

SAUDI ARAMCO
world



Arabians 2011

Gregorian and Hijri Calendars

"Drinkers of the Wind"

WRITTEN BY PETER HARRIGAN CALENDAR PHOTOGRAPHS BY TARIQ DAJANI

The Arabian horse has inspired poets, writers and artists for centuries. The Arabic *qasida* written by the famed Imru' al-Qays 15 centuries ago still conjures both the iconic form and the distinctive movement of the breed.

"The two great features, possibly, that a novice would notice quickest in the Arabian horse, is the forehead, or *jibbeh*, which cannot be too prominent, and the other is the tail set high and carried in an arch," wrote Homer Davenport, one of the earliest importers to America of desert-bred (*asil*) Arabians. "Nature, when she made the Arabian, made no mistake, and man has not yet been able to spoil him."

Bedouin lore speaks of how the first "drinkers of the wind" were formed from a handful of south wind, and indeed the precise origins of Arabians are shrouded in both legend and uncertain science. Some equine geneticists argue the breed came out of Central Asia, from where confederations of nomads migrated over the steppes into the Fertile Crescent. Others argue it came from Turkic bloodlines, descended from the Turkmen and Akhal Teke. Others place its origins around the Caspian Sea, and there are other theories too of domestication of proto-Arabian horses in the

monsoon-touched southwestern Arabian Peninsula.

There is broad consensus, however, on what built the Arabian's traits: adaptation over 3000 or more years to extreme conditions and a nomadic Bedouin way of life; a long process of selection, by both nature and humans, based on survival and performance; and an enduring insistence on bloodline purity. The breed's intelligence, says international Arabian horse judge Peter Upton, "owes much to the long history as close companion of man in war and peace."

The leading guardians of the Arabians were the tribes of Najd, the central desert ranges of Arabia. There, the horses were carefully bred and kept alongside camels, for in such a climate, the Arabian cannot survive without human care and camels that can provide milk in the absence of water.

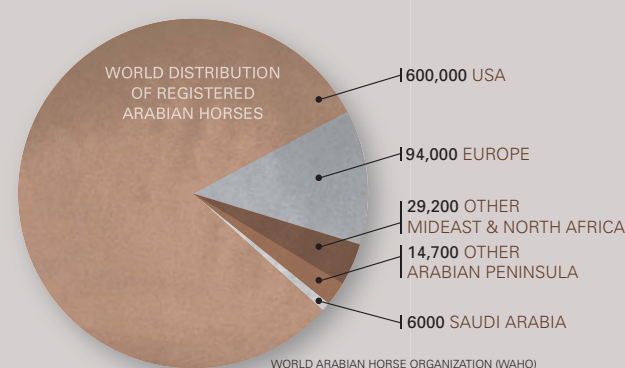
The long era of an isolated gene pool, however, drew to a close with the spread of Islam and growth in trade, which also brought the Arabian recognition far beyond its origins and had a lasting influence on other breeds.

After the coming of Islam in the seventh century, the asil horse was held in the highest esteem from Egypt to India and Europe. Everywhere, cavalry required light, swift horses endowed with stamina, nimbleness, an even temperament, longevity and fertility. Because the Arabian developed as a singular breed, it was above all considered an "improver," able to reliably pass on qualities to successive generations. This lured Europeans beyond the trading centers of the Levant and into Arabia, where Bedouins were understandably reluctant (and at times staunchly unwilling) to part with top horses. But rewards for those travelers who could return with an Arabian stallion or—better yet—a broodmare were great, for such prizes brought with them priceless genetic templates of strategic significance.

Arabian stallion depots, state breeding centers and royal stud farms spread across Europe, where the growing popularity of orientalism added fashion to the breed's appeal. Leaders of tribes and rulers including 'Abd al-'Aziz Al Sa'ud, the Sharif of Makkah and the Al Khalifa of Bahrain all sent gifts of Arabians to monarchs in Europe, and many of the descendants of these horses have been preserved to this day.

In England and America, sport, not strategy, drove demand for Arabians. Between 1684 and 1730, three now-famous Arabians landed in England and changed equine history: the Byerley Turk, the Darley Arabian and the Godolphin Arabian. Bred with native stock, these became the founding fathers of the Thoroughbred. Bulle Rock, a son of the Darley Arabian,

Very swift he is, like the toy spinner a boy will whirl,
Plying it with his nimble hands by the knotted thread.
His flanks are the flanks of a fawn, his legs are like an ostrich's.
The springy trot of a wolf he has, the fox's gallop. —Imru' al-Qays



arrived in Virginia from Britain in 1730, the first Thoroughbred to land on American soil. The supreme racing steed had been developed.

Today, more than 90 percent of pure-bred Arabians—some 750,000 horses—are raised outside the Middle East. Of those, some 80 percent are in the United States.

With these demographics, the breed that now serves as a powerful cultural symbol of Arabia will continue to give pleasure to all who are fortunate enough to witness its grace, beauty, patience, poise and dance-like movement. 🌍



Peter Harrigan (harrigan@fastmail.fm) is a visiting researcher at the Institute of Arab and Islamic Studies, Exeter University, and an editor of two books on Arabian horses: *Out of the Desert* (2010) and *Royal Heritage* (forthcoming).



Tariq Dajani (www.tariqdajani.com) is a freelance photographer based in Amman, Jordan. He has exhibited in more than a dozen galleries since 2007. He is also an avid rider.



GUY RHODES / KING ABDULAZIZ ARABIAN HORSE CENTER

Pure-bred desert horses have always been among the most highly prized, and among Arabians, there are five major bloodlines, or strains: Mu'niqi, Saglawi, Obeyah, Hamdani and Kuhaila. All appear above, photographed at the King Abdulaziz Arabian Horse Center (KAAHC). Cover: Hayfaa Dirab, a Saudi desert-bred Bay Mare, comes face-to-face with Bint Fawazah, a Russian Black Mare. Both were brought to the KAAHC as part of its effort to improve the breed worldwide.

About this Calendar

The photographs in this calendar were made possible through the support of the King Abdulaziz Arabian Horse Center (KAAHC) in Dirab, Saudi Arabia. Stabling almost 200 Arabians, the 40-year-old KAAHC is the leading institution for preserving and improving the pure-bred Arabian in its homeland. As a department of the Saudi Ministry of Agriculture, a member of the World Arabian Horse Organization (WAHO) and the only Arabian horse project of the United Nations, the KAAHC issues horse passports, registration certificates and pedigrees; it inserts identifying microchips and maintains the kingdom's stud book. Sami Nohait, director of the KAAHC, highlights the importance of the Arabian to the region: "Arabian horses are the most important animal species in the Middle East."

Patterns of Moon, Patterns of Sun

WRITTEN BY PAUL LUNDE

The *hijri* calendar

In 638 CE, six years after the death of the Prophet Muhammad, Islam's second caliph, 'Umar, recognized the necessity of a calendar to govern the affairs of Muslims. This was first of all a practical matter. Correspondence with military and civilian officials in the newly conquered lands had to be dated. But Persia used a different calendar from Syria, where the caliphate was based; Egypt used yet another. Each of these calendars had a different starting point, or epoch. The Sasanids, the ruling dynasty of Persia, used June 16, 632 CE, the date of the accession of the last Sasanid monarch, Yazdagird III. Syria, which until the Muslim conquest was part of the Byzantine Empire, used a form of the Roman "Julian" calendar, with an epoch of October 1, 312 BCE. Egypt used the Coptic calendar, with an epoch of August 29, 284 CE. Although all were solar calendars, and hence geared to the seasons and containing 365 days, each also had a different system for periodically adding days to compensate for the fact that the true length of the solar year is not 365 but 365.2422 days.

In pre-Islamic Arabia, various other systems of measuring time had been used. In South Arabia, some calendars apparently were lunar, while others were lunisolar, using months based on the phases of the moon but intercalating days outside the lunar cycle to synchronize the calendar with the seasons. On the eve of Islam, the Himyarites appear to have used a calendar based on the Julian form, but with an epoch of 110 BCE. In central Arabia, the course of the year was charted by the position of the stars relative to the horizon at sunset or sunrise, dividing the ecliptic into 28 equal parts corresponding to the location of the moon on each successive night of the month. The names of the months in that calendar have continued in the Islamic calendar to this day and would seem to indicate that, before Islam, some sort of lunisolar calendar was in use, though it is not known to have had an epoch other than memorable local events.

There were two other reasons 'Umar rejected existing solar calendars. The Qur'an, in Chapter 10, Verse 5, states that time should be reckoned by the moon. Not only that, calendars used by the Persians, Syrians and Egyptians were identified with other religions and cultures. He therefore decided to create a calendar specifically for the Muslim community. It would be lunar, and it would have 12 months, each with 29 or 30 days.

This gives the lunar year 354 days, 11 days fewer than the solar year. 'Umar chose as the epoch for the new Muslim calendar the *hijrah*, the emigration of the Prophet Muhammad and 70 Muslims from Makkah to Madinah, where Muslims first attained religious and political autonomy. The *hijrah* thus occurred on 1 Muharram 1 according to the Islamic calendar, which was named "*hijri*" after its epoch. (This date corresponds to July 16, 622 CE on the Gregorian calendar.) Today in the West, it is customary, when writing *hijri* dates, to use the abbreviation AH, which stands for the Latin *anno hegirae*, "year of the *hijrah*."

Because the Islamic lunar calendar is 11 days shorter than the solar, it is therefore not synchronized to the seasons. Its festivals, which fall on the same days of the same lunar months each year, make the round of the seasons every 33 solar years. This 11-day difference between the lunar and the solar year accounts for the difficulty of converting dates from one system to the other.

The Gregorian calendar

The early calendar of the Roman Empire was lunisolar, containing 355 days divided into 12 months beginning on January 1. To keep it more or less in accord with the actual solar year, a month was added every two years. The system for doing so was complex, and cumulative errors gradually misaligned it with the seasons. By 46 BCE, it was some three months out of alignment, and Julius Caesar oversaw its reform. Consulting Greek astronomers in Alexandria,

It is he who made the sun to be a shining glory, and the moon to be a light (of beauty), and measured out stages for her, that ye might know the number of years and the count (of time). —The Qur'an, Chapter 10 ("Yunus"), Verse 5

he created a solar calendar in which one day was added to February every fourth year, effectively compensating for the solar year's length of 365.2422 days. This Julian calendar was used throughout Europe until 1582 CE.

In the Middle Ages, the Christian liturgical calendar was grafted onto the Julian one, and the computation

of lunar festivals like Easter, which falls on the first Sunday after the first full moon after the spring equinox, exercised some of the best minds in Christendom. The use of the epoch 1 CE dates from the sixth century, but did not become common until the 10th.

The Julian year was nonetheless 11 minutes and 14 seconds too long. By the early 16th century, due to the accumulated error, the spring equinox

was falling on March 11 rather than where it should, on March 21. Copernicus, Christophorus Clavius and the physician Aloysius Lilius provided the calculations, and in 1582 Pope Gregory XIII ordered that Thursday, October 4, 1582 would be followed by Friday, October 15, 1582. Most Catholic countries accepted the new "Gregorian" calendar, but it was not adopted in England and the Americas until the 18th century. Its use is now almost universal worldwide. The Gregorian year is nonetheless 25.96 seconds ahead of the solar year, which by the year 4909 will add up to an extra day. 🌐

Paul Lunde (paul_lunde@hotmail.com) is currently a senior research associate with the Civilizations in Contact Project at Cambridge University.

Converting Dates

The following equations convert roughly from Gregorian to *hijri* and vice versa. However, the results can be slightly misleading: They tell you only the year in which the other calendar's year *begins*. For example, 2011 Gregorian includes the first 36 days of AH 1433.

$$\text{Gregorian year} = [(32 \times \text{Hijri year}) \div 33] + 622$$

$$\text{Hijri year} = [(\text{Gregorian year} - 622) \times 33] \div 32$$

Alternatively, there are more precise calculators available on the Internet: Try www.rabiah.com/convert/ and www.ori.unizh.ch/hegira.html.



Saudi Aramco
world 2011

"The two great features, possibly, that a novice would notice quickest in the Arabian horse, is the forehead ... and ... the tail set high and carried in an arch."

—Homer Davenport, one of the earliest importers to America of desert-bred (asil) Arabians.

Attar Dirab is a five-year-old Grey Stallion of the Kuhhaila Memreih strain. His bloodlines are from Egypt, Russia and Spain.

JANUARY
MUHARRAM — SAFAR 1432

| Saturday | Sunday | Monday | Tuesday | Wednesday | Thursday | Friday |
|----------|----------|----------|----------|-----------|----------|----------|
| 1 26 | 2 27 | 3 28 | 4 29 | 5 1 | 6 2 | 7 3 |
| 8 4 | 9 5 | 10 6 | 11 7 | 12 8 | 13 9 | 14 10 |
| 15 11 | 16 12 | 17 13 | 18 14 | 19 15 | 20 16 | 21 17 |
| 22 18 | 23 19 | 24 20 | 25 21 | 26 22 | 27 23 | 28 24 |
| 29 25 | 30 26 | 31 27 | | | | |
| | | | | | | |

FEBRUARY
SAFAR — RABI' I 1432

| Saturday | Sunday | Monday | Tuesday | Wednesday | Thursday | Friday |
|----------|----------|----------|----------|-----------|----------|----------|
| | | | 1 28 | 2 29 | 3 30 | 4 1 |
| 5 2 | 6 3 | 7 4 | 8 5 | 9 6 | 10 7 | 11 8 |
| 12 9 | 13 10 | 14 11 | 15 12 | 16 13 | 17 14 | 18 15 |
| 19 16 | 20 17 | 21 18 | 22 19 | 23 20 | 24 21 | 25 22 |
| 26 23 | 27 24 | 28 25 | | | | |
| | | | | | | |



Saudi Aramco
world 2011

"Next to the camel in importance for the Bedouin is his mare.... The horse and the camel complement each other in the desert—the horse is swift and the camel enduring.... Without the horse, the camels cannot be defended against raiders or retrieved when they are plundered. But without the sweet milk of camels, the horse cannot survive."

—Saad Abdullah Sowayan, Nabati Poetry (University of California Press, 1985)

Bint Khuzamah (Grey) and foal (Bay) are pure Saudi desert-bred from the Kuhaila Um Arqob strain.

MARCH

RABI' I — RABI' II 1432

| Saturday | Sunday | Monday | Tuesday | Wednesday | Thursday | Friday |
|----------|----------|----------|----------|-----------|----------|----------|
| | | | 1 26 | 2 27 | 3 28 | 4 29 |
| 5 30 | 6 1 | 7 2 | 8 3 | 9 4 | 10 5 | 11 6 |
| 12 7 | 13 8 | 14 9 | 15 10 | 16 11 | 17 12 | 18 13 |
| 19 14 | 20 15 | 21 16 | 22 17 | 23 18 | 24 19 | 25 20 |
| 26 21 | 27 22 | 28 23 | 29 24 | 30 25 | 31 26 | |
| | | | | | | |

APRIL

RABI' II — JUMADA I 1432

| Saturday | Sunday | Monday | Tuesday | Wednesday | Thursday | Friday |
|----------|----------|----------|----------|-----------|----------|----------|
| | | | | | | 1 27 |
| 2 28 | 3 29 | 4 30 | 5 1 | 6 2 | 7 3 | 8 4 |
| 9 5 | 10 6 | 11 7 | 12 8 | 13 9 | 14 10 | 15 11 |
| 16 12 | 17 13 | 18 14 | 19 15 | 20 16 | 21 17 | 22 18 |
| 23 19 | 24 20 | 25 21 | 26 22 | 27 23 | 28 24 | 29 25 |
| 30 26 | | | | | | |



Saudi Aramco
world 2011

"He paws the ground with his fore-feet like the action of one who digs for water. He has full command of himself as soon as his first shortness of breath has passed: we stroke him down, but he will not be still, so eager is his heart."
—Mufaddaliyat: An Anthology of Ancient Arabian Odes, translated by Sir Charles James Lyall and Peter Harrigan

Jawal Dirab is a six-year-old Chestnut Stallion of the strain Sowaiti Al-Firm bred from Russian and Spanish bloodlines.

MAY
JUMADA I — JUMADA II 1432

| Saturday | Sunday | Monday | Tuesday | Wednesday | Thursday | Friday |
|----------|----------|----------|----------|-----------|----------|----------|
| | 1 27 | 2 28 | 3 29 | 4 1 | 5 2 | 6 3 |
| 7 4 | 8 5 | 9 6 | 10 7 | 11 8 | 12 9 | 13 10 |
| 14 11 | 15 12 | 16 13 | 17 14 | 18 15 | 19 16 | 20 17 |
| 21 18 | 22 19 | 23 20 | 24 21 | 25 22 | 26 23 | 27 24 |
| 28 25 | 29 26 | 30 27 | 31 28 | | | |
| | | | | | | |

JUNE
JUMADA II — RAJAB 1432

| Saturday | Sunday | Monday | Tuesday | Wednesday | Thursday | Friday |
|----------|----------|----------|----------|-----------|----------|----------|
| | | | | 1 29 | 2 30 | 3 1 |
| 4 2 | 5 3 | 6 4 | 7 5 | 8 6 | 9 7 | 10 8 |
| 11 9 | 12 10 | 13 11 | 14 12 | 15 13 | 16 14 | 17 15 |
| 18 16 | 19 17 | 20 18 | 21 19 | 22 20 | 23 21 | 24 22 |
| 25 23 | 26 24 | 27 25 | 28 26 | 29 27 | 30 28 | |
| | | | | | | |



Saudi Aramco
world 2011

"The characteristic hallmarks of the Arabian are its exquisite head, intelligent and singularly gentle look, full eye, sharp thorn-like little ear.... It is a horse of great courage and tenacity, yet kindly and affectionate." —Peter Upton, author and twice president of the Arab Horse Society of Britain
Fadwa Dirab, Shareefat Dirab and Qaseedat Dirab are Grey Fillies that share European, Russian, Polish and Egyptian descents.

JULY
RAJAB — SHA‘ABAN 1432

| Saturday | Sunday | Monday | Tuesday | Wednesday | Thursday | Friday |
|----------|----------|----------|----------|-----------|----------|----------|
| | | | | | | 1 29 |
| 2 1 | 3 2 | 4 3 | 5 4 | 6 5 | 7 6 | 8 7 |
| 9 8 | 10 9 | 11 10 | 12 11 | 13 12 | 14 13 | 15 14 |
| 16 15 | 17 16 | 18 17 | 19 18 | 20 19 | 21 20 | 22 21 |
| 23 22 | 24 23 | 25 24 | 26 25 | 27 26 | 28 27 | 29 28 |
| 30 29 | 31 30 | | | | | |

AUGUST
RAMADAN — SHAWWAL 1432

| Saturday | Sunday | Monday | Tuesday | Wednesday | Thursday | Friday |
|----------|----------|----------|----------|-----------|----------|----------|
| | | 1 1 | 2 2 | 3 3 | 4 4 | 5 5 |
| 6 6 | 7 7 | 8 8 | 9 9 | 10 10 | 11 11 | 12 12 |
| 13 13 | 14 14 | 15 15 | 16 16 | 17 17 | 18 18 | 19 19 |
| 20 20 | 21 21 | 22 22 | 23 23 | 24 24 | 25 25 | 26 26 |
| 27 27 | 28 28 | 29 29 | 30 1 | 31 2 | | |
| | | | | | | |



Saudi Aramco
world 2011

"First of all, the head should be large, not small.... There should be a great distance from the ears to the eyes, and a great distance from one eye to the other, though not from ear to ear. The forehead, moreover, and the whole region between and just below the eye, should be convex.... There should be nothing fleshy about their prominence, and each bone should be sharply edged." —Lady Anne Blunt, Arabian breeder and author of *A Pilgrimage to Nejd*, 1881.

Razeen Al Thani is an eight-year-old Chestnut Stallion of the strain Hamdani Samri with Egyptian and Russian bloodlines.

SEPTEMBER

SHAWWAL — DHU AL-QA'DAH 1432

| Saturday | Sunday | Monday | Tuesday | Wednesday | Thursday | Friday |
|----------|----------|----------|----------|-----------|----------|----------|
| | | | | | 1 3 | 2 4 |
| 3 5 | 4 6 | 5 7 | 6 8 | 7 9 | 8 10 | 9 11 |
| 10 12 | 11 13 | 12 14 | 13 15 | 14 16 | 15 17 | 16 18 |
| 17 19 | 18 20 | 19 21 | 20 22 | 21 23 | 22 24 | 23 25 |
| 24 26 | 25 27 | 26 28 | 27 29 | 28 30 | 29 1 | 30 2 |
| | | | | | | |

OCTOBER

DHU AL-QA'DAH — DHU AL-HIJJAH 1432

| Saturday | Sunday | Monday | Tuesday | Wednesday | Thursday | Friday |
|----------|----------|----------|----------|-----------|----------|----------|
| 1 3 | 2 4 | 3 5 | 4 6 | 5 7 | 6 8 | 7 9 |
| 8 10 | 9 11 | 10 12 | 11 13 | 12 14 | 13 15 | 14 16 |
| 15 17 | 16 18 | 17 19 | 18 20 | 19 21 | 20 22 | 21 23 |
| 22 24 | 23 25 | 24 26 | 25 27 | 26 28 | 27 29 | 28 1 |
| 29 2 | 30 3 | 31 4 | | | | |
| | | | | | | |



Saudi Aramco
world 2011

"The principles of furusiyya, or horsemanship, are closely associated with such noble values as honor, generosity and chivalry. Many elements of our heritage and culture are inextricably linked to the horses, and there is no finer example than that of the founder of our country, King 'Abd al-'Aziz Al Sa'ud, who was the last leader in history to unite a country on horseback."

—HRH Faisal bin Abdullah bin Mohammad Al Sa'ud, Minister of Education

Barq Dirab is a five-year-old Stallion of the Julfa strain bred from Egyptian and Saudi bloodlines.

NOVEMBER

DHU AL-HIJJAH 1432 — MUHARRAM 1433

| Saturday | Sunday | Monday | Tuesday | Wednesday | Thursday | Friday |
|-------------|----------|----------|----------|-----------|----------|----------|
| | | | 1 5 | 2 6 | 3 7 | 4 8 |
| 5 9 | 6 10 | 7 11 | 8 12 | 9 13 | 10 14 | 11 15 |
| 'Id al-Adha | | | | | | |
| 12 16 | 13 17 | 14 18 | 15 19 | 16 20 | 17 21 | 18 22 |
| 19 23 | 20 24 | 21 25 | 22 26 | 23 27 | 24 28 | 25 29 |
| 26 1 | 27 2 | 28 3 | 29 4 | 30 5 | | |
| | | | | | | |

DECEMBER

MUHARRAM — SAFAR 1433

| Saturday | Sunday | Monday | Tuesday | Wednesday | Thursday | Friday |
|-----------|----------|----------|----------|-----------|----------|----------|
| | | | | | 1 6 | 2 7 |
| 3 8 | 4 9 | 5 10 | 6 11 | 7 12 | 8 13 | 9 14 |
| 10 15 | 11 16 | 12 17 | 13 18 | 14 19 | 15 20 | 16 21 |
| 17 22 | 18 23 | 19 24 | 20 25 | 21 26 | 22 27 | 23 28 |
| 24 29 | 25 30 | 26 1 | 27 2 | 28 3 | 29 4 | 30 5 |
| Christmas | | | | | | |
| 31 6 | | | | | | |



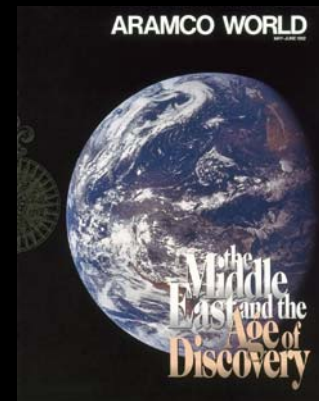
1949



1952



1986



1992



2010

In November 1949, the Arabian American Oil Company (Aramco) launched an interoffice newsletter named *Aramco World*. Over the next two decades, as the number of Americans working with Saudi colleagues in Dhahran grew into the tens of thousands, *Aramco World* grew into a bimonthly educational magazine whose historical, geographical and cultural articles helped the American employees and their families appreciate an unfamiliar land.

The magazine is now published by Aramco Services Company in Houston, Texas on behalf of Saudi Aramco, which succeeded Aramco in 1988 as the national oil company of Saudi Arabia. In 2000, *Aramco World* changed its name to *Saudi Aramco World* to reflect this relationship.

Today, *Saudi Aramco World's* orientation is still toward education, the fostering of cooperation and the building of mutual appreciation between East and West, but for the last four decades the magazine has been aimed primarily at readers outside the company, worldwide, as well as at internal readers. Its articles have spanned the Arab and Muslim worlds, past and present, with special attention to their connections with the cultures of the West.

Subscriptions to *Saudi Aramco World* are available without charge to a limited number of readers. Multiple-copy subscriptions for seminars or classrooms are also available. Subscriptions may be requested at www.saudiaramcoworld.com or as follows: From Saudi Arabia, send to Public Relations, Saudi Aramco, Box 5000, Dhahran 31311; from all other countries, send a signed and dated request by mail to *Saudi Aramco World*, P.O. Box 2106, Houston, Texas 77252, USA, by e-mail to saworld@aramcoservices.com or by fax to +1 (713) 432-5536.

The texts of all back issues of *Aramco World* and *Saudi Aramco World* can be found on our Web site, www.saudiaramcoworld.com, where they are fully indexed, searchable and downloadable. Articles from issues since the end of 2003 include photographs. In addition, many photographs from past issues are available at www.photoarchive.saudiaramcoworld.com, and licensing for approved uses is royalty-free.



www.aramcoservices.com
www.saudiaramco.com

A searchable, indexed reference disk containing PDF scans of all print-edition articles, from 1950 to 2007, is also available upon request, without charge, from the addresses above.

