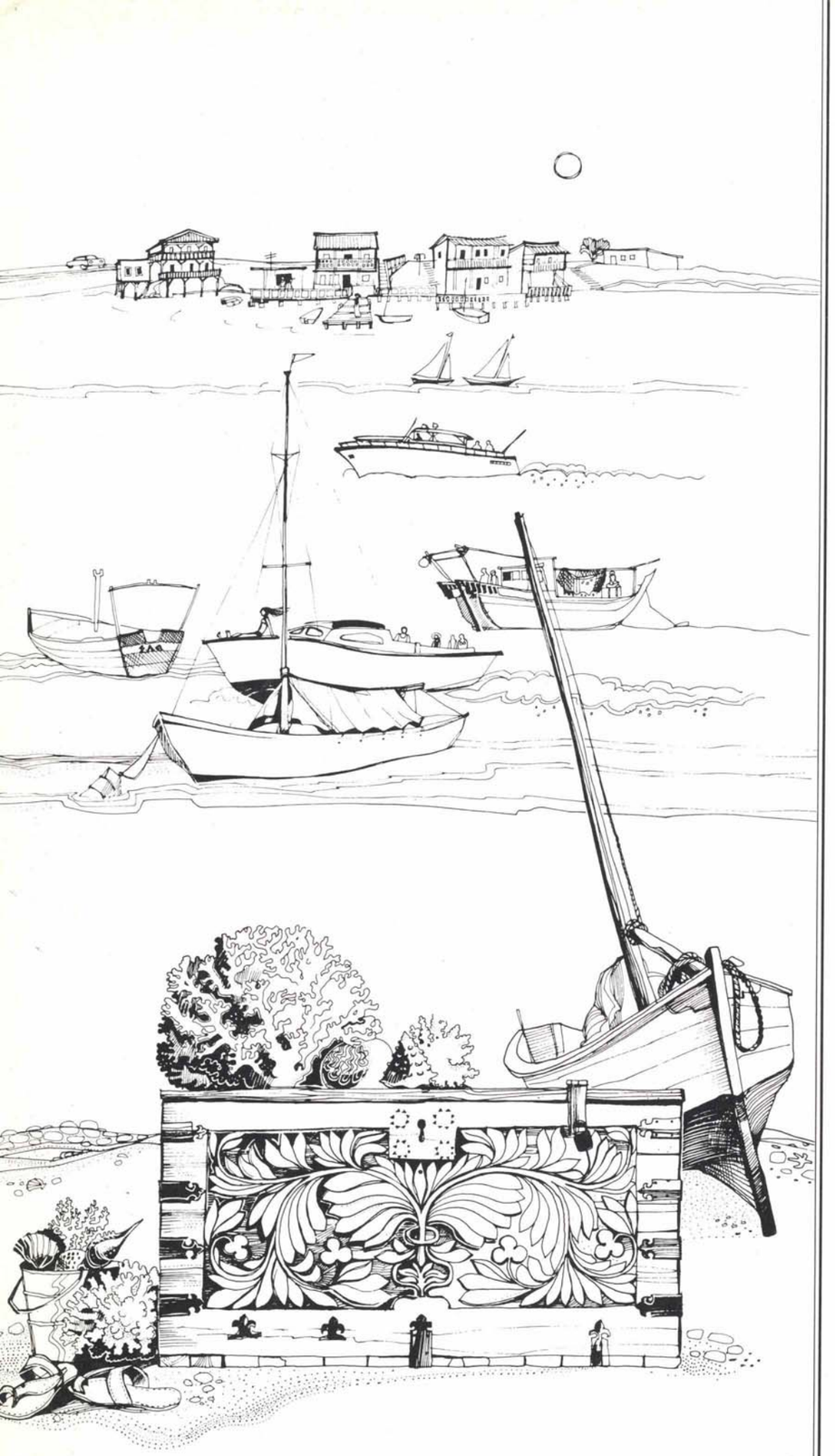

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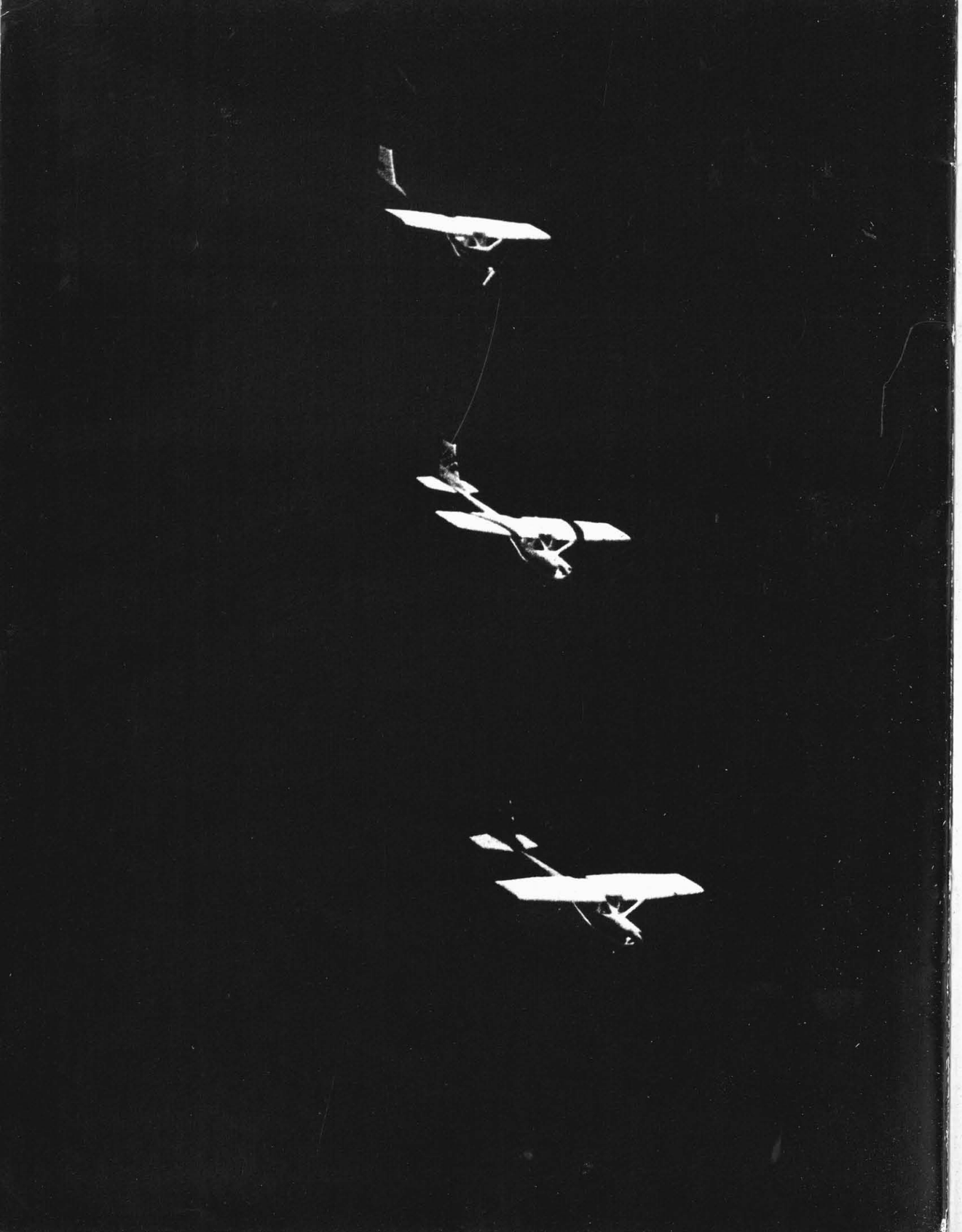
JANUARY-FEBRUARY 1973

Impressions of Arabia



ARAMCO WORLD magazine

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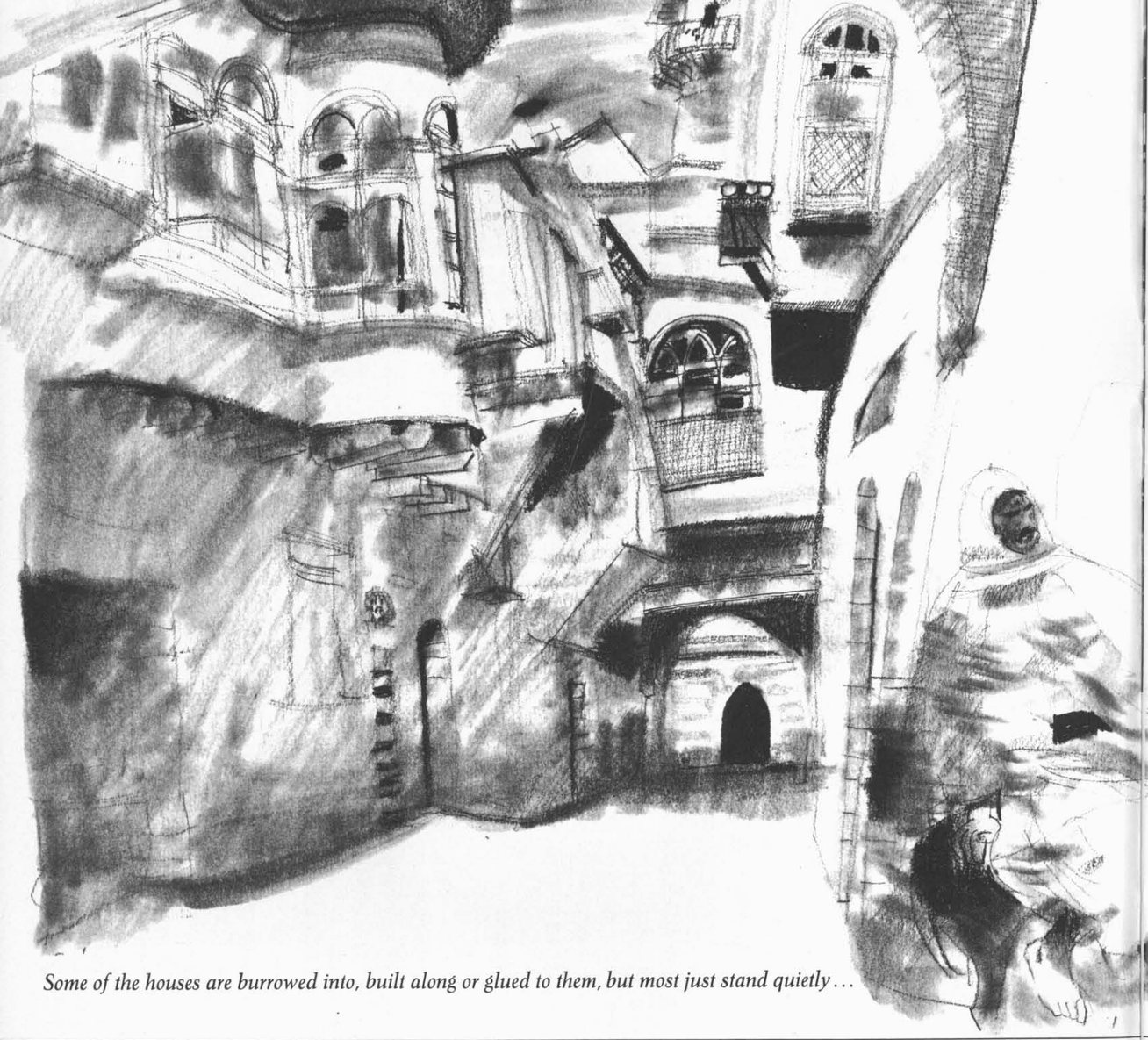
Impressions of Arabia

Cover: One of Islam's most sacred sites is the Prophet's Mosque in Medina, a city which for Muslims is the second holiest city after Mecca. The mosque is also, as this painting by Penny Williams suggests, one of Islam's most beautiful structures. Page 11.

← "Operated by men obviously practicing maneuvers as well as navigation ... the sleek, single-engine aircraft swoop down to investigate landing sites ... See p. 25.



Some of the houses are burrowed into, built along or glued to them, but most just stand quietly…

BY THE WALLS OF DAMASCUS

Although some historians say Syria's capital is the oldest continually inhabited city in the world, the fragments of the city's walls still standing don't reflect this great antiquity. The most picturesque section of wall, a mile-long stretch of stone and clay fortification between two gates at the northeast corner of the old city, is of mixed and uncertain age. Bab Tuma (the Gate of St. Thomas) on the north, where the Barada River rushes along the wall toward the green Ghuta plain (*Aramco World*, July-August 1972), dates only from the 13th century, while Bab Sharki (East Gate), at the end of the biblical Street Called Straight, not far from where St. Paul is said to have been lowered from the wall to safety in a basket, is a restored Roman gateway. Between these two entrances to the old city the wall is topped by scores of picturesque houses all askew which—though comfortable enough inside—rather look like what one visitor called "quaint improvisations, burrowed into, built on and glued on" the wall during past centuries.

Behind the wall today are the cool and narrow alleys of the Christian Quarter of the old city; outside it is fronted now by a wide avenue with a narrow park and trees along its base.

Frank Beck, an Australian artist and illustrator who has lived and worked in several East-European and Middle Eastern countries, painted most of Damascus during a six-month visit last year and was commissioned by the Syrian Government to sketch the Damascus International Fair. But he became particularly fond of the historic northeast corner of the wall shown in his drawings on these pages, an area where, he says, the wall has "a kind of marriage with the river, in and out, rippling by, purring and purling through the bushes in the shadow of the precarious wooden balconies and the old houses."

SKETCHED BY FRANK BECK

THE DROOP SNOOT IN THE MIDDLE EAST

L'Orient

With a window-rattling roar the Concorde 002, the second prototype of the world's first supersonic airliner, swept into Beirut early last summer to wind up a 46,000-mile, 11-nation tour that included Saudi Arabia, Bahrain, Iran and Lebanon.

The tour was to display the Concorde's highly publicized potential, but in the Middle East so far only Iran has reacted. Despite a price tag of close to $43 million per plane, the Shah of Iran has ordered three for the country's growing air fleet.

Nevertheless the tour was not at all unsuccessful. Wherever it went, the "droop snoot," as the Concorde has been dubbed, was a sensation. This was partly because the Concorde has the most startling shape of any plane ever to touch down at Mediterranean and Gulf air terminals, a shape that calls up echoes of the extinct pterodactyl, yet suggests futuristic fantasies. But it was also because many people wanted to see if Mach-2 speeds—nearly 1,400 miles an hour—really could shatter windows in a whole community. They didn't, as it turned out, but supporters were not entirely happy either. With only first-generation engines in place—and those worn by testing and demonstrations—the Concorde during its Middle East demonstrations was not quite as unobtrusive as backers would have preferred. But second-generation engines, they promise, should remedy that problem within the next two years.

The Concorde is the result of a joint effort by the British Aircraft Corporation and Aerospatiale France. Its long, tubular fuselage measures a modest 184 feet, six inches long. Its interior accommodates up to 128 passengers. When fully developed, four Olympus turbojet engines should deliver 80 tons of thrust, enough, some authorities say, to carry it from Paris to New York without refueling. Supposedly the new engines will also reduce pollution emissions, the second factor which has stimulated much debate concerning this new entry in the continuing development of air travel.

During its visit to Bahrain, the "droop snoot" raced from Bahrain to India in an hour and 40 minutes. In Saudi Arabia, where His Royal Highness Amir Turki ibn 'Abd al-'Aziz, Vice-Minister of Defense and Aviation, headed a party of officials invited for a demonstration, it flew to north-central Arabia, then shot southwest toward Taif before returning to the Dhahran air terminal. In Beirut, last stop in the Middle East, 14 officials, including the British and French ambassadors, boarded the Concorde for a one-hour demonstration flight to Crete and back.

PHOTOGRAPHS BY A. A. AL-MENTAKH AND KHALIL ABOU EL-NASR

In its swing through the Middle East, the Concorde visited Beirut (p. 4, left and p. 5, center and bottom) and Saudi Arabia (p. 4, right and p. 5, top) where, at Dhahran International Airport, the Vice-Minister of Defense and Aviation boarded the plane for a supersonic tour over the Kingdom.

PETROLEUM AND THE POSTAGE STAMP

The discovery of Arabian oil has brought unexpected riches to stamp collectors too.

BY ROBERT OBOJSKI

It would be difficult to name two items which have woven themselves into the fabric of everyday lives more than postage stamps and petroleum. Yet neither existed in any recognizable form before the mid-19th century. The first postage stamp did not appear in England until 1840 and the first derrick did not strike oil until 1859.

Today, however, these two commodities are not only common, but have merged in a series of postage stamps depicting the oil industry in all its aspects—especially in the Middle East, which by the 1970's, accounted for 40 percent of the entire free world's petroleum production, and 68 percent of its oil reserves.

Since there are about 150,000 varieties of postage stamps, most philatelists have long dismissed all thoughts of acquiring examples of every stamp that exists. Instead they specialize. They try to obtain every stamp which has one feature, no matter how obvious or obscure, in common with every other one.

Some collectors specialize in stamps from a single country, a particular period of time, or examples which have been printed in the same color. Others concentrate on what their fellow hobbyists call thematic, or topical collections: art, sports, religion, railroads, fish, animals, flowers, to name but a few. Stamps engraved with depictions of birds are so numerous that there are specialists who search out and mount only seabird stamps, or wading and water birds, game birds or birds of prey. It is indicative of both the number and the enthusiasm of thematic collectors that in the United States this breed has formed its own exclusive group, the American Topical Association.

With regard to petroleum, philatelists have been collecting oil stamps since the first oil stamps were issued in 1919 by a country called Azerbaijan, which at the time was enjoying a brief existence as an independent nation before becoming one of the Soviet republics. Between 1919 and 1922 Azerbaijan issued a series of stamps with scenes of the important oil field of Baku, one of which, a 1922 two-ruble stamp, shows oil gushing from a wooden derrick, a type which has gone the way of the Model T except in the Caspian field of the USSR.

In the Middle East, the first stamps with an oil theme became available to post office customers—and collectors—about 30 years ago, and issues have since depicted nearly every step in the production and shipment of petroleum: drilling rigs, onshore and offshore, whose shapes offer designers considerable artistic scope; oil pipelines, processing plants and refineries, storage tanks and tank farms, oil tankers—all pictured with great clarity.

Often a head-and-shoulders portrait of a nation's ruler, wearing the traditional **ghutra** and **agal,** becomes part of the design, contributing color and character to the stamp and leaving no doubt about which part of the world it comes from. Often, too, some oil-connected event is sufficient reason for Middle Eastern postal authorities to issue yet another oil stamp. The anniversary of an important discovery, the placing on stream of a significant new facility, the holding of a regional conference on petroleum have all been occasions for the issuance of commemoratives with the unmistakable stamp of oil on them.

Among stamps prized by collectors of petroleum themes are those above. They are, from left to right, a 1966 Kuwait 10-fils stamp done in blue with an orange and yellow flare behind a derrick; a 1964 Sharjah 20-NP in blue and yellow, depicting an offshore drilling rig; any of Saudi Arabia's 1960 series showing a gas oil separator plant; a 1969 Qatar 1-dirham view of a tanker; a 1961 Jordan 15-fils view of the Zarka refinery, and two 10-milliemes UAR stamps, one commemorating the First Arab Petroleum Congress, held in Cairo in 1959, the other commemorating the Fifth Arab Petroleum Congress, held in 1965.

Stamps from the author's collection

Other petroleum postage stamps which collectors like are, above, a Kuwait 20-fils 1966 view of a historic tanker; left, a UAR 10-milliemes stamp issued in 1958 as one of a series on industry in the UAR; center, Dubai's three large and colorful 1969 stamps showing how the world's first underwater petroleum storage tank was constructed, floated out into the Gulf and sunk; upper corner, Abu Dhabi's 125-fils night view of offshore drilling; below, left, Oman's 25-baiza view of storage tanks in the desert, issued in 1969 when Oman was the Sultanate of Muscat and Oman; below, three stamps from Iraq, one a 5-fils derrick and pipeline issued in 1967 on the occasion of the Sixth Arab Petroleum Congress, another a 15-fils refinery view issued on the same occasion, and the third a 1965 10-fils stamp to publicize a deep-sea terminal for tankers.

The Dhahran International Airport during the Concorde's visit last year.

Impressions of Arabia

PAINTINGS AND DRAWINGS BY PENNY WILLIAMS

In May last year, Penny Williams, a Canadian artist, flew to Saudi Arabia from Beirut to execute a specific assignment: paint Saudi Arabia.

Considering the size of Saudi Arabia —about a quarter the size of the United States—and the variety of scenic grandeur—high mountains, shimmering salt flats, vast deserts and two long, empty coastlines—this was harder to do than assign. But to Miss Williams, who has been working in the Middle East for seven years, it was simply one of a lengthening list of commissions that has won for her a reputation as one of the foremost illustrators in—and of—the Middle East. Furthermore, it was not Miss Williams' first visit to Saudi Arabia. In 1970 she spent two months preparing drawings for **Aramco World's** special issue: "The Arab Woman: An Untypical View."

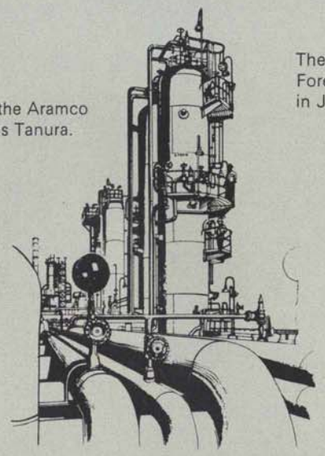
As anyone who studies a Williams drawing or painting will instantly note, Miss Williams is a stickler for detail. Be it the intricate needlework of a handsome **abaya,** the close carving of a stone façade or the stance of a desert lizard, she obstinately insists on a meticulous correctness. It is a trademark that admirers have come to expect.

In Saudi Arabia, where the fierce heat of summer starts early and where artists of either sex, but especially female, are scarce, the hours of sketching that precede a finished painting required great patience. Miss Williams was baked by the sun, covered by dust, surrounded by crowds of curious boys and in one public square was firmly, if amiably, shooed away twice. By the time she finished her travels, she had walked the streets of Jiddah, camped overnight in remote Mada'in Salih, sweltered on the pier of busy Dammam Port as freighters winched cargo onto freight cars below, dipped grateful fingers into the clear water of ancient Hofuf's vast irrigation project and driven the twisting roads of mountainous 'Asir Province—where she stopped a week to turn out four paintings at the personal request of the Governor of 'Asir, His Royal Highness Amir Khalid al-Faysal.

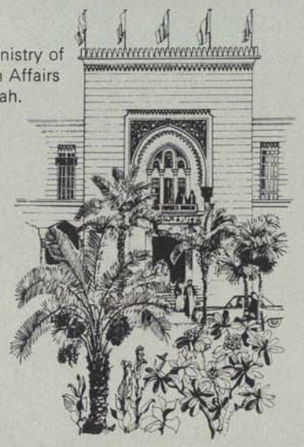
With her basic research completed —20-odd rolls of film and bulging portfolios of swift sketches—she settled down to paint seriously, emerging only to check a color or remeasure a doubtful perspective.

The results, which will also grace Aramco's 1973 calendar, are Miss Williams' impressions of an Arabia where the contrasts between custom and innovation are probably more sharply defined than in any country in the Middle East and where the beauties of an ancient culture have yet to bow to the onslaughts of unthinking change.

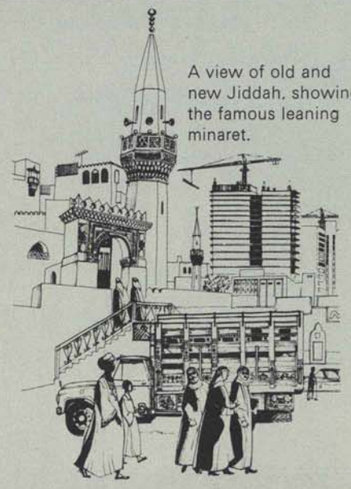
An offshore oil drilling platform in the Arabian Gulf.



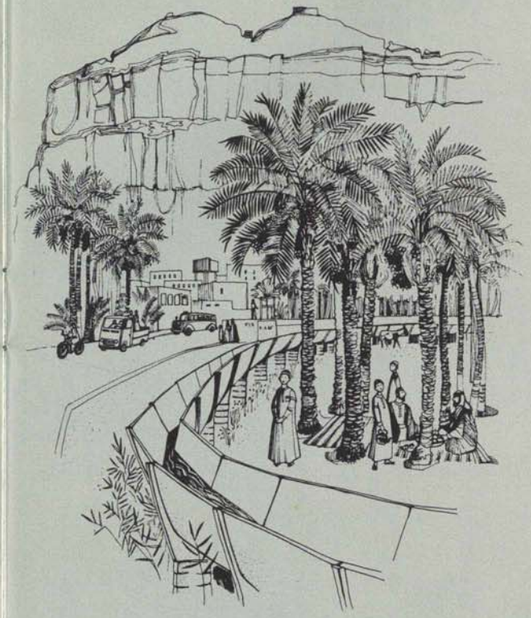
A section of the Aramco refinery in Ras Tanura.



The Ministry of Foreign Affairs in Jiddah.

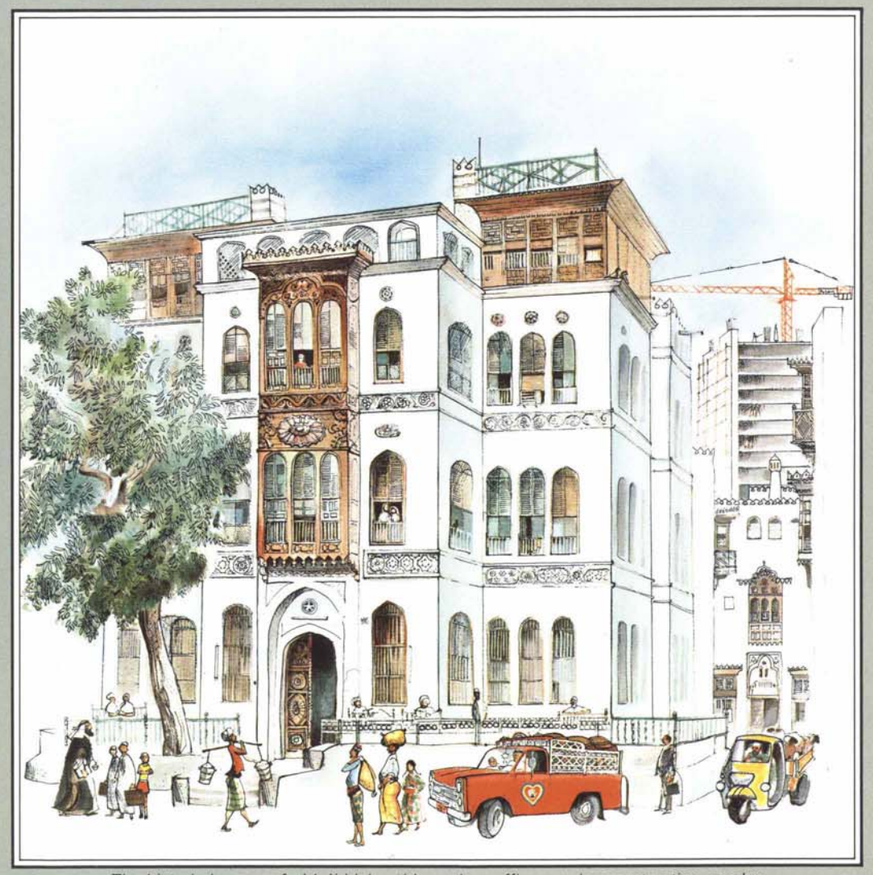


A view of old and new Jiddah, showing the famous leaning minaret.

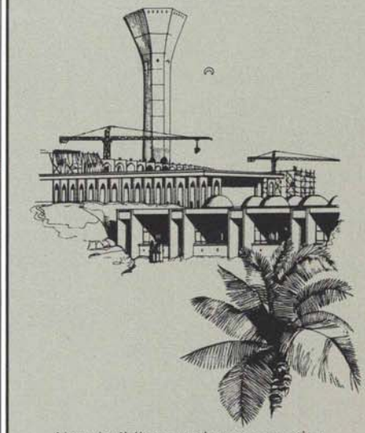


The Saudi Arab Government's mammoth irrigation and drainage project in al-Hasa oasis.

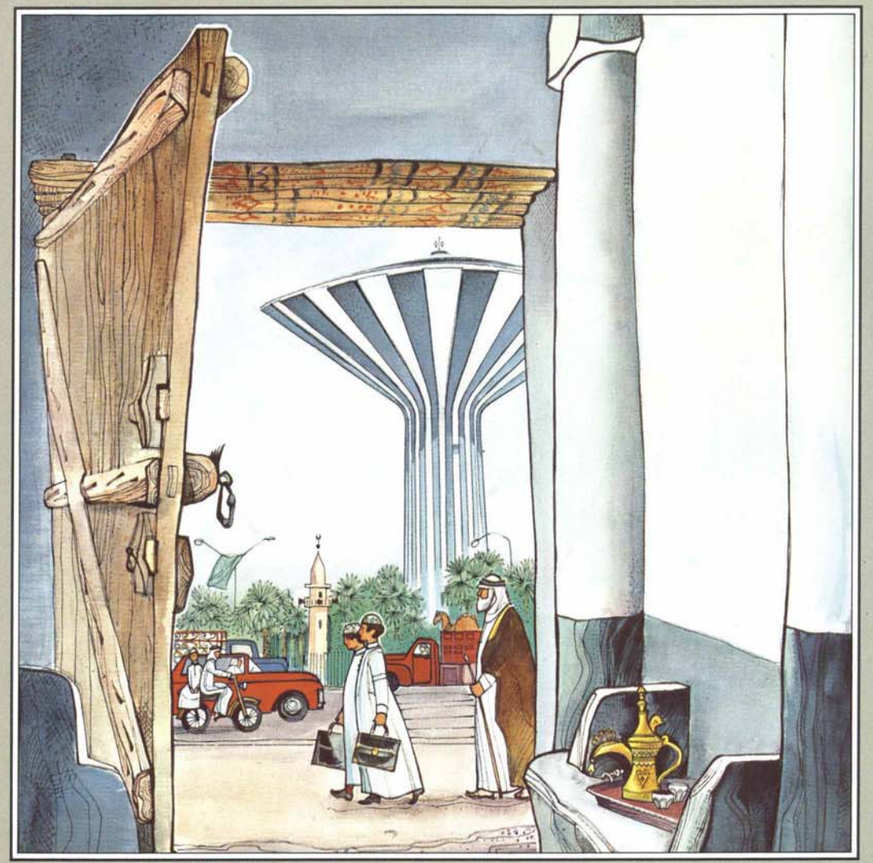
Modern cranes unloading ships onto freight cars at Dammam Port.



The historic houses of old Jiddah, with modern offices under construction nearby.

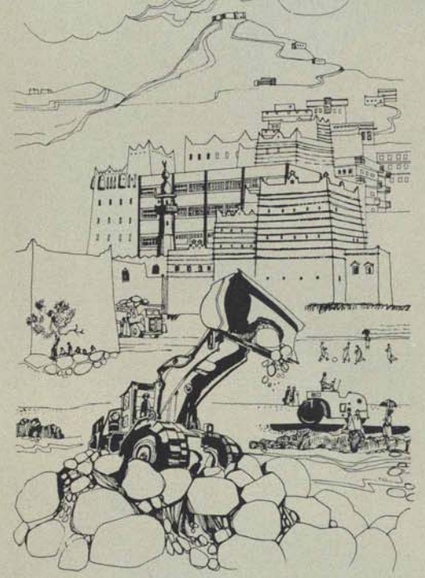


New buildings under construction at the College of Petroleum and Minerals in Dhahran.

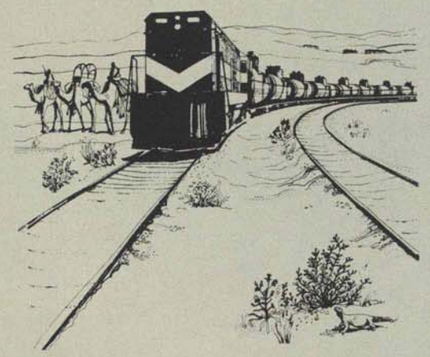


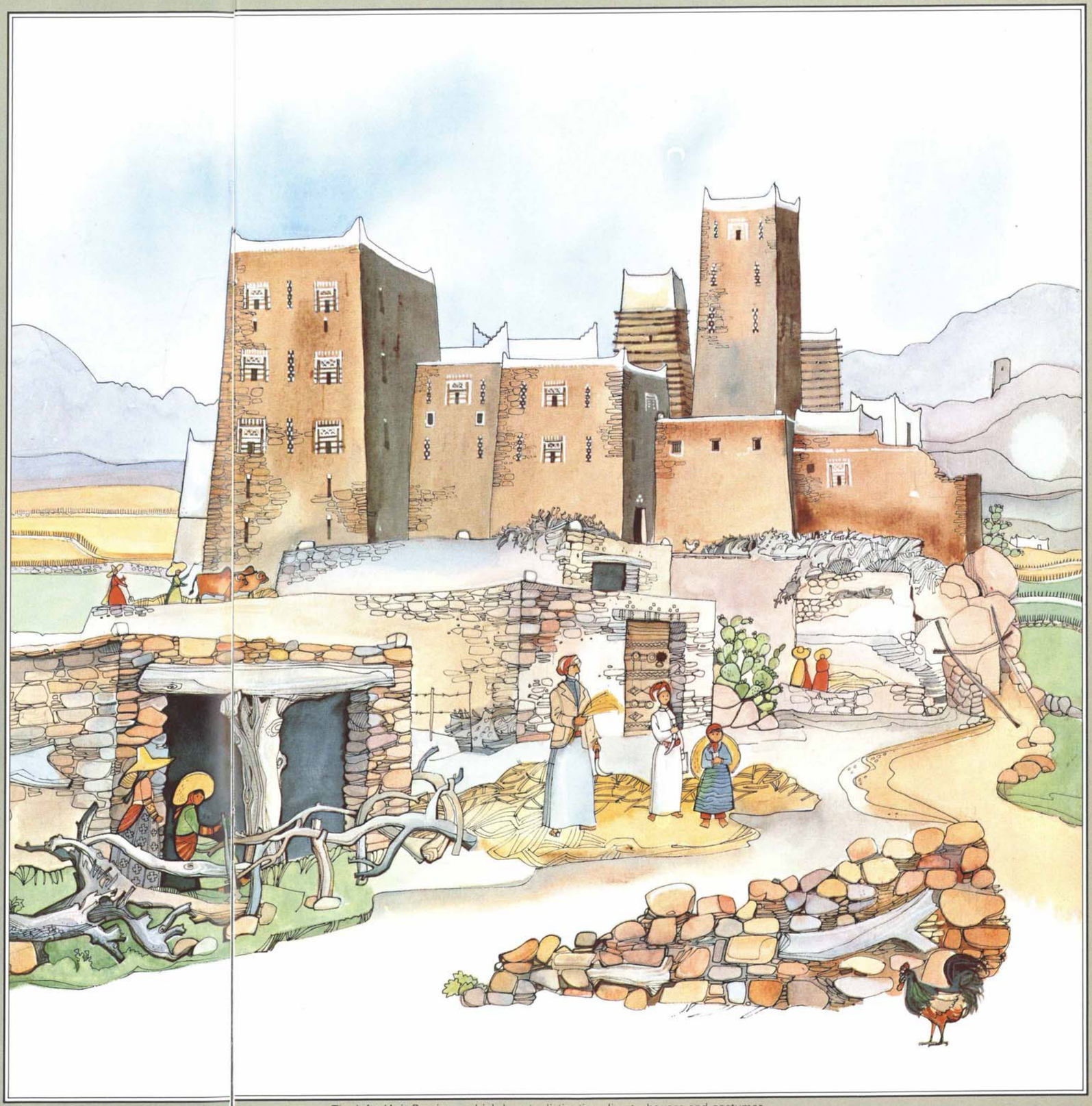
Riyadh's giant new water tower, framed by a picturesque old doorway.

Major road construction
programs underway
in the mountains of 'Asir.

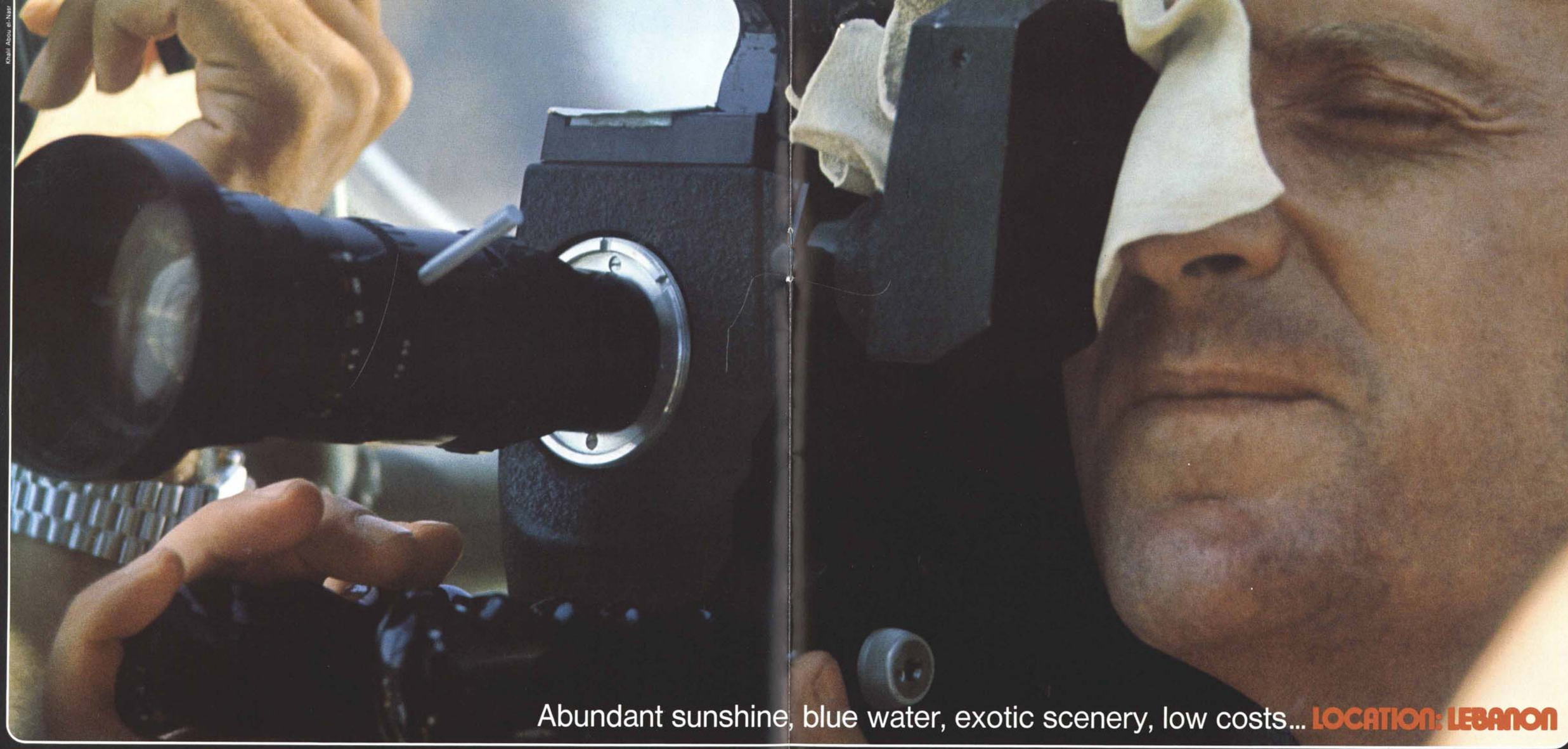


A fast diesel hauling freight
from the east coast to Riyadh,
capital of Saudi Arabia.





The lofty 'Asir Province, which boasts distinctive climate, houses and costumes.



Khalil Abou el-Nasr

Abundant sunshine, blue water, exotic scenery, low costs... LOCATION: LEBANON

In search of lower costs and exotic locales, film producers have marched across Europe from Spain to Italy to Yugoslavia. Now they're coming to Lebanon.

Actually Lebanon has served as a movie set before. In addition to an active Arabic-film industry of its own and a series of lamentable Iranian, Italian and Indian films, the country began playing host to western film makers as early as 1964, when David Niven did *Where the Spies Are*. Not long after, Mickey Rooney and Lex Barker came out to film a grade-B thriller called *24 Hours to Kill*, a French company made *La Grande Sauterelle* and Ann-Margret, prior to her *Carnal Knowledge* comeback, teamed up with Laurence Harvey in an obscure thriller called *Rebus*.

But in the last couple of years Lebanon has begun to attract major film-makers too. In 1971 producers of Steven Coulter's *Embassy* chose Beirut over Paris for the locale of an all-star film. In 1972 Diana Sands of *Georgia! Georgia!*, Calvin Lockhard of *Cotton Comes to Harlem* and an all-black company spent the better part of the summer and fall filming *Honey Baby, Honey Baby*, a comedy-thriller which is to have its world premiere in Beirut. More recently, reports have been received that British director Peter Granville is checking out locations in Lebanon to film a well known book.

Embassy, which was released in England last spring and tried out in Georgia, Oklahoma, Arkansas and Minnesota in the fall, is a tense story about a Russian spy who defects to an American embassy in "an unnamed developing country in the Middle East."

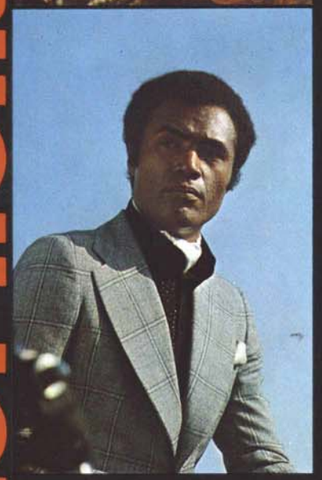
In a canny bid for audiences at all levels, actor Mel Ferrer, this time behind the camera as producer, put together an all-star box-office package that has something for everyone. For the newly-tapped and very lucrative black audiences, there's hard-hitting Richard Roundtree of the *Shaft* series; for nostalgic survivors of the Hollywood era there's Ray Milland, his *Love Story* baldness covered with a handsome gray wig; for the cinematography crowd there's Sweden's Max von Sydow, star of Ingmar Bergman's brooding masterpieces, Raoul Coutard, director of photography in the unforgettable *Z*, and French actress Marie-Jose Nat. Even the TV addicts have their delegates: towering Chuck Connors of *The Rifleman*, Broderick Crawford of the old *Highway Patrol* and director Gordon Hessler of *Alfred Hitchcock Presents*.

The film also has Squad 16, Lebanon's strapping, red-bereted emergency police, an army helicopter and the handsome American Life Insurance Building (*Aramco World*, July-August 1971).

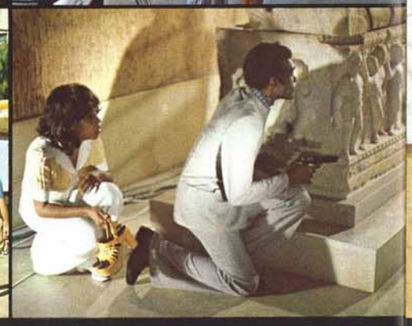
Less pretentious, and less richly financed, is *Honey Baby, Honey Baby*. A "black capitalism" venture from Kelly-Jordan Inc., independent producers from New York, this film is frankly aimed at the 30 million U.S. blacks that film producers are now enthusiastically wooing. With Diana Sands, the most famous black screen personality since Sidney Poitier made it big, and Calvin Lockhard, star of the sleeper *Cotton Comes to Harlem*, and director Hugh Robertson,who edited *Shaft* and *Midnight Cowboy*, it would be a hard target to miss.

PHOTOGRAPHED BY KHALIL ABOU EL-NASR, JACK SHEHAB AND JOHN TAYLOR

HONEY BABY HONEY BABY

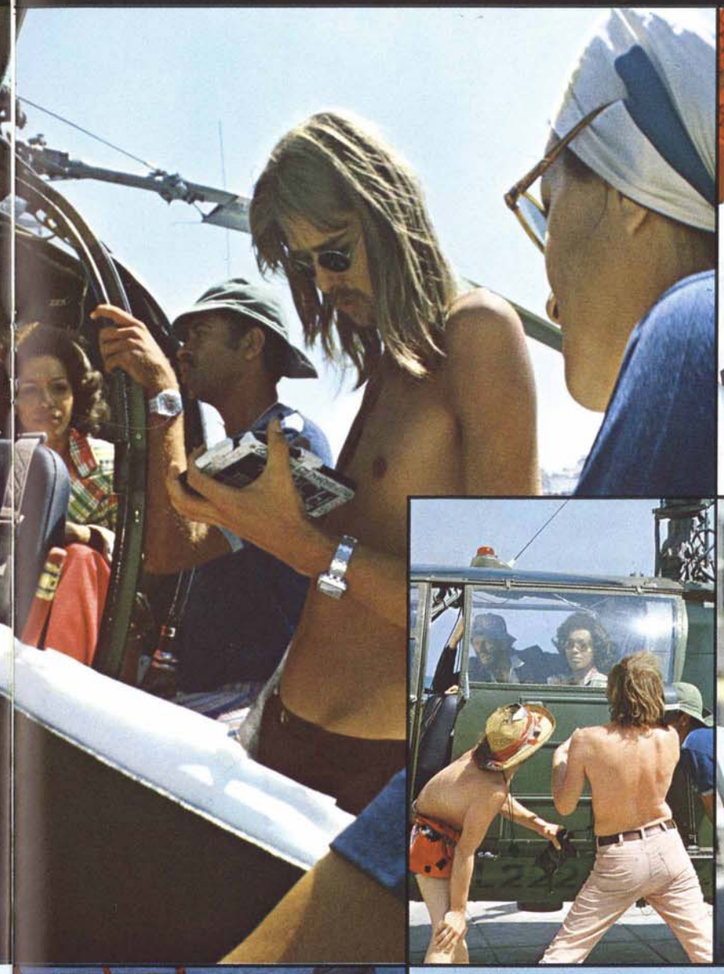


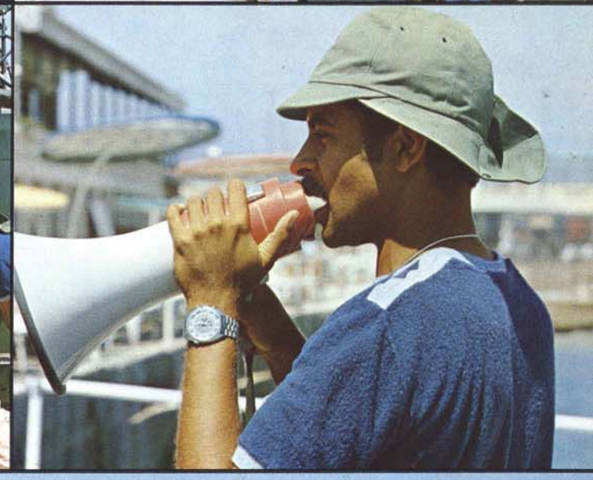
In filming **Honey Baby, Honey Baby,** the producers tried to take full advantage of Lebanon's scenery by writing scenes that required the company to range up and down the country's photogenic coast. Above, and across, Diana Sands on a ship in St. George's Bay and Calvin Lockhard in ancient Byblos. Center, Miss Sands in a Lebanese army helicopter. Far right, a helicopter pilot, and the director of the film, Hugh Robertson, who edited **Shaft** and **Midnight Cowboy.** Below, Miss Sands in a Beirut discotheque, doing scenes in the old city of Beirut, at the famous St. George's Hotel and in the National Museum. Center, Miss Sands touching up makeup between scenes aboard the ship. Far right, Lockhard and Miss Sands at a Roman theater in Byblos.

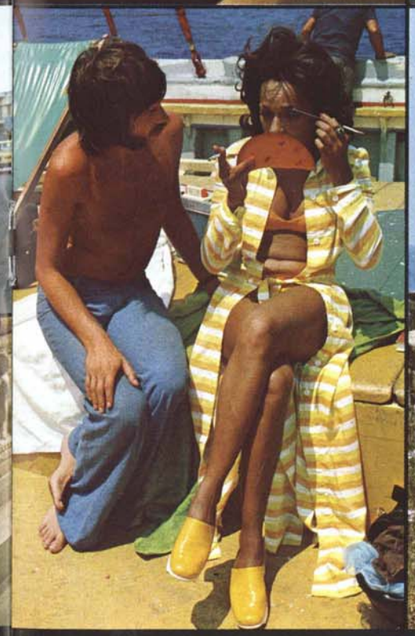


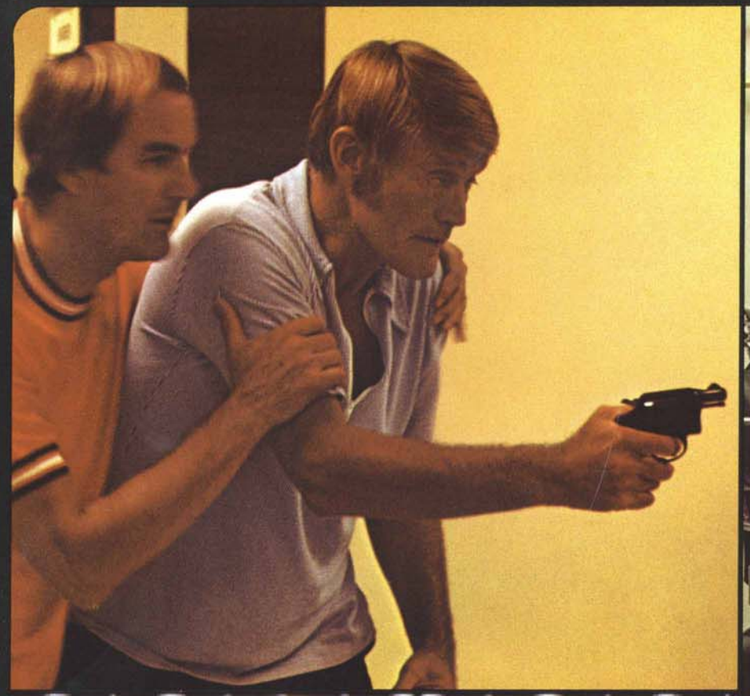
John Taylor

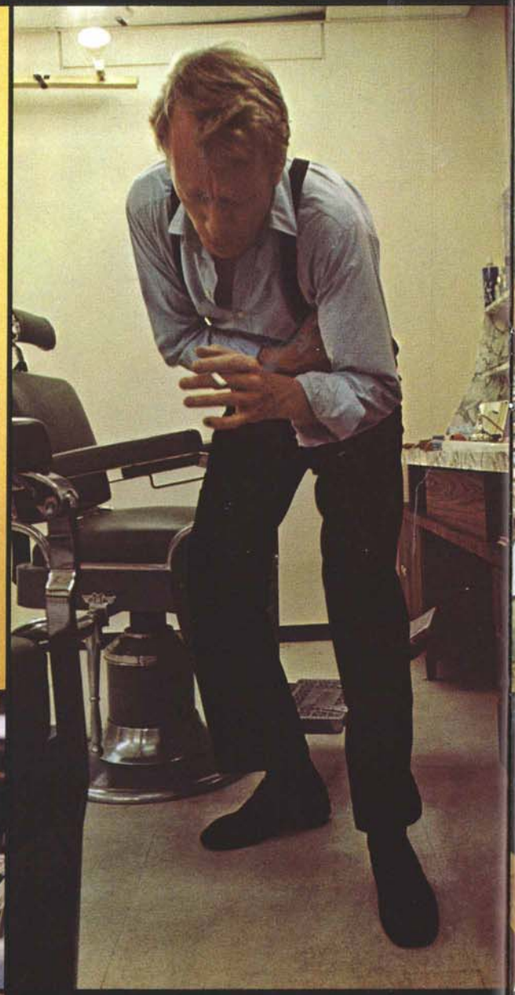
Khalil Abou el-Nasr

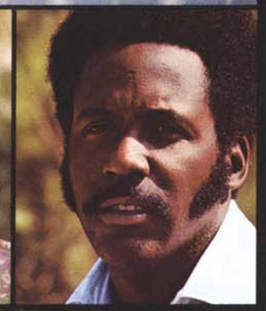


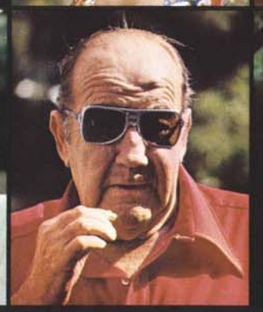








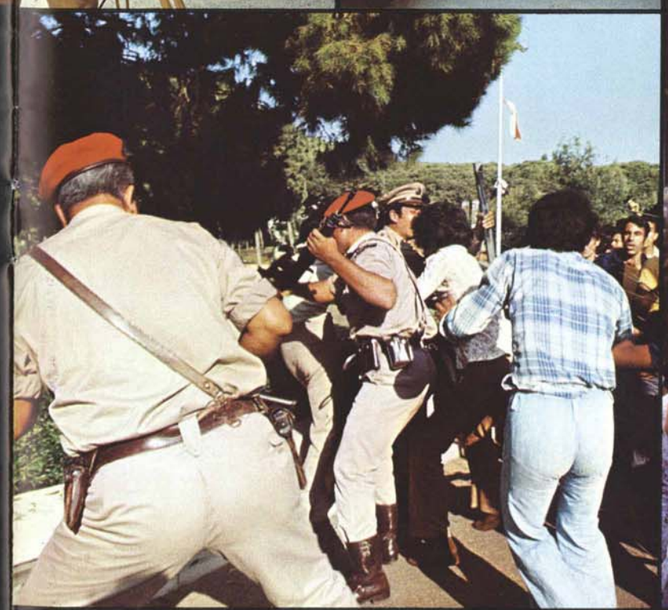


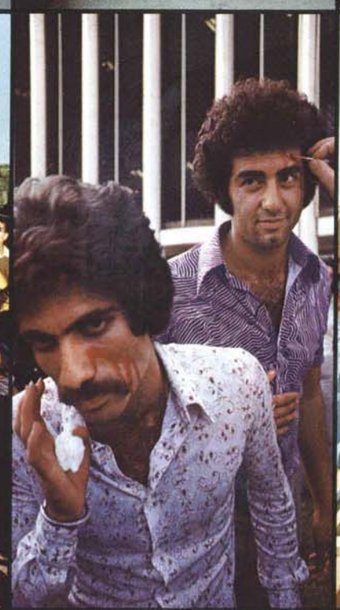


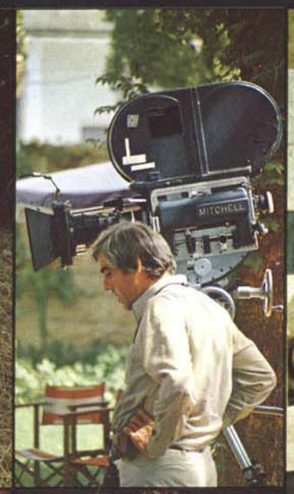
EMBASSY

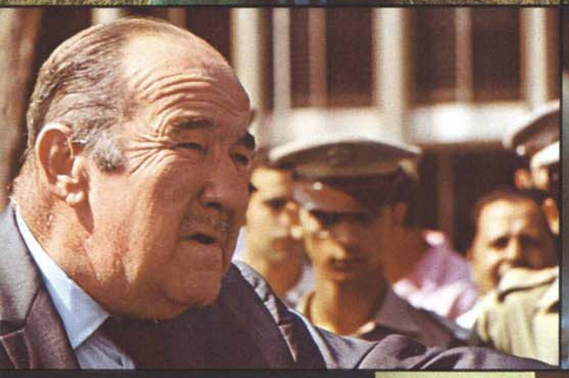
For **Embassy**, Chuck Connors and a stunt man, upper left, and Max von Sydow, above, practice for an assassination scene. Left, center, Lebanese policemen tensely awaiting a "mob" supposedly moving on the embassy. Left, the stars of the film: Max von Sydow, Marie-Jose Nat, Richard Roundtree, producer Mel Ferrer, Broderick Crawford, Ray Milland. At right, above, the company shoots a scene in the garden of Henri Pharaon, a prominent figure in Lebanese society. At right, center, von Sydow attempts to escape as he emerges from the "embassy." Right, below, Squad 16, Beirut's riot police, "defend" the embassy, students have their injury makeup applied and a camera crew prepares a track for the camera to follow the action.

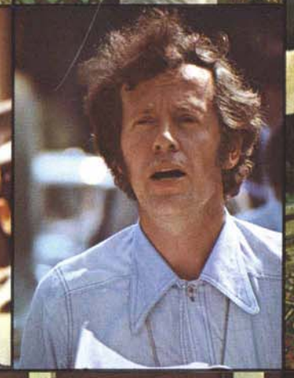
Jack Shehab





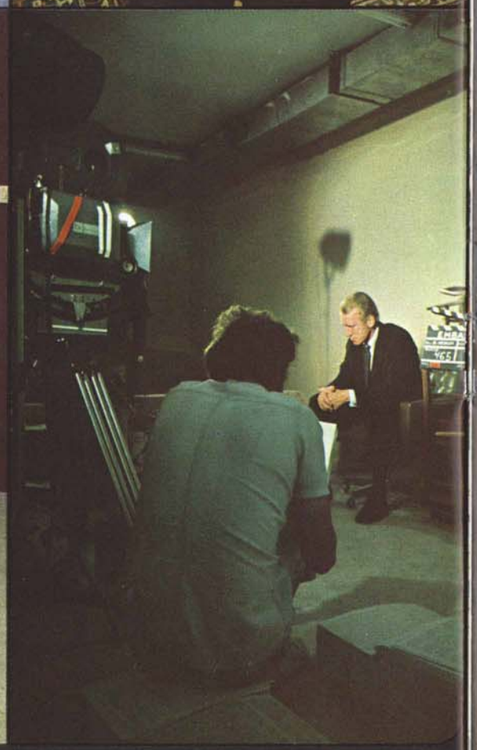






EMBASSY

Above: producer Mel Ferrer and star Marie-Jose Nat go over lines; Raoul Coutard, whose famous **Z** is a recent film triumph, director of photography; movie and TV veteran Broderick Crawford in a scene; former TV director Gordon Hessler; veteran actor Ray Milland in wig. Below: Connors in his role as the political assassin who tries to kill the brooding von Sydow.



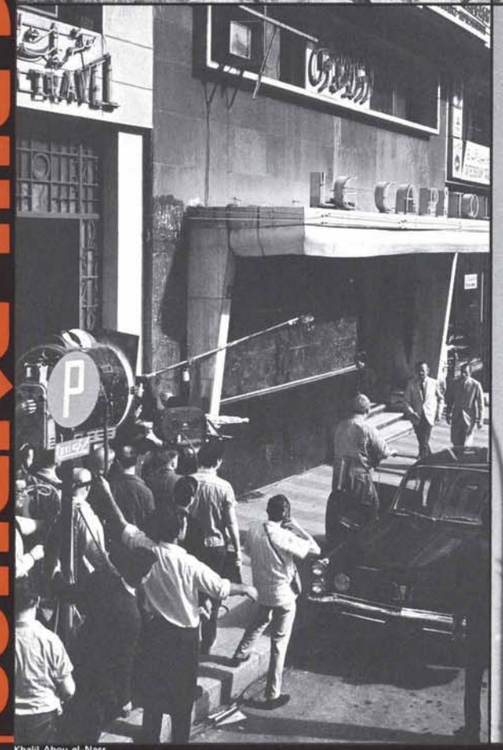
SPIES ARE 3

REBUS

Top: Ann-Margret, prior to her comeback in **Carnal Knowledge,** played in obscure, low-budget, not terribly successful films such as **Rebus,** a thriller filmed in Lebanon with Laurence Harvey.

Bottom: Until **Embassy** was filmed, the only major company ever to use Lebanon as a location was MGM, which sent David Niven over for a light-hearted foray called **Where the Spies Are.** Courtesy Italia Film, Beirut

WHERE THE S



Khalil Abou el-Nasr

ARABS IN THE AIR

BY FREDERICK KING POOLE / PHOTOGRAPHED BY WASEEM TCHORBACHI

In the Middle East today, a sky-minded and capable young man can often start from scratch and, without ever leaving the area, rise to the top in aviation.

In the pure, blue-tinted desert air, Amman, the city of seven hills, recedes into the background and four fast, low-wing Piper Cherokees, climbing at full throttle on a southerly track to Aqaba, flash into the solitude of the surrounding wastelands. Operated by men obviously practicing advanced training maneuvers as well as cross-country navigation, the sleek, single-engine aircraft fall into a straight-line formation, swoop down to investigate possible emergency landing sites, then set a course following a string of hills overlooking the Jordan River Valley. Out past the starboard wings, orange groves of the rich agricultural lands watered by the East Ghor Canal appear. Down to the left are the long black tents of the Bedouins and, occasionally, camel riders in red *ghutras*, carrying silver daggers, members of Jordan's elegant Desert Patrol.

Further on, above rock and sand, the band of Cherokees descends again to zoom over desert castles built to protect the routes to Mecca; over the ornate stone carvings which are all that can be seen from the air of the ancient stone-protected city of Petra; over a monastery built on a needle of rock where the prophet Aaron, brother of Moses, is said to be buried—and then on to a formation landing at Aqaba, Jordan's port on an inlet at the tip of the Red Sea, once a fortress but now a playground whose crystal-clear waters, tropical fish and coral make it a leading attraction for skin divers and sunbathers.

A man down in the desert might well wonder what is going on. Is it a movie? Or a military exercise?

It is neither. It is simply a demonstration, by instructors and students at Jordan's Royal Academy of Aeronautics, that in aviation, as in many things, the Arabs these days can often go it alone.

This is an accelerating trend in the Arab countries: to build up a civil aviation tradition good enough to train national pilots for national airlines. These days, it is no longer impossible for a young man to receive a large part of his air and ground instruction in the Arab world.

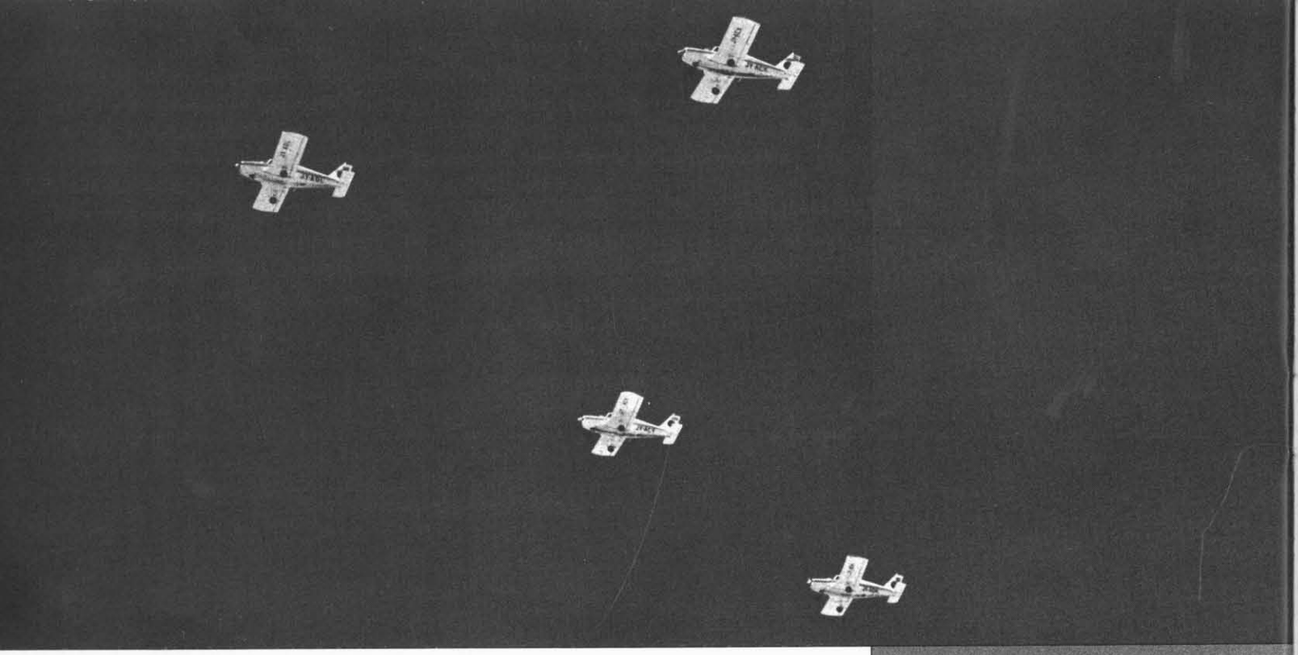
The achievement of the goal can be described only as the realization of a dream —for that is how pilots always talk of it. Almost all aviation professionals, the hard-core professionals, are men who have wanted to be pilots since childhood and who, without exception, believe they have escaped the mundane lives that most people accept.

This sense of pride cropped up during the trip from Amman to Aqaba when the Aqaba control tower, accustomed to receiving only three commercial flights a week, objected to the sudden appearance of our Cherokee armada. The Academy's chief flying instructor, Capt. Lee Jones, a former RAF squadron leader who founded the RAF's celebrated aerobatic formation flying unit, the Red Arrows, had radioed ahead that he and his pipe-smoking deputy, Nayef Shukri, only 28 years old but already widely known in the region, planned to land their two planes together, side by side. The tower had opposed the plan, but Captain Jones was firm about our intentions and the descent and landing were carried out in perfect order—as originally planned.

Afterwards, during a formal debriefing in the shade of Aqaba terminal, one could feel the pride welling up in the young Jordanians as their leader spoke of the landing: "Never let anyone, not even a flight controller, make the final decisions for you," Capt. Jones told them.

"Under international law, when you are the man at the controls nobody can tell you what to do, he can only advise you. You are the one who has to make the decisions. It is you who will have to answer for the results."

The captain of an aircraft does indeed have to answer for the results. Like the captain of an ocean liner, he has total



Left: Capt. Lee Jones, chief flying instructor, Royal Jordanian Academy of Aeronautics. Center: Ibrahim Khatari, an instructor. Right: Nayef Shukri, the Jordanian academy's deputy chief flying instructor.

responsibility for the aircraft under his command. On the other hand, this is one of the reasons why being a pilot—a common dream in childhood—never, for most young dreamers, amounts to more than childhood fantasy.

That the dream and reality could come together in the Arab world would have seemed farfetched not long ago. In the years following World War II, aviation was still in its infancy most places outside the West, and the operational crews of what regional airlines existed were composed almost entirely of foreigners, usually Americans or Europeans. Throughout the then-underdeveloped countries, aviation was decades behind.

But today hundreds of young Arabs who are undergoing flight training stand as proof that their dreams are far more than fantasy. A young man practicing aerobatic maneuvers over the eastern Mediterranean island of Cyprus, a pretty girl flying high above the mountains of Lebanon, a Jordanian making a simulated instrument flight in a Link Trainer at Amman International Airport—these and many more know what is real.

Furthermore, these new pilots have already begun to think of themselves as part of an established tradition. Although aviation mindedness came late to the Middle East, there are already Middle Eastern aviation success stories.

A case in point is the career of Abdel-Mawla Oweini who, 25 years ago, was a 13-year-old boy who plastered the walls of his bedroom in Beirut with pictures of airplanes, attended every movie in town that touched on aviation, and, whenever he heard the noise of powerful engines, looked to the sky.

Abdel-Mawla's family wrote off his obsession. In the 1940's few Arabs had ever been pilots. Besides, the Oweini family over the years had a tradition of success in business and the professions.

Abdel-Mawla did not disappoint his family; he became a highly successful professional man. But he also realized the dream. Still in his thirties, he has not only had years of high adventure behind him, but has also become a figure to be reckoned with in the aviation world. Today Abdel-Mawla is Captain Oweini, a senior flight captain of the Beirut-based Trans Mediterranean Airways, one of the world's largest and most significant cargo carriers. A dozen times a year he circles the globe in command of a Boeing 707. A self-confident, expansive and genial commander, he has made himself into the sort of man who by force of personality attracts attention everywhere. And everywhere can be almost anywhere for Captain Oweini: Bombay or Tokyo, New York or Amsterdam.

Moreover, on his way to the top he established a new family tradition. One of his younger brothers, Sami, 32, is now a first officer, which in practice means copilot and second in command of an aircraft. Another, Nabeel, 29, is a flight engineer. Together, the Oweini brothers could make up an entire TMA Boeing operational flight crew.

Despite his youth, his current eminence and the carefully plotted international jet routes he now flies, Captain Oweini knows all about what pilots still refer to as "flying by the seat of your pants." He began such flying as soon as he was licensed, ferrying cargoes about the Middle East in old four-engine Yorks, which were really no more than converted World War II bombers. He flew oil equipment to Oman while that state was still a medieval bastion, cut off by government policy from most contact with the outside world. In the early 1960's he flew in the Congo for the United Nations, a time that saw 12 foreign pilots slaughtered by Congolese tribesmen. Once he landed in an area of Uganda so remote that his aircraft was the first the local people had ever seen.

It was in the desert, however, that he faced some of his greatest challenges. All over the Middle East there are near-perfect flying conditions for at least 10 months of the year, but every part of the world has its hazards and in the Arab lands it is the unique dangers of desert flying—a set of frequently unpredictable conditions that must be taken into consideration by any man from the region who chooses aviation as his career.

On a clear summer day, over coffee at a Beirut restaurant beside the blue Mediterranean, Captain Oweini reminisced about flying over the great wastelands which begin not many miles away and which, in the early days, were strewn with the wreckage of aircraft.

Some sources say this was because some airlines simply could not maintain their planes properly. But it was also because weather conditions can change so fast that pilots were caught off guard. "Sandstorms are something that have to be experienced to be believed. It is not just a matter of reduced visibility. I have been in sandstorms where I could see my finger in front of my face but not much else."

For a novice airman, to have visibility cut suddenly is more than disconcerting. With no horizon, you must study the instrument panel intently and listen carefully to the engine to discover whether you are flying straight and level, climbing close to stalling speed, or diving down. Winds in a sandstorm reach gale force and the highest skills are required for takeoffs and landings. To be able to navigate means heavy reliance upon instruments. Radio beacons and Instrument Landing Systems have now been set up all over the Middle East, but as recently as seven years ago a pilot flying to most points across the desert to

Over Jordan, Royal Academy pilots practice (above) a "finger-four" formation and (below) "box," "combat" and "diamond" formations.

On Cyprus, another center for Arab flying, Daedelus Aviation also offers fine facilities and training in parachuting and sky-diving.

From left to right: Marie Noelle Craissaty, of the Aero Club of Lebanon, a student pilot; Simona Joseph Yammine, of the Academy of Technical Sciences, the first Arab girl to complete her entire pilot training in the Arab East; Nelly Bright, a Lebanese Aero Club student.

Left: Nabeel Oweini, TMA flight engineer, and his brother Capt. Abdel-Mawla Oweini in a DC-6, a TMA workhorse now being replaced by Boeings; Right: In Lebanon's Civil Safety Center an official and pilot in the Redifon Boeing 707 Digital Flight Simulator.

the Arabian Gulf often had no radio aids to guide him. Frequently, when he took off he did not know where he would eventually be able to touch down.

The most hazardous time for pilots is in the spring when the "khamsin," a frontal system named for the Arabic word for "fifty," indicating the days of its duration, moves across North Africa into the Middle East, bringing blinding sandstorms that often last for 48 hours or longer, whirlwinds accompanied by thunderstorms affecting areas of up to 300 miles in length and sometimes reaching heights of 10,000 feet.

Capt. Trian Udrisky, a retired TMA commander, who was in charge of civil aviation in prewar Rumania and now serves as senior flying instructor at the private pilots' Aero Club of Lebanon, remembers vividly trips to the Gulf without instrument aids during the khamsin. He also recalls the terror of the *habub*, an African spring sandstorm that occurs when a tropical air mass moves up from the equator. "In the Sudan once I landed in Khartoum easily and under fine visibility, and by the time I had stepped out of the cockpit the *habub* had come up, I could see nothing, and the sand was blowing so hard it was like sticks being hurled at my face."

In Amman, Nayef pointed out further difficulties in desert flight: "Usually, if all other methods fail, a pilot can rely on landmarks for navigation in good weather. If you lack radio aids, you can at least look down and see something that is marked on your chart. But in desert flying, charts are often no more valuable than they would be over the open seas. A sand hill marked on a chart can have shifted position by many miles before the chart is distributed."

Michel Abboud, a short, personable 26-year-old TMA first officer, who at various times has served as a flying instructor at Beirut's Aero Club, Amman's Royal Academy, and a flying school in Cyprus, once made a flight from Khartoum across the savannah belt and the Sahara to Tripoli in Libya relying solely on dead reckoning, which is navigation by figuring the effect on an airplane's track of the winds, and from that knowledge deciding what heading to use. He arrived only a few miles off course. "But I was lucky," he admits. "Winds can shift so drastically from those reported at the start of a flight that there have been cases of pilots winding up hundreds of miles from their intended track."

Another constant problem is landing in the desert—even when the skies are clear. If there is a runway, an experienced pilot, or for that matter an amateur, can easily judge the height at which he must regress to land. But if there is no defined runway to use as a reference point or, as is frequently the case at desert airports, the runway cannot be seen because the wind has covered it with

Above: Lebanese student John Abdo pushes a Cessna 150 onto the Nicosia club's field, gasses it up on one side, checks struts while field assistant gasses the other side, checks the flaps and propeller before taking off. Below: Robert Saliba and copilot Jean Nehme get okay from tower, race down the runway and take off.

sand, any pilot will have difficulty in figuring the correct regress point. If you are too high, you overshoot; if you are too low, which is far worse, you can plummet nose down into the sand.

Bearing in mind that trainees may one day be command pilots flying desert routes, the Royal Academy in Jordan recently inaugurated a desert-survival program. Each student must now spend two grueling months out in the desert under supervision of the Royal Jordanian Army. The training involves techniques for finding water, long forced marches to build up endurance, instruction in finding your position by the sun and stars, and even hand-to-hand combat. "We did not know what would happen when we started the program," Captain Jones said, "but so far every young man we have sent to the desert has finished the course."

The desert-survival course is but one example of the stringent standards expected by the Royal Academy. A student in Jordan can now complete all his training towards his commercial pilot's license with Instrument Rating—making him eligible to start training on transport planes with an airline—in about a year. During this period in Jordan the students now go through upwards of 1,000 hours of ground instruction, which is many times more than most commercial pilots receive. They also put in well over the required minimum of 200 hours in the air.

At its spacious, breezy headquarters beside the Amman airfield, the academy's classrooms are a 30-second walk from its fleet of Cherokees. There are six single-engined Cherokees, a twin-engine Piper and six full-time flight instructors, in addition to ground instructors. The academy is also taking delivery soon of a small plane designed for the strains of loops, rolls and other aerobatics.

Meanwhile, at Beirut International Airport, the busiest in the Middle East, the newest commercial training venture in the region is under way. The two-year-old aviation section of the private Academy of Technical Sciences is operating with two Cherokees, has two more on order, and has the use of a leased twin-engine Piper Comanche. With plans to expand to the same size as the Jordanian academy, the Technical Academy already has 22 full-time commercial flying students, operating out of the TMA hangar. As in Jordan, where there are Syrian and Pakistani students, as well as young Jordanians headed for jobs with Alia, the Royal Jordanian Airline, the Beirut school has flying students from Saudi Arabia and Egypt as well as from Lebanon. The whole point of such flying facilities, according to Salim Hajj, founder and president of the Technical Academy, is that "there is no reason why Arab pilots should be sent to England or America to learn their flying. We have advanced to the point where we are capable of training our own pilots right here."

That enthusiastic view, of course, skips over the need for considerable exposure to the snow, fog and other variables in weather that one rarely encounters in the Middle East. Nevertheless, as testimony to Mr. Hajj's faith in the future of Arab aviation, his school is producing what he believes is the only girl career pilot ever to be trained in the Middle East: Simona Joseph Yammine, a lively, talkative, brown-haired Beiruti whom one would expect to encounter in a discotheque rather than a hangar. Simona has completed her examinations with Lebanon's Department of Civil Aviation and, barely out of her teens, should soon be the first local girl to become an aviation professional, a pilot eligible to start airline training should any line be sufficently impressed with the basic arguments of Women's Lib.

Chatting recently in the left-hand pilot's seat of a Cherokee, dressed in an incongrously stylish blue and white pants suit, Simona circled the old castle on the breakwater of southern Lebanon's scenic port of Sidon. While handling the controls and keeping an eye on the instruments, she spoke with amusement of how her friends and family reacted to her career.

"Even the little children used to laugh at me when I was in school," she said. "I couldn't think of anything else but flying even then. When I was supposed to be studying I was making paper airplanes."

Today Simona doesn't mind the laughter. "I want to work in aviation," she said. "I might even use some of my family's land to set up a new airport exclusively for light aircraft. But mainly I think flying is fun."

There was a pause while she waited for another question. Then she said, "You'd better ask me what I'm going to do next year... I'm going to buy my own plane and make a trip by myself around the world."

Across the airfield, situated in a hangar belonging to Lebanon's Middle East Airlines, the Aero Club, which has a Cherokee and three slow, high-winged Cessna 150's —two-seater aircraft which are still the favorite type of plane of many pilots who want to "feel the air"—there are other girl students. But Simona remains unique, so far, in making aviation a life plan.

Another center for Arab flying is the Nicosia Airport in Cyprus, not an Arab country, but only 150 miles from Beirut and with excellent flying conditions almost every day of the year.

In 1965, two young Cypriot air-traffic controllers, Spiros Christophides and Milton Georgiades, returned home from training in England, bought two Piper Colts, which are similar to the more common Cessna 150's, and opened a private flying club, partly to promote aviation on their island and partly so that they themselves could keep up their pilot's ratings. They set up headquarters in the sprawling, disused Old Airport, which had been abandoned when Nicosia's modern new passenger terminal was built.

In the years since, Spiros and Milton's Nicosia Flying Club, working in conjunction with its offshoot, Daedalus Aviation, Ltd., has reached the point where half a dozen instructors provide commercial training for about 50 Arab students a year. One of their graduates is flying for Alia, another for Syrian Airways, five for TMA, and eight for MEA. They now have four Cessna 150's, including one especially designed for aerobatics, a four-seater Cessna 172 and a six-seater Cessna 206, in addition to one of the original Colts.

On a recent visit to the Old Airport, where a relaxed and friendly atmosphere always prevails, flying activities included a highly sophisticated three-Cessna formation flight over the beach resort of Famagusta, where scores of sun-loving tourists were on their feet waving as we went by; loops and rolls performed high over the Nicosia airfield; and many hours of the advanced semi-aerobatic exercises that commercial pilots must learn.

Among the students participating in the formation flight was Johnny Abdo, a cheerful and collected young man, who at the age of 24 resigned from TMA's Traffic Division to fulfill a life-long ambition to become a pilot. "There is nothing like this," Johnny said. "Even when I start flying transports I'm always going to stay around small planes."

Another enthusiastic Lebanese, Robert Saliba, 23, who had come over with 21-year-old Jean Nehme, a friend he first met at the Aero Club, spoke of how "I began this more or less as a business but now that I can fly, now that I understand what it means to be

Left: Fouad Shaker of Bahrain (foreground) and Bassam Zaim Jamilia of Syria. Center: Saliba, Nehme and Milton Gorgiades, deputy chief flying instructor, Nicosia club. Right: Eisa Ben Laden of Saudi Arabia looks at solo mementoes on bulletin board.

in the air, I do it because more than anything else it is just what I want to do."

Eisa Ben Laden, 22, a handsome, clear-eyed Saudi who had become a close friend of Nayef's while they were studying together in England at the Oxford Air Training School, was completing his Commercial License with an eye to steering his family's engineering firm, the Shaik Mohamed Ben Laden Organization, further into aviation. Another friend of Eisa's, Fouad Shaker, 21, a happy-go-lucky Bahraini, was mulling plans for an air-taxi service between his Gulf island state and Iran. And Bassam Zaim Jamilia, 26, from Aleppo, in Syria, had recently given up a profitable import-export business in Cairo and was in training to become a pilot with Syrian Airways.

All spoke of how aviation facilities in the region are mushrooming. One nearby example, a new Nicosia air-taxi company, Air Venus, had just started offering flight training with two Cherokees, and was ready to add two more, plus two twin-engine Pipers, and set up its own airfield near the beach village of Paphos.

In Cairo, which before military considerations changed the emphasis to air force flying was the center for civil aviation training in the Middle East—Captain Oweini, for instance, made his first solo flight there—plans have been set forth for a revitalized civil training program on similar lines to Jordan's and on a larger scale.

In Beirut, construction has started on a new two-story clubhouse for the Aero Club, which, although geared to private pilots, has trained a number of young men who are now pilots with Lebanon's two international airlines.

After becoming a commercial pilot, a student must, of course, go on to training with an airline before he can fly large transports. Fortunately for any pilot in the Middle East, good training facilities are close at hand. In 1965, the Lebanese Government and the United Nations' International Civil Aviation Organization (ICAO), which sets international aviation standards, jointly set up the Civil Aviation Safety Center near the Beirut airport. Using the most complex modern facilities, the Safety Center has provided training for thousands of airline pilots from all over the world. Naguib Nassr, 32, an intense, wiry, former Aero Club instructor and holder of Lebanon's "Student Pilot Permit No. 1," recently joined MEA as a first officer, and is currently training on the Safety Center's Redifon Boeing 707 Digital Flight Simulator, the only computerized jet transport simulator for thousands of miles around.

But, important though it may be, modern technology is not the ultimate concern of advanced professionals. Every pilot I have met in the Middle East has talked with the pride shown by the Jordanian students during their debriefing at Aqaba. All have maintained the dream. Captain Oweini still has in his mind the image of his boyhood bedroom plastered with pictures of aircraft. Bassam, who, like most Arab pilots, is the first member of his family to enter aviation, still recalls how, as a young teen-ager, he spent his free hours as a spectator at the Aleppo airfield; he has a 14-year-old brother at home who is now doing the same. One feels that years hence Simona will still have characteristics of the little girl who flew paper planes.

Nayef summed it all up after dinner in Amman one night. Leaning back, smiling, puffing on the pipe that has become his trademark, he began talking about his own career. "I am where I am because I am a pilot. It is as simple as that. But another time in history I would have had to live abroad to do what I want to do in the future. Now we are going to be able to match the best pilots anywhere. I'm staying on at the academy because all the exciting things that have to do with flying are now all taking place right here."

Frederick King Poole spent four years as a UPI correspondent and four years as a book editor before writing his first novel, Where Dragons Dwell, *for Harper & Row and accepting a commission for a second novel now in progress. He has lived in the Middle East since 1971 where, as this article suggests, he has continued his avocation as pilot.*