

Six Decades 2010: Aramco World/Saudi Aramco World 1949 – 2009

The story of Aramco World—predecessor publication of Saudi Aramco World begins in November 1949 in New York, at Aramco's headquarters, then at 505 Park Avenue. The company was 16 years old; World War II had been over for four years. In Dhahran, Saudi Arabia, oil pro-

duction was soaring to 40 times its wartime levels. To the Americans, "it was as if a new frontier were opening: Seemingly unlimited resources were being discovered in an unknown land," wrote former Aramco World assistant editor Bill Tracy. "Following so closely the horror of two

World Wars, the boom was exhilarating, easily understood as a sign of a brighter future."

The company had grown to more than 1000 employees, and every year, more and more of them were moving to work in Dhahran, Before departure, each new

"Preference for cooperation and ... deep respect for Saudi Arabia's heritage marked Aramco's philosophical break with an era of one-sided resource exploitation in the Middle Fast."

William Tracy, "Aramco World Turns 50," Nov/Dec 1999

employee received a handbook containing not only the company's rules, but also advice to help bridge what Tracy called "the natural but enormous cultural gaps" between America and Saudi Arabia. As the workforce grew, in 1949 Aramco's executives launched a newsletter that, in its opening paragraph, announced its intention to "break down

walls of isolation so that our people in America will be helped to see beyond their immediate surroundings."

But that first issue lacked something essential—a name on the front page. The winner of the naming contest turned out to be the college-sophomore daughter of Aramco comptroller Bill Trust. Today, Anne Trust Daly is a retired middle-school teacher and mother of five grown children.

"My dad had come home and said

that the in-house paper was going to be published and needed some names. And he said, 'If you are interested, it is a fifty-dollar prize.' Well, of course, I was in school, and that sounded really quite good," she recalls from her home in Connecticut. Until this year, when Saudi Aramco World contacted her, she had lost touch with

the magazine she named. "I'm very impressed with it, and when I was teaching, it would have been a wonderful addition to the information we had in the classroom. At the time, we had nothing to compare with it."

Far left: In this photo published in January 1950—the date of the first issue to carry the name Aramco World—Anne Trust receives her \$50 prize from Aramco president William F. Moore. In college and on a tight schedule, "I didn't even

consider asking to leave class five minutes early," she recalls. "I had to really tear down there. I was a couple minutes late, and my father was very upset because the president was waiting." Listen to Anne Daly's story at www.saudiaramcoworld.com.

Volume I, No. 1



FELLOW EMPLOYEES

For a long time we have wanted a publication for and about the men and warren of Aramon's New York and Son Francisco offices. This is one Brst, modest effort in that direction.

Araneco operates over vant dictances, making more difficult a proper exchange of news, ideas and information. In the United States we have offices in cities separated by the breadth of the continent. Our oil operations are in far away Saudi Arabia. There are affiliates in ducess of cities throughout the world. We wish to break down walls of isolation or that our people here in America will be helped to use beyond their immediate surroundings, know more of what is going on in other departments and in other centers of company activity.

We hope this publication will enable us to get better acquainted with

NAME CONTEST

This publication needs a name. There are 10 bright, new allver dollars for the one, who produces the right idea. A contest to select a same will slose one month from today. It is open to all copleyees and their families. The judging will be by a representative consmittee.

The name should be abort. It ought to be duacriptive, It would be nice if it were tied into some phase of what we do or where or who we are. We have thought of "Double A", from the company insignia, but somehow that doesn't strike us as quite good enough.

Write your choice of a nome on plain paper with year own name and department clearly indicated. and address the envelope to "Contest Manager, Double A." Drop the contribution in the "out" how and the Mail Room will send it on.

Also if you wish to write in any reaction-quertions, kirks or comments - send on a note addraused to "Editor, Double A," and follow the some procedure. We guarantee it will be road. If signed, we will acknowledge it. If suggestions sow practicable, we'll adopt them.

OIL PRODUCTION

Dhahran reports an average oil production, during September, of 412,228 barrels per day, with the refinery averaging \$71,913 barvels for the some period. Saudi Arabia is now the 3th runking of-producing country of the world.

BOWLING

November 1, 1949

Arares lawlers got off to a fiving start a few works ago with over a hondred fellows and girls hearing hig wooden bulls at little wooden sticks. About \$200 is available for individual prines or an after-season shindig, in addition to the team tro-1thy won last year by Preducing.

The Rowling Conntition is headed by Personnel's Dore Hurbort, Treasury's Ray Con is V. P ... and Comptroller's John Bowler (aptir enough) is Secretary-Trescurer, General Services' Geneviews Dean and P and To Dick Gollan complete the Committee which has arranged for Tuesday and Websenby after-neck competition

The girl captains are: Giney Zims for General Services: Faith Loslow for Comptrollers; Julia Ester for Law, Aristics and Covernment Relations; Retty Calcart for P and T; Helen Bard for Mugt's; Marilyn Freund for Personnel No. 1; Marge Bergman for Personnel No. 2: and Counis Bridgeman for Presumed No. 3.

The fellows here Chet Kemp to explain Profitetrge; J. Gelderson for Purchasing, Aviation and Management; Don Purigett for General Services, J. Hawler for Comptenders; Drew Merbert for Presonnel No. 1; George Shunglesesa for Personsel No. 2; T. Gitchell for Personnel No. 2 and Milt Williams for Personnal No. 4.

Team standings will be appropried next month.





Patterns of Moon, Patterns of Sun

WRITTEN BY PAUL LUNDS

The *hijri* calendar

In AD 638, 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 the 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, AD 632, 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 BC. Egypt used the Coptic calendar, with an epoch of August 29, AD 284. Although all were solar, 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 BC. 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, AD 622 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 sea-

sons 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 BC, it was some three months out of alignment, and Julius Caesar oversaw its reform. Consulting Greek astronomers in Alexandria, he created a solar calendar in which one day was added to

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

February every fourth year, effectively compensating for the solar year's length of 365.2422 days. This Julian calendar was used throughout Europe until AD 1582.

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 AD 1 dates from the sixth century, but did not become common until the 10th. Because the zero had not yet reached the West from Islamic lands, a year was lost between 1 BC and AD 1.

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 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, 2010 Gregorian includes all but the first 14 days of AH 1431, and it includes the first 25 days of AH 1432.

Though they share 12

lunar cycles—months—per

solar year, the hijri calendar

uses actual moon phases

to mark them, whereas the

Gregorian calendar adjusts

its nearly lunar months to

synchronize with the sun.

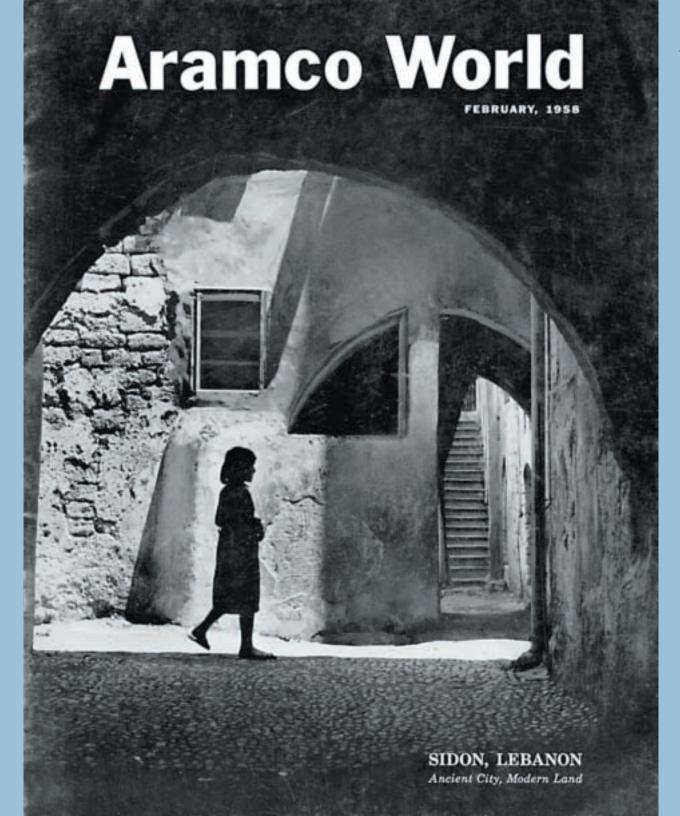
Gregorian year = $[(32 \times Hijri \text{ year}) \div 33] + 622$

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

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

Six Decades 1950's

By the early 1950's, Aramco proving possible between Saudi and expatriate employformat of *Aramco World* ran until 1952, when the company the Field," which later led to articles, styled along the lines of *Life, Look* and



"Nobody at the time was thinking in terms of 'cultural diversity.' The Cold War dominated foreign affairs, and even the term 'Third World' was new.... In retrospect, it is remarkable that the foundation of *Aramco World*'s intercultural approach was so soundly laid so early on."

The teaser for this cover story read: "Sidon, a city of laminated civilizations, is that rare kind of place where you can have your car filled with gasoline at a sparkling new service station while watching archeologists uncover the ruins of an ancient king's stables." Such stories, with their invocation of comfortingly familiar elements, helped employees—and, increasingly, non-Aramco readers—appreciate the richness of history and depth of culture in the unfamiliar places to which their work had taken them. Khalil Abou El-Nasr, who took this photograph, regularly covered Trans-Arabian Pipe Line operations in Lebanon, Syria, Jordan and Saudi Arabia. From 1965 until his death in 1977, he photographed 40 articles for the magazine, 10 of them cover stories.

JANUARY

MUHARRAM — SAFAR 1431

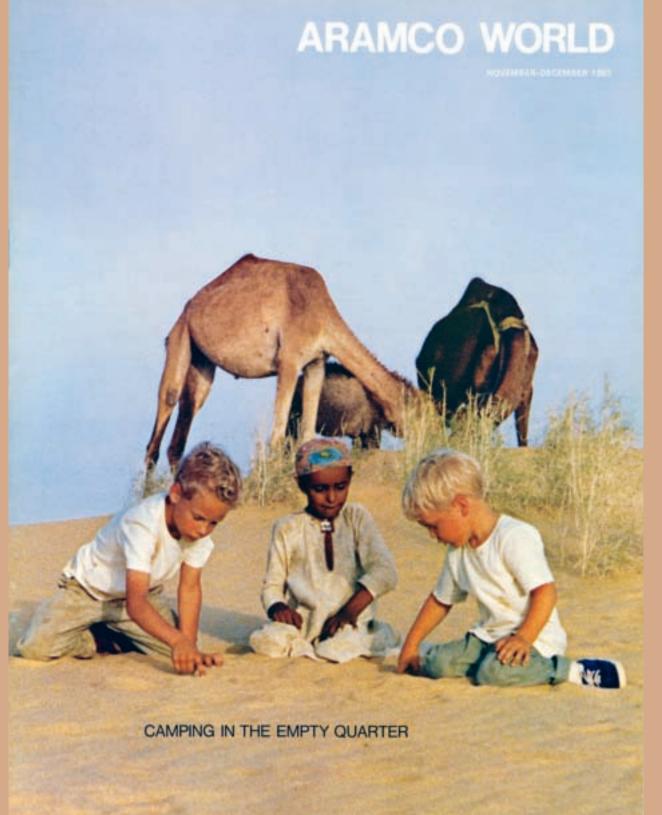
FEBRUARY

SAFAR—RABI' I 1431

Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
						1			1	2	3	4	5
						15			17	18	19	20	21
2			_		_	•		_	0		10	4.4	42
2 16	3 17	4 18	5 19	6 20	7 21	8 22	6 22	7 23	8 24	9 25	10 26	11 27	12 28
10	17	10	17	20	Z I	ZZ	22	23	24	23	20	21	20
9	10	11	12	13	14	15	13	14	15	16	17	18	19
9 23	24	25	26	27	28	29	29	30	1	2	3	4	5
16	17	18	19	20	21	22	20	21	22	23	24	25	26
1	2	3	4	5	6	7	6	7	8	9	10	11	12
23	24	25	26	27	28	29	27	28					
8	9	10	11	12	13	14	13	14					
30	31												
15	16												

Six Decades 1960's

In 1964, the company moved Beirut, closer to the heartbeat of the economically booming Middle East and a city brim-Hoye, a news writer who reporting program at Columbia University, to help guide the of a company one. From this ship by drawing from both insider points of view—with all their pride and affectionview, with all their professional detachment and ability to



"The Middle East
was a place where
modernity and history
mixed at every turn, a
place of fascinatingly
deep roots and
spectacular new,
emerging wings."

found Bedouin friend in this 13 with his father." As they their own and the Saudis' them and other expatriates, in their own right, and today, Aramco World's online index for Kevin and Riki's father, their uncle, historian Jon brother Erik.

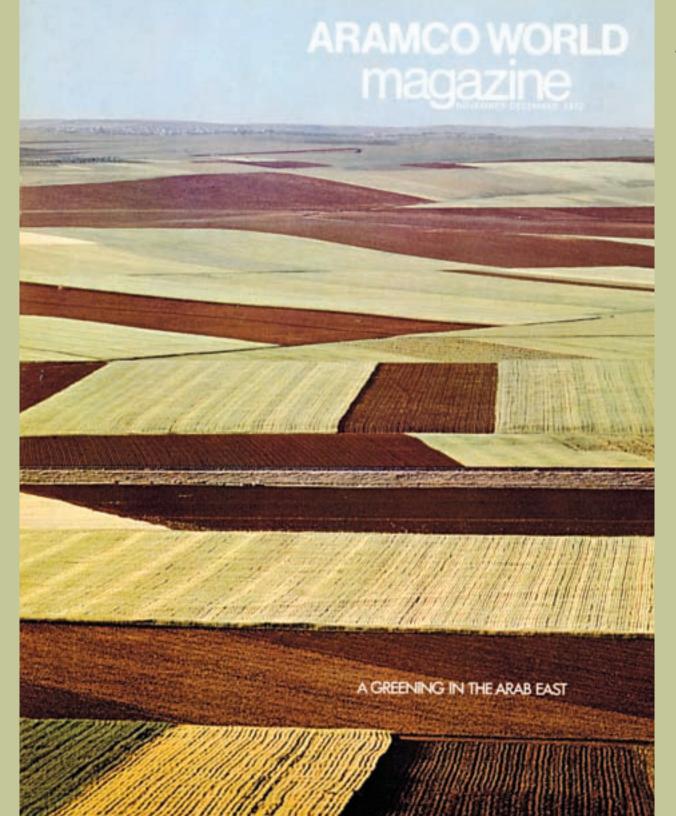
MARCH

RABI' I — RABI' II **1431**

APRILRABI' II—JUMADA I 1431

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

Six Decades 1970's



"The magazine's message was not that people are all the same, but that their differences are of mutual interest and their societies interdependent, and that seeking to understand one another is an intrinsically mutually enlightening process."

In this photo by Nik Wheeler—one of the magazine's Beirut regulars—ripening grain stripes the floor of Lebanon's Bekaa Valley. As governments in the region looked at population projections and the limited available agricultural land—only about 20 percent of the Middle East is arable—they teamed up with international experts to introduce new strains and new crops to meet new demands, in the spirit of the "green revolution" then occurring throughout the world. Joseph Fitchett, who later became a Pulitzernominated political correspondent for the International Herald Tribune, reported in this issue that durum wheats were introduced; corn yields were raised by 70 percent with hybrid strains; ancient millet and sorghum varieties were revived; and new strains of rice, adapted to the region,

MAY JUMADA I — JUMADA II 1431

UNE		
UMADA	II — RAJAB	143

Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
1	2	3	4	5	6	7				1	2	3	4
17	18	19	20	21	22	23				18	19	20	21
8	9	10	11	12	13	14	5	6	7	8	9	10	11
24	25	26	27	28	29	30	22	23	24	25	26	27	28
15	16	17	18	19	20	21	12	13	14	15	16	17	18
1	2	3	4	5	6	7	29	1	2	3	4	5	6
22	22	2.4		24	2=	20	40	20	24	22	22	2.4	25
22 8	23 9	24 10	25 11	26 12	27 13	28 14	19 7	20 8	21 9	22 10	23 11	24 12	25 13
O	9	10	11	IΖ	13	14	1	O	7	10	1.1	12	13
29	30	31					26	27	28	29	30		
15	16	17					14	15	16	17	18		

Six Decades 1980's

The Europe-based magazine kept its links to the Arab technologies, and the audience and a deeper pool of free-lance contributors. In 1986, after a 22-year career expressing what Ismail Nawwab, Aramco's manager and heartfelt determination to light a candle of understanding that would help illumine the world of Arabs and Islam speaking West," editor Hoye company tapped Rob Arndt, son of two generations of scholars and linguists with roots in both Germany and Turkey. In the same year, it moved the magazine for a generations of Saudis rose in the ranks to manage what oil company, the expatriate workforce declined, and the focus of the magazine turned ever more outward to the public audience, especially to



"By then it was a wellestablished tradition that *Aramco World* wrote about the oil industry or Aramco itself only when the story was of interest to its general readership."

"A fleet of white-sailed feluccas ferries tourists across southernmost city in Egypt 'waters of life' flowed out of the Nubian deserts each year to flood and irrigate the Nile of the many enduring themes Feeney, a New Zealand-born Canadian filmmaker who had already lived in Cairo for more than two decades when he made this photo. Until his death in 2006, shortly after the American University in Cairo mounted a major retrospective exhibition of his work, he gave both the city he had adopted and the dozens of articles he Aramco World his minute, loving attention.

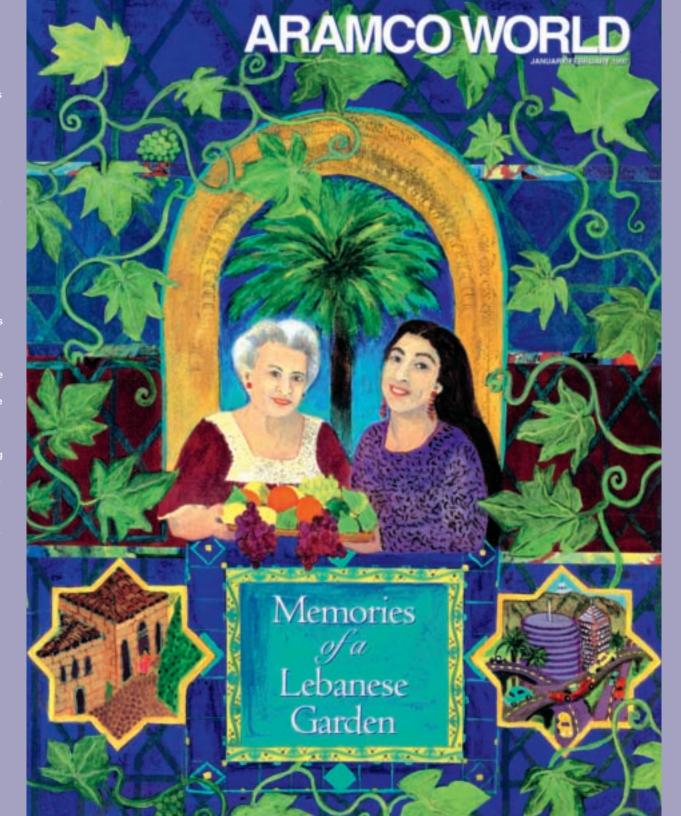
JULY RAJAB — SHA'ABAN 1431

AUGUST SHA'ABAN — RAMADAN 1431

Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	_	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
					1	2			1	2	3	4	5	6
					19	20			20	21	22	23	24	25
3	4	5	6	7	8	9	-	7	8	9	10	11	12	13
21	22	23	24	25	26	27		26	27	28	29	1	2	3
۷ ۱		23	27	23	20	<i>Z1</i>		20	21	20		1	_	3
		4.5	45									10	10	
10	11	12	13	14	15	16		14	15	16	17	18	19	20
28	29	30	1	2	3	4		4	5	6	7	8	9	10
17	18	19	20	21	22	23	2	21	22	23	24	25	26	27
5	6	7	8	9	10	11	1	11	12	13	14	15	16	17
24	25	26	27	28	29	30	7	28	29	30	31			
12	13	14	15	16	17	18		18	19	20	21			
. —														
21														
31 19														
1フ														

Six Decades 1990's

As fields of knowledge such as Middle East history, literature and archeology expanded, contributions to Aramco World's pages came from increasingly specialized tographers, broadening and deepening its coverage—notably with a theme issue "The Middle East and the Age of Discovery" published for the Columbus quincentennial in 1992. In 1994, the company contracted for the magazine's design and printing near its Houston base, and technological advances in those fields helped boost the magazine toward the high visual standards that remain one of its with readers' own growing sophistication, articles became more varied in length, topic and complexity, aided near the end of the decade by the advent of the Internet. Marking its 50th anniversary in 1999, the magazine produced a traveling photo exhibit, "Bridging East & West," which hung in several dozen venues over the years that followed, and today can be viewed online.



"The degree of public understanding that would constitute a favorable business climate, although greater than in the past, was still lacking in many respects."

Lebanese-American artist and a portrait of herself and her center of a fruitful "garden" that evokes the living culinary tradition she inherited from her family. Her story reached from the cedars of her grandmother's native village of Douma to the palms of her own native Los Angeles—a family arc common to evergrowing populations of immigrants from Arab and Muslim countries to Europe and the Americas. Her illustrations in this issue used collage and photographic transfers overlaid with acrylic paints. Later, she incorporated them into her cookbook, Alice's Kitchen.

SEPTEMBER

RAMADAN — SHAWWAL 1431

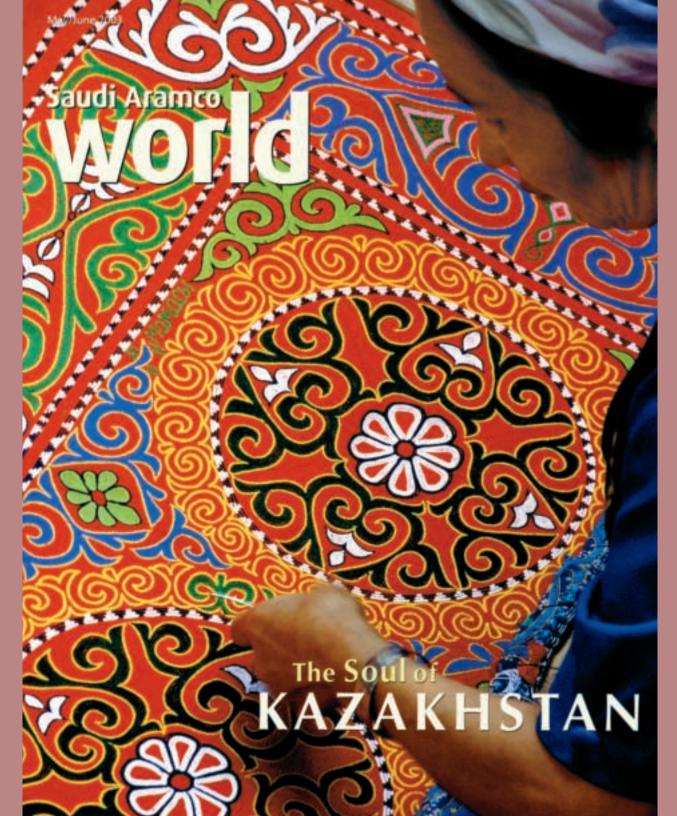
OCTOBER

SHAWWAL — DHU AL-QA'DAH 1431

Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
				1	2	3							1
				22	23	24							22
4	5	6	7	8	9	10	2	3	4	5	6	7	8
25	26	27	28	29	30	1	23	24	25	26	27	28	29
23	20	_,	20		30		23		23	20	2,	20	2,
					(1.1.1.7)								
11	12	13	14	15	'Id al-Fitr	17	9	10	11	12	13	14	15
11 2	3	4	5	6	7	8	1	2	3	4	5	6	7
_	J	7	J	U	,	O	1		3	4	J	O	7
40	40	20	24	22	22	2.4	4.4	4=	40	40	20	24	22
18	19	20	21 12	22	23	24	16	17	18	19	20	21	22
9	10	11	12	13	14	15	8	9	10	11	12	13	14
25	26	27	28	29	30		23	24	25	26	27	28	29
16	17	18	19	20	21		15	16	17	18	19	20	21
							30	31					
							22	23					

Six Decades 2000's

With the July/August 2000 issue, the magazine received a new name and a new design: The Aramco World nameplate, set in Helvetica Bold in the upper right-hand corner of the cover since 1964, had become an anachronism for a company that since 1988 had carried the name Saudi Aramco. The decade brought compilation issues, issues in a variety of other languages for international events and unprecedented interest from educators—which led to the introduction of the magazine's "Classroom Guide" department. Over this "digital decade," Saudi Aramco World first became available on the Internet in 2001 with PDF scans at www.saudiaramco.com; at the end of 2002, it launched its 40,000-image, free photo archive at www.photoarchive. saudiaramcoworld.com. The next year brought the first Web edition, as well as the full-text archive of back issues indexed at www.saudiaramcoworld.com. Web publishing more than doubled the number of the magazine's readers to roughly half a million worldwide, six times a year, and the Web edition continues the print edition's award-winning traditions.



"As interest in Arab cultures and Islam soared after the horrors of 9/11 and the wars that followed, *Saudi Aramco World* was no longer alone as an intercultural voice, yet its point of view—neither entirely western nor entirely Arab—remains unique."

Giving fresh life to the artistic syncretism so characteristic of Kazakhstan and the other lands of Central Asia, Zakiya Akai-Kyzy—a practicing attorney as well as a master embroiderer—patterned her wall hanging, known as a tuskiiz, with both traditional Kazakh motifs and designs she saw during a sojourn in Mongolia. From the earliest times, the vitality of transcontinental trade through Kazakhstan and other lands of Central Asia has given its textile artists access to wide ranges of dyes, techniques and stylistic influences. Like many of the magazine's current free-lance contributors, photographer Wayne Eastep, who took this cover shot, has extensive experience in the Muslim world and knows that personal encounters with cultures beyond one's own can be deeply formative experiences.

NOVEMBER

DHU AL-QA'DAH — DHU AL-HIJJAH 1431

DECEMBER

DHU AL-HIJJAH 1431 — MUHARRAM 1432

Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	_	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
		1	2	3	4	5						1	2	3
		24	25	26	27	28						25	26	27
6	7	8	9	10	11	12		4	5	6	7	8	9	10
29	1	2	3	4	5	6		28	29	30	1	2	3	4
13	14	15	16	17	18	19	1	11	12	13	14	15	16	17
7	8	9	10	11	12	13		5	6	7	8	9	10	11
,			10		12	13	~	9	O	,			10	
20	24	'Id al-Adha	22	2.4	25	24	_	10	10	20	24	22	22	24
20 14	21 15	22 16	23 17	24 18	25 19	26 20		18 12	19 13	20 14	21 15	22 16	23 17	24 18
14	13	10	17	10	19	20		12	13	14	13	10	17	10
27	28	29	30					25	26	27	28	29	30	31
21	22	23	24					19	20	21	22	23	24	25
								Christmas						

audi Aramco World regards "the Muslim world"—an increasingly blurry category—as part of a global "us," not as a "them." Our writers and photographers are in sympathy with their subjects and enthusiastic about them, while simultaneously maintaining a professional critical detachment toward them. Because we do not assume that our readers are either familiar with this point of view or already interested in our subject matter, it is up to our contributors to attract the readers' attention and arouse their interest. The best articles take into account a reader's culturally exterior point of view and bring him or her toward an understanding of an interior angle on the subject: How do the people who live in or work with the place or culture or topic at hand view their history, their experience? Is that similar to, or different from, how outsiders see it? Our contributors show aspects of the subject that casual outside observers might miss. They go beyond the visible and the superficial to make connections, point out implications, give reasons or make clear the historical background using credible—often local-sources.

—Guidelines for Contributors



www.saudiaramcoworld.com

ubscriptions to the print edition of 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 request 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, PO Box 2106, Houston, Texas 77252, USA, by e-mail to saworld@aramcoservices. com or by fax to +1 (713) 432-5536. No subscription is required to read the online edition at www.saudiaramcoworld.com.

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.



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.



www.aramcoservices.com www.saudiaramco.com