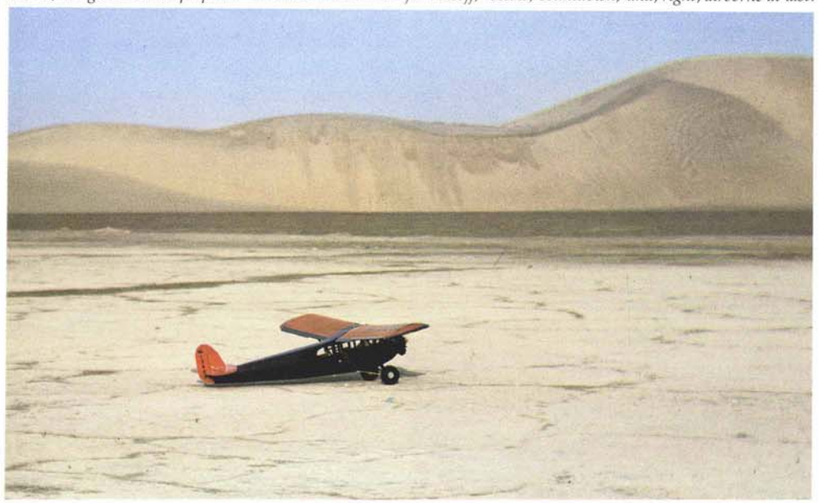




Clockwise starting above:
The model Fairchild 71 at various stages of design, construction and testing, and, finally, ready for flight.

A closeup of the engine and cockpit of the Fairchild 71 during a pre-flight check of the model's operational range.

Above, the ground crew prepares the model Fairchild 71 for takeoff; below, countdown; and, right, airborne at last.



some of them innovative, radio-controlled gas-powered models.

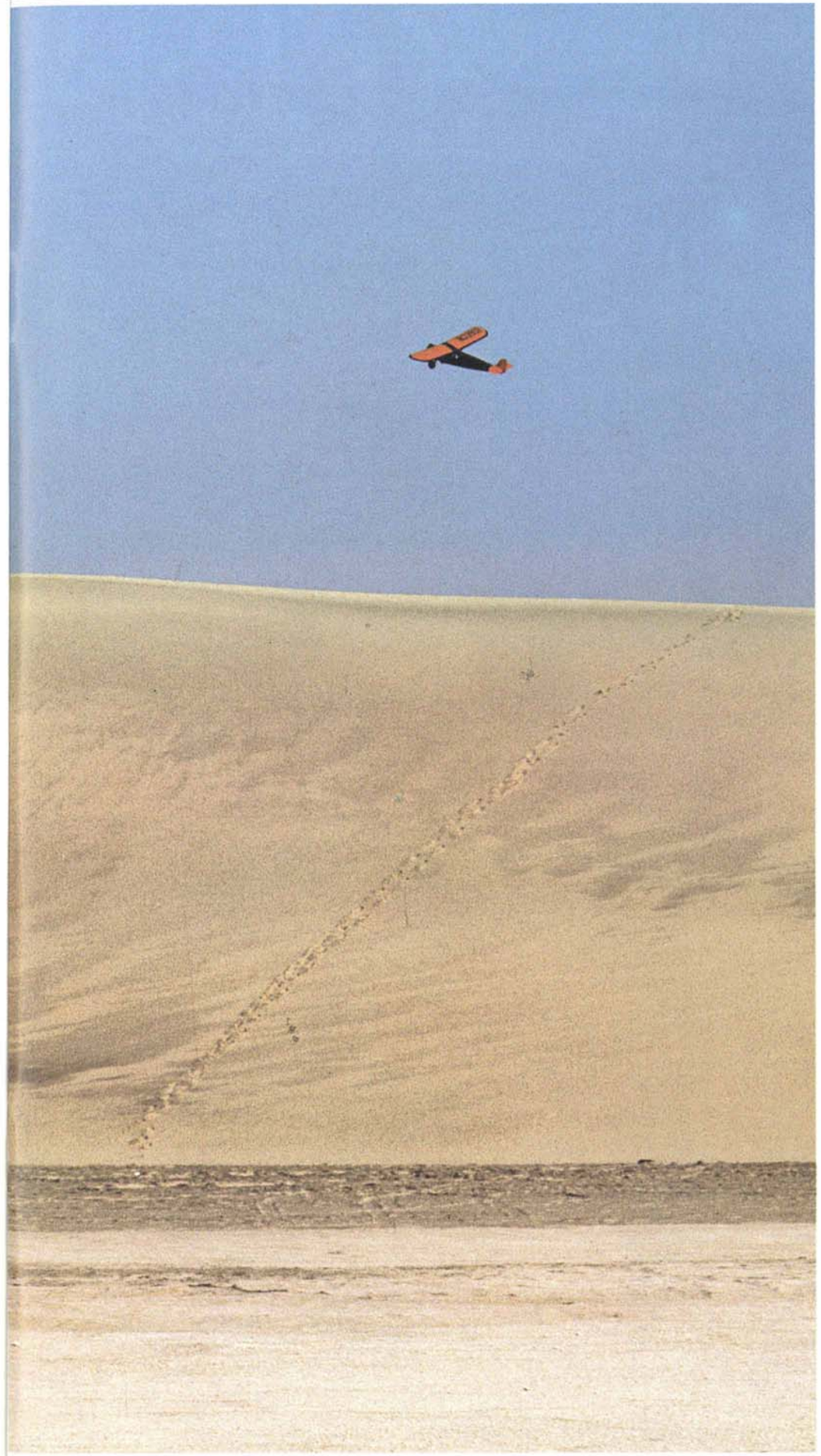
Recalled to service in 1950, Goodrich flew B-26 bombers in Korea, finally landing at Wright Patterson Air Force Base, home of the Air Force Museum and of the Air Force Institute of Technology – an idyllic assignment that stimulated his interest in historical aircraft and also allowed him to acquire a master's degree in aeronautical engineering.

By 1960, with eight children to educate, Goodrich had left the air force for the construction industry, but still spent most of his spare time producing replicas that, when entered in competitions, usually took top honors. One, a model of the Handley Page 400, a World War I twin-engine biplane, is on display in a museum in Taipei.

"For me, the most interesting part of model building," says Goodrich, "is the research involved." To build his model of Aramco's Fairchild, for example, he started by acquiring photos of the Fairchild 71 from the Fairchild Hiller Corporation – especially interior and exterior detail – plus drawings of the original design, since the blueprints had been destroyed years earlier when workmen mistakenly cleared out the wrong hangar. In the photo collection of Joe Mountain, the pilot-photographer who conducted much of the reconnaissance work with the Fairchild 71 in Saudi Arabia, he also found detailed views of the plane's instrument panel and other interior and exterior shots. These included the serial number – which enabled Goodrich to locate photographs taken when the plane left the factory at Farmingdale, New York.

The photos, unfortunately, offered no specific clues as to the plane's coloration, a crucial consideration for authentic reproduction. But Theron K. Rinehart, research editor at Fairchild, suggested that the color might be orange and dark blue – which were common to that era – so Goodrich, on leave in 1981, tracked down several oldtimers to see if they could confirm these colors. None could, however, until Russ Gerow, mechanic and photographer, set the record straight: orange for the wings and tail, dark blue for the fuselage.

From conversations with other pioneers – "Soak" Hoover, Felix Dreyfus, Art Brown, Floyd Ohliger, Tom Barger and Phyllis Kerr, widow of the redoubtable Dick Kerr, who was in command when the Fairchild 71 first set down at Jubail – Goodrich was able to



assemble enough data to begin his model. It was a job that would take a solid year of nights, weekends, holidays and even some 2:00 a.m. sessions when the answer to a knotty question would suddenly pop into his head.

Some of the answers were amazing. Using plastic kit cylinders and a steel mixing bowl, for example, Goodrich exactly duplicated the curvature and scale of the original nine-cylinder Wasp engine built by Pratt and Whitney, and provided a rudder, an elevator, ailerons, control stick and rudder pedals that answer correctly to radio-control instructions.

In keeping with the original, the landing gear has shock absorbers, the wing , fold, locust-fashion – permitting Goodrich to transport it easily – and operational navigational lights, a red light on the left wing, a green on the right and a white light on the tail, all operate on command. Wing lights, made from two tiny flashlights, come extremely close to actual size in scale.

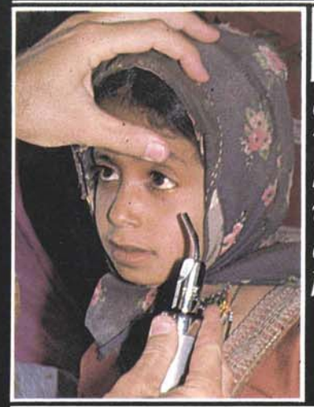
To duplicate metal-covered parts, aluminum was used, and for parts covered by fabric in the original aircraft there is silk – hand-painted, of course. Inside the cabin, wicker seats duplicate the wicker seats of yore, and where leather was, leather is. Even the upholstery nails securing the leather in the cabin are spaced apart according to scale. Finally, a duplicate model of the original Fairchild K-3 camera was also built to scale and is placed in the rear cabin door window as photos showed it to be.

Building a model, of course, is easier than getting it to fly, but Goodrich achieved this too. It flies a scale-speed compatible with the slow, stable speed of the original Fairchild. It is so authentic, in fact, that film producer John Feeney was able to simulate scenes of the original exploration effort by using the Goodrich model in his *Aramco at Fifty*, the story of Aramco's 50 years of growth. Built to scale – 50-foot wings now 100 inches (15 – 2.5 meters) three-foot wheels now six inches (0.9 meters – 15 centimeters) and the nine-foot propeller 18 inches (2.7 meters – 45 centimeters) – the 14 pound model (6.4 kilograms), powered by a four-cycle .60 cubic-inch engine, soared and roared above the sand of Saudi Arabia for Feeney's cameras just as the original did for Aramco's pilots 50 years ago.

Mary Norton who has lived in Saudi Arabia since 1958 is a veteran contributor to Aramco World Magazine.

The centerpiece of the kingdom's eye-health strategy...

KKESH: AN EYE ON VISION



Boasting four-wheel drive vans instead of camels and computers rather than saddlebags, and carrying a team of 43 dedicated professionals, a one-of-a-kind, 15-vehicle "caravan" rolled out of Riyadh early this year on a 9,600-kilometer journey (5,965 miles) that wound through villages, encampments and cities throughout Saudi Arabia on a mission of mercy: the groundwork for an upcoming kingdomwide campaign against sight-destroying illnesses.

WRITTEN BY ARTHUR CLARK
PHOTOGRAPHED BY M.S. AL-SHABEEB AND WAYNE IMBRESCIA

King Khalid Eye Specialist Hospital (KKESH) in Riyadh, the center of a 15-week survey to determine the causes of visual loss and blindness in Saudi Arabia.

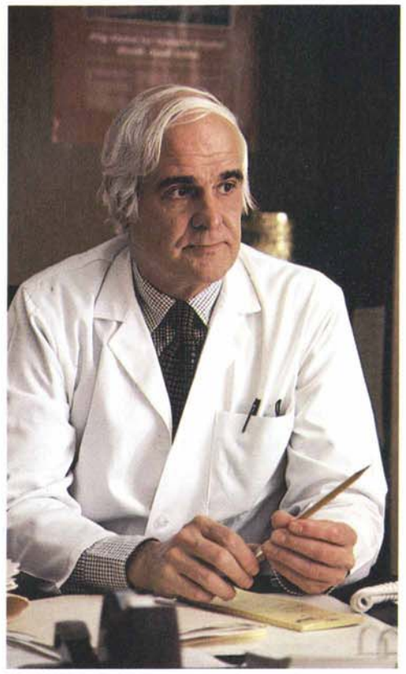
The caravan – dispatched from the new King Khalid Eye Specialist Hospital (KKESH) in Riyadh on February 11 – returned some 15 weeks later packed with enough data, some experts think, to eradicate blindness in the kingdom.

From the start, the survey team had set their sights high. Doctors teamed up with ophthalmic technicians, nurses and microcomputer-toting "registrar-interpreters" – to interview and examine 16,800 Saudis, including 2,500 Bedouins, in their cross-country effort. And even before data analysis got under way at KKESH late in May, they had begun to revise some eye-health myths and had made some still unannounced discoveries: that the contact-virus trachoma, which can cause blindness if untreated, is not nearly as prevalent as expected and is "disappearing as an entire disease," and that the Bedouins, thought by medical men to be bothered most by eye problems among the country's population sectors, have better, not worse, eye health than counterparts in villages and cities.

The KKESH survey was designed to determine how much visual loss and blindness there were throughout the kingdom – and what the causes are – said coordinator Dennis Ross-Degnan of the Maryland-based International Eye Foundation (IEF) which assisted the joint Saudi Ministry of Health-KKESH project. But in addition to survey work, said the Harvard-trained scientist, ophthalmologists also examined and treated individuals who asked for advice about eye problems along the caravan's routes – even effecting some "instant cures." The survey was also developed to trace the incidence of sight loss in particular geographic and demographic sectors in the country, and to establish ways of providing, in the field, fast clinical and microbiological assessment of the intensity of communicable eye disease.

Such comprehensive surveys are recommended by the World Health Organization (WHO) for countrywide programs to prevent blindness – and are one more example of the kingdom's systematic efforts to provide modern health care from border to border.

The survey was meant to "sample areas, not people," said Ross-Degnan at the survey's conclusion. Though that might sound like an odd formula for covering a country like Saudi Arabia, it most decidedly was not. Routed through all five of the kingdom's major geographical regions (excluding, of course, the population-sparse "Empty Quarter"), the team made 16 main stops, fanning out in groups to randomly selected households, where they took down medical histories, measured visual acuity and then gave complete eye examinations – in some cases with instant diagnoses.



KKESH Medical Director David Paton from Houston.

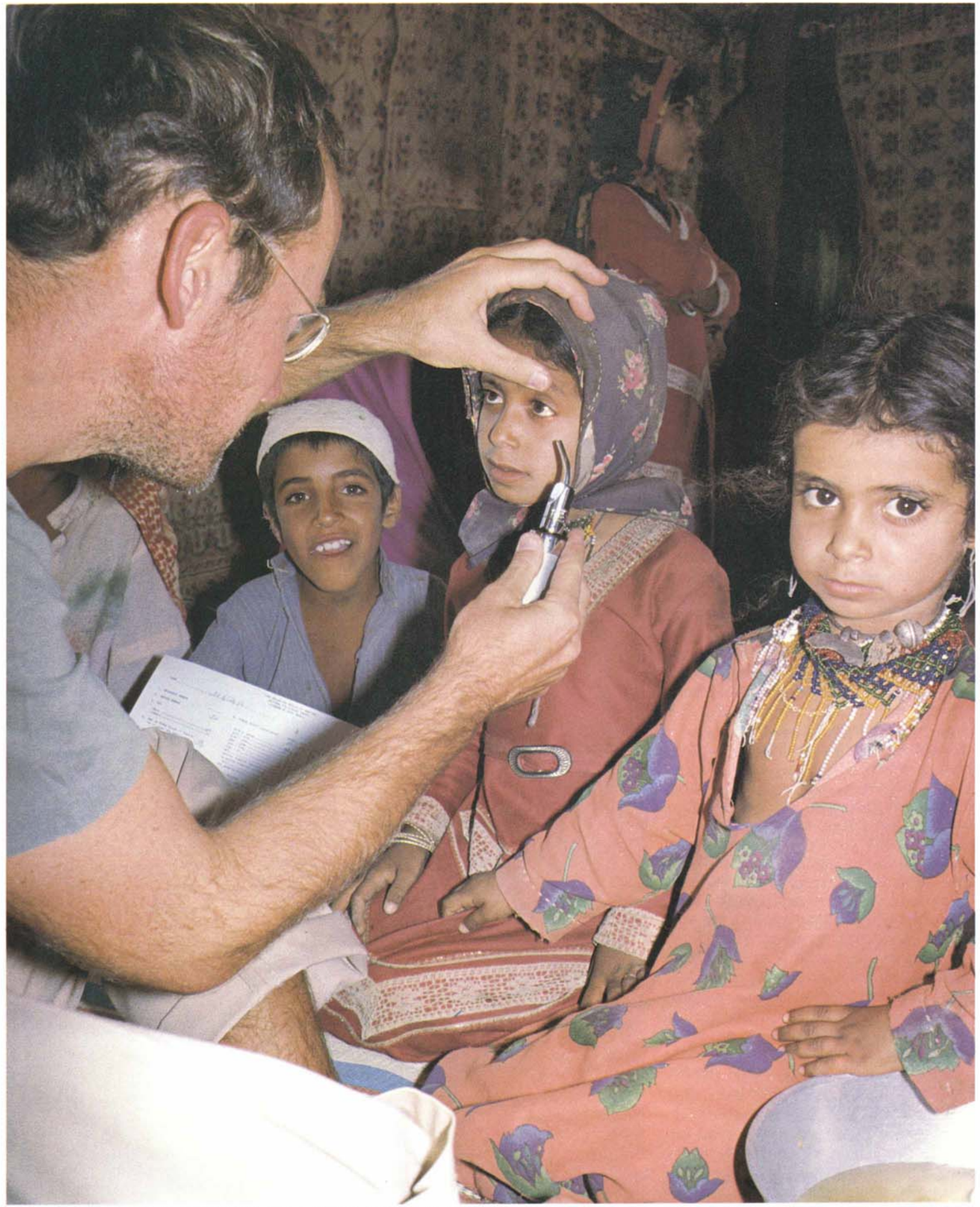
Ahmed Tuwaijri, 28, who served as survey administrator.

The expedition "covered the length and breadth of the kingdom . . . from Jiddah on the Red Sea to Dammam on the Gulf, all along the border in the north, to Abha and Jaizan in the south," as Ross-Degnan described it. This was no small achievement for a caravan that included eight vans towing six-person sleeping trailers, a mobile pharmacy and a water truck and two refrigerator trucks, plus a flatbed truck for carrying gear and a pickup truck used by mechanics.

KKESH served as the survey's staging base. Named after the late King Khalid, the facility was opened as a referral center in December 1982 and officially inaugurated by King Fahd in November last year. With a 44-doctor staff, including 30 ophthalmologists, 12 camera-equipped operating rooms, a cornea eye bank and 263 beds, KKESH is described by Medical Director Dr. David Paton as "unequivocally the largest modern eye hospital in the world." Quite simply, it is the centerpiece of the kingdom's eye-health strategy.

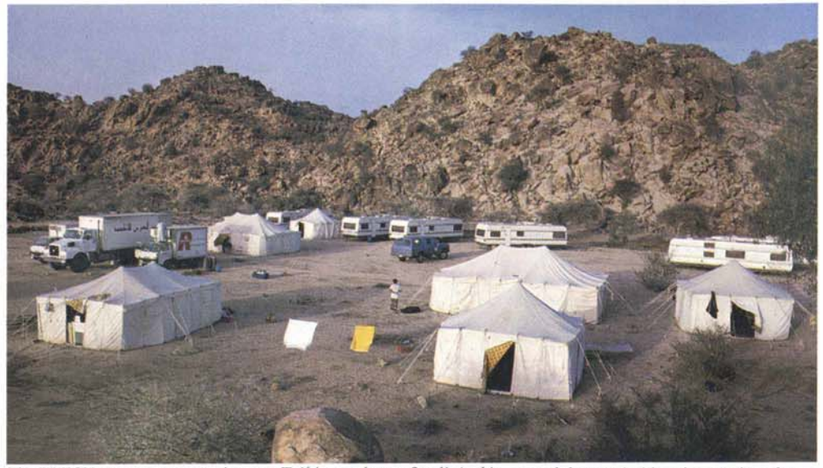
The survey was the first major project of the eye center's research department whose director, Dr. Khalid Tabbara, worked with Ross-Degnan to design the eye-inspection program. KKESH Deputy Medical Director Dr. Ihsan Badr, who has served as head of the ophthalmology department at King Sa'ud University in Riyadh, was instrumental in implementing the survey. Both Paton and Tabbara are at KKESH on leave from medical faculties in the United States: Paton from Houston's Baylor College of Medicine and Tabbara from the University of California, San Francisco, Procter Foundation.

"We're able to offer the top of the line in respect to eye-disease treatment," said Paton this spring as he adjusted a TV in his



Children were a special focus of the KKESH survey. Watched by their brother, Bedouin girls in the Taif region are given an examination to check their pupil reaction.

office so that the picture from a nearby operating room zeroed in – via microscope – on a cataract operation. "I don't think there is any other developing country that can make that statement."

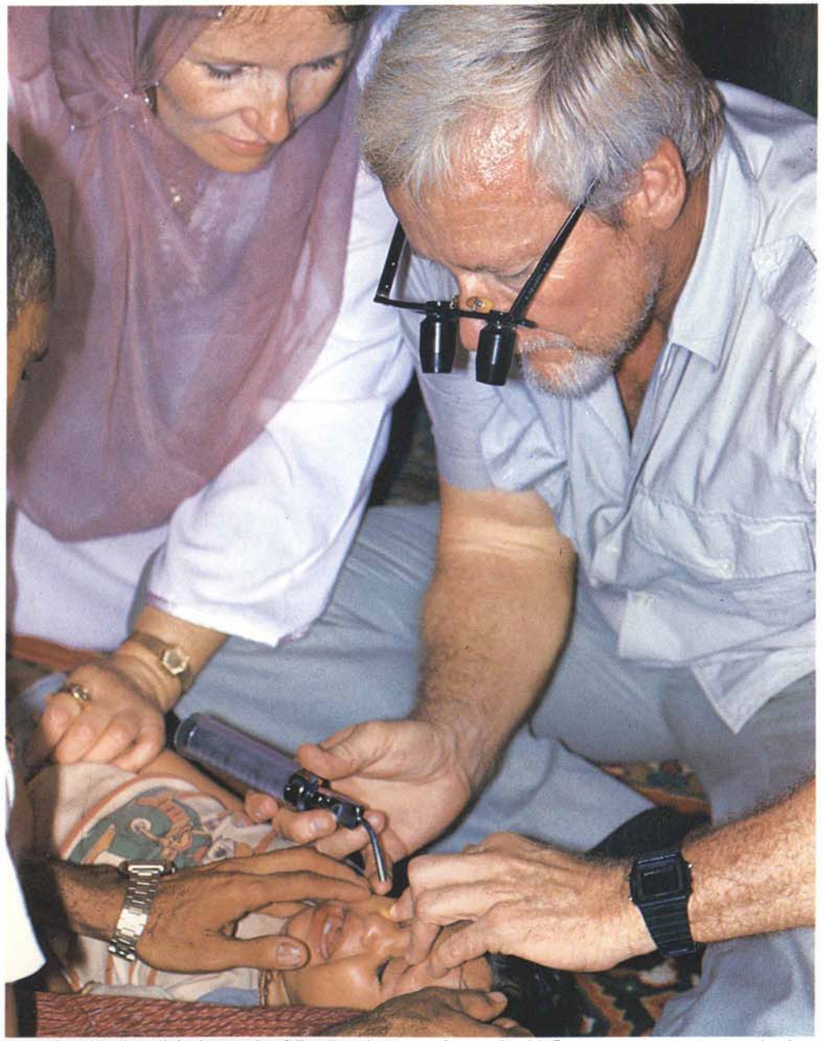


The KKESH eye survey campsite near Taif in southwest Saudi Arabia, one of the team's 16 main stopping places.

Already, the eye center has had wide impact. "In the past, hundreds and hundreds of Saudis were sent to Europe and the United States for eye care at high cost . . . and there was not always adequate follow-up here," said Paton, noting that Saudis qualify for free eye care from the government. "Now, no more go out for eye care at government expense unless there is a decision from here. And that hasn't happened yet."

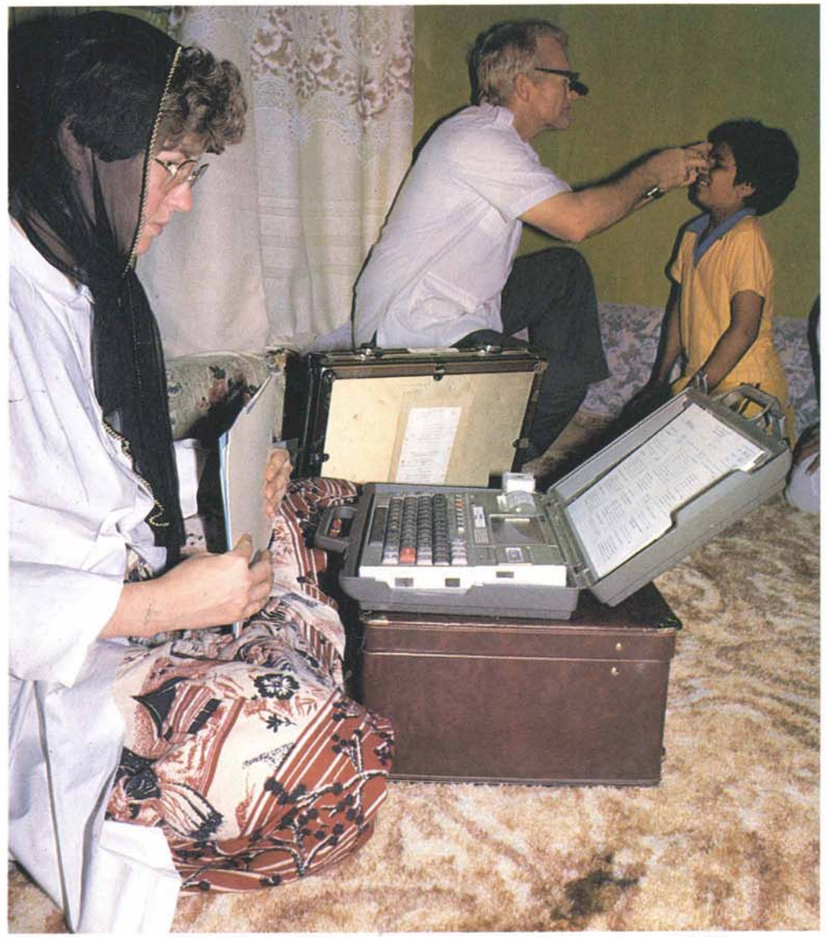
In a sketch of the eye survey prepared at its outset, Ross-Degnan attributed many of the eye ailments that do develop in the kingdom to such regional factors as "the lack of availability of water, the harsh glare of the desert sun, the high level of atmospheric dust and, until recently, the lack of easy access to either curative or preventive medical care." He added in the post-survey interview, "as a rule of thumb, 60 to 70 percent of blindness that results is preventable. We'll be able to make a big dent in that in a short time if we're able to concentrate on the population where the high risks exist."

Ross-Degnan's claim will be quickly tested. According to Paton, KKESH plans to start "appointing and rotating staff in remote areas" as soon as the analysis of survey data has pinpointed the "high-risk" areas, and after eye-care facilities are measured kingdom wide. In addition, the eye center was to have started an ophthalmology residency program this September in cooperation with King Sa'ud University. "Within a decade we should be able to produce all of the ophthalmologists we need in the kingdom," said the medical director. "What is needed are super diagnosticians, super surgical technicians and people skilled in the area of preventive medicine. We're developing our program to play to the strengths we need."

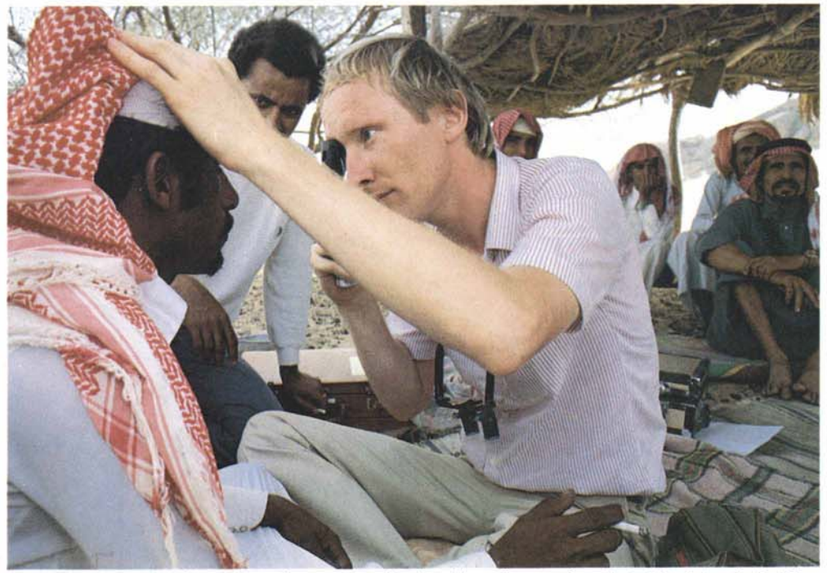


Dr. Robert Meaders of the International Eye Foundation, and nurse Joy McGregor carry out an eye examination.

Interlinked to the teaching program and coupled to the eye-disease survey is hospital research. Research will be "most relevant to the kinds of eye problems in the kingdom – problem-based clinical research," said Paton, though in fact dramatic results from the survey have already outrun implementation of KKESH plans.



A doctor examines a child in his home while a computer operator records his findings for the KKESH eye survey.



Dr. Wilfred Rademaker of KKESH carries out an examination of the optic nerve of a patient at Yanbu' on the Red Sea.

Ahmed Tuwaijri, a 28-year-old University of Chicago graduate from Riyadh who served as eye survey administrator, put his finger on one key reason why. "In the field," he said, "people would know you could cure their eyes." And though survey team members weren't there to dispense service, according to original plans, they found out early on that their aid could come in handy. As a result, they set "office hours" every morning from 6:30 to 8:30 to examine walk-in patients.

One of those patients was a 45-year-old man whose sight in one eye was nearly gone. The diagnosis: a membrane crossed the pupil of the eye, constricting it and severely reducing vision. The examining doctor studied the problem and then effected what must have seemed like a miracle.

"The doctor put a lot of dilating medicine in the eye and the patient sat down and waited," said Ross-Degnan. "Then the membrane broke. It was like an instant cure."

Five ophthalmologists, six ophthalmic technicians, six nurses and eight registrar-interpreters were with the survey team at any one time. Doctors from KKESH, the ministry of health and the IEF participated in the survey. Professional staff got one week off after five on the job and three of the five ophthalmologists were rotated in and out of the field, making for a total survey census of 82.

Demonstrating faith in the team's ability to treat eye maladies, individuals would sometimes walk long distances to the camp. In one such case in the Bishah area in the southwest, a patient's illness was diagnosed as glaucoma, a disease in which increased pressure on the eyeball results in progressive loss of sight. Referred to KKESH, the man was given a lift into Bishah 100 kilometers away (62 miles) to get the papers required to travel free to and from treatment at the eye center. "It was an acute case," recalled Ross-Degnan. "He had already lost some vision. He would have been blind if he'd waited longer."

Delicate cataract surgery under way in a TV-equipped operating room at King Khalid Eye Specialist Hospital, Riyadh – the largest modern eye hospital in the world.

In all, more than 150 people were referred to KKESH for complicated surgery, said the coordinator, and in one case, round-trip air fare and a $60-a-day stipend were provided for one family member to accompany a patient.

As to the unexpected discovery that the Bedouin population had a lower incidence of eye disease than either village or city dwellers, Ross-Degnan ventured a couple of theories he thought might explain the situation. One was "survival of the fittest in the desert," resulting in a population with stronger eyes over generations. The second was based on what he viewed as a healthy lifestyle: "The Bedouins are less crowded than people in more urban settings, and hygiene is less of a problem; they have a healthy diet and are an overall healthy people."

Dr. Diaa Mosely of the eye hospital carries out an examination at a Bedouin encampment in northern Saudi Arabia.

The survey also showed that the once-prevalent disease trachoma is not the menace it used to be. An illness that strikes in conditions of crowding, poor hygiene and poor sanitation, "trachoma does still occur and is still a problem, but not the overwhelming problem people thought it would be," Ross-Degnan said. "It's really disappearing ... due to the nation's development and clean water supplies."

To reach such conclusions, the survey targeted households headed by Saudis in 20 regions throughout the kingdom. Survey administrators picked 50-household segments for coverage in each of three demographic zones in each region: cities with populations between 10,000 and 30,000, towns of 1,000 to 10,000 populations, and communities of less than 1,000 persons. Eleven cities with more than 30,000 residents were also included, but survey leaders, judging that cities of that size seemed similar throughout in factors indicating eye disease, did not sub-divide them. The two largest cities – Jiddah and Riyadh – were allotted three 50-household segments each, Makkah (Mecca) two and the remainder one apiece.

Lists of residents, starting with the head of the house, in the randomly selected household segments were drawn up, and from a base of 220 names in each segment, the survey team worked through the list trying to derive a statistically true reading of eye illness and blindness in the overall population.

The survey was modified in two areas. In non-metropolitan regions of the Eastern Province, the kingdom's oil-producing heartland, "there were not that many people relative to other areas," explained Ross-Degnan. "Thus we had to over-compensate on the sample."

The Bedouins also proved to be a special case. "There was no conceivable way without considerable expense and time to get any true probability sample of the Bedouins," said the coordinator. "There was no way of defining the areas they lived in." So the survey team examined every Bedouin encountered.

"We'd go out into the desert with guides who could tell us where Bedouin encampments were and just stop at a group of tents and examine everybody we could find," said Ross-Degnan. "We always approached the Bedouins with someone from the local community whom they knew. The Bedouins are fabulous people, extremely traditional and very hospitable and courteous. Many times they would kill a goat or sheep and cook rice and just share their hospitality."

Indeed, the survey seemed to have had as profound an effect on some of the team members as it did on the Saudis they met on the road.

"Actually, I could tell you every inch of this country now," said Tuwaijri, the young administrator who was the team's main go-between with local authorities. "But I had never seen and never would have seen most of the territory we covered without the survey."

High points of his trip, he said, were to spend "days and days in the field, to live with the Bedouins, to eat with the people. To walk into hundreds of houses. To see different traditions from those in my home Central Province, the Najd. It gave me a unique opportunity to know my people. People would see you for 30 minutes, invite you for dinner, butcher a lamb for you ... and talk to you as if they knew you for years and years."

Notably, the survey was the first of its kind ever done using minicomputers in the field to speed accurate data collection. By using them, the leaders in the field cut survey time by months.

For Saudi Arabia the high point of the great caravan was its precious cargo: the hope of clear vision.

Arthur Clark is an Aramco World *writer stationed in Dhahran.*

A Union general, Confederate colonels and majors, an assortment of captains and one naval officer. They were ...

The Khedive's Cartographers

WRITTEN BY DAVID W. ICENOGLE
ILLUSTRATED BY MICHAEL GRIMSDALE

William T. Sherman

Ulysses S. Grant

Abraham Lincoln

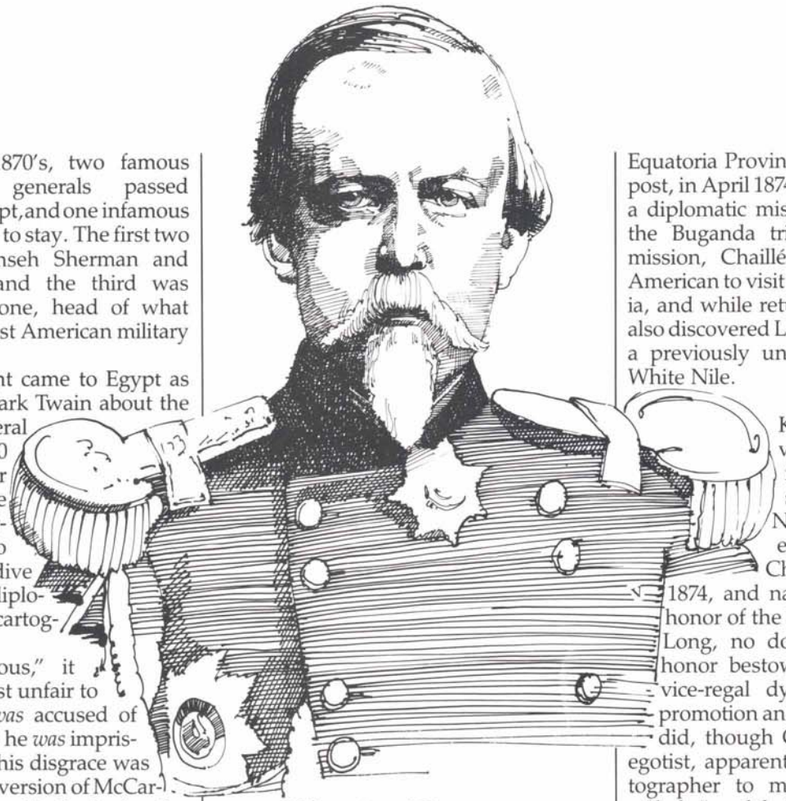
During the 1870's, two famous American generals passed through Egypt, and one infamous general came to stay. The first two were William Tecumseh Sherman and Ulysses S. Grant, and the third was Charles Pomeroy Stone, head of what might be called the first American military mission to Egypt.

Sherman and Grant came to Egypt as observers – as did Mark Twain about the same time. But General Stone and some 50 other Civil War officers from both the Union and Confederate armies came to serve Ismail, the khedive of Egypt as soldiers, diplomats and, above all, cartographers.

The term "infamous," it should be said, is most unfair to General Stone. He *was* accused of treason, it is true, and he *was* imprisoned as a result. But his disgrace was the result of an 1860's version of McCarthyism that swept the North during the war; a Congressional committee – eerily similar to the House Un-American Activities Committee (HUAC) a century later – accused Stone of treason and imprisoned him for six months in Fort Lafayette on Governor's Island in New York harbor. He was never tried, but, though later released, was never exonerated either. As a result, he left the army and was working as a mining engineer in West Virginia when the khedive of Egypt began to recruit a corps of American military officers to help rebuild the Egyptian Army and map Egyptian territory in Africa.

For Stone, this was another chance and he seized it: in 1870 he was appointed chief of staff of the Egyptian Army with the rank of major general. Stone and his cadre of Civil War officers began to rebuild Egypt's military power, and, from spacious headquarters in Cairo's medieval Citadel, to direct a series of reconnaissance expeditions into Ismail's growing empire in The Sudan, Uganda, and the Ethiopian borderlands, expeditions that would prove far more important than retraining an army.

Although General Stone published relatively little himself, his staff put out a series of reports on these expeditions



Charles P. Stone

entitled *Publications of the Egyptian General Staff* (Cairo, 1876-1878). Stone was also instrumental in the foundation of the *Société Khédiviale de Géographie* in 1895, a society established to disseminate geographical information about the khedive's growing empire in the Nile Basin. From such reports has come much of the story of the khedive's cartographers.

Among those cartographers were any number of colorful personalities. Raleigh Edward Colston, son of the ex-wife of one of Napoleon's marshals; Samuel H. Lockett, the engineer who designed the famous defenses that defied Grant's siege of Vicksburg; E. S. Purdy, a wastrel who was to die in poverty in Cairo in 1881, and the most colorful and controversial of them all, Charles Chaillé-Long.

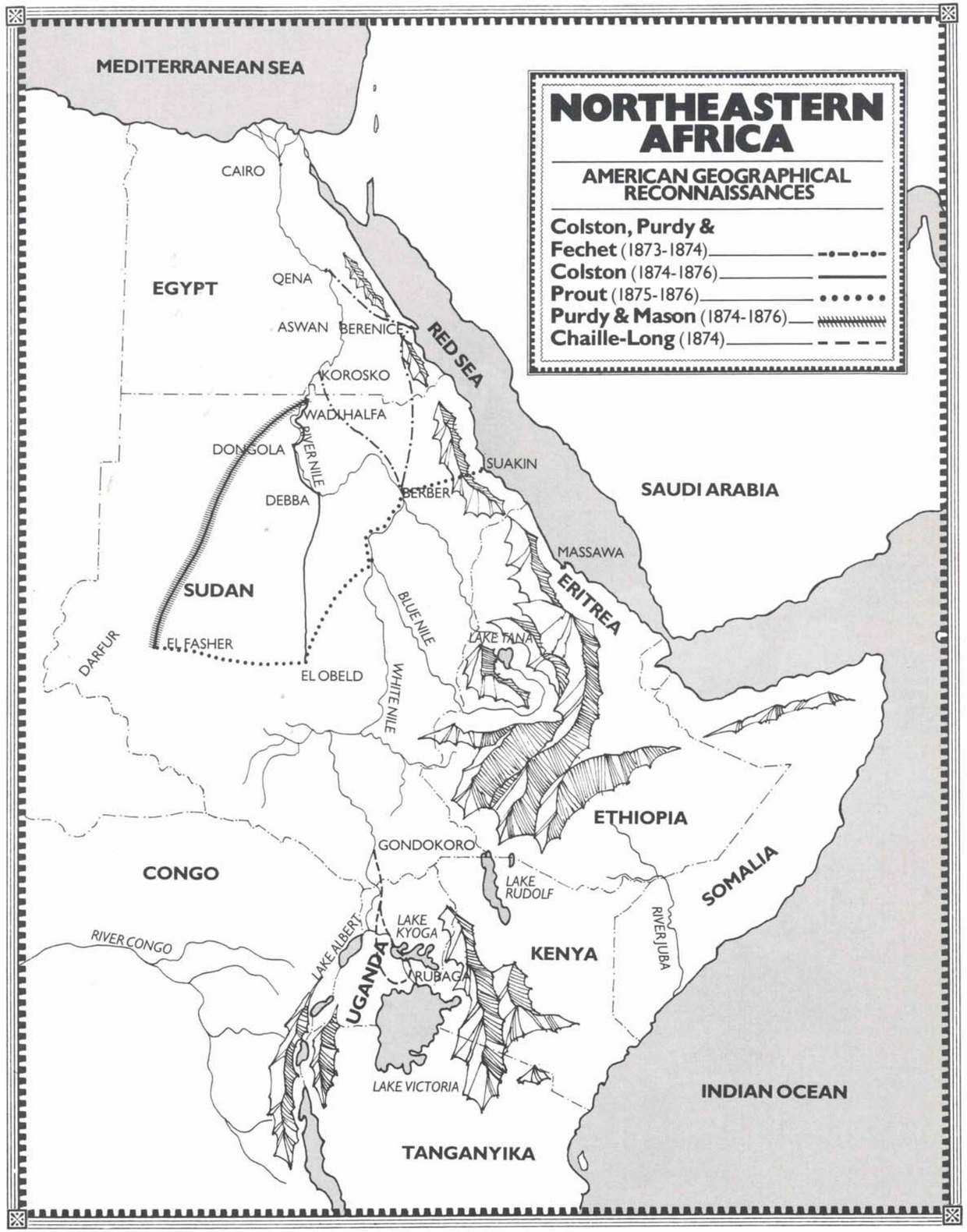
A native of the state of Maryland and an ex-captain in the Union Army (See *Aramco World*, November-December 1978), Chaillé-Long, a lieutenant colonel in the Egyptian Army, became chief of staff to the famous British soldier-administrator and religious mystic Charles "Chinese" Gordon – "Gordon of Khartoum" – during the first part of Gordon's tenure as governor of Equatoria Province in The Sudan. In that post, in April 1874, Chaillé-Long set out on a diplomatic mission to Mutesa, king of the Buganda tribe. In completing this mission, Chaillé-Long became the first American to visit Uganda and Lake Victoria, and while returning to The Sudan, he also discovered Lake Kyoga and navigated a previously unexplored section of the White Nile.

With regard to Lake Kyoga, Chaillé-Long's involvement is particularly interesting. A broad and shallow expansion of the Nile, the lake was discovered and navigated by Chaillé-Long in August, 1874, and named "Lake Ibrahim" in honor of the khedive's father. Chaillé-Long, no doubt, expected that this honor bestowed upon the Egyptian vice-regal dynasty would result in promotion and honors for himself, as it did, though Chaillé-Long, a supreme egotist, apparently tried to bribe the cartographer to make what Chaillé-Long called "my lake" appear larger on the map than it actually was.

In any case, that was how the lake was named on the Great Map of Africa produced by the General Staff in 1877. But although some German maps of the mid-1870's called it "Longs See," thus honoring its discoverer, both English and German maps were calling the lake "Coja," "Cojae" and "Kodscha" by the late 1870's, spurring Chaillé-Long into a long, acrimonious correspondence with the Royal Geographical Society, protesting what he called "British intrigue" in conspiring to deny him the explorer's right to name any geographical features that he had discovered. The battle was still going on in 1904.

In early 1875, Chaillé-Long led another expedition into Africa – to the Azande country along the Nile-Congo watershed – and in 1876 carried out a reconnaissance of the Juba river in Somalia. His book *Central Africa: Naked Truths of Naked People* (London, 1876; New York, 1877) recounts his adventures in flamboyant and egotistical prose.

As for Colston, he was the son of an American medical student and the Duchess of Valmy, ex-wife of Napoleon's Marshal Kellermann. Born in France, he lived there until 1842, when the family returned



The "Khedive's Cartographers" – the 50 former Civil War officers from the Union and Confederate armies who accepted commissions from the Khedive of Egypt after the war – surveyed jungles and deserts, mapped lakes and rivers, including an unknown section of the Nile.

Chaille-Long

to Virginia – in time for the Civil War. During the war he became a brigadier general in the Confederate Army. After the war, however, Colston was unable to find remunerative employment and, needing to support his wife, an inmate of a mental asylum in North Carolina, he joined the American Mission with the rank of colonel in 1873. His personal papers are located in the Southern Historical Studies Collection at the University of North Carolina. Colston's diary, which covers his day-to-day activities during the period he spent in Egypt and The Sudan, is a valuable source, and, although it has been used by several researchers, it has never been published.

Colston conducted two topographic and geological expeditions which were reported on in the *Publications of the Egyptian General Staff*. The first, in 1874, surveyed the Nubian Desert between Qena (Qina) and Barbar. On this expedition he was accompanied by two ex-Union officers, Major Oscar E. Fechet and Colonel Purdy.

It was the second expedition, however, that was significant: a trip, in 1875, from Debba (al-Dabbah) on the Nile to El-Obeid (al-Ubayyid) in Kurdufan during which he was seriously injured in a fall from a camel.

Believing that he was going to die in the hot waste of the Sudanese desert, Colston wrote his will and sent it to the American consul in Cairo, Charles Beardsley. "By the time this reaches you," he wrote, "my mortal remains will be entombed in a lonely grave in the desert." Then, in an example of his incredibly high standards of honor and duty, he added, "...it also grieves me that I am unable to be of further service to His Highness, the Khedive."

As it turned out, Colston did *not* die in the Sudanese desert. Indeed, he survived for another 20 years, dying in the Confederate Old Soldiers' Home in Richmond, Virginia.

Colston's successor as commander of the expedition was Colonel Henry G. Prout, an ex-Union officer from New York, who continued into the province of Darfur, a formerly independent sultanate which had recently been conquered by a Sudano-Egyptian army. Prout and Colston each wrote reports on the results of the expedition which were printed in the *Publications of the Egyptian General Staff*. Prout then served as governor of the Equatoria Province for a short period in 1876, after the first resignation of Gordon from that post.

Of all the travelers, adventurers and administrators who passed through The Sudan in the 19th century, Colston, research suggests, may have been the most honorable and charitable. It is astounding, therefore, to read in his letter to George Hurlbut, librarian of the American Geographical Society, his opinion of Emin

Emin Pasha

Raleigh E. Colston

Pasha, governor of Egypt's Equatoria Province in 1887 – whom the famous Henry M. Stanley, of Stanley and Livingstone fame, set out to rescue when the Mahdist revolt trapped him near Lake Albert.

War Department
Surgeon General's Office
Washington, D.C., April 6, 1887

Mr. Geo. C. Hurlbut

Dear Sir,

I rec'd yesterday the Bulletin for which I am very much obliged. I will send copies to as many of my old Egyptian comrades as I can locate.

I read with interest your Geogr. Notes referring to Emin Pasha. It is possible that Stanley will arrive too late – but he has not been wasting time like Wolseley, and I think he is much superior to the latter as a leader. I met Emin Pasha at Khartoum in 1875 & 1876. He was then a mere adventurer seeking employment as a surgeon in the Egyptian service, which he obtained from Gordon. I was surprised to learn how he has come out since. He certainly was (apparently) one of the most contemptible specimens of humanity I ever met ... I looked last night at my diary for that date and here is an extract.

"Dec. 14, 1875, met at Consul Hansal's (Austrian) ... a renegade trying to pass himself off as a Turk ... Attends mosk [sic] regularly. Presented as a great musician and could not play anything..."

There must have been something more in him than appeared on the surface. I hope most sincerely that he may be relieved in time. The likenesses published of late of Emin Pasha are very good – I recognized him at first sight.

With best wishes I remain
Very truly yrs.
R. E. Colston

If Raleigh Colston was the most competent and indefatigable worker of the American Mission, Samuel H. Lockett was surely the best cartographer. Born in Virginia in 1837, Lockett graduated second in his class from West Point in 1858, became a colonel in the Confederate Army and designed the defenses of Vicksburg. After the war, he taught engineering and mathematics at Louisiana State University (where his unpublished papers are now located), and in 1873 completed the first accurate topographic map of Louisiana. But, unable to support his wife and five children in the difficult conditions which followed the war, he joined Stone's staff in Egypt in 1875.

Samuel H. Lockett

Ismail, The Khedive of Egypt

In Egypt, Lockett's work first involved the planning and construction of fortifications. But then he surveyed the region of Eritrea between Mesewa and the escarpment of the Ethiopian Plateau, which resulted in a map and a lengthy report to General Stone, still unpublished. Lockett than went on to his supreme accomplishment: preparation of the "Great Map of Africa" with the help of Egyptian and American officers of the General Staff. A cartographic masterpiece, this map is almost certainly the finest and most accurate map of that continent produced up to that date, and is invaluable to anyone studying the extent of geographical knowledge of Africa in 1877. Measuring three by five meters (10 feet by 16 feet) with a scale of 1:3,000,000, it won a grand prize at the Paris International Exposition of 1878, but remained in manuscript form at the Abdin Palace Archives in Cairo until 1934, when it was first printed by the Egyptian government.

In 1877, Lockett returned to the United States to become a professor at the University of Tennessee. Six years later, he joined General Stone again – this time as Stone's assistant in a quite different undertaking: construction of a pedestal for what would be the Statue of Liberty. After providing most of the original drawings for the pedestal, he moved on to Bogota, Colombia, in 1891, where he died while seeking construction contracts.

Two other American contributors to the khedive's cartographic achievements were Purdy and Alexander McComb Mason (See *Aramco World*, March-April 1974), a former naval officer in the Confederacy. Mason, who was to spend more time in Egypt and The Sudan than any of the American members of the general staff – from 1870 to 1885 – served as acting governor of Equatoria in 1876-1877 during the absence of Gordon. In this time he made a thorough survey of Lake Albert, which had been discovered by Samuel W. Baker in 1864 and had been circumnavigated by Romulo Gessi in 1876. Despite such feats, Mason, to this day, remains a shadowy figure.

Purdy, an ex-Union officer from California, conducted two expeditions. In 1873, he surveyed the country between Barbar on the Nile and Berenice on the Red Sea, and in 1874-1876 commanded a survey party which traveled from Dongola (Dunqulah) southwestwards to El-Fasher in an investigation of the resources of the newly-conquered province of Darfur. His report was printed in the *Publications of the Egyptian General Staff* in 1877. A spendthrift, Purdy later squandered the money provided for his return to the United States, and died in poverty in Cairo in 1881.

Despite their successes, the khedive's cartographers spent a relatively short time in Egypt. On June 30, 1878, Ismail's regime, on the verge of bankruptcy, discharged all but General Stone, who, still uncertain of his reception in the United States, lingered on until 1883, when the British occupation of Egypt rendered his position superfluous.

In an ironic ending to his career, Stone then became chief engineer in charge of the construction of the Statue of Liberty's pedestal on Bedloe's (Liberty) Island, from which he had a splendid view of the Governor's Island military prison where he had been incarcerated 20 years before. Grateful to his old Egyptian comrades, however, he continued to employ them until, in January 1877, he died, thus bringing to an end an interesting footnote to the history of the American Civil War, and the history of Egyptian-American relations.

Dr. Icenogle, assistant professor of geography at Auburn University in Alabama, is finishing a book on the Civil War officers who served the khedive of Egypt.

The Lighthouse of al-Ikhwan

WRITTEN AND PHOTOGRAPHED BY ERIC HANAUER

Hamdi, the deckhand, was the first to see the lighthouse – on the Red Sea's al-Ikhwan islands (The Brothers) – and by the time the beacon had been shut off for the day, we could see the outline of the lighthouse itself on the horizon.

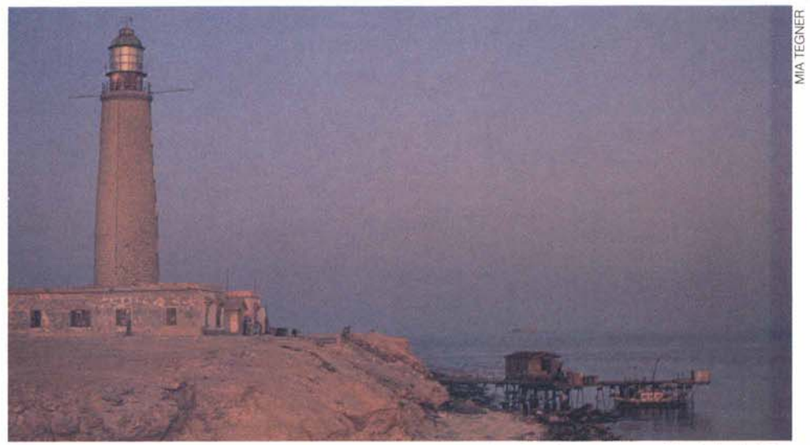
On a chart of the Red Sea, the al-Ikhwan islands are small dots about 160 kilometers south of Ras Muhammad (100 miles) at the tip of the Sinai Peninsula. Calling them islands, in fact, is an exaggeration; they're little more than large rocks. Yet to those who know, these tiny coral islets are the stuff of legends. They stand alone in mid-sea; the marine life there is said to be the most prolific in the Red Sea – an area considered the world's foremost underwater paradise; and the shipwrecks attest the fury of their storms.

The island on which the lighthouse stands is about 400 meters long (1,312 feet) with the lighthouse right in the middle and a fringing reef all around.

The lighthouse was built by the British in 1883. Its walls – of cemented stone – are a bit more than a meter thick at the base (four feet) and so strong, according to Muhammad Harga, captain of the lighthouse crew, that the Egyptian government's plans to tear it down several years ago had to be dropped because an inspection proved that nothing comparable could be economically built today. Even though, he added wryly, the beacon operates the same way it did 100 years ago: with a gas-mantle lantern.

A tribute to British workmanship, the light and lens mechanisms – built by Chance Brothers of Birmingham – belong in a museum rather than in a still functioning lighthouse in the space age, along with a polished walnut and glass case, full of brass gears and flywheels.

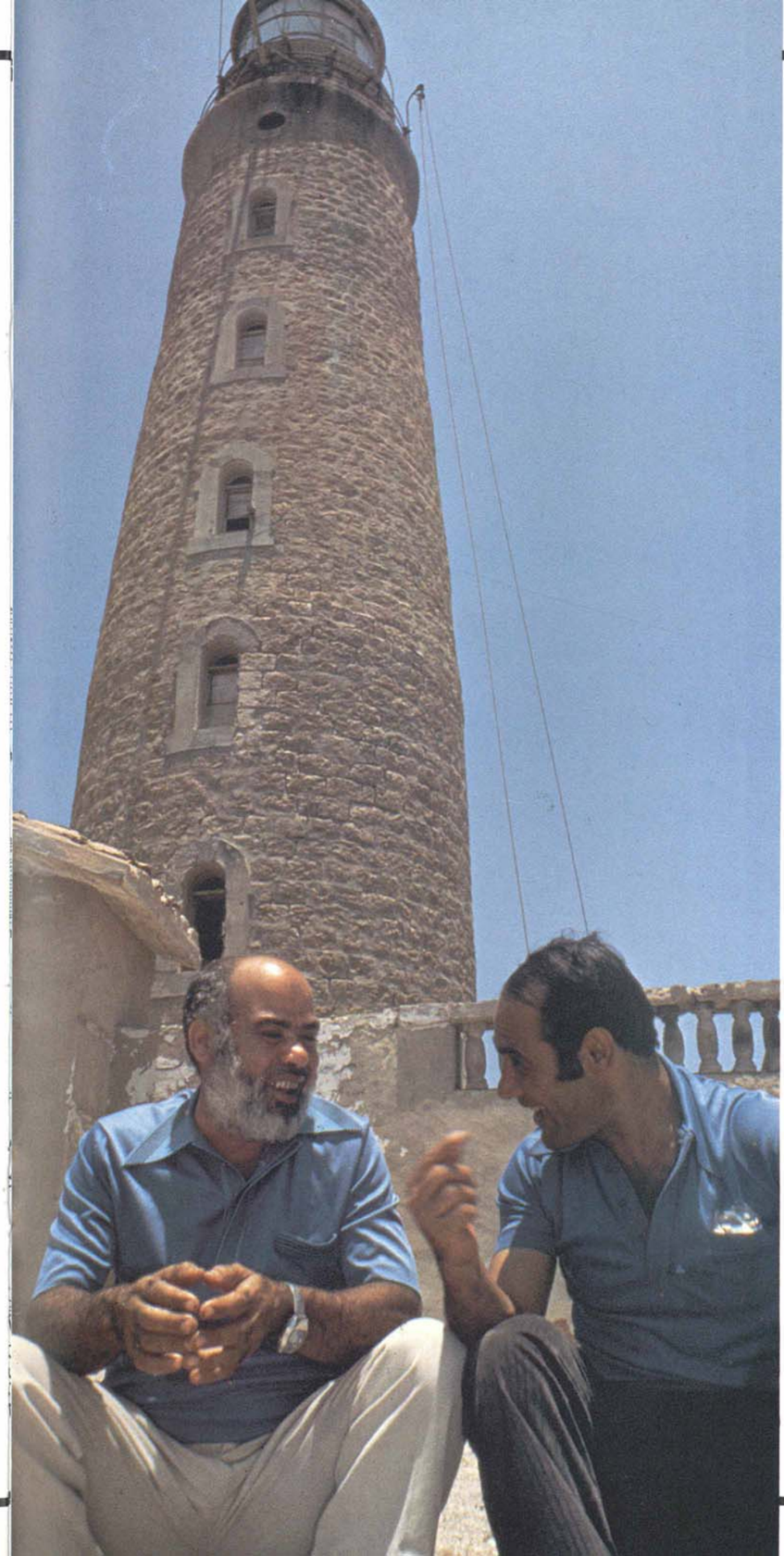
The lighthouse is rather like a pocket watch on a grand scale, and has a weight suspended on a steel cable. Wound with a hand crank to the top of the lighthouse, this weight, when a lever is thrown, begins a leisurely four hour descent which drives the finely balanced mechanism of a fresnel lens – which magnifies the lantern light 200 times. Although it weighs more than a ton, the four-sided lens can also be turned by hand along its circular track, and despite a few scratches and chips, it looks as if it will still be working after most of us are gone. The light itself is like a huge Coleman lantern – with a mantle, and gas that is hand-pumped.



MIA TEGNER

For 100 years the lighthouse on al-Ikhwan, the islets called The Brothers, has flashed a warning to ships in the Red Sea.

Captain Harga lights the great gas mantles of the al-Ikhwan lighthouse, a masterpiece of 19th century technology that includes a fresnel lens capable of magnifying light 200 times and flashing a beam visible 30 kilometers away.



Captain Harga, right, talks with one of the crew stationed on al-Ikhwan for four months at a time to keep the old, but dependable mechanisms working.

After a 15-minute warm-up, the mantle begins to glow and the lens begins to turn – focusing the light into four beams flashing over a 32-kilometer radius (20 miles). As the lens and lamp complete a full circuit in 20 seconds, mariners can see a flash every five seconds.

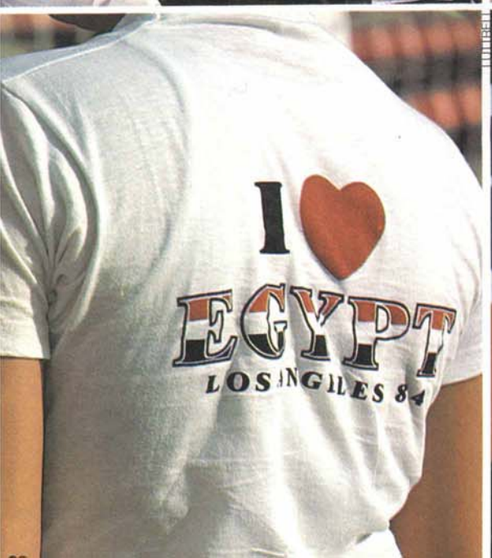
In describing his assignment on al-Ikhwan, Captain Muhammad says it's "a simple job, under difficult conditions," – meaning, he explains, that his crew of four must stay on the island for four-month shifts without electricity, without a source of fresh water and utterly dependent on a supply ship every six weeks for both water and food. Even in emergencies, communications can be difficult since the old Marconi wireless has not functioned properly in 20 years. Once, in fact, when a crew member became seriously ill, they had to set a fire with gasoline and old tires to signal for a boat.

Obviously, Captain Muhammad said, getting along with the crew is important on such a tiny island. "If you don't," he smiled, "there is no place to go." But he also made it clear that he and his crew take their work seriously – and that they feel a kinship with lighthouse keepers everywhere. He inquired about American lighthouses and nodded understandingly when told that most of them are automated. Next year, he said sadly, electricity will come to al-Ikhwan too – in the form of a generator. When it does, the old clockwork will be retired, and a more powerful light will replace the gas mantle.

Still, he said, he has rich memories. Some years ago, for example, President Nasser of Egypt stopped by during a Red Sea cruise. "He took tea with us," said Muhammad with pride.

So did we – tea and groupers, a marvelous eating fish caught by one of our divers, Ali Saad el-Din. Since the crew normally subsists on the small fish they can catch from the pier, the groupers were a treat, so the lighthouse crew pulled out all stops, and turned out one of the finest meals we had in the Red Sea area. It was a memorable note on which to end our visit to this superb relic of another era.

Eric Hanauer is an assistant professor of physical education at California State university and is currently working on a divers guide to the Egyptian Red Sea.



ANP-PHOTO

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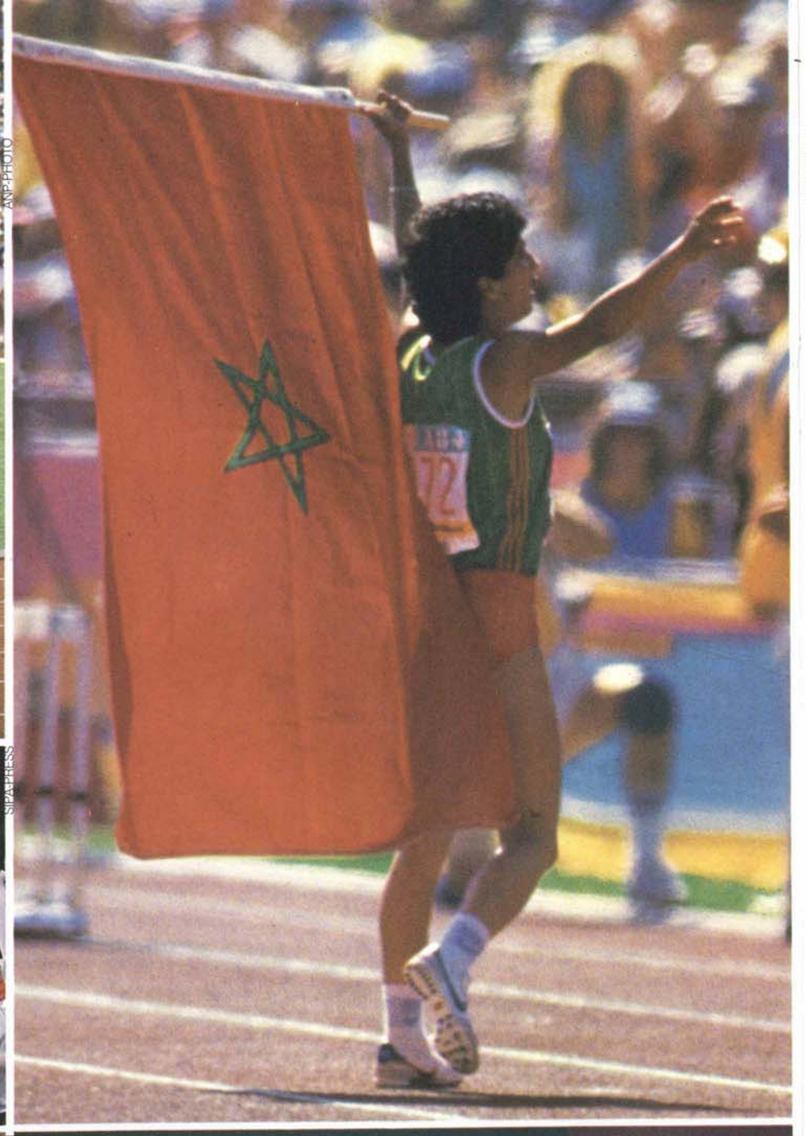


SIPA-PRESS

THE ARABS AND THE OLYMPICS

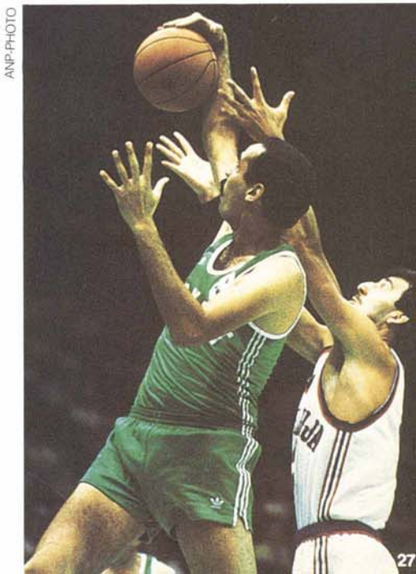
A SUMMARY

WRITTEN BY BRIAN CLARK AND JOHN GOODBODY
PHOTOGRAPHED BY BRIAN CLARK, DAVID LUTTRELL, ANP-PHOTO, SIPA-PRESS AND ALLSPORT

Clockwise starting at left: weightlifter Ahmed Tarbi of Algeria waves to crowd; an Egyptian fan shows his support; Muhammad Zaoui of Algeria, at right, squares off against his U.S. opponent; the large Arab presence at the Olympics was dramatically stated at the opening ceremonies; Nawal El Moutawakil, the first Arab woman to win a gold medal, carries the Moroccan flag around the arena; Sa'id Aouita, who won a second gold medal for Morocco; Egyptians struggling with a Yugoslav team for a medal in basketball.

ALLSPORT

ANP-PHOTO



SOCCER, SAUDIS AND SEOUL

WRITTEN BY BRIAN CLARK AND JOHN GOODBODY
PHOTOGRAPHED BY BRIAN CLARK AND DAVID LUTTRELL

For Saudi Arabia, it seemed, the 1984 Olympics were just a warm-up for the 1988 games in Seoul. Though they won no medals – and were eliminated from the soccer competition earlier than expected – the Saudis played hard, lost gracefully, cheered wildly and looked forward to Korea with hope. As the Saudi soccer coach Khalil al-Zayani put it so well: "We'll be back – and we'll be better."

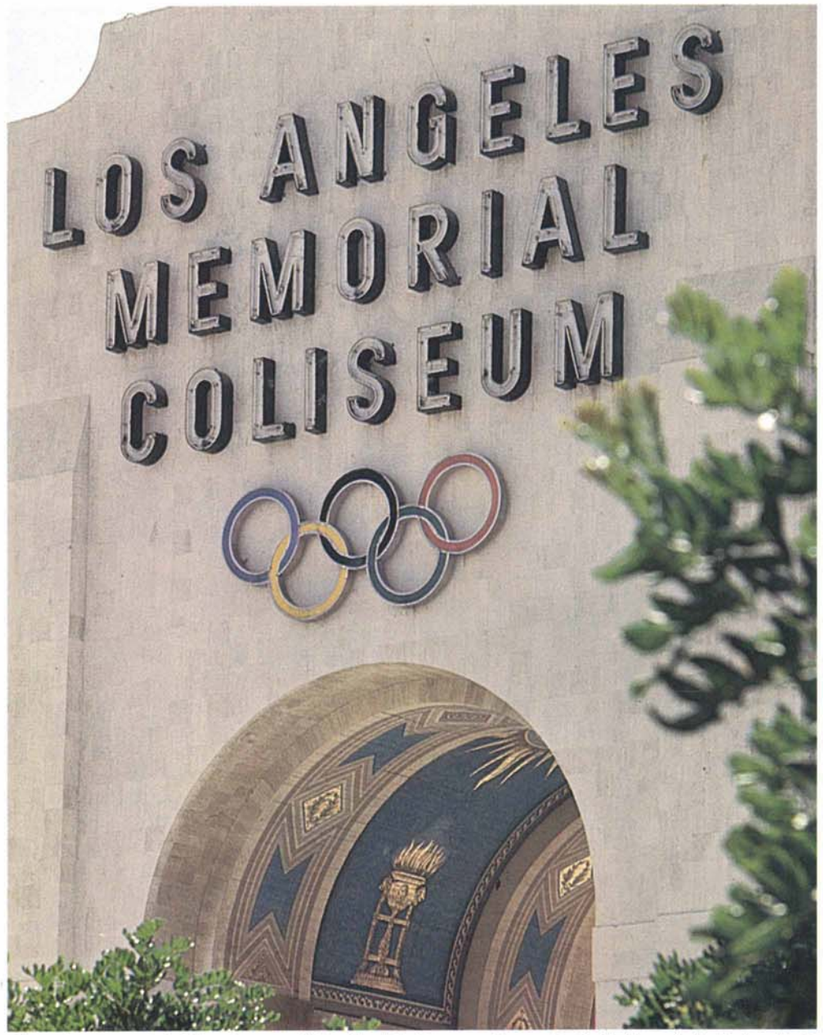
Everyone seemed to be thinking the same way. Despite the early setbacks in soccer, for example, the disproportionately large crowd of Saudi fans continued to roar with enthusiasm each time a Saudi player so much as touched the ball. And though the kingdom's hopes for victory were soon crushed, the fans continued to wave the green and white Saudi flags – to the rhythmic beat of a drum – cheered with enthusiasm and dismissed defeats with philosophic shrugs. And when it was over, one fan, still smiling widely, summed up the crowd's reaction: "Just watch us in Korea."

The chief disappointment, in fact, was the failure of American television to broadcast soccer games. Though soccer was played all across the United States – from Harvard University to Palo Alto, California and the Rose Bowl in Los Angeles – TV coverage was so scant that Joao Havelange, president of the International Football Federation entered an official complaint with the International Olympics Committee (IOC).

Since five of the 16 soccer teams at the Olympics were Arab teams, many Arab fans were upset by the lack of coverage, but otherwise Arabs at the Olympics were generally pleased. Some, like the Saudi soccer fans and players, were happy just because they had qualified for and competed in the games. Others – from Egypt, Lebanon, Syria, Algeria and Morocco – were pleased because their own athletes did exceptionally well, or because many of the 600 athletes from 18 countries listed as Islamic countries won medals or at least exceeded expectations.

Of all the Islamic countries represented at the Los Angeles games, Morocco, of course, was the happiest. With two gold medals, (See pages 30 and 31), one of them the first ever won by an Arab woman,

The flag of Saudi Arabia proudly hangs amongst those of other nations competing in the 1984 summer Olympic Games.



Above: An entrance to the Olympic arena. Below: Saudi Arabian soccer fans rooting for their team inside the Rose Bowl.

Morocco stole the show. But they were by no means alone. Pakistan won a gold medal in field hockey; Egypt and Syria won silver medals in judo and wrestling; Algeria and Turkey both won two bronze medals in boxing and Turkey another bronze in wrestling. Some of these countries also did well in basketball and weightlifting, and Saudi Arabia competed in five sports.

For most of the Arab fans, however, soccer was the game to watch – especially the Arab teams: Saudi Arabia, Qatar, Egypt, Iraq and Morocco.

Generally speaking, the Arab teams were a bit out of their league, but one team, Egypt, reached the quarter finals only to go down in defeat to Italy in a hard-fought match in which three Egyptians and an Italian were sidelined by referees and one player was suspended.

Despite that, Egypt recovered impressively at their Stanford University match at Palo Alto in which they crushed Costa Rica 4-1, only to collapse in their August 2 match with the United States.

In the final-eight competition, Egypt faced France, the eventual gold medalist and the team against which the Egyptians had managed a rugged two-hour scoreless tie during the Mediterranean Games in Casablanca last September. At Palo Alto the two teams nearly achieved the same result: after two hours the game went to penalty kicks.

Qatar, another Arab country with an Olympic soccer team, also started off brightly – holding mighty France to a 2-2 tie – and winning accolades from the French team manager, Henri Michel. "The Third World teams, including the Arabs, are getting much better," he said. "All teams are equal now, all have the same preparation. We'll be hearing from these teams in the future."

Later, however, at Harvard University across the continent in Massachusetts, Qatar's bright start was quickly dimmed by a 2-0 victory by Norway in a fiercely fought match that ended with 14 policemen escorting the players off the field.

Iraq also started well – with a draw against Canada and a lively game against Yugloslavia, one of Europe's better teams. The Iraqis, however, lost to Cameroon.

As for Saudi Arabia, the kingdom's team came to California with bright hopes and the backing of the whole kingdom. "We believe," said Prince Bandar bin Sultan, the Saudi ambassador to the United States, "that we have a very good chance

Sa'id Aouita, after winning the 5000-meter event in 13 minutes 05:59 seconds and setting an Olympic record.

THE AOUITA EXPRESS

WRITTEN BY JOHN GOODBODY
PHOTOGRAPH BY SIPA-PRESS

The most famous train in Morocco now is the Aouita Express. It runs from Casablanca to Rabat, and it's always on time – like the man that it's named for: Sa'id Aouita, who won Morocco's second gold medal in the Olympic games by winning the 5,000-meter event in 13 minutes 05:59 seconds, an Olympic record.

In recent years, running has become one of the glamor events at the Olympic games, possibly because so many people today are out running in the streets of New York, London, Paris and almost everywhere else. At the Los Angeles games, for example, the long awaited race between the famous Mary Decker of the United States and the equally famous barefoot champ from South Africa, Zola Budd, running for Britain, was one of the big stories of the Olympics even before their now celebrated – and heartbreaking – collision.

Sa'id Aouita may not be in the Decker-Budd class with respect to news coverage, but, by winning the 5,000 meters, the 24-year-old runner from Fez became a contender for the title of the fastest man in the world – now held by Briton David Moorcroft with a time of 13 minutes, 00:41 seconds.

Aouita's Olympic race was a thriller. Though he had racked up a record-breaking time of 13 minutes 04:78 seconds earlier this year, Sa'id, obviously, had to keep a wary eye on Moorcroft, and also on Portuguese runner Antonio Leitao, who, eventually, placed third. For a moment or two, Markus Ryffel of Switzerland also posed a threat when he came flying out of the pack in the final 250 meters. But then, in the last 100 meters, Sa'id passed everyone with ease and came down to the finish smiling and waving.

With one gold medal in the bag already (See Page 31), Sa'id's victory did wonderful things for the morale of Morocco particularly and Arabs generally. As Sa'id said himself in a telephone talk with Morocco's King Hassan II: "I am dedicating the victory to the African continent, the Arabian countries and especially to my own country..."

King Hassan, meanwhile, had done a bit of dedicating too. Just before the Olympics began, he had renamed the Casablanca-Rabat express train the Aouita Express, a signal honor for a young man who was totally unknown five years before when his coach, Aziz Daouda, first noticed him in a national cross-country high school race and instantly decided he was a winner.

"He had the quality of people who go all the way," Coach Daouda told an Aramco World *reporter in Los Angeles. "Most runners are afraid of exhausting themselves, but he had an easy stride and was relaxed when running. I could see he had something special."*

By 1981, Sa'id was on his way – he had won the World Student Games 1,500-meter title – and though sidelined in 1982 he came in third in the 1,500-meter race in 1983. In June, in Italy, he switched to the 5,000-meters event, but when he got to Los Angeles he still hadn't decided whether to run the 5,000 meters or the 1,500, the event in which he had won a bronze medal in Helsinki in 1983. Then he hurt his leg and decided that the 5,000 meters would be best. As a result, observers now think Sa'id might be the first athlete to run that event in less than 13 minutes – and so does Sa'id. "I know I can go below 13 minutes," he said.

A GOLD FOR NAWAL

WRITTEN BY JOHN GOODBODY PHOTOGRAPH BY SIPA-PRESS

At the Los Angeles coliseum last month, Morocco's tiny, 22-year-old Nawal El Moutawakil became the first Arab woman ever to win an Olympic gold medal – with a startling victory over favored runners from Sweden, Rumania and the United States in the 400-meter hurdles. Her time of 54:61 seconds set an Olympic record and was the 10th fastest time in hurdles history.

For Morocco as well as Nawal, it was an exciting triumph; it was the country's first gold medal and its second Olympic medal of any sort since Rhadi ben Abdesselem took a silver in Rome's 1960 marathon. But even the Americans, whose patriotic cheering had nettled many foreign observers during the games, came to their feet when the red and green Moroccan flag flapped to the top of the flagpole and Nawal strode tearfully to the podium beneath the Olympic flame to claim her medal.

Two hours later, as offiicals put through a telephone call to King Hassan II in Rabat, Nawal was still in tears – tears of gratitude to her late father who had encouraged her to become an athlete. "A gold medal for an Arab woman is something else again," she said, "but my father wanted me to become a champion – first in my club, then in my country, then in Africa and finally in the world. He would be very happy for me now."

Everyone else certainly was. Abdelouahed ben Hassan Benjelloun, Morocco's International Olympic Committee member, told Aramco World *that Nawal's victory "shows that with serious training victory is possible by a competitor from any country." And Abdellatif Semlali, Morocco's minister of sports, said that although Nawal is the outstanding representative of female athletes in Morocco, she is not unusual because she is a girl. "She is unusual because of her ability."*

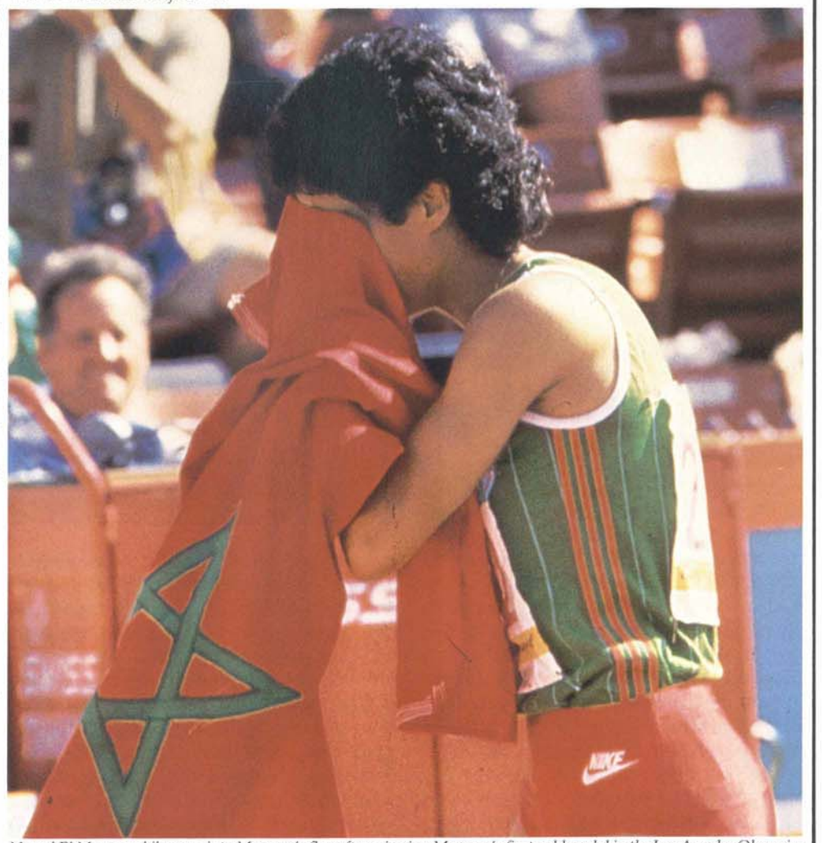
Praise and pleasure at Nawal's victory came from every quarter. American sports writers, not normally given to excessive sentiment, went all out for her, and Charles Palmer, general secretary of the General Assembly of International Sports Federations, said "it is particularly gratifying to see the development of sport in any Third World country." He also expressed the hope that all nations would encourage women to compete in sports.

In addition, the Algemene Bank Maroko named its Casablanca branch the Nawal El Moutawakil bank.

Nawal was by no means the only athlete from North Africa to compete in the games. Another Moroccan, Fawzi Lahbi, ran extremely well against fierce competition in the 800 meters – as did The Sudan's Omar Khalifa. But unlike, for example, America's Carl Lewis, who was expected to win everything in sight, Nawal El Moutawakil's victory was totally unexpected. For one thing, she is only 1.60 meters tall (five feet, two inches) and only weighs 49 kilos (a shade over 100 pounds) and girls that size aren't expected to beat such long-legged champions as Sweden's Louise Skoglund, America's Judi Brown or Rumania's Christina Cojocaru.

Such observers forgot that Nawal, a physical education major at Iowa State University, was not new to running. She had started with cross country, switched to sprinting and the 400 meters before trying the hurdles. They forgot too that in 1983 she was a semi-finalist in the world championships, and that in 1984 she had become the African champion and the American Collegiate champion.

At the starting gun, Nawal, though dwarfed by her western rivals, soon showed her extraordinary ability. In a supremely confident race, she led from start to finish over the 10 flights round a stadium packed with the 89,000 fans who would soon applaud her – and Morocco's – victory.



Nawal El Moutawakil weeps into Morocco's flag after winning Morocco's first gold medal in the Los Angeles Olympics.

for a medal, and the whole country is behind us.''

That degree of confidence may have been premature, but it was not entirely unfounded. This spring, after all, the Saudi team stunned the world of football by beating a strong South Korean team 5-4 in the Asia-Oceanic Olympic Qualifying Rounds – and qualified for the Olympics.

With that victory, the Saudi team instantly achieved star-status – and triggered spontaneous celebrations of glee throughout the kingdom. Even the Royal Family showed its pleasure – with a cascade of gifts to the players and a decision to publish a series of posh color advertisements in such magazines as *Time*, *Life* and *Newsweek*, the Sunday supplement *Parade* and newspapers from coast to coast, plus handsomely photographed nationwide televised spots.

Many people in the world of sports were stunned when the Saudi team began to beat teams like South Korea and New Zealand in the games at Singapore. Others, however, said the kingdom's strong showing was no aberration. In fact, they argued, improvements in football roughly parallel improvements in other areas. As the country advances as a whole, they said, so will its sports teams.

This is certainly possible. In 1976, the government's General Presidency for Youth Welfare decided to develop soccer in Saudi Arabia with the same intensity shown by other government agencies as they developed roads, communications, schools and universities and hospitals under a massive series of five year plans to industrialize and develop the kingdom. Initially, and wisely, the youth welfare group started by upgrading children's and teenage sports, but then, when the time was ripe, they brought in top soccer coaches and launched what has since become one of the best sports programs in the Middle East; by 1984 the kingdom was spending $30 million on sports.

As one result of this, Saudi soccer quietly established a toehold in the region and then, in 1982, startled the sports world when the Brazilian star Mario Zagalo, was brought in to coach the national soccer team, and Tele Santan came to coach the Jiddah al-Ahli Sports Club, one of the better teams in the kingdom.

Then, last March, after a frustrating loss to Iraq in an Arabian Gulf tournament, Saudi Arabia replaced the national team coach with one of its own: Khalil al-Zayani, who had led his hometown club – al-Ittifaq of Dammam – to national and Gulf championships in years past. According to some observers it was al-Zayani's knowledge of Saudi psychology as well as his soccer skills that sparked Saudi wins over teams like New Zealand, Kuwait and South Korea in the Singapore showdown.

Those victories were exceptional. In 12 Olympic-trials games, the Saudis shut out their opponents five times and allowed only one goal in five other contests – surprising not only observers on the sports scene, but also themselves. As coach al-Zayani said, "Our boys did the impossible. I am incredibly happy."

But the Olympics still lay ahead and as the summer progressed, al-Zayani, to get ready for the team's debut at the Rose Bowl, took his team to Jubail on the Gulf Coast for two weeks, then to Portugal for intensive practice and training matches. Finally, along with Saudi Arabia's cyclists, archers, fencers and marksmen, the soccer players arrived in Los Angeles. Altogether there were 78 Saudi athletes, the largest delegation of Saudi sportsmen ever to attend the Olympics.

Although the soccer team quickly headed for the Dominguez Hills College football field south of Los Angeles to practice – and get used to L.A.'s famous smog – it was not all work. The athletes also got a chance to look around Los Angeles, tour the Universal Studios movie production lot and attend receptions and parties given by the Arab community of Los Angeles. As part of the Olympics Arts Festival – which gave each competing nation the opportunity to present shows and displays of its arts – the Saudis were able to hear their own favorite singer, Mohamed Abdu, the most popular singer in the kingdom.

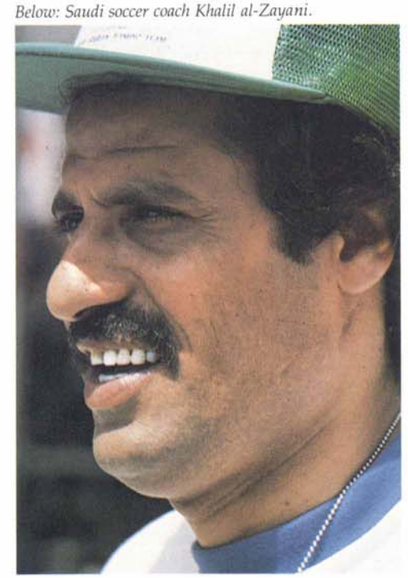
Meanwhile, at the Saudi Information Center near the University of California at Los Angeles, Prince Turki ibn Sultan, one of the kingdom's delegation, in an interview with *Aramco World*, discussed the role of sports in Saudi Arabia. He said that Saudi Arabia has a long tradition of sports – hunting, with falcon and saluki, the desert greyhound, camel racing and horse racing – but that these days the emphasis is on modern sport. As a result, he said, the kingdom now has 154 football clubs, 132 track and field clubs, 132 volleyball clubs, 120 table tennis clubs 90 bicycling clubs, 69 handball clubs, 55 gymnastic clubs, 53 basketball clubs and 31 swimming programs.

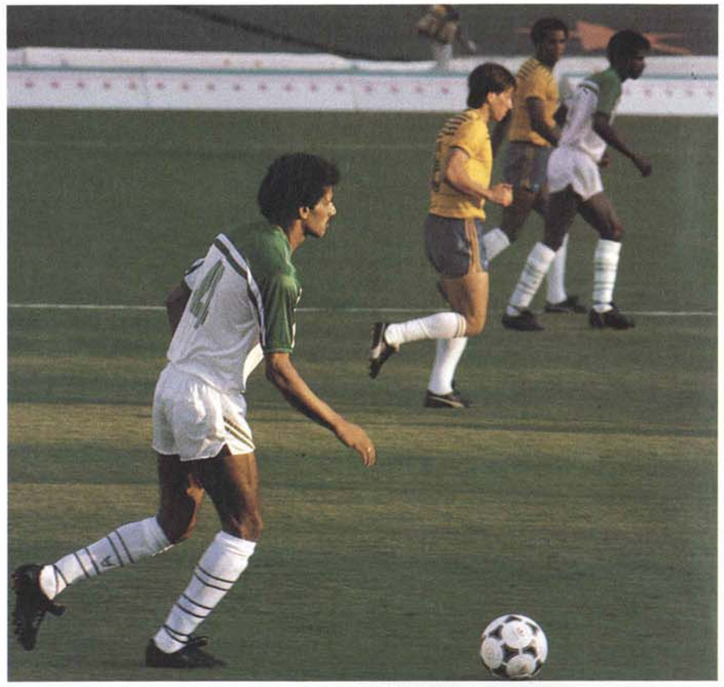
Furthermore, he went on, the youth welfare presidency in charge of sports will build 26 new sports centers, 12 sports halls, three sports-medicine facilities and 15 new swimming pools under the third Five Year Plan. "Youth to a nation," said the prince, "is as springtime to the seasons. It is the . . . barometer of a nation's progress."

At the Olympics, soccer, despite American disinterest in the game and media

Left: Some members of Saudi Arabia's Olympic soccer team, which won a berth in the 1984 games by upsetting such powerful teams as New Zealand, South Korea and Kuwait in trials held at Singapore last spring. In matches played at the Rose Bowl in Los Angeles, the Stamford University stadium in Palo Alto and at Harvard University in Cambridge, Massachusetts, the Saudi team won no medals but gained the experience that players and coaches said they would need to do better in the 1988 games in Seoul, South Korea. Shown here are, top row, left to right: Majed Abdullah, Muhammad al-Mutlaq, 'Umar Bakhshwain, Ahmad al-Bishi, Hussain al-Bishi, Muhammad 'Abd al-Jawad; bottom row, left to right: Sami Jasim, Fahd Musabiyih, Muhaisin al-J'uman, Samir 'Abd al-Shakour, and Ahmad Bayazid. Not shown is Saleh Khalifa al-Dossary, team captain in Singapore and Los Angeles.

Below: Saudi soccer coach Khalil al-Zayani.





Saudi soccer players in action during the Los Angeles Olympics, where they played hard and won praise from their opponents. Opposite below: King Fahd photo in the Rose Bowl.

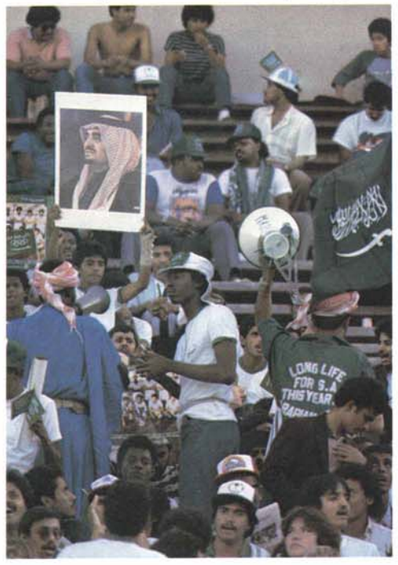
neglect, was one of the important crowd pleasers. Games were played right across the country – from Cambridge, Massachusetts to Palo Alto, California – and attracted vast crowds; indeed, as the 16 teams fought their way through the preliminary rounds, quarter-finals and semi-finals to the finals, they drew the largest turnouts ever recorded in the United States. And though the Saudis did not advance past the first rounds, they played well enough to win praise from some of their opponents.

Since Saudi Arabia's first match saw them pitted against powerful Brazil, the handwriting was on the wall almost immediately. Brazil dominated the play right from the start and although the Saudi eleven came on strong in the second half – to score its only goal of the night – Brazil won 3-1.

After the game, Majed Abdullah, who scored the Saudis' single goal on a penalty kick, acknowledged that Brazil played well and that Saudi Arabia should have taken the offensive. "Their man-to-man defense controlled us," he said, "and each time we tried a different tactic, they managed to cover us well. We tried to attack in the second half, but it was to no avail."

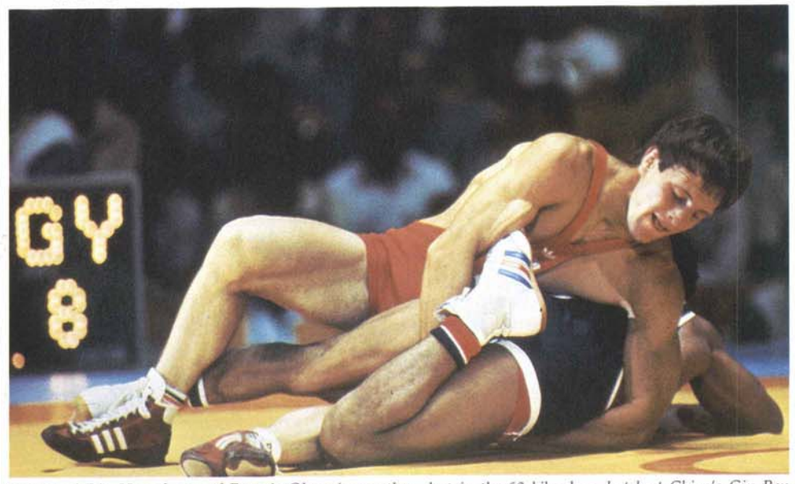
Despite the defeat, Majed Abdullah said, he was overwhelmed by the number of Saudi fans in the stands and welcomed their loud, vocal support. "It helped, and it really wasn't expected. I just wish our play as a team would have been better."

Coach al-Zayani was also disappointed, but not upset. "We are still young and



COMBAT MEDALS

WRITTEN BY JOHN GOODBODY PHOTOGRAPH BY ANP-PHOTO AMSTERDAM



Hussam el-Din Hamed, one of Egypt's Olympic wrestlers, lost in the 68 kilo class, but beat China's Gin Ren.

To nearly everyone's surprise, four Arab competitors closed the 1984 Olympic games by winning a clutch of medals in combat sports traditionally dominated by other countries: judo, wrestling and boxing.

One of the four, Muhammad Rashwan, a burly 28-year-old Egyptian businessman, walked off with a silver medal in judo, a sport usually controlled by the nation that invented it: Japan. In impressive early bouts, Muhammad quickly disposed of Bechir Kiiari of Tunisia, Mihai Cioc of Rumania and, finally, China's Xu Guoging, a relative newcomer to judo, but so strong that he had broken the backs of two sparring partners a year before.

Then, however, he came up against Japan's formidable Yasuhiro Yamashita – unbeaten in 198 contests since 1977 and winner of four world titles and eight all-Japan titles. Though he started fast and hard – with a quick, aggressive attack – Muhammad was soon turned and held, for the required 30 seconds, by the extraordinary Yamashita. Muhammad's silver medal, nevertheless, was impressive. It was the first ever won by an Arab in Olympic judo tournaments.

In free-style wrestling, another Arab, Joseph Atiyeh, won a silver medal for Syria – the country's first – in the 100-kilo class (220 pounds) – by pinning Rumania's Vasile Pascasu in 4 minutes and 42 seconds. A student at Louisiana State University, Atiyeh then faced Lou Banach representing the United States and was pinned himself in one minute and one second.

Two Algerian boxers picked up bronze medals in boxing. Light-heavyweight Mustapha Moussa, who had outpointed Malawi's Drake Thadzi, nearly lost a decision to Anthony Wilson of Great Britain, but was given the match when the Jury of Appeals reversed the 3-2 decision. He then went on to face Anton Josipovic of Yugoslavia, however, and was so decisively defeated – on points – that he was taken to the hospital, though released soon after.

The other Algerian, middleweight Muhammad Zaoui, stopped Lesotho's Tsill Monne and, on a jury-reversed decision, beat Zambia's Moses Mwaba before coming up against American Virgil Hill, one of the 12-man American powerhouse, and losing.

Athletes from another Islamic country also picked up combat medals. Turgut Aykac and Eyup Can of Turkey won bronze medals for featherweight and flyweight boxing and Ayhan Taskin, also of Turkey, won a bronze for wrestling.

Like other such victories, however, the combat sports were seen by most Arabs as just a reconnaissance. "Watch us in Korea," said one man. "Then you can make a judgment. As one famous American said, 'We have just begun to fight.'"

"I hope they win everybody..."

WRITTEN BY BRIAN CLARK PHOTOGRAPHED BY BRIAN CLARK AND DAVID LUTTRELL

During the Olympic games, Saudi Arab soccer stars met, and swapped T-shirts with, some 30 American youngsters, from the Los Angeles area's American Youth Soccer Organization (AYSO) in one example of what a Saudi prince said was the importance of Saudi Arabia's presence at the games: "to present a positive image of Saudi Arabia."

Prince Turki ibn Sultan, who played soccer when he was growing up, told an Aramco World *writer that it would have been nice if Saudi Arabia had won a medal or two, but that creating a positive image in America is better.*

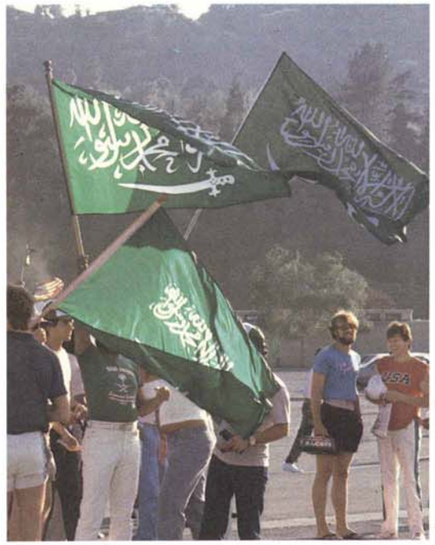
As part of an effort to do that, the Saudi Arab government, proud of its athletes, printed huge full-page to four-page full-color advertisements in American magazines and newspapers, and presented impressive nationwide television spots repeatedly throughout the games. The point, according to Wendy Fox of the Boston Globe, *was to express the fact that "the Saudis are button-popping proud" to be at the Olympics – but also to call attention to the kingdom's economic and educational progress and its commitment to peace.*

At their meeting with the AYSO kids, ranging in age from five to 13, the Saudi soccer players did their bit by kicking the ball around with the American youngsters. And Majed Abdullah, known in Middle East soccer circles as the "Pele of the desert," urged them to learn the basics, play often, but only for the love of the game. "If you push too much," he said, "you can take away the joy of the game."

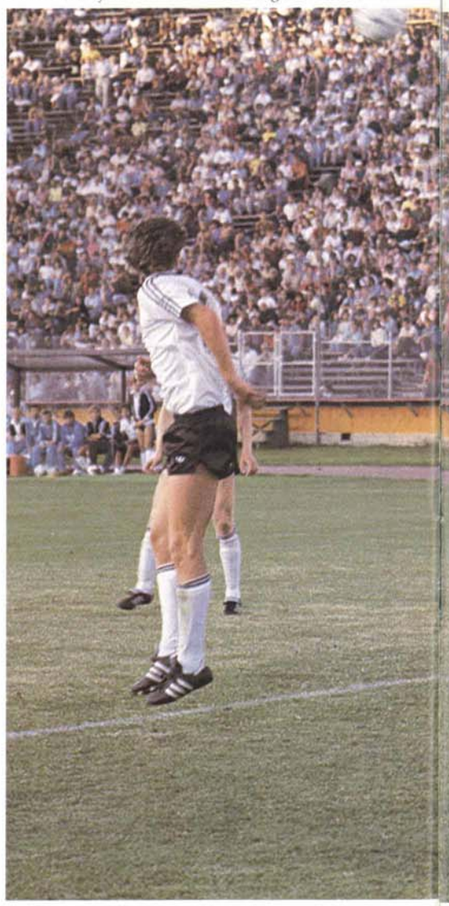
For the AYSO boys, who are members of a 300,000-strong organization in the U.S., coming to the tightly guarded Olympic Village, getting free tickets to both Saudi games in the Rose Bowl – as well as Saudi T-shirts and hats – added up to an unforgettable thrill. This was especially true for five-year-old Jason Vargas of Bellflower, California who was photographed with the players. "What a way to begin soccer," said Jason's mother. "He'll be addicted to the sport for sure, now."

Jason was just as enthusiastic. "Wow, they're neat guys. I hope they win everybody."

Above: Majed Abdullah at AYSO. Below: Jason Vargas.



Saudi soccer fans outside the Los Angeles Rose Bowl.



The fast-moving match between Saudi Arabia and West Germany resulted in both thrills, below, and spills, above.

inexperienced in play," he said. "Our players were nervous and felt the pressure. When they adjusted, things changed and we played at our level. We are learning from our mistakes." Brazil's coach, praising his Arab opponents, agreed. "We had a very creative game going, but we have a lot of respect for the Saudis. They did well."

In the second match – against Morocco – Saudi Arabia did even better, but could not connect on its goal shots. Morocco won the game 1-0 – a frustrating defeat for the Saudis who buzzed the goal continually and got off shot after shot without putting any of them in the net.

Again, however, they won praise from their opponents and refused to be discouraged. Jose Faria, the Moroccan coach, said the Saudis were "great," and that the game as a whole was played "on a European level." And Coach al-Zayani said again that it was a matter of experience. "Things might have been different if we had capitalized on our chances. But we are still gaining experience. Morocco played only well enough to win."

Commenting on the same game, one player said that he was pleased to play another Arab team – because it showed how the sport is on the rise in the Middle East. "Five of the 16 teams in the Olympics are from the Arab world," he said, "The sport has a great future in our countries."

By the third game of the preliminaries, of course, the virtually scoreless Saudis were feeling the frustration – especially as, in their last game, West Germany easily ran up a 4-0 lead in the first half and ended the game with a 6-0 triumph – and with Samir 'Abd al-Shakour, 30 minutes into the second half, ejected for a foul. Though the players later declined to comment on the game, al-Zayani, like the fans, looked resolutely to the future. "We're disappointed . . . but we're still glad to have been able to come here. And if we didn't play as well as we would have liked, well, we learned a lot . . . and World Cup possibilities have been greatly enhanced. Furthermore,we look forward to marching in the closing ceremonies . . ."

As to future Olympics, Coach al-Zayani summed it up for all the Saudi athletes. "We'll be back . . . and we'll be better."

John Goodbody, a former sports writer for London's newspapers and UPI and author of two books on the Olympics, now free-lances for Compass, the Third World feature and news service. Brian Clark, a staff writer for the Modesto Bee in California, covered the Winter Olympics in Sarajevo for Aramco World Magazine.

The Many Hats of William Yale

WRITTEN BY AILEEN VINCENT-BARWOOD
PHOTOGRAPHED BY ALLEN VINCENT-BARWOOD

Middle East hats in miniature (mounted on boiled eggs): a Turkish fez (left), a man of Bethlehem (foreground), Jewish hats (rear, center) and (right) an unmarried villager – the untied tassel denoting freedom. Opposite: a Bedouin headdress.

They're just big enough to fit on an egg. They're accurate in every detail. And though the bright silks and satins are now somewhat dulled, the fabric now a little frayed, they tell a colorful tale...

The tale, which begins more than 100 years ago, has all the elements of a modern thriller and some of the elements of a TV soap: two wars, a beautiful refugee, political intrigue, a secret agent and a romance that lasted 60 years. It even has, in a cameo role, Lawrence of Arabia.

Enter, the first player in the drama.

In 1870, to escape the Franco-Prussian war, a Miss Baldensperger (first name not revealed) fled Alsace-Lorraine for Palestine, where she had been born 18 years before. Her father and mother ran a Protestant mission school for orphans there – though they were better known for the bees they kept in old clay hives – and on her return, Miss Baldensperger began to teach arts and crafts at the school. Miss Baldensperger, who had grown up in Palestine and lived there until the end of her life, wrote of her childhood with fondness:

> At our house in the village of Urtas, there is a narrow glen, enclosed to right and left by rugged hill-slopes, and watered by an ever-running brook, where the most luscious apricots, peaches, pears, figs and other kinds of fruit are grown. These fruit trees of Urtas, gay with innumerable blossoms or weighed down by fruit fit for the tables of kings and princes – the bright blue sky seen through the branches as I lay beneath them dreaming – the singing of the birds, the murmur of the brook, and the fragrant odor of the plants on which our bees find so plentiful a harvest, make a never-to-be-forgotten world.

To Miss Baldensperger, one of the most arresting sights of the area was the colorful headdresses of the men: the paisley and red turbans of the Druze elders, the conical yellow, red and green hats of the protectors of the mosques and holy places, the purple-tasseled headgear of the men of Bethlehem, the red fezzes of the Turks and the sky-blue *kafiya* of the desert chieftain. She was so taken with these headdresses, in fact, that she encouraged her young charges to study the beauty and uniqueness of these head coverings and to reproduce them in miniature – on bases of scooped-out lemon and lime halves, baked hard by the sun. The intricate draping and tiny stitches done by these young craftsmen show their teacher's exacting eye for detail; so precisely wrought, in fact, are some of the tiny turbans that only a child's small hands could have fashioned them.

Enter, now, the second player.

Prior to World War I, in 1913, a young American, William Yale, arrived in Constantinople. A descendant of Elihu Yale, founder of Yale University, and himself a Yale man, William had yearned from the time he was a boy growing up in New York state "to go adventuring." At 26 he had already worked as a laborer on the Panama Canal, as a private tutor, and as a roustabout in the U.S. oil fields – though "always dreaming of the time when I would be sent to foreign lands," as he later wrote. Now employed by the Standard Oil Company of New York, he had been sent to the Middle East in the company's foreign service.

One day, while on an exploratory trip through Palestine in search of oil deposits, he met and fell immediately in love with a beautiful dark-haired American woman from Cleveland, Ohio: Edith Hanna, visiting Jerusalem with her mother and sister and staying at the Grand New Hotel. As Yale tells it in his memoirs: "While cooling my heels in Jerusalem my tedium was relieved by the arrival of an American mother and two daughters. The youngest daughter was so lovely I was crazy to meet her." Before Edith Hanna left for London the two had made plans to meet again as soon as possible.

But it was not to be so.

The year, by now, was 1914. In Europe, Kaiser Wilhelm of Germany declared war on England and France, and when Ottoman Turkey sided with Germany, the whole of the Middle East, with the exception of Egypt, was suddenly right in the middle of the enemy camp. War had once again intervened in the lives of the story s protagonists: the romance had to be postponed.

Edith Hanna went no farther than London. Here she joined the nursing order of St. John's of Jerusalem at St. Dunstan's Hospital and began working with blind soldiers and sailors while she waited for her suitor. Yale, still in the Middle East as a Standard Oil employee, was able, as an American neutral, to continue his travels throughout the area. For the next three years he made many valuable contacts, meeting and talking to people on both sides of the conflict, Turk and German as well as British and French.

Like his friend Lawrence of Arabia, who was the same age, Yale sometimes dressed in Arab or Turkish garb; thus disguised, he traveled throughout Turkey and Syria, Palestine and Egypt, speaking Arabic as well as French, becoming, in his own words, "more and more a friend of the Arab cause."

During all this time, his correspondence with Miss Hanna was difficult and complicated: their letters had to travel across Europe by train, and had to pass through four sets of censors: Turkish, Bulgarian, Austrian and German. So they devised a code and arranged to exchange letters through a "Swiss connection" in Geneva, a friendly lawyer who sped their mail on its way along with his own. To the end of their lives, it was a story each of the Yales delighted in retelling.

Early in 1917, Yale, wanting to be of service to his country, and to the Arabs, went to work for the U.S. Department of State. His duties were loosely defined – "to report on any Near East matters that might be of interest to the U.S. government when peace comes" – so, based in Cairo, he resumed his travels throughout the area, gathering information and friends later to prove useful to his career as well as his country.

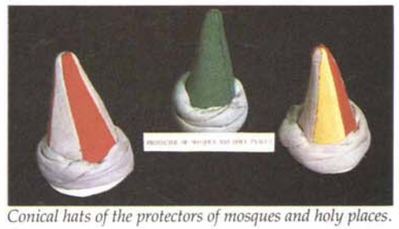
In 1918, he returned to Jerusalem – this time as the U.S. Military Observer on the staff of General Sir Edmund Allenby, the British general in charge of the Egyptian Expeditionary Force. Because he freed Palestine after four centuries of Turkish rule, Allenby then was the hero of the day, and Yale found him to be a courageous and outspoken man and a fine companion.

Re-enter Miss Baldensperger, now in her late 60's, still active at the mission.

Through her, Yale saw and was enchanted with the miniature headdress collection. He knew he must have it, he wrote, because it "summed up all the color and dash and design of the teeming streets I've come to love." He bought the collection as a wedding gift for Miss Hanna – though he had not yet proposed to her, nor even seen her in four years.

But again there was a delay.

By now prominent – and recognized as a specialist in Middle East affairs – Yale was asked by President Wilson to serve on what came to be called the "King-Crane Commission," a blue ribbon government group formed by the president to sound out Arab opinion on the forthcoming mandates being proposed by Britain and France. Later that same year, Yale was also sent to Paris as the U.S. delegate on Arab affairs at the Paris Peace Conference.



Conical hats of the protectors of mosques and holy places.

In Paris, however, Yale wangled an assignment as a diplomatic courier so that he could take the diplomatic pouch from Paris to the American embassy in London. So, finally, he caught up with – and proposed to – the elusive Edith Hanna. "There I saw the same lovely woman I'd met five years before in Jerusalem," he wrote of this meeting. "I was somewhat daunted ... but ... there was a garden, there was moonlight, it was Spring."

At the wedding, Yale at last presented the headdress collection to his bride, "as a reminder of the happy day in Jerusalem when we met." It was delightfully received by the new Mrs. Yale, and when the war was over, they, the hats and the household were moved to Cairo where, for the next three years, Yale ran a shipping and tourism business. Then, however, the Yales left Cairo to go to the Institute of Politics in Williamstown, Massachusetts, where Yale was to lecture on Middle East affairs for the next two years. And when they arrived the headdress collection failed to show up.

Edith Yale was distraught. "Alas, my precious hat collection, gift of my beloved, has been lost. I am most upset," she wrote to a friend.

"They both loved that little hat collection," says a New Hampshire friend, Frank Maria, "because it reminded them always of the Middle East where they'd met. It had become for them a sort of symbol."

Three years later, the Yales moved again – to the University of New Hampshire at Durham, where Yale was to teach Near East History as an assistant professor – and during the move found the hats. They were in an unpacked box that had been stored in a friend's attic. Restored to its delighted owners, the collection was displayed prominently in their new home, in Chester, New Hampshire for the next 45 years, carefully preserved and much admired.

During this time, William Yale, now Professor Yale, never lost his interest in Arab affairs. Taking temporary leave from the university in 1945, he attended the United Nations Conference on International Organization in San Francisco as assistant secretary of the international secretariat. Later that year, he was country specialist for Palestine in the State Department's Office of Post-War Planning, but resigned because of President Harry Truman's Middle East policy. Upon his return to the University of New Hampshire, he completed *The Near East* for the University of Michigan's *History of the Modern World* series. It was, for its time, the definitive work on the subject.

In 1974, now in their late 80's, the Yales were forced by illness to move to a nearby nursing home, and their beloved farm, with all its contents, was put up for auction. Concerned as always, about her "dear little collection," Edith Yale asked friends in Boston's American Arab Association (AMARA), of which the Yales had long been active members, to see that the collection was kept intact and preserved. Happy to do so, two AMARA members attended the auction, found the little headdresses loose in a box, bid on them, got them – for $22.50 – and made them a part of AMARA's cultural exhibit. This exhibit is shown around New England whenever there is occasion to put on a Middle East display, where it captures admiring attention and, to a handful who know, evokes memories of a Middle East romance.

Aileen Vincent-Barwood is a regular contributor to Aramco World *magazine.*