BEIJING REVIEW

HIGH, HIGH, UP IN THE SKY

Space Technology
Over the Past 30 Years

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10 Key Projects in the Western Regions

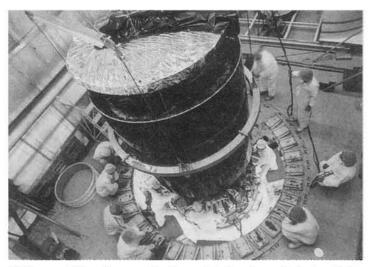
Cherishing the Environment

Shortly before International Children's Day, a special art exhibition was held in the China Art Gallery in Beijing. The works by 100 female painters and 100 children from the city focused on environmental protection. In front of a piece of work called White Ghost, made of plastic waste bags, a mother tells her daughter to cherish the environment.



Xie Jiahua





30 Years of Development in Space Technology: Beginning with the Dongfanghong-1 satellite and ending with the Shenzhou spacecraft, China's space industry has undergone 30 years of development, and its satellite development technology has become increasingly mature and reliable. The country is now putting a greater focus on the application of satellites. **p.12**

Western Region Development: Ten Projects Scheduled for 2000: The western region development is now in full swing. The Chinese Government has decided to undertake 10 projects in the western region in 2000. These projects focus mainly on infrastructure and ecological construction. p.17





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President Urges Technological Innovation

hinese President Jiang Zemin urged a conference of scholars to launch a new wave of scientific and technological progress and innovation.

Jiang said efforts should be increased to carry out the strategy of revitalizing China by relying on science, education and sustainable development, building a system of innovation, promoting scientific and technological innovation, speeding up industrialization of new and high technology, accelerating reforms of the existing scientific system and applying research results to production in the shortest possible time.

The president made these remarks at the Conference of the Chinese Academy of Sciences and the Chinese Academy of Engineering held on June 5 in the Great Hall of the People.

People in the scientific and technological circles should promote the spirit of science, noted Jiang. The spirit of drawing truth from facts and adventure will be advocated in all trades.

"A breakthrough has been made in science and technology around the globe. Modern science characterized by information and life science is advancing by leaps and bounds. We are being confronted with rare devel-

> opment opportunities and formidable challenges. Under the circumstance of multi-polarization and economic globalization, China must accelerate its scientific progress and innovation," he said.

> The role of scientists is very important in scientific

and technological development, he added, stressing that the essence of science is innovation.

The president urged Chinese scientists to follow the world trends, firmly grasp key scientific issues that are of strategic importance to China's economic, scientific and defense development, and rely on their own instincts.

The most important things in pursuing Marxism are to adhere to the scientific principle and spirit of Marxism, be skilled at discovering new things as conditions change, and gain useful experience, he said.

Leading officials, especially highranking officials, should take the lead in studying scientific knowledge and apply it to their daily work. Officials should consider the opinions and suggestions of scientists and engineers and take their opinions as reference before they make decisions on scientific and technical issues, Jiang said.

Scientific development requires the training of a large body of young technical personnel, and leading officials should create favorable conditions for this purpose, he added.



JI KUEREN
President
Jiang Zemin
giving a
speech at the
Conference of
the Chinese
Academy of
Sciences and
the Chinese
Academy of
Engineering.



China, Moldova Support Each Other in Fighting Separatists

resident Jiang Zemin and his Moldovan counterpart, Petru Lucinschi, agreed to back each other's efforts to fight separatist forces.

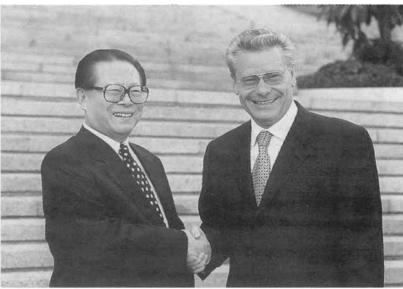
For China, renegades in Taiwan are the separatists seeking independence. For Moldova, the Transdnestr region in the eastern part of the nation is pushing for international recognition of its independence and is demanding equal status at talks with Moldova.

President Jiang said that China and Moldova understand and support each other's efforts to consolidate state independence and sovereignty. He added that Moldova is a trustwor-

thy friend and noted that China supports Moldova's efforts to end the disputes in its eastern region.

Moldova will not establish any official ties with Taiwan, President Lucinschi stressed. It opposes Taiwan's entry into any international organization in which only sovereign states are entitled to become members and participate in activities.

Jiang said China and Moldova have maintained good political relations since the establishment of diplomatic ties in 1992. There is still much potential for future cooperation in trade and economic matters, he said.



LIU JIANGUO

President Jiang Zemin greeting Moldovan President Petru Lucinschi on June 7 in Beijing.

In a joint statement, both sides reiterated that they will strengthen cooperation in international organizations, especially the United Nations, on the basis of equal sovereignty.

President Lucinschi visited China June 7-12 at the invitation of Chinese President Jiang Zemin. After their meeting on June 7, Jiang and Lucinschi signed three agreements on cooperation in public health and medical science, prevention of tax evasion and double taxation, and civil aviation.

Popular Science Books Published

be first two sets of books in a popular science series written by 176 academicians from the Chinese Academy of Sciences (CAS) and the Chinese Academy of Engineering (CAE) were recently published.

In his preface to the series, President Jiang Zemin noted that publishing high-quality popular science books is vital to promoting the quality of science and education in China.

The series comprises 50 books written by prominent scientists such as Nobel Prize winner T.D. Lee, the late scientist Wang Ganchang, and CAS Vice-President Bai Chunli.

At the books' release conference

on June 4, CAS President Lu Yongxiang said that science popularization is crucial to the country's invigoration.

The completed series will include 175 books focusing on the most advanced theories and issues related to economic construction and social development.

Work on the books was started by CAS and CAE scholars in 1998.

City Informationization Forum Opens in Shanghai

he high-level forum on city informationization in the Asia-Pacific Region that opened on June 5 attracted 650 delegates, including officials from UN organizations, decision-makers from over 40 cities in the Asia-Pacific

region, Chinese and overseas specialists and relevant Chinese government officials.

Both UN Secretary-General Kofi Annan and Chinese Vice-Premier Wu Bangguo sent congratulations to the forum, which was jointly held by UN, UNDP, the Shanghai Municipal Government, the Chinese Information Ministry and the Chinese Academy of Sciences.

Topics on the development of the information industry, the application of information technology, exchanges and cooperation in the field of city informationization were discussed in the forum.

The forum also saw the signing of the "Shanghai Manifesto," which aims to promote city informationization in the Asia-Pacific region.

Jiang Pays Tribute to President Assad

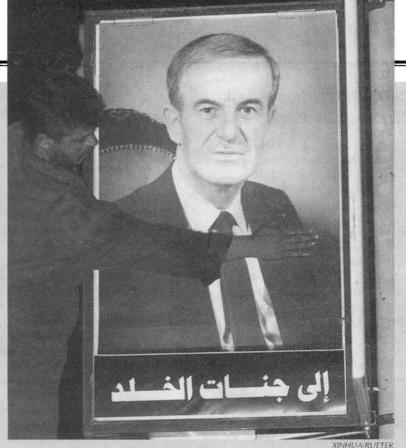
hinese President Jiang Zemin paid tribute to Syrian President Hafez al-Assad on June 11, describing him as an "outstanding leader."

In a message to Assad's son, Bashar al-Assad, Jiang said that President Assad dedicated his entire life to Syria's prosperity and his people's well-being.

Jiang gave his heart-felt condolences on behalf of the Chinese Government and people to Bashar al-Assadand and the Syrian people.

"His death is a great loss to both Syria and China. China has lost a deeply respected friend," Jiang said.

Assad died of a heart attack on June 10 at the age of 70.



A portrait of President Hafez al-Assad hung on the street by a worker.

PLA Officers and Men Give Blood in HK

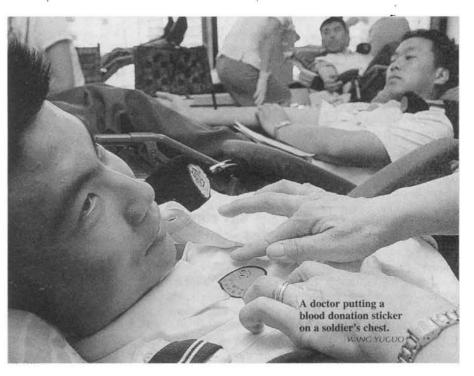
ome 400 officers and soldiers of the Hong Kong Garrison donated blood for Hong Kong residents on June 7 at the Hospital of Gun Club Hill Barracks.

Sponsored by the Barracks Hospital and the Hong Kong Red Cross Blood Transfusion Service, this donation is the third since PLA troops were stationed in the Hong Kong Special Administrative Region in 1997.

"The PLA troops contribute the most donors and offer the largest amount of blood in Hong Kong every year," said Dr. Lin Che Kit, Hospital Chief Executive of the Hong Kong Red Cross Blood Transfusion Service. "It is not easy to organize

more than 400 people to give blood so efficiently."

Zhou Borong, Deputy Commander of the PLA Hong Kong Garrison, said that the PLA officers and soldiers all regard blood donation to be their duty in dedicating their love to the local community.



Earthquake Strikes Gansu

n earthquake measuring 5.9 on the Richter Scale jolted an area between Jingtai and Baiyin counties in northwest China's Gansu Province at 18:59 on June 6, according to China's earthquake monitoring network.

The epicenter was located at 37.1 degrees north latitude and 104 degrees east longitude. The tremor was felt in surrounding counties and cities including Lanzhou, the capital of the Province.

Some earthen brick houses collapsed and communication with some villages has been broken off.

No information on the number of casualties was available.

Flood Kills 36 In Northwest China

evastating floods in the counties of Dangchang and Minxian in Gansu Province killed 36 people and left thousands homeless on May 31.

The worst flood in 150 years destroyed 1,345 houses and affected 180,000 people in the two counties 400 km from the provincial capital of Lanzhou, according to the provincial disaster-relief group.

Direct economic losses were estimated at 178 million yuan (US\$21.45 million).

The provincial government has mobilized 5 million yuan (US\$602,400), 800 quilts, 10,000 items of clothing, 120 tents and other disaster-relief materials for flood victims.

No cases of epidemic illnesses have been reported in the flooding area so far.

Global Cooperation in Environmental Protection

hinese Premier Zhu Rongji called for global efforts to fight the serious pollution problems and ecological deterioration facing all mankind.

In a historic proposal for coordination between global environmental protection and economic development, Zhu noted that it is the common aspiration of all nations to have a better environment and a better future.

Zhu made these remarks in a nationwide televised address on the eve of the World Environment Day—June 5.

"Ecological destruction and environmental pollution poses a serious threat to the subsistence and development of mankind. Solving these problems has become an important mission that can not afford any delay," he said.

The premier called for the peoples of all nations to join hands in protecting the Earth—our common homeland.

He said the Chinese Government has attached great importance to protecting the environment and has drawn up a series of laws, regulations and measures for this purpose.

Positive progress has been made as a result of China's unremitting efforts toward environmental protection and ecological construction along with economic restructuring in recent years, the premier said.

However, he said, "we must be aware that the country's environmental pollution is still serious and that ecological deterioration has not yet been brought under control."

Noting that the sandstorms that hit many parts of the country repeatedly this year should be taken as a warning for the entire Chinese nation, Zhu said, "It is a long-term and arduous task for us to protect the ecology and improve the environment."

China will face greater pressure and challenges in environmental protection as it marches towards the third-stage strategic goal of its modernization drive, he said.

"We must earnestly implement our sustainable development strategy and put greater efforts toward environmental protection and ecological construction," Zhu said.

China will rely on science and technology and increase investments for conserving water and soil, curbing environmental pollution, and improving the country's ecological environment through efforts under a national plan to plant more trees and grass.

"We believe that, through the hard work and unremitting efforts of the Chinese people, the rivers and lakes across China will become cleaner, the sky clearer and the landscape in the country more beautiful," the premier noted.

Zhu also promised that the Chinese Government will continue to adhere to the principles concerning international environmental cooperation, actively join the international community in solving global environmental problems, and carry out related international environmental conventions so as to make due contributions to protecting the global environment.



XINHUA/AFP

Vladimir Putin meeting with President Bill Clinton in Moscow.

Clinton to Europe: A Symbolic Tour

by Xiao Li

S. President Bill Clinton began his European tour on May 30. In the following eight days, he visited Portugal, Germany, Russia and Ukraine. This was Clinton's last and most important visit before his departure from the White House in January 2001.

Clinton had two major goals regarding the economy and international security for his visit. One was to resolve the U.S.-European trade conflict; the other was to gain concessions and confirmation for the National Missile Defense (NMD) system from Russia. However, according to his two assistants, these two issues did not see any breakthroughs.

The U.S.-EU summit held in Portugal was the economic arena for Clinton's visit. In recent years, trade between the United States and the European Union developed rapidly. Last year, the trade volume between the two sides hit US\$450 billion and the mutual investment volume broke US\$1,000 billion. From 1994 to 1998, U.S. investment in Europe grew sevenfold. However, with the enhancement of economic cooperation, the trade conflicts between them also increased. The EU countries also hoped that their trade conflicts with the United States would be solved at the summit, within the framework of a multilateral trade

system of the World Trade Organization. They oppose the one-sided sanctions by the United States and wished to avoid a "trade war" across the Atlantic Ocean. For this purpose, both sides decided to open a new round of multilateral negotiations by the end of the year to diminish trade conflicts.

The United States' persistence in developing the NMD system was criticized by each country Clinton visited. The EU countries are worried about Washington's plan to distribute the NMD system and U.S. preparations to alter the Anti-Ballistic Missile Treaty (ABM) of 1972, fearing that this might endanger the international community's efforts to prevent nuclear proliferation and stop the arms race. In one of his speeches, French President Jacques Chirac pointed out that any attempt to weaken the international arms control mechanism will destroy world peace and stability. The EU countries disapproved of the United States' not listening to the objections of other countries, and the latter threatened that there would be no consultations, only notifications.

In Germany, Chancellor Gerhard Schroeder expressed his worry over the United States' development of the NMD system, saying that this could spark a new round of the global arms race. He pointed out that the United States should take its security partners into consideration, since the impact of the program will go well beyond the United States.

During June 3-5, Clinton paid a working

GLOBAL OBSERVER

visit to Russia. This was Clinton's last visit to Moscow during his stay in office and his first meeting with Russian President Vladimir Putin since the latter was sworn in. They exchanged views on strategic stability, nuclear disarmament, bilateral ties, regional conflicts, environment protection and economic cooperation, reaching some consensus and signing a joint statement on the principle of strategic stability and other documents. However, no substantial progress was made on the key issue of nuclear disarmament.

Clinton had two main aims for his Russia visit. First, Clinton wanted to persuade Russia to agree to the modification of the ABM, thereby promoting the establishment of the NMD system and allowing him to leave a "rich heritage" to his successor; second, Clinton wished to restore the relationship between the two countries, which had cooled during the Kosovo War, to a level of partnership, so that he could counterattack the Republican accusations regarding his Russia policy. Clinton did not achieve his goals at this summit.

Analysts said that this interaction revealed the United States' position toward Putin's diplomacy. Different from Clinton, who will soon say good-bye to the White House, the newly elected president Putin is enormously proud of his success. Naturally, he wishes to express his firm stand on arms control. Russians cherished illusions about Clinton when he was first elected President, hoping that he would help Russia shorten the gap between it and Western developed countries. Today, however, two thirds of Russians do not trust the United States. Many even think that U.S.-Russian relationship is only half a step away from the Cold War. From a series of Putin's diplomatic activities, people see that Russia has reduced enthusiasm toward the United States. The Washington's position as a diplomatic center ended in the mid 1990s.

However, Putin gave a positive evaluation to the Russia-U.S. Summit. "The summit not only confirmed the high standard of our relations, but also consolidated the trends in our relations for the near future," he said. Clinton said that the United States will continue to develop relations with Russia and support Putin's economic reform plan.

On the afternoon of June 5, Clinton visited Kiev, capital of Ukraine, the last stop on his European tour. He stayed there for only six hours, but achieved unexpected results. Before his visit, public opinion was that he was only making a demonstrative tour. However, when he was in Ukraine, Ukrainian President Leonid D. Kuchma took the opportunity of World Environment Day to formally declare that the country is closing the Chernobyl nuclear power plant on December 15 this year. This not only realized Western countries' wishes for dozens of years, but also gave meaning to Clinton's visit.

The Confusing Coup D'etat in Fiji

by Xiao Zhou

n the morning of May 19 a coup d'etat took place in Fiji, an island in the South Pacific that had always before been tranquil. A gang of gunmen, led by a frustrated businessman named George Speight, stormed into Fiii's parliamentary compound and took Prime Minister Mahendra Chaudhry and the other 44 members of the Cabinet and the Parliament hostage, and announced the establishment of a new government. Former President Kamisese Mara immediately delivered a speech condemning the illegal coup, and declared the entire country to be in a state of emergency. The military announced its loyalty to Mara. Initially, the situation seemed to be an ordinary coup, and it was assumed that the rebels would not be able to maintain their position for long. However, the ensuing developments took many people by surprise.

The situation began to reverse on May 25, when former Prime Minister Sitiveni Rabuka, now Chairman of the Great Council of the Chiefs, which has great influence over the Fijian political situation, announced that the Council would agree to the requirements of Speight, and appealed for the establishment of an interim government to ensure aboriginal control of the state. The council even suggested that Chaudhry leave office so that Speight would release the hostages, including Chaudhry himself.

Then, former President Mara suddenly promised to remit Speight and his partners after they released the hostages. He even expressed agreement to Speight's requirement of amending the constitution. However, Speight didn't show interest in Mara's concessions. He insisted that Mara leave office and

announced that he himself would take over all power of the state. Mara, as president of the country, could do nothing but resign on the evening of May 29. At the same time, Commodore Frank Bainimarama declared that he would take over the regime and put the entire country under military control. He also revealed his intentions to negotiate with Speight in dealing with the hostage crissis. However, although the military government promised to pardon Speight and his partners, Speight wouldn't concede, and required that his supporters be part of the future civil government.

How could Speight be so powerful as to allow him to bargain with the president and the military government? Why did the president and military government have no other method of dealing with the criminals than repeatedly making concessions? This situation is extremely surprising. However, an even more amazing sight can be witnessed on the streets of Suva, capital of Fiji. Speight, the leader of the coup, can enter and leave the Parliamentary Compound freely, without any threat. He can deliver speeches on the street before large crowds, and can travel around Suva in police cars on inspection tours.

This coup is somehow different from others. The entire situation is complicated and confusing, with ethnic conflicts, political struggles and personal resentment mixed together. However, sorting through this complicated phenomenon reveals that ethnic conflicts are the source of this Fiji coup.

The native Fiji people lived on this island for generations. At the end of the 19th century, the British shipped many Indians from its densely populated colony to the island as contract labors to grow sugar cane. The Indian laborers, who had their own culture and religion, couldn't blend into the native culture, and

neither could their descendants. At present, while the Indians control Fiji's economy, their political status is extremely low. The natives, as the majority of the population, have political superiority, but resent their economic inferiority. The political struggle between the two ethnic groups has existed throughout the history of Fiji, ever since it gained its independence.

When Chaudhry came into power as the first Indian Prime Minister in Fiji's history, the internal struggle became more intense. When the Chaudhry government began carrying out pro-Indian policies, the conflicts between the natives and the local Indian population were aggravated. The natives criticized the Indians monopoly over national economic lifelines, which they felt undermined the Fijian's interests. Over the past several months, Fijians held demonstrations to protest Indians who held major posts in the government. The coup d'etat staged by Speight pandered to the antagonism the natives held toward the Indians. This is why the military spokesman said: "The coup d'etat is not a blatant crime, but a mistake made for political reasons. They command strong political support." It was reported that the military government has decided to amend the constitution to restrict Indians' political opportunities. As a result, Fiji will return to the same state of racial inequality as in the period of the Rabuka regime.

The Fijian coup has aroused the deep concern of the international society. New Zealand, Great Britain and India have condemned the coup leader. Australia and New Zealand have decided to take sanctions against Fiji. In addition, the commonwealth has again suspended Fiji from the organization. Fiji may once again be reduced to be an orphan in international society. Regardless, Speight isn't taking any of this into consideration. He upholds the banner of safeguarding natives' rights to seek personal political ambition. Because of this, the military government has to cooperate with Speight in order to satisfy the natives. However, since the military government can't afford to simply ignore the voice of the international society, the concessions it makes must be limited.

The military government maintained its promise to pardon the criminals of the coup in the recent ultimatum, but showed toughness the first time since the coup took place. At present, the military regime should first address the hostage crisis and lead the country to peace and stability. However, it is not clear weather the military will continue the peaceful negotiations with Speight or resort to force.

Since the coup d'etat is related to ethnic conflicts and the natives support Speight's requirements, the coup might be made legitimate. On the other hand, the Indians, who account for 44% of the Fijian population, will not give up their struggle for equal political opportunities. At present, the Fijian situation is full of unstable factors.



PROVIDED BY XINHUA

Coup leader George Speight is about to travel on inspection tour in a police car.

The Situation in South Lebanon After the Israeli Withdrawal

by Xiao Zhou

he last Israeli soldier's withdrawal from South Lebanon at 6:42 in the morning on May 24 marked the end of 22 years of Israeli occupation in this area.

Israel invaded Lebanon in 1978 and 1982 under the pretext of fighting the Palestinian guerrilla in Lebanon. In 1985, Israel set up an 850-square-km "security zone" in South Lebanon as a strategic buffer, where it built 22 fortifications, stationed 155 Israeli soldiers and officials, and commanded pro-Israeli South Lebanese troops numbering over 3000. However, the "security zone" was not secure. For many years, the Israeli troops were vigorously attacked by armed forces led by Hezbollah, and many were killed or injured. In order to pull out of this "death marshland." the Israeli Government planned to withdraw its troops from South Lebanon before July 7. The Israeli troops began to prepare for their withdrawal at the beginning of May, rearranging the pro-Israel South Lebanon troops and gradually delivering the sentry posts to the troops. Unexpectedly, the armed forces led by the Lebanese Hezbollah assaulted the "security zone" and seized the sentry posts. As a result, the Israeli troops had to complete their withdrawal in haste.



XINHUA/AFP

Israeli soldiers are carrying artillery shells to the new sentry posts at the Lebanon-Israel border.

Israeli occupation of South Lebanon had always been a point of focus in the Middle East. Armed conflicts periodically broke out ever since Israel set up its "security zone," and many Lebanese and Israeli soldiers lost their lives. This deepened the hostility between the two peoples. Many hope that the withdrawal of Israeli troops will end the tragedy in South Lebanon, pave the way for peace in the area. and promote peaceful negotiations in the Middle East. However, as there are still some differences between Israel and Lebanon regarding the unilateral withdrawal of the Israeli troops, many complicated problems have yet to be tackled, and will pose a considerable challenge to the two governments.

The present South Lebanon can be compared to a barrel of gunpowder. Israeli troops attempted to destroy all fortifications, equipment and weapons during their withdrawal. However, due to their haste, a great deal of weapons and artillery were left, and could be collected by the guerrilla led by Hezbollah. These collected weapons and artillery could be used to attack the Israeli border.

It was reported that 130,000 mines were planted throughout Lebanon, concentrated mainly in South Lebanon. Over more than 20 years, thousands of people died from land mines. After the Israeli withdrawal, accidents resulting from exploded land mines continued to occur. On May 28, two vehicles exploded in

> a sudden blast as they drove along a road in South Lebanon. Two children were killed and six were injured. The United Nation has requested that Israel map out the mines they planted as soon as possible in order to help Lebanese troops remove the mines.

> The villages and towns that had been occupied by Israel have now been taken over by Hezbollah and the "Amal" Movement. South Lebanon houses people of a variety of religious sects. At present, clashes between Muslims and Protestants have broken out, leading to many deaths and injuries. South Lebanon is now in anarchy, with fighting and looting everywhere. On May 28, a Protestant was shot to death

> > Furthermore, many prob-

lems between Israel and Lebanon remain unresolved due to Israel's unilateral withdrawal of troops, carried out without mutual agreement. The frontier delimitation is still controversial. Four thousand armed Palestinians still live in Lebanon, and are thought of as a "time bomb." The Lebanese government insists that Israel compensate US\$70 billion for Lebanese losses resulting from the war. Lebanon will punish members of the pro-Israel South Lebanese troops, as well as the soldiers' families, both those staying in Lebanon and those fleeing to Israel. These are problems that must be addressed by both sides. The most significant problem is that South Lebanon's economy has been closely connected to Israel's for over 20 years. Now almost all of its infrastructure, including its water and power departments, is linked to Israel's. As a result, South Lebanon's economy is still controlled by Israel.

The Lebanese government opposed the unilateral withdrawal of Israeli troops. It had expected that the Israeli withdrawal would be discussed in a peaceful negotiation framework between Syria, Lebanon and Israel. Since an agreement was not reached, Lebanese troops will not garrison the area to safeguard the Lebanon-Israeli border. Consequently, the querrilla army led by Hezbollah and the "Amal Movement" can move about freely in the area, threatening the Israeli border. Many Lebanese are worried about the possibility of Israel reacting to the violent assaults by Hezbollah with large-scale revenge. Therefore, many Lebanese are now selling Lebanese pounds in large quantities in order to purchase US dol-

At present, the United Nation's Interim Forces in Lebanon (UNIFIL) has begun to enter the area Israel just left. UNIFIL has garrisoned in Lebanon since 1978 in compliance with Resolution 425 of the Security Council of the United Union. The forces now number 4513, which will increase to 7935 according to a recent resolution of the Security Council. The major duties of UNIFIL are to maintain peace and stability between Israel and Lebanon. Furthermore, it is the Lebanese government's duty to safeguard public security in South Lebanon

It can be concluded from the current situation that the withdrawal of Israeli troops does not mean the realization of peace in the area. In fact, the situation in South Lebanon is still in anarchy and turmoil. Armed clashes spring up at any time initiated by any number of unstable factors. With the help of UNIFIL, the unstable factors may be contained for the time being. However, the region's long-lasting peace and stability requires the great efforts of Israel, Lebanon and the neighboring Arabian countries in the spirit of mutual understanding, trust and concessions.

Foreign Ministry News Briefings

t the regularly scheduled ministry news briefings on June 6 and 8, Chinese Foreign Ministry Spokeswoman Zhang Oivue announced that, at the invitation of the parliaments and governments of the Federal Republic of Yugoslavia, the Republic of Slovenia, the Republic of Croatia, the Republic of Slovakia, the Republic of Azerbaijan and the Republic of Ukraine, Chairman Li Peng of the Standing Committee of the National People's Congress will pay an official goodwill visit to the abovementioned six countries from June 11 to 26. During his visit, Chairman Li Peng will have extensive contact with the leaders, members of the parliaments, and people from all walks of life in the six countries, so as to advance the sound and stable development of relations between China and these countries in the spirit of promoting understanding, enhancing trust, strengthening friendship and deepening cooperation.

At the invitation of President Jiang Zemin, President Festus Mogae of the Republic of Botswana will pay a state visit to China from June 12 to 17. The leaders of the two countries will exchange views on bilateral relations and issues of common interest.

The spokeswoman then answered reporters' questions.

Q: What is your comment on the peace process of the Middle East and the Israeli withdrawal from southern Lebanon?

: China is very concerned about the peace process in the Middle East and the situation in Lebanon. We hope that the new development in Lebanon will promote the comprehensive development of the Middle East peace talks. We also hope that the concerned parties take effective measures to guarantee the stability of this region and create conditions for realizing comprehensive peace in this region as soon as possible. We hope that the relevant countries earnestly follow UN relevant resolutions and continuously strive for the comprehensive development of the Middle East peace process on the basis of the basic principle of land for peace in a pragmatic and flexible spirit.

Q: How much aid did China provide to the Democratic Peoples' Republic of Korea (DPRK) during General Secretary Kim Jong Il's recent visit to China?

: China and the DPRK are friendly neighbors. The two countries have maintained friendly cooperative ties. We

feel that continuing to develop these relations conforms to the fundamental interests of the two sides and is conducive to the peace and stability of this region. The Chinese side greatly wishes to further these friendly and cooperative relations.

As for aid, the Chinese side will provide a certain quantity of grain and other goods and materials to the DPRK free of charge.

this?

Q: U.S. President Bill Clinton recently visited Russia. What is your comment on

Not long ago U.S. President Clinton visited Russia. The two sides agreed upon some documents. Of them, the most important was the joint statement on strategic stability signed by the United States and Russia. We took notice of the publication of their joint statement. China's position against the national missile defense system is very clear and is known to all. We support Russia's stand for safeguarding the integrity and validity of the Anti-Ballistic Missile Treaty.

O: A certain country wishes to amend the Anti-Ballistic Missile Treaty (ABM). What is your comment on this?

: To revise and threaten to withdraw from the ABM Treaty does not only affect the process of nuclear disarmament and undermine the basis of non-proliferation of nuclear weapons, but can also bring about a new arms race, possibly extending to an outer space arms race. Therefore, we feel that this attempt will directly produce an extensive, profoundly negative impact upon global peace and stability. In the end, the amendment will do no good to any country in the world.

What are the Chinese Government's expectations for the upcoming summit meeting between the Democratic People's Republic of Korea and the Republic of Korea

(ROK)?

The Chinese Government has always advocated and supported that the DPRK and ROK gradually increase mutual trust and improve their relations through dialogue and contact. We welcome and support their upcoming summit meeting in Pyongyang and hope that it achieves positive progress.

> To safeguard peace and stability on the Korean Peninsula is a basis for China's dealing with the affairs of the Korean Peninsula. In the future China is willing to play a constructive role in maintaining peace and stability there.

> Q: It is reported that the United States and

> China will hold disarmament talks in July. What is China expecting from these talks? : China and the

United States agreed in principle to resume consultation on military control and the non-proliferation of nuclear weapons. The exact time for this meeting is under discussion. China and the United States exchange opinions and views in many fields. They will exchange views on this issue, which will be significant for strengthening mutual understanding.

O: What is your view on the bombing of the Sri Lankan Minister of **Industrial Development?**

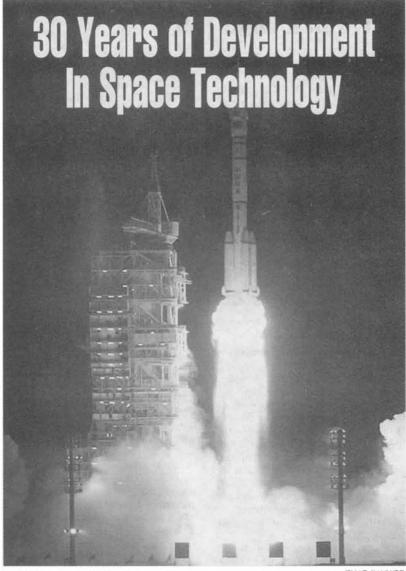
: We were shocked at the news that the Sri Lankan Minister of Industrial Development was murdered. As friends of Sri Lanka we sincerely hope that the situation of peace and stability in Sri Lanka will soon be restored. We are also confident that the Sri Lankan Government and people will be able to deal with their internal affairs.

Q: Refugees of the DPRK have entered China. What is your comment

In recent years a few people from the DPRK illegally crossed the border and entered China because of economic difficulties. According to China's law, international law and usual international practice, as well as their purposes of crossing the border, they are not treated as refugees. From the humanitarian point of view, they are treated well. China has handled this issue from the perspective of maintaining peace and stability on the Korean Peninsula.



Spokeswoman Zhang Qiyue.



China's first spacecraft, Shenzhou, blasting off into space.

ZHAO JIANWEO

by Li Ning

hina sent its first manmade earth satellite, Dongfanghong-1, into space in 1970, becoming the fifth country that had this capacity, following the then Soviet Union, the United States, France and Japan.

With the successful launching, China started its exploration into space, and has become one of the major space powers in the world after 30 years of development.

Spacecraft Development

At 6:30 am on November 20 last year, a spacecraft named Shenzhou (Divine Ship) blasted off into space from the Jiuquan Satellite Launching Center in northwest China's Gansu Province, aboard a new type of Long March (LM) carrier rocket. After a 21-hour test mission, Shenzhou, China's first spacecraft, successfully landed in the Inner Mongolia Autonomous Region. Unmanned, the spacecraft and launching vehicle had both been developed with Chinese hardware and expertise.

Beginning with the Dongfanghong-1 satellite and ending with the Shenzhou spacecraft, China's space industry has undergone 30 years of exploration. Today, the nation has established a regular spacecraft development system, and its space undertakings have entered a new era of rapid development.

According to Xu Fuxiang, Director of the Chinese Research Institute of Space Technology, China's space development has witnessed tremendous changes over the past 30 years. Satellite models have been diversified, and development technology has expanded in possibilities and is more open. Today, satellites are used not only for scientific research, but also for serving public needs.

Chinese scientists have so far developed, or been involved in the development of, more than 40 satellites and spacecraft, which include major models of low, intermediate and high orbit satellites. In particular, the success of Shenzhou's test flight symbolizes that China is one step toward its goal of eventually sending people into space.

According to Xu, various platforms are now available at the Chinese Research Institute of Space Technology for developing different types of satellites, such as medium capacity satellites, retrievable satellites, earth observation satellites and modern minor satellites. Xu noted that, last year, China succeeded in launching several different new types of satellites, such as the Experiment-5 scientific experimental satellite, the Resource-1 earth resources remote sensing satellite, and the spacecraft. All of this indicates that China's satellite development technology is becoming increasingly mature and reliable.

Although Chinese astronauts did not go into space with Shenzhou, they spared no effort in their training and are ready to go at any time. A space medical engineering institute in Beijing is equipped with a complete set of aerospace ground simulation testing equipment, such as a low-pressure seal capsule, a low-pressure tran-

COVER STORY

sition temperature chamber and a lifesupport system experimenting chamber. It encompasses a number of training facilities, including a Chinesemade manned centrifugal device, which is the largest of its kind in Asia, and a land impact (testing) table. While two Chinese astronauts were sent to Russia for training, others received their training here.

At present, analysis of the results of the Shenzhou spacecraft test mission is still under way. Based on the analysis, China will make further improvements of various systems in tute are tackling difficult technical problems. According to Xu, these satellites will be more advanced than the former models in terms of information transmission frequency, range and speed, means of collecting information and reliability. It is expected that China will establish two to three satellite application networks.

In its future development, Xu's institute will conduct extensive cooperation with its foreign counterparts and relevant departments. The cooperation will involve the joint development of satellites, the supply of satel-

purpose applied satellite system is taking shape in China.

According to Sun, over the past 30 years, China has successfully launched 43 independently developed satellites of 15 types. These satellites are being extensively used in aspects of the economy, science and technology, culture and national defense. Several satellite series have been formed, including a communications satellite, a meteorological satellite, a resources satellite, a marine satellite and a scientific experimental satellite. China ranks among the world's lead-



The Xi'an Satellite Monitoring and Control Center.

HE PING

the spacecraft and will launch several additional unmanned flights before sending astronauts into space with them. "China will surely make substantial breakthroughs in its spacecraft development before long," said Xu confidently.

Xu revealed that the Chinese Research Institute of Space Technology is now making preparatory research for the development of a large capacity communication satellite, a navigation and positioning satellite and a satellite for disaster reduction, and scientists in the instilites or satellite parts, satellite carry or recovery service, spacecraft simulated space environment tests by contract, and the design, manufacturing and development of a satellite ground application system.

Satellite Application

Sun Laiyan, Deputy Director of the China National Space Administration, delivered a speech at the forum on the application and development of satellite remote sensing during the last Beijing International High Technology Week. He said that a multi-functional, multiers in terms of retrievable satellite technology, and encouraging progress has been made in navigation satellite development.

"In today's world, space activities are no longer limited to inspiring scientific achievements; rather, they offer important means for improving the quality of people's lives, expanding the living space of human beings and developing new resources," Sun noted.

Satellites bring benefit to the daily lives of ordinary Chinese people.

Satellite application in remote

sensing. There are more than 400 units and nearly 10,000 scientists and technicians in China that are directly engaged in satellite remote sensing. China is now using domestic and foreign satellites to conduct weather analyses and forecasts, meteorological research, surveys of land resources, the planning and evaluation of agricultural resources, forest surveillance, development, utilization and protection, environmental monitoring, marine and sea wave meteorology, marine pollution monitoring, and earth surveying and mapping.

services have developed rapidly during the past 20 years. China has established 37 large and medium-sized satellite communications ground stations. In satellite broadcasting television, there are eight channels on CCTV, and over 30 channels on TV stations of various provinces and municipalities, as well as over 30 voice broadcasting channels. More than 30 million people have received or are receiving education and training through satellite broadcasting and TV educational programs.

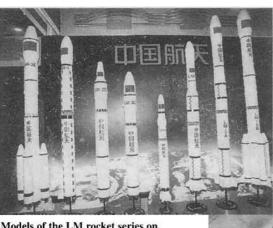
 Satellite application in navigation and positioning. At present,

Chinese users mainly use the American global positioning system (GPS). In China, large cities, like Beijing and Shanghai, have installed the GPS

lance and control network. Sun said that, in a bid to promote the development of the space industry, China will encourage domestic satellite companies to employ Chinese-made products and domestic service to the highest possible extent. Meanwhile, on the premise of observing related policies and agreements, the country will also encourage its space enterprises to expand exports of related products and service in an orderly way.

Rockets in Commercial Business

Over the past three decades, China, relying on its own efforts, developed nine models of the LM carrier rocket, noted Luan Enjie, Director of the China National Space Administration. Their carrying capacity to solar stationary orbit is 2.8 tons, to earth stationary orbit 5.1 tons, and to low earth orbit 9.2 tons, To date, the



Models of the LM rocket series on display.

PI DAWEI

Chinese and American experts and technicians putting the Apstar-1 communication satellite on board the LM-3 rocket in July 1994.

MENG QUANJUN

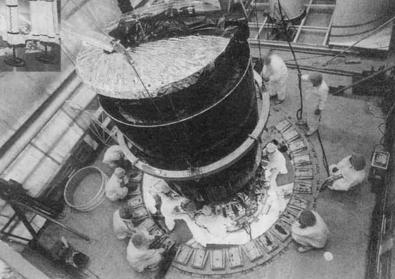
Official statistics show that meteorological satellites help raise the accuracy of forecasts on disastrous weather, which alone has reduced economic losses by several billion yuan a year. Another statistic published in 1995 demonstrated that the Chinese satellite ground station ranked second that year among all such stations across the world in terms of the growth of sales volume. The operating expenses of the Chinese station are small compared with its counterparts in developed countries. However, it ranks third among the world's 17 stations in data service operation.

• Satellite application in communications. Satellite communications

devices on some public buses and taxis, while fishermen form the largest group of GPS users. More than 30,000 fishing vessels in China have installed the system, accounting for 11 percent of the total.

At present, China has basically formed various satellite ground application systems, a high-precision GPS network that covers the entire country, and a satellite and spacecraft surveilLM vehicles have been used in 60 launches. Since October 1996, China has succeeded in each of its 18 launches.

In 1985, the Chinese Government announced that it would put the LM vehicle series on the international launching market, and the China Great Wall Industry Corp. began undertaking a commercial launching service.



COVER STORY

Through negotiations, the corporation signed its first contract with the United States.

On April 7, 1990, LM-3, known as "handsome man", sent the Asat-1 satellite, made by the US Hughes Communications Space and International Inc., into space from the Xichang Satellite Launching Base. The launch marked the opening of a new business for China-the international commercial satellite launching service, and created a miracle-its accurate ejection into orbit achieved what America's similar satellites failed to do on 31 former occasions. It also put an end to the legendary journey of this satellite. It is said Hughes Co.'s HS376 satellite failed to eject into the orbit because of some faults; later it was brought back by American astronauts, and its owners changed four times.

In the past decade, LM rockets have successfully carried 25 foreign satellites into space.

When China first entered the international launching market, the LM-3 rocket, which was the most powerful in the LM family, could only carry medium-weight satellites. However, communication satellites were increasing in capacity and weight. To adapt to this change, the Chinese scientists attached four boosters to the LM-2, which later became known as the LM-2 cluster rocket. As a result, the LM carrying capacity to low earth orbit increased from 2.5 tons of the LM-2 to 9.2 tons. In August 1992, the improved vehicle succeeded in carrying the Hughes-made Aussat-B1 satellite into space.

However, no one can ensure 100 percent success in launching, and China is no exception. On its first launch on February 15, 1996, the LM-3b, 21 seconds after blasting off from the Xichang Satellite Launching Center, lost its balance, fell and exploded. The rocket and the satellite it carried were both destroyed, marking a grave accident in China's space history.

On August 18 of the same year, during the 11th mission of the series, the LM-3 experienced an abnormal situation. Its third-stage engine cut out 48 seconds ahead of time, failing to eject the satellite it carried into the predetermined orbit.

That year, China's rockets and space industry suffered severe set-backs.

The Chinese astronauts did not halt in their efforts. Manufacturers of the LM-3b spent three months analyzing their failure, and eventually discovered its cause after conducting over 130 tests. Then, they improved upon the rocket. Eighteen months later, on August 20, 1997, the second LM-3b successfully sent a satellite

ity of the former to earth stationary transfer orbit will be 3.7 tons. At the same time, it can also meet different requirements of various orbits, thus expanding the scope of launching service. The latter will be a large rocket with a carrying capacity of 14-15 tons to low earth orbit and 7 tons to high orbit. These vehicles will soon be available on the market.

Broad Prospects

Luan Enjie recently wrote an article marking the 30th anniversary of the successful launch of China's first



ZHAO JIANWE

"Well done!"—A representative from the US Motorola Co. congratulates the Chinese chief engineer in charge of the improvement of the LM-2b, after the rocket succeeded in sending the company's iridium satellite into space.

from the Philippines into space. Around 30 days later, another LM-3b vehicle was assembled and succeeded in carrying the Apstar-2 R satellite into space on October 17.

Statistics show that the overall success rate of China's LM rocket is about 90 percent. Since 1990, commercial launches have accounted for 65 percent of the total flights of the LM rocket. Between 1990 and 1997, Chinese rockets took 7-9 percent of the international commercial launching market.

Currently, the China Academy of Launch Vehicle Technology is developing more powerful rockets—the LM-3C and an advanced model of the LM-2 cluster rocket. The carry capacman-made satellite. He said that space activity has developed at an amazing-ly rapid rate, making special contributions to the sectors of communications, navigation, time service, remote sensing, surveillance and meteorology. It will surely play an important role in the information revolution in the 21st century, Luan predicted, noting that various countries in the world have attached unprecedented importance to the space industry at the turn of the century.

In his article, Luan reiterated China's goals for space development. They are as follows:

 Satisfying the demands of national economic development and building up defense while maintain-

Appendix 1:

Top 10 Events in China's Space Technology

- April 24, 1970 The Long March I launch vehicle sent the Dongfanghong I, China's first man-made satellite, into orbit.
 - 2. November 26, 1975 The first recoverable satellite was successfully launched.
 - 3. April 8, 1984 The first geosynchronous stationary orbit satellite was launched.
- November 20, 1999 The Shenzhou experimental spaceship was successfully launched
- October 14, 1999 A resources satellite co-developed by China and Brazil was successfully launched.
- September 7, 1988 A sun-synchronous meteorological satellite was successfully launched.
- August 14, 1992 The Long March 2E, a high-propulsion launch vehicle, was successfully launched.
- 8. May 12, 1997 The Dongfanghong III, a large-capacity communications satellite, was sent into orbit.
- October 25, 1985 China entered the international commercial launching market.
- August 20, 1997 The Long March III, a high-earth-orbit and high-propulsion launch vehicle, was successfully launched.

The list of events was compiled by a selection committee made up of academicians from the Chinese Academy of Sciences and the Chinese Academy of Engineering

Appendix 2: World-Leading Space Technologies Owned by China

China ranks third in the world in space recovering and remote-sensing technologies. In 1975, the Long March II launch vehicle carried a return satellite into orbit, making China the third country to master this technique after the United States and the former Soviet Union. At present, China's space vehicle recovering technology leads the world. Of the 17 recoverable satellites that have been launched, 16 have been successfully recovered.

China's launching capacity ranks fourth in the world. In 1984, China successfully launched a 1,450-kg geosynchronous communications satellite. Similar launches had been conducted by the United States, the former Soviet Union and France.

China was the third country to use low-temperature high-performance propellant. China was the second country to master the high-altitude second-start technique.

China has made major breakthroughs in space technology. Solar energy batteries can now provide the energy needed after the lift-off of spaceships.

Appendix 3: Capacities of Major Launching Vehicles in the World

Country/Region	Model	Maximum Capacity (kg)	
		Low Earth Orbit	Geosynchronous Orbit
The United States	s Delta Series	5,040	1,980
	Atlas Series	7,640	3,700
T Que D	Titan Series	21,800	5,760
	Space Shuttles	29,500	
Russia	Soyuz	7,320	
	Proton	21,000	5,500
Ukraine	Zenith	13,800	5,400
European Union	Ariane-4	9,400	4,200
Japan	H-2	10000	3,800
China L	ong March Series	9,500	5,000

ing China's advanced international position in the space field;

- Striving to enhance China's comprehensive national strength, safeguard national security and consolidate China's status as a powerful country;
- Helping to revitalize the nation through science and education and realize sustainable development; and
- Promoting the peaceful development and utilization of outer space and bringing benefits to mankind.

Luan stated that China's space undertakings have a bright future. According to him, China will gradually build a multi-functional, multiorbit space infrastructure composed of various satellite systems, including a remote sensing satellite, navigation and positioning satellite, communication satellite, and tracking and data relay satellite. It will also establish a satellite ground application system, thus forming a comprehensive information network that harmoniously links the ground with space, and features long-term steady operation and all-weather, all-time and omni-directional observation.

Luan also said that China will adopt effective measures to raise the reliability of the existing LM rocket series and lower costs, thereby improving its competitiveness in the international commercial launching service market. China will also produce a new generation of rockets that are non-toxic, non-polluting and highly efficient in the near future. It will promote the industrialization of space activity so as to obtain greater economic results. At the same time, it will conduct space exploration activities in accordance with national capability and practical demand, realizing its set goal of sending human beings

Luan stressed that on the principle of "peaceful utilization, equality and mutual benefit, making up each other's deficiencies and joint development", China will strengthen exchanges and cooperation with all other countries in the world, so as to make greater contributions to the exploration and peaceful utilization of outer space, as well as to human civilization and progress.

Western Region Development: Ten Projects Scheduled for 2000

The Office of Western Development and the State Development Planning Commission. while formulating medium- and long-term plans concerning western region development, have put forward 10 projects to be launched in the west in the year 2000. These projects focus mainly on infrastructure and ecological construction.

1. The Xi'an-Hefei Section of the Xi'an-Nanjing Railway

The past few years saw great developments in railway transportation in western China. However, there are still problems, such as slow networking progress, poor railway quality and low transport capacity. According to the needs of western region development and the schedules for railway transportation, railway development in the western region will emphasize the expansion of the railway network and construction of east-west, internal and external passageways.

The Xi'an-Nanjing Railway via Nanyang will be a convenient passageway linking China's northwest and southwest to the east and central south of China, shortening the distance in railway transport between the above regions and optimizing the railway network.

2. The Chongqing-Huaihua Railway

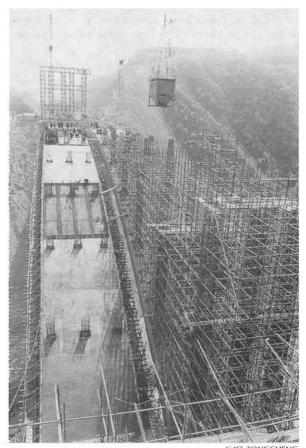
The Chongqing-Huaihua Railway is of great strategic significance to the completion of the railway network in the southwest, forming a convenient external passageway and promoting sustained development of the local economy and the economy of the western region on the whole.

3. Highway Construction in the West (including national trunk highways and roads in Statelevel poverty-stricken counties)

Currently, the major problems in highway development in western China are the small scale of highway networks, poor availability and low technical level. According to the preliminary plan, there will be four steps in the overall highway development in western China. First, while properly implementing the current plan for the layout of national trunk highways, new roads and highways will be built to form major passageways that not only connect the west with the mid-east, the southwest with the northwest, and all neighboring regions, but that also reach major rivers and the ocean. Second, the construction of trunk highways within western China will be strengthened, and the quality of highway networks improved. Third, the highway construction in poverty-stricken areas will be strengthened, and the availability of highways further improved. Fourth, the construction of trunk highways that connect west China and central China will be arranged concurrently, so as to fully develop the transportation in western China.

4. Airport Construction in the West

At present, a preliminary airport network is taking shape in the western region, mainly consisting of the major airports in Chengdu, Chongqing, Xi'an, Kunming, Urumqi, Lanzhou, Guilin, Nanjing and Hohhot and some minor airports. However, apart from Yuannan, communi-



The Yuncheng-Sanmenxia Expressway is an important part of the passageway linking Asia and Europe. The Wojiazui Bridge is currently under construction.

cation hubs have not yet been formed in any of the regions. There are few feeder airports, and the pattern of air routes is largely city-to-city, rather than hubs with flights radiating from each city. Therefore, the fundamental principles for airport development and construction in the western region will be implementing communication-hub projects, developing feeder airports, improving air route structure and enhancing efficiency.

According to this projection, construction of the Xianyang International Airport in Xi'an will begin this year, and a feeder airport network will be under construction at the same time, with Shuangliu Airport in Chengdu, Xianyang Airport in Xi'an, Wujiaba Airport in Kunming, Zhongchuan Airport in Lanzhou, and Urumqi Airport as communication hubs. In this way, an airport network will be gradually formed, with major airports as regional centers.

5. Elevated Light Railway in Chongqing (phase I, Jiaochangkou-Xinshancun section)

Chongqing, as one of China's municipalities directly under the Central Government, is also an important center in the southwest region and upper reaches of the Yangtze River. However, due to topographical conditions, the structural problem of urban transportation is very serious. Therefore, construction of a fast-speed urban railway system with a large capacity will effectively ease the burden on traffic.

As the first project of its kind in the western region, the construction of the first phase of the Chongqing light trunk will also be of great significance to the improvement of the urban transportation level and investment environment in the entire western region.

6. The Sebei Qaidam Basin-Xining-Lanzhou Natural Gas Pipeline

The Qaidam Basin in Qinghai Province is one of the regions in China rich in natural gas. Natural gas fields with abundant reserves have been discovered in the eastern and western part of the basin. There is serious air pollution in Lanzhou and Xining, the respective provincial



ZHOU HENGYI

On April 28, the Chongqing-Changshou Expressway, a 3-billion-yuan project, opened to traffic.

capitals of Gansu and Qinghai and two of the major industrial cities in northwest China. The pollution in these two cities mainly results from the soot emitted from burning coal. The utilization of natural gas as a clean and high-quality energy will not only improve the energy mix and the air quality in these two cities, but will also promote the economic development in Gansu and Qinghai provinces.

The construction of the six projects mentioned above will also improve the transportation facilities in the western region, laying a solid foundation for the amelioration of the investment environment in the central and western regions and for the implementation of the western region development strategy.



WANG IINGY

To protect the source of the Yellow River, Gonghe County of Qinghai Province has been actively engaged in a large-scale afforestation drive. Now 5,800 mu of forests have been planted for wind blockage and sand anchorage.

7. The Water-Control Projects at Zipingpu in Sichuan Province and Shapotou on the Yellow River in the Ningxia Hui Antonomons Region

Strengthening of the construction of water facilities in the western region is an important task related to the overall development of the west and the improvement of the ecological environment.

The Zipingpu water conservancy project in Sichuan Province, located in the upper reaches of the Minjiang River, is a large-scale project mainly intended for irrigation and water supply, and which has comprehensive functions like power generation and flood control. Its construction will improve the flood-control capacity in the downstream Chengdu Plain. The water supply guarantee rate will increase by 10 percentage points, which will be of great significance to the economic development of Sichuan Province.

The construction of the water-conservancy project at Shapotou on the Yellow River will improve the irrigation conditions along the Yellow River in Ningxia, as well as improve the guarantee rate and water utility efficiency of areas currently irrigated by the Yellow River. While improving the comprehensive productivity of agriculture in this region, the project will control the total amount of

water drawn from the Yellow River, increase the power supply, help the inhabitants in mountainous areas rise out of poverty as soon as possible, and foster the rapid development of the rural economy in this region.

8. Returning Farmland to Forests and Pastures, Ecological Construction and Breeding Saplings in the central and western regions

Returning farmland to forests and pastures is of great strategic significance to the development of the western region. The implementation of this project will effectively improve the ecological environment and prevent soil erosion in the western region. From the year 2000, pilot projects of converting land to forests and pastures will be carried out in 13 provinces and regions in the upper reaches of the Yangtze River, the middle reaches of the Yellow River like Yunnan and Sichuan, Shaanxi and Gansu. A projected total of 343,000 hectares of land will be returned to its original state, and there will be 432,000 hectares of man-made forests and pastures on what was previously wasteland. This project will not only have an enormous ecological effect but will also be an active driving force for the adjustment of the cultivation mix in rural areas.

Besides returning farmland to forests and pastures, the Central Government will also invest in comprehensive projects to ecologically control areas with serious soil erosion and bad ecological environments. The projects are of extreme importance to the social and economic development of the western region. Only by strengthening the control over and constantly improving the ecological environment can the abundant natural resources in the west be fully explored and utilized, the conditions for the introduction of capital, technology and talent be created, the flooding in the middle and lower reaches of the Yangtze and Yellow Rivers be mitigated and social and economic development be promoted. Hope for the development of the western region lies in this project, which is also an important condition for the realization of the sustainable development of the entire country.

Water-control projects, returning farmland to forests and pastures, ecological construction and sapling projects in the western region all combine resource development with environmental protection and pursue the integration of economic, social and ecological effects for the sustainable development of the economy.

9. Qinghai Potassic Fertilizer Project

Qinghai Province is a poor region in western China. The construction of large industrial projects in this area is of great political and economic significance to the strategy of the western region development. The salt water lake in Qinghai is rich in potash resources, which not only guarantee the current production capacity but also satisfy the needs of this project and other follow-up projects. Due to the current low production capacity, most of the potash fertilizers need to be imported.



ZHOU HENCY

At a science and technology festival in Chongqing University, students appreciate the web pages developed by their schoolmates.

Making use of self-developed technology that has been successfully applied in production, this project offers clear advantages.

The construction of this project will support the country's agricultural production, promote the comprehensive utilization of the resources in the salt lake and foster local economic development. This project also serves as an active experiment on the rational exploration of natural resources and the readjustment of the industrial structure in the western region.

10. Facilities Construction in Colleges and Universities

In order to implement the strategy of western region development, speed up the cultivation of talent and enhance the quality of talent, the State has decided to support higher education and construct lab facilities, as well as promote the socialization of logistic services in colleges and universities in the western region by making use of the funds raised through the issuance of government debts. This project will effectively improve the educational and technical levels of the laborers, accelerate the development of education and enlarge the scale of the cultivation of high-level talent. It will also ameliorate the conditions for schooling in the western region, create favorable working conditions for research staff and improve the research standard in colleges and universities.

A Look Back on the Holiday Economy

by Li Rongxia

team of five people from northeast China, headed by Miss Guo, visited the Palace Museum in Beijing on May Day. "You can't imagine how crowded it was when we crossed the Golden Water Bridge," Miss Guo recalled. "It was so crowded that you could not even breathe."

China instituted a new holiday system last National Day. Now, the Chinese people have seven days off during three festival periods-National Day, the Spring Festival and International Labor Day (the May Day). Tourism, catering and shopping industries thrived during the holidays, which many scholars and business people have hailed "the coming of the holiday economy." On this May holiday in particular, travel was the first choice of many Chinese people. Hordes of passengers flooded famous scenic spots, jamming railway stations, airports and docks. The number of tourists was far more than that expected.

Holiday Tours Soar

According to incomplete statistics provided by tourism departments, from May I to 6 there were 1.7 million overseas tourists who came to China, added to the 46 million domestic tourists traveling within the country. Chinese tourists who went abroad totaled 100,000. Revenue from tourism amounted to 18.1 billion yuan, demonstrating a vast potentials for consumption.

Beijing hosted 70,000 overseas tourists from May 1 to 7, bringing in US\$50 million foreign exchange, while 1 million domestic visitors brought in 1.7 billion yuan. Beijing residents touring within the city numbered 1 million, with expenditures reaching 189 million yuan. More than 1.5 million Beijing residents left Beijing to sightsee, of which more than 7,000 traveled abroad, doubling that in the same period of last year.

More than 2.5 million overseas tourists poured into Shanghai, while more than 500,000 Shanghai residents traveled through the rest of the country.

Xinjiang was visited by 60,000 domestic tourists, setting a record high in history.

This past May holiday saw all tourist and scenic spots packed with tourists, no matter whether they were hot or cold tourist attractions, old or new.

The huge number of tourists throughout the country benefited airlines, railways, public transportation, department stores, travel agencies, catering businesses and even film developing stores on the streets.

Airline companies throughout the country arranged 15,300 flights, of which the number of additional and chartered flights came to 1,500, transporting more than 1.7 million passengers, up nearly 50 percent over the same period of last year.

Railway bureaus offered an additional 1,058 tourist trains, 300 more than the total number of tourist trains last year. In seven days, passengers who traveled by train reached 27 million, an increase of 25 percent over 1999. Ticket revenues amounted to 750 million yuan, an increase of 110 million yuan.

Every day, stores were crowded with shoppers late into the night. The daily sales of the Beijing Wangfujing Department Store reached the amazing figure of 6.8 million yuan. The average growth for large stores in Beijing reached around 40 percent.

The catering markets were also full to capacity. Beijing old brand Quanjude Roast Duck Restaurant had a total sales volume of 3.54 million yuan from May 1 to 7. During this period, the average number of daily consumers exceeded 15,000, a record level.

Information Merits Attention

The seven-day May holiday passed joyfully, but it has sparked a hot debate on the holiday economy.

Prof. Chen Zhun, who works with the Market Economic Research Institute of the State Council Development Research Center, feels that the brisk economic activities this May holiday were a natural result of State policies adopted since 1998 to spur domestic demand. With the macro-economic situation taking a favorable return. the people's incomes rising to a certain level and their disposable income reaching a critical point, high consumption levels are inevitable.

Looking back at the May Day, one can see a few changes. First of all, the dynamic of supply and demand is changing. The holiday economy was only one of the signs of this change. In the first quarter of 2000, China's export demand from the outside increased 39.1 percent, and demand for essential elements of production also grew day by day. According to data from the State Internal Trade Burea, the growth rate of demand exceeds that of supply. This past holiday's splurge consumption should not be regarded as an isolated event.

The second is the change in prices. People noticed the raised prices arising from the increasing demand during the May holiday. On the one hand, they showed that services need to be standardized and put under strict management. On the other hand, it can also be seen as simply more evidence that prices have been changing, with the May holiday prices doing no more than reflecting a series of price changes. In the sec-

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ond half of last year, the negative growth began narrowing though the price drop continued. In the first quarter of this year, the consumer price began to turn upward. Recently, prices of rolled steel products, which had been in a slump for a long time, soared, and that of farm products quietly picked up. All of this indicates that a change is taking place in both prices and the market because a deflationary market is characterized by continuously dropping prices. The changes point to the imminent departure of the deflationary market.

The third is the change of socioeconomic expectation. Along with changes in consumer psychology, a traveling frenzy spread throughout the country during the May holiday, affecting both wealthy and ordinary citizens. This demonstrates that the anticipated problems with low income, which had adversely affected economic growth, have been subdued. The expected growth in consumption gradually appeared, not partially or in a special stratum, but throughout the entire country.

The traveling frenzy this past May holiday reveals a vast tourist market in China. According to Wei Xiao'an, Director of the Planning and Financial Department of the National Tourism Administration, having seven days off was the direct cause for people's traveling. However, the underlying reason was the deep, ongoing reform and opening-up program. China has experienced the important transition from a deficient economy to a relatively surplus economy, and people's incomes have risen steadily. With their basic needs satisfied, people begin to look for higherlevel consumption. Traveling thus becomes a significant outlet for this disposable income.

Statistics released by the National Bureau of Statistics show that, by the end of 1999, the per-capita disposable income of urban residents increased from 343 yuan in 1978 to 5,854 yuan, while the average net income of farmers rose from 134 yuan to 2,210 yuan.

For a long period of time, due to their low standard of living, the Chinese had regarded traveling as a luxury and viewed travelers as "idlers." People's consumption was mainly concentrated on food, clothing, and other basic necessities.

Researcher Zhang Qizi of the Chinese Academy of Sciences feels that tourism consumption is an inevitable result of social and economic development. He said that the development of a market-oriented economy and the opening to the outside world have broadened the perspectives of the Chinese people. The people no longer measure the quality of living by material wealth. The accelerated pace of life makes people yearn for nature and the pleasure of leisurely vacations. Traveling can satisfy these needs. Meanwhile, the



During holidays, the Long Corridor in the Summer Palace is often crowded with tourists seeking relaxation.

NATIONAL REPORT

small family structure and an improving social security system also stimulate tourist consumption.

Wang Yue, a tourist from Hefei, capital of Anhui, said, "I have been to Beijing several times on business, but this time I come to relax with my wife and son. Sightseeing in Beijing will allow my son to learn what he can't learn from books."

China's tourism has been developing since China adopted the reform and opening program in 1978. Now, the tourism sector has become an important means of the government in stimulating domestic demands and develop economy. Last year, the State Council worked out a new system for festivals and holidays—a move that creates an ideal time for travel.

Statistics show that the number of domestic travelers last year hit 700 million, forming the largest domestic tourist market in the world. The income from domestic tourism increased 18 percent over the previous year to 283.1 billion yuan.

Proceeding from the huge demands on the tourist market, China has set a goal — to become one of the large tourist countries in the world within 20 years. According to the plan, by 2020, revenue from the tourist sector will surpass 3,300 billion yuan, or 8 percent of the nation's GDP, doubling that of 2000.

Grasping the New Trend of Consumption

The holiday tourism, hailed as a new trend of consumption and a newly rising industry by economists and related experts, seemed to spring up overnight. Many related sectors were poorly prepared, however, which disappointed many travelers.

A tourist from Zhejiang Province still shudders when thinking of his hurried experience during his few days of travels, which were like being in a battle. "Wherever I went, I saw places packed like sardines. Due to traffic jams, I had to spend most of my holiday in transit. When I finally arrived at my destination, I was completely rushed, with no time to enjoy the scenery."



Streams of tourists in front of Tian'anmen Rostrum.

A consumer who lives in outskirts of Beijing said that when he heard on the news that all scenic spots were packed with tourists, he thought the pedestrians' street wide Wangfujing might be better than other places. So, he took his family shopping at Wangfujing. However, he was surprised by how crowded it was, with shoppers all jostling each other in the street. Many exhausted tourists were found sitting on the ground to catch their breath. Where to eat was also a big problem.

The problem of overcrowding also brought about some safety troubles. On April 30, in a large amusement park in Nanjing, Jiangsu, a moving "space shuttle" fell off its base because of a welding problem. Two tourists had head injuries.

The overcrowding has also affected the quality of tourist services. Illegal actions infringing upon consumers' rights and interests occurred frequently. Some tourists complained that the Zhengzhou Yellow River Sightseeing Area forced tourists to buy admission tickets together with tickets to the Yellow River cableway.

It was common for tourists to leave feeling happy and excited, but return feeling disappointed. A young couple from south China said that they came to Beijing hoping to climb the Great Wall. However, when they learned that the Great Wall was overflowing with people, they had to give up their long-cherished dream. Cars and buses crawled on the expressway to Badaling for five hours. Normally, the journey takes only one hour by car.

Experts say poor preparations of tourism-related sectors was only one problem for the holiday economy. A more essential problem is with their structure, management and coordination. All related sectors should be aware of the importance of the holiday economy and grasp the opportunity of the new consuming trend.

What they need to do now is to grasp the new consumption trend, promote the transition from the extensive mode to an orderly one and improve service quality during the holidays. At the same time, the Government should create a better holiday economy environment by strengthening macro-control, opening more channels and actively diverting tourists. All these are not only a must for the coming of long holidays in succession, but also a demand of China's WTO entry, which will require China to standardize and improve tourist service in light of international practices.

In the end, the holiday economy is

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marked by its short duration. It is impossible for a city to build more hotels, or a travel agency to purchase more motor vehicles just for these holidays. In addition, transport capacity by land and air is limited. The crux of the problem lies in the limited number of holidays. With a population of 1.2 billion, how can the country bear the pressure of millions of people traveling in the same period of time?

Experts suggest that related departments institute a salary-paying vacation system to encourage people to travel. If people can make travel arrangements at different times, the tour peak may be lowered. Some travelers also suggest that if a oneweek vacation could be added in the spring and autumn respectively, in addition to the May holiday and National Day, it would not only release the bottle-neck pressure during the holidays, but also significantly increase the profits from the holidays. In this way, the marked contrast between low and peak periods could be avoided, and some famous scenic areas could control the volume of tourists at a proper level and improve service quality.

People in the tourist circles advocate that the tourist sector and other related sectors need to adjust their industrial structures. According to the changes of market, it is necessary for related departments to make unified arrangements for transportation and hotel facilities, as well as for tourist routes. Efforts also should be made to strengthen coordination, blending the peak periods with the slack seasons, drawing people to both the hot spots and the cold spots, and pushing the holiday economy from extensive mode to intensive mode. With all-around enhanced service quality, travelers will be better able to enjoy their vacations.

It is agreed that seeking a balance between supply and demand cannot just rely on three legal long-duration holidays. Efforts should be put into strengthening macro-control, opening more channels and actively diverting streams of tourists. For example, large and medium-sized cities should develop holiday resort facilities in their outskirts, forming holiday resort areas that would attract more tourists.

While displaying bright prospects for the development of tourism, the massive traveling during the holidays also indicates that China's tourist market needs further improvement. Currently, as a domestic tourist forecast has not been developed, related sectors are rushing to meet the demands of the coming holiday economy. Tourist departments are asking

for a clear schedule of three-day holidays in order to be able to make proper arrangements for transportation and accommodations.

There are also problems with the information sector, characterized by a shortage of basic data on the volume of tourists and prices. Information systems are slow to react to demand. This is another reason residents are left to travel blindly. It is suggested that the Internet should be used to provide accurate tour information for tourists. Data from a tourist webpage would be more accurate and objective than that directly from a single travel agency.

Shop managers are seeking new measures to deal with the coming holiday economy. Luo Min, Director of the Business Department of Beijng Guiyou Plaza said in his report on the holiday economy that the holiday economy has emerged on several occasions. However, most shops in Beijing developed no marketing strategies other than having sales. A market shaped by holiday consumption in a real sense has not vet formed. The massive traveling during the May holiday, though a challenge for tourist sectors, may provide a turning point for shop managers to update their business concepts. Guiyou Plaza plans to put forward a program integrating tourism, entertainment and culture for future longduration holidays, such as joining hands with new scenic spots not well known to the public. By spending a certain amount of money in the store, consumers can tour the scenic spots free of charge. In this way, the store can help divert the stream of tourists from hot scenic spots. Sales will no longer be the only way to attract consumers in the holiday economy.

The long May holiday left people with many things to think about in addition to the crowded stores and traffic jams. Now, many people in related sectors have begun contemplating, discussing and planning the holiday economy from different angles and diversified channels. Hopefully the holiday economy will develop in a sound way.



Catering outlets have a good taste of the holiday economy.

Photos by LI SHIGONG

What Do Beijingers Want?

BEIJING QINGNIAN BAO (Beijing Youth Daily)

ith the improvement of living standards, people are starting to have higher expectations for different aspects of life. A recent questionnaire surveyed 731 Beijing residents, and the results are as follows:

Income

Expectations for monthly family per-capita income per person are generally high, while 10 percent have expectations even lower than they did last year.

While estimating their monthly income in the coming one or two years, Beijingers are not being impractical. They have projected the figures according to their current income levels and estimates of the future. Statistics reveal that the average monthly income expected by Beijingers is 2,226 yuan.

The latest statistics from the Beijing Bureau of Statistics show that the percapita disposable income for urban residents was 9,183 yuan in 1999, or 765 yuan per month, an actual 7.8 percent increase over the previous year. Beijingers have placed greater hopes on the next couple of years, with expectations ranging from 100 to 30,000 yuan. Fifty percent of the people surveyed have expectations lower than 1,500 yuan, with most people expecting 1,000 yuan per month, accounting for 23 percent of all surveyed. The next largest group of people, 19.6 percent of the total, expects 2,000 yuan a month.

If the results are divided into seven groups, the expectations of most Beijingers fall between 1,000-1,499 yuan and between 2,000-2,999 yuan, the groups being 28 percent and 23.4 percent of all surveyed, respectively. The people who expect 5,000 yuan or above account for 9.6 percent, while those whose expectations fall below last year's average monthly income of urban residents also form 9.6 percent.

Housing

The average expectations of Beijingers for housing area in the next five years exceeds the current level by 78.3 percent—27.5 square meters per person, while one quarter of all sur-

veyed still expect a housing area lower than the 1999 average (15.4 square meters per capita) for urban residents.

The survey shows that the lowest and highest expectations are 5 and 150 square meters. The standard deviation is 18.5, and the median is 20 square meters, which indicates that half of the people have an expectation below 20 square meters per person. Statistics also show that the groups of people who expect 20 and 30 square meters are the largest of all surveyed, 24.1 percent and 21.5 percent respectively.

If the expectations are divided into five groups, nearly one third of the people hope to own a house with an area 21-30 square meters per family member, and 26.8 percent hope to move into a house that will provide each person with 16 to 20 square meters. It is noteworthy that about one fourth of the Beijingers have rather low expectations for housing area, even lower than the actual average per person last year. These people are mostly found among the low-education-level and lowincome groups. Beginning in the last few years, the welfare housing system is being phased out, making financial capacity an important factor influencing housing area. This change is reflected in the fact that those between 18 and 24 years of age, who are just beginning their careers, are full of confidence in the future, and most people between 35 and 44 are at the peaks of their careers and have some savingsthese two groups of people have expectations above the average. By comparison, 35.3 percent of those over 55 have lower expectations. The fact that so many people have such low expectations for the average housing area per family member reflects the differences between people's housing conditions.

Pastime

According to the survey, 37.8 percent of the Beijingers are satisfied with their pastime activities, 36.7 percent commented that their recreational lives were "just-so-so," and 25.6 percent are not satisfied. Further analysis shows that older and younger people are more satisfied than the middle-aged. Of elderly people over 55, 56.8 percent are satisfied, and only 18.3 percent are not

satisfied. This fact is easy to believe in Beijing, where elderly people are commonly seen happily engaged in various pastime activities, such as the yangko, dancing, taijiquan and qigong. There are also choruses and model groups made up of the elderly. In contrast, most Beijingers between 25 and 44 do not have a good time after work, and only 28.6 percent of them are satisfied. These people are starting or are in the prime of their careers, are under great pressure and have little leisure time, which explains why they would be less satisfied with their pastime activities.

The survey also reveals that whether people are satisfied with their recreational lives has little to do with their income levels. People with different levels of income may choose different means of recreation, which produce similar effects.

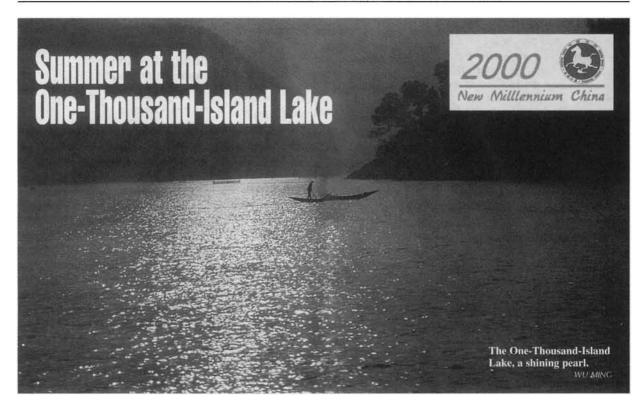
When it comes to forms of recreation, Beijingers engage in a wide variety. Traveling is the top choice of 37.9 percent of them.

This has something to do with the increase in people's income levels. Investigation shows that of those with a monthly income below 499 yuan, 29.1 percent want to travel over other things; the higher the income, the higher the proportion-38 percent for those with a monthly income between 800 and 999 yuan, 45 percent for those with a monthly income between 1,500 and 1,999 yuan, and 60 percent for those with a monthly income over 2,000 yuan. Obviously, financial capacity has become the biggest determinant in Beijingers' choosing traveling as their most-desired form of recreation.

Considering this preference for traveling from the perspective of age reveals that 54.1 percent of those between 25 and 34 say that traveling is their favorite form of recreation; the percentages for the 18-24 and 35-44 age groups are 46.9 percent and 44.4 percent respectively. Due to health-related factors, only 21.4 percent of people aged between 55 and 65 are keen on traveling.

An opinion poll conducted three years ago showed that 31.9 percent of the Beijing residents persisted in doing physical exercises. This survey indicates that only 28.7 percent are keen on doing exercises in off-hours.

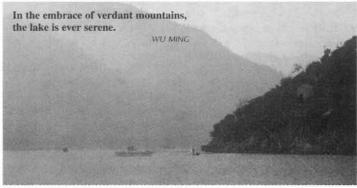
(May 10)



ocated in Chun'an County of Zhejiang Province, the One-Thousand-Island Lake is an artificial lake made in 1995 as the result of the establishment of the Xin'an Power Station, the first large-scale hydropower station to be domestically designed and equipped by China. Among the 44 State key scenic spots, the One-Thousand-Island Lake is a comparatively large national forest park and is hailed as a charming pearl on the tourist route of Hangzhou-Huangshan Mountain.

There are 1,087 islands scattered throughout the lake. Some are lined up together like screens, some are scattered like pearls, some embrace a central island like stars around the moon, and still others are interlinked like lace.

The lake boasts four areas of around 20 scenic spots. Both natural scenery and cultural legacies are rich in the area, which abounds in animal and plant life. The forest near the lake houses about 1,786 plant species, while the lake is home to 87 fish species. There is no doubt that a trip to the lake will be a feast both for



your eyes and your stomach.

In the summer, the lake transforms into an emerald. The 17.8 billion cubic meters of lake water serve as the best natural air-conditioner. With 573 square km of lake and beautifully clear water, One-Thousand-Island Lake is the ideal setting for water activities. Summer is the best time of the year to visit the lake, and tourist programs offered this season include:

Summer Camp on Water

With a 93 percent forest coverage, clear water and clean air, the lake is the ideal place for teenagers to get acquainted with and explore nature. During the summer, while camping out by the water, teenagers can experience folk life on the island, pick fruit in the orchards, collect plant and animal specimens, learn about science, plant monument trees, look for the sources of mineral water, visit the aquatic animal kingdom and go on mountain and water eco-tours.

World of Water

At the World of Water on Wenxin Island, tourists are free to play in the crystal clear water. You can pitch a sun umbrella on the beach and enjoy basking in the sun. Or you can relish

a swim in the lake. Those who seek serenity can rent row boats or water bicycles and those who prefer a challenge can go surfing, ride jet skis or parachute jump while moored to a motorboat. Airplanes that travel on water are also available for you to have a bird's eye view of the One-Thousand-Island Lake. Everyone can find something they enjoy among the variety of activities at the World of Water.

Wooden Huts on the Islands

For those who are sick and tired of urban cement and concrete construction, the cozy wooden huts around the One-Thousand-Island Lake offer an attractive alternative. More than 50 of these huts are available in the vicinity of the lake. While their wooden structure is in great harmony with nature, the interior decoration and amenities, like the air-conditioner and toilet, conform to modern life. An assortment of attractions, including art performances, bowling, a sauna, angling, barbecues and night tours, is offered by the water recreation center and the game center. Life in the wooden hut is sure to be romantic.

Maze on Water

The Jieshou Archipelago is a natural maze on water, boasting over 500 interspersed islands and countless intersecting harbors. A trip through it by boat will prove to be an expedition into wilderness.

Gourmet Festival of the Lake

Uncommon to urban dwellers, the 87 freshwater fishes and unique staples abundant in the nearby forest are especially appealing. To serve tourists dishes unique to the lake area, the Second Gourmet Festival will be held from July to August, during which period restaurants and hotels will compete to see who serves the top 10 dishes on the One-Thousand-Island Lake. Tourists can savor exquisite dishes and snacks at affordable prices.

China Sports Arena Contest

Challenging tourists and taking

them to their extremes, the Zhejiang TV Station's "Big Arena" program uses the One-Thousand-Island Lake as its setting for many activities. These activities include climbing an 800-step hill while loaded with water at Mishan Island, carrying a bride at Wulong Island, pulling a boat 5 km at the Gold Waterway, an expedition into the maze with a dingy, a family pulley contest of over 5 km and a hobbyhorse-riding contest around the lake. Filled with new sensations and traditional folkways, these activities

will form lingering memories for tourists.

Shopping and Accommodations

The county bearing the name of the One-Thousand-Island Lake lies on the Pailing Peninsula at the center of the lake. Hotels and restaurants are available throughout the country. The Xin'an Road, Tourist Shopping Road and snack booths along the streets are must-see places.

The Idyllic Hongshanhu Lake

Ithough it may sound strange to many, Hongshanhu Lake is a scenic spot worth visiting in summer. Located in Chifeng City of the Inner Mongolia Autonomous Region, the lake belongs to the national large-scale water conservancy project. It is also the largest reservoir in northeast China with a projected holding capacity of 2.56 billion cubic meters.

After 40 years of construction, Hongshanhu Lake has become a spotlight on the Mongolia Grassland and is a superb summer resort in Chifeng.

The Hongshan Reservoir boasts multi-dimensional scenery of mountains, water, fish, shoals, fields, forests and fruits. Climbing Tiantaishan Mountain, you can have a full view of the lake with the Hongshan Precipice piercing down into the lake. In front of the mountain ripples the endless emerald water.

In the summer, the verdant mountain and emerald lake are in great harmony under the blue sky. Fish can be seen swimming on the surface of the water under the gliding gulls.

But Hongshanhu Lake's charm does not stop at its scenery, for the lake is also a land of milk and honey. In the lake grow around 10 rare fishes, with one claiming the title of "soft gold." Other aquatic delicacies, such as lobsters, also abound in the lake. Visitors will really enjoy a feast here

If you like swimming, the lake will not disappoint you. Both the Beitan Lido and the Nantan Lido feature soft and fine sand, clear water and a smooth and gentle lake floor. Tourists are free to play in the water and refresh themselves in the embrace of the mountains and lake.

Along the two sides of the lake grow over 500 hectares of trees. These trees are windshield belts and are conducive to water and soil conservation, the improvement of the environment and climate adjustment. In the tourist area, orchard trees can be found almost everywhere, and tourists can taste more than 10 species of fruit.

Hongshanhu Lake is within easy access. Trains and airplanes take you directly to Chifeng City, where you can take a bus there along the No.305 National Highway.

The scenic spot has one access route on land and two by water. Riding on the boat, you can appreciate the idyllic scenery along the sinuous waterway. About 15 km to the north lies a natural lake, grassland and desert tourist area that is also worth seeing.



China to Actively Tap New Energy Resources

hina is working out a plan to actively develop various new and renewable energy resources in the 21st century, focusing on water, solar, wind, geothermal and tidal resources, so as to make up for the declining production of traditional energy resources.

The country has very rich new and renewable energy resources—254 million kw of recoverable wind energy resources, 3.5 million kw of geothermal resources and more than 20 million kw of tidal energy.

The vast rural areas have nearly 300 million tons of biological materials for developing methane gas.

To date, China's annual utilization rate of new and renewable energy has reached 300 million tons of standard coal.

In addition, over 200,000 units of household small and mini-wind generators have been applied in mountainous and pastoral areas and on islands. China also has imported large and medium-sized wind generators from Denmark, the Netherlands and the United States to equip over 20 wind power plants.

More than 50,000 small hydropower stations have been set up nationwide with a total installed capacity of 22 million kw.

About 75 percent of rural households have installed coal-saving stoves, with annual bio-gas production topping 1.5 billion cubic meters.

The country is also rich in tidal energy, 90 percent of which is located in Zhejiang and Fujian provinces. So far, a dozen tidal power stations have been built throughout the country.

Imported Timber Stock Up

he stock of imported timber in China has soared to more than 1 million cubic meters, as the size of these imports has increased dramatically, according to customs sources.

China's foreign trade companies began importing timber in December 1998, when China began to implement a ban on logging in many national forests

Overall imports in 1999 grew at a remarkable rate of 18.2 percent, the highest growth since 1994, at a total worth of US\$165.8 billion.

The entry port of Shenzhen handled 241,200 cubic meters of timber imports in the first four months this year, up 50 percent from the same period last year, while 49 new foreign companies joined in the business of timber imports during

the period.

Insiders note that rising imports of high-quality timber materials was fanned by the booming real estate market and the upholstering business.

Simple varieties of traditional upholstering timber materials, such as miscellaneous timbers and pine wood, no longer satisfy the domestic market. Shenzhen Customs imported 41,200 cubic meters of beech logs in the first four months this year, compared with 15,100 cubic meters for the corresponding period last year.

Customs officials also attribute rising timber imports to the policy of developing the vast western region. Foreign trade companies have foreseen the huge demand for timber for mammoth infrastructure construction projects.

However, the big increase in timber imports has already created stockpiles, and some experts warn that it will take six to 10 months for the domestic market to consume the inventory.

Yunnan: Largest Flower Production Base

outhwest China's Yunnan Province is highly likely to become the largest flower production and export base both in China and Asia at large.

Tucked away at the Yunnan-Guizhou Plateau, Yunnan is wellknown as "kingdom of plants," "garden of nature" and "botanical genes bank."

Yunnan boasts about 2,500 varieties of wild flowers, most of which are rare species and valuable primitive breedings.

In recent years, Yunnan's flower industry has developed rapidly. The output of fresh cut flowers from the province has stood first place in China since 1994.

The flower sales of the province account for 40 percent of the domestic market, with the flower growing area expanding from 16 hectares in 1994 to 1,729 hectares in 1999. The number of flower enterprises rose from 79 in 1994 to 250 in 1998.

Yunnan now has three large flower production bases—the temperate fresh cut flower production area in Kunming, the tropical flower production area in



The Lijiaxia Hydropower Station in construction.

Massive Hydropower Construction to Be Launched

hina expects to see a booming development of hydropower in the 21st century, with total hydropower capacity reaching 125 million kw by 2010, or 33.1 percent of the country's exploitable hydropower resources.

It has the richest hydropower resources in the world, with exploitable water energy resources estimated at 378 million kw.

Hydropower projects at the Three Gorges, Xiaolangdi and Ertan are the largest on earth.

China aims to develop additional hydropower capacity ranging between 80-100 million kw in the first 20 years of the 21st century, and hydropower generating units with capacity totaling 4-5 million kw on average.

Much still needs to be done to explore the enormous hydropower resources, for the present hydropower generating capacity accounts for only 13.8 percent of the exploitable potential, a figure lower than the world average.

Xishuangbanna and Yuanjiang, and the cold bulb flower production area in Deqing and Lijiang.

The annual flower output in the province reaches 1.1 billion bunches.

To promote the development of the flower industry, the province has invested 160 million yuan to build a 313-hectare floriculture production park. More parks are planned to be built in Xishuangbanna, Jiangchuan and Yuanjiang.

The province also supports exportoriented enterprises with funds and technology.

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China Issues Rule on JV Hospitals

hina has renewed administrative measures governing Sinoforeign joint-venture hospitals and clinics, hoping the sector's sound development can provide people with a wide range of health care services.

According to a rule recently published by the Ministry of Health and the Ministry of Foreign Trade and Economic Cooperation, overseas hospitals and firms can launch joint ventures in China after they get permission

from the two ministries.

Solely foreign-funded hospitals are still not allowed in China.

A joint-venture hospital should be internationally advanced in equipment, technology and management, and should be able to provide service that local hospitals cannot give, stipulated the rule which goes into effect as of July 1.

Investment in a joint-venture hospital should not be less than 20 million yuan (about US\$2.4 million), stock shares of the Chinese side should not be less than 30 percent, and the term of the joint venture should not exceed 20 years.

However, exceptions may be made for hospitals opening in China's central and western regions, as well as in remote and poor areas.

Investors from Hong Kong, Macao and Taiwan will have to obey this rule when launching joint-venture hospitals on the mainland.

China is reforming its hospitals by dividing them into non-profit and for-profit categories, and will exercise different fee-charging and taxation policies. Most joint-venture hospitals are expected to fall into the for-profit classification.

There are about 200 joint-venture hospitals and clinics in 19 Chinese provinces. Only 18 hospitals and some 60 clinics have official permits.

The rule aims to create a healthy environment for development of this sector.

Five Challenges Ahead in New Millennium

the next century, which will bring about significant social demands for science and technology.

The first challenge is the aging population. China's population will reach 1.3 billion by the end of this century and is expected to top 1.6 billion by the middle of next century.

Agriculture is the second challenge. One quarter of the country's land is dry and its arable land is decreasing.

Energy is the third challenge. Since 1993, China has become a net importer of petroleum. However, China still needs petroleum, with the gap estimated at 100 million tons by 2010.

Environment is the fourth challenge. Drying lakes and rivers, desertification, salinization and deterioration of grasslands asre serious problems that China faces. Of the world's 10 most air-polluted cities listed by the World Health Organization (WHO), seven are in China.

The last challenge facing China lies in the information sector. The core of the information industry, such as CPU chips and computer operating systems are dominated by foreign companies. Some important computer and network accessories, sensors and applied software are not protected by intellectual property rights.

Strategy Changed to Absorb More Foreign Funds

hina is trying to absorb more foreign capital by encouraging foreign businesses to set their sights on its service industry.

Agriculture will become a promising target for foreign funding. The sector currently receives only 2 percent of the foreign capital flowing into China.

The Government encourages international corporations to purchase or merge Chinese enterprises by initiating a series of reform, such as establishing stock and property rights trading markets, mapping out new laws and regulations and redistributing State assets.

Powerful Auto Partner Looked For

aced with globalization, China's auto sector has to adopt effective means to tackle the unprecedented challenges it will face following the country's WTO entry.

Currently, the industry has weaknesses such as small scale, irrational allocation and low efficiency. The crux of the problem is how to create the best environment to attract foreign invest-

Since combining domestic motor enterprises to form several large enterprise groups and building small joint ventures have both proved ineffective, a better alternative is Sino-foreign cooperation on a large scale.

The ideal partner for China's auto industry will be large multinational enterprises that are not only willing to set up research centers in China, but that also intend to build large-scale production bases.

Liberty Mutual Group Opens Beijing Office

he Liberty Mutual Group, the second largest mutual property and casualty insurance company in the United States, opened its Beijing office in early June.

Liberty is applying for a license to conduct property and casualty insurance business in the country.

The company is in partnership with the China Insurance Regulatory Commission, the Ministry of Labor and Social Security, and the State Economic and Trade Commission, and hopes to share the company's experience and research to improve the lives of Chinese workers and their families.

Liberty joined the Shanghai Medical University and opened the Liberty Mutual Safe Work Center to research on occupational safety and health issues.

Chongqing, a large city in the west, is the target of Liberty's next investment.

The Beijing office is the group's second in China, following the other branch that opened in Chongqing two years ago.

by Li Ning

CCTV Joins Hand With Website

ithout the inconvenience of fighting through the crowds to the Auto 2000 China, Internet surfers and car lovers enjoyed a live broadcast of the auto exhibition on the morning of June 10, broadcast by CCTV and Zhaodaola.com.

It was CCTV's first live broadcast with a website. Combining its resources with limitless network resources, it presented the spectacular event to all corners of the world, in a unique opportunity to display its own image.

Zhaodaola.com provides not only market information of automobiles, but also an auto culture. Visitors can obtain information about any automobile seen on the web page.

Zhaodaola.com won first place for life service information providing during last year's national website competition.

Shanghai Offers More Investment Opportunities

oreign investors will find more opportunities for their cash in Shanghai's industry expansion, as well as in the upgrading and restructuring of State-owned enterprises.

The city's fixed capital industrial investment will reach 62 billion yuan (about US\$7.5 billion) this year. The figure is expected to hit 400 billion yuan in the next five years, which is about the same amount invested since 1991.

The new investment will be put mainly into high-tech industries, including integrated circuits, fiber and mobile telecommunications and Internet products, as well as into sectors such as jewelry, interior decoration and cosmetics.

Technological progress will account for 55 percent of Shanghai's economic growth by the year 2002.

Meanwhile, Shanghai will also offer new incentives for foreign investment in the restructuring of the State-owned enterprises.

Shanghai approved a total of 323 industrial projects involving foreign funds of US\$961 million in the last five months, up 58 percent over the same period last year.





Students at the Suzhou Middle School attend class together with their counterparts in Gansu Province.

Remote Education Program Initiated in the West

remote education program carried out live on May 25 allowed students from the Middle School Affiliated with the Great Wall Co. of Tianshui, Gansu Province, to attend classes of the Suzhou Middle School over a thousand miles away.

Sponsored by the Department of Science and Technology from the Ministry of Education (MOE) and organized by Ambow, a high-tech company founded in the Silicon Valley by Chinese students studying abroad, the program received praise from Wei Yu, Vice-Minister of MOE.

During the course of the program, the two schools exchanged teaching programs through the satellite signal of the Chinese Educational Television Station, and students communicated with each other through the television-conference system in their classrooms.

According to officials from MOE and experts with Ambow, the pro-



PHOTOS BY PI DAWEI

Dr. Huang Jin, Ambow President and CEO, at the signing ceremony of the Ambow/Sun Basic Educational Portal Computing Cooperation MOU.

gram aims to enable the western region to share modern educational resources with the relatively developed eastern area through the use of advanced communications technology and equipment. This new style is expected to help promote basic education in the western region.

Ambow, dedicated to the research and development of the Internet and related software and hardware technology, has established a steady and long-term partnership with high-tech heavyweights, such as IBM, Sun, Intel and Sony. Leading the company to its promising future are graduates from prestigious universities and institutes such as Berkeley, Harvard, Stanford and MIT. The advancement of the national high-tech industry is their common aspiration.

With its headquarters now set up in Beijing, Ambow focuses its emphasis on remote education by offering a package of solutions to common difficulties.

Gaining More Access to the Olympic Games

n May 19, Yuan Weimin, head of the State Sports General Administration, announced the latest update regarding China's qualifications for the Sydney Olympic Games. By April 30, Chinese athletes had joined almost 50 qualification contests, and about 298 athletes had gained qualifications in 23 major events and 156 minor events.

The 23 major events are: football, basketball, shooting, softball, archery, rowing, sailing, tae kwon doe, cycling, wrestling, judo, canoeing, gymnastics, water sports (including swimming, diving, water polo and water ballet), boxing, fencing, weight lifting, ping-pong, field hockey, badminton, track and field events, five modern events, and three muscle events. There are four events that China will not get the chance to compete in: baseball, horse racing, handball and tennis.

China hasn't yet qualified for volleyball (or beach volleyball), but the chance is still there, with the last qualifying test expected to end on August 20.

The Sydney Olympic Games has about 28 major sporting events and 300 minor ones, including 167 competitions for men, 121 for women and 12 mixed events.

Website for the Disabled Receives Donation

he largest website offering services for disabled Chinese all over the world, www.2000888.com, received a donation from Microsoft on May 21, the National Day for the Disabled.

The site www.2000888.com was launched by the Shenzhen Association of the Disabled of Guangdong Province, and was laid out and produced by 13 disabled people at Shenzhen. It received software from Microsoft, as well as technological support and consultation.

Microsoft said supporting the disabled is a noble undertaking, and requires helping hands from all segments of society.

by Du Jun

Hope for the Israeli Philharmonic Orchestra

efore the Young Israeli Philharmonic Orchestra made their trip to China in May, a Chinese music industry insider made this remark: I have never been to a performance by this young orchestra, but I know that it will be excellent from one simple fact—it is composed of Israel's musical geniuses.

He was right. Though not perfect, the performance of the Young Israeli Philharmonic Orchestra could be described as amazing.

Their instrumental performances, both solos and ensembles, were pure in tone and clear in sound. The audience was extremely impressed with their superb playing, which surpassed mere technical skill. The audience could truly sense the feeling behind the music. The violin concertos by these young musicians, though perhaps flawed in one or two transitions between solo and ensemble segments, were terrific, the female solo violin player in particular. Her cadenza was stunningly superb.

Director Zeev Dorman maintained a simple yet mature style, without any unnatural maneuvers aiming to impress the audience, which was good for both the orchestra and the audience.

Though there is a myriad of young philharmonic

orchestras in the world, the Young Israeli Philharmonic Orchestra is generally recognized to be one of the best. The orchestra has about 90 members, aged from 15 to 25, and while some of them still look quite young, their musical skills have always been mature.

The Young Israeli Philharmonic Orchestra was founded by the late musical general director Shalom Ronly-Riklis in 1984 in cooperation with the Israeli Philharmonic Orchestra. In addition to its main purpose of training the younger generation for Israel, it also helps attract gifted musical talent to the Israeli Philharmonic Orchestra. The marvelous performance by the Israeli Philharmonic Orchestra, directed by Zubin Meita, is still a vivid memory for Chinese audiences. After enjoying the performance of the Young Israeli Philharmonic Orchestra, audience members couldn't contain their excitement about the future of the Israeli Philharmonic Orchestra.

Since 1988, Zeev Dorman, Shalom Ronly-Riklis' successor, the founder of the orchestra, has not only emphasized the improvement of the orchestra's playing skills, but has also allowed the young players to participate in more international music festivals to gain experience. Over the past decade, the Israeli Philharmonic Orchestra gave more than 10 home concerts every performance season, in addition to touring all over the world for musical galas.

by Feng Jing



A Scene from Christmas in August.

Here Come Movies From the ROK

he 2000 ROK Movie Week & Seminar was held at the Beijing Film Academy on May 15-21, drawing over 1,000 moviegoers and seminar attendees, including industry insiders, directors, actors and actresses, and students from the two countries.

Sponsored by the Beijing Film Academy and the Embassy of the Republic of Korea (ROK) in China, the program showed 12 movies, including Callousness, Summer Rain Light, Christmas in August and Abyss. Most of these movies made their debut in China and depict the lives of the younger generation of the ROK. Some were shown at international movie festivals in the late 1990s and attracted much attention.

With the establishment of diplomatic relations between the two countries. China and the ROK have increased economic and cultural exchanges. As the representative countries in Asia, the movie industries of the both countries have made remarkable progress and received honor after honor at international movie events. However, members of the two countries' movie industries didn't have much opportunity to interact, except at international movie festivals. This is the first time such extensive and direct communication has occurred between the industries of the two countries.

Chinese audiences were impressed by the production and artistic achievement of ROK movies. According to sponsors, *Christmas in August* was the most popular with the Chinese audience.

During the week, a series of topical speeches were attended by ROK directors, producers and critics. Experts of the two countries also had in-depth discussions about problems with movie production and distribution.

Representatives from the famous ROK brand Samsung, the sole sponsor of the event, said that, if possible, they hope this event will be held regularly, and that good ROK movies can have exposure to larger audiences.

Encouraged by the enthusiastic response generated by movie week, Samsung announced the establishment of a scholarship for the Beijing Film Academy, hoping to promote the movie exchange between the two countries.

The Beijing Film Academy enjoys a prestigious position in China as Asia's largest and China's only institution training movie professionals. Foreign movie weeks, such as the Italian and Japanese movie showcases, have also been held.

by Li Ning

WHAT TO SEE

Movies

Shanghai Noon, an action thriller starring Hong Kong kung fu movie star

> Jackie Chan, will hit theaters in Beijing at the end

of June. The movie follows how a Chinese royal bodyguard, a martial art master, rescues a kidnapped Chinese princess in the wild American West. The movie was well received in Taiwan and Hong Kong.

Other new movies playing in Beijing Theaters include the Chinese movie *I Meant It* and the Hong Kong movie *The Year 2000.*

Dance

Spirit, an Irish dance troupe, will perform in the Century Theater from June 23—25. The show will feature dance that blends Irish, Spanish, European and American styles. Among the dancers are Patricia Murray, dancing champion in Ireland, and Claire Holding, a well known ballet dancer.

Exhibition

An exhibition of Salvador Dali's paintings is being held at the China National Art Museum through June 27. The exhibition displays 58 of Dali's works, including 20 oil paintings and 38 illustrations. These works, from 1920 to 1983, are representative paintings of the artist.

Add: China National Art Museum, 1 Wusi Avenue, Dongcheng District Tel: 64012252

Acrobatics

The China Acrobatic Troupe stages

a nightly variety show at the Tiandi Theater. The award-winning variety show has juggling, stunt cycling, balancing, jumping through hoops, and ancient Chinese dancing. Add: No.10, Dongzhimen Nandajie Tel: 65023984

The No.1 Team of the China Acrobatic Troupe juggles, cycles and tumbles every night at Chaoyang Theater. The 46-year-old troupe has toured more than 60 countries and has won numerous international awards. The program includes tight-rope walking,



martial arts and magic tricks.

Add: Chaoyang Theater, No. 36, Dongsanhuan Beilu, Chaoyang District Tel: 65072421

Peking Opera

The Lao She Tea House stages a show of Peking opera, acrobatics and magic every night. Every Sunday afternoon there is a special performance of Peking opera. There is also a traditional Chinese musical instrument performance every day except Sunday.

Add: No.3, Zhengyang Market, Qianmen West Avenue

Tel: 63036830

The Huguanghuiguan Opera Theater

Every night the theater stages select parts of Peking opera.

Add: No. 3, Hufang Road, Xuanwu District

Tel: 63518284

The Zhengyici Opera Theater

Singers from the Beijing Opera Theater and the Beifang Kunqu Opera Theater perform select parts of classic Chinese operas every night.

Add: No. 220, Xiheyan Avenue, Hepingmenwai, Xuanwu District

Tel: 63033104

The Liyuan Theater presents nightly traditional Peking Opera excerpts specially packaged in short programs for foreign audiences. With English interpretation, the performances are at the Beijing Peking Opera Theater.

Add: Qianmen Hotel, 175 Yong'anlu Street, Xuanwu District

Tel: 63016688

Drama

Summer Memory, a drama about the love between a deserted countryside woman and a young man, is playing in the small Beijing People's Art Theater. The drama is performed by artists from the Tianjin People's Art Theater.

Admission: 50 yuan. Students enjoy a 50 percent discount.

Tel: 65250123



The Shanghai Passat Is Now Formally For Sale



n June 6, the day inaugurating the Sixth Beijing Auto Show, the Shanghai Passat finally appeared on the market in the capital and other cities.

It was more than a year ago that the release of a new model of the Shanghai Passat was announced. Ever since then customers have been eagerly waiting, and phone inquiries have flooded the company. Multitudes of visitors were attracted to the month-long exhibition tour of the new model, and about 1,000 customers made reservations with authorized dealers.

Consumers' extreme enthusiasm is attributed to the car's characteristics. As a new model by the German Volkswagen, Passat is the "flagship" of B-class automobiles. It is a frequent prize-winner in the world, having received trophies including "the Best Auto in 1997" in German and Europe, the "Best Auto for Home Use in 1997" in Britain, and "the Best Imported Auto" in 1997 and 1998 in Japan. The Shanghai Passat, modeled

upon its German prototype, has been newly developed to suit Chinese customers' aesthetic standards and purposes, as well as China's road conditions and mandatory rules and regulations. While retaining the essence of the original model, it has gained a style typical to China's market demand. Therefore, as a milestone in the design history of the German Volkswagen, the appearance of the Shanghai Passat on the market, following the Santana and the Santana 2000, marks a new period for Shanghai Volkswagen and Shanghai's auto industry.

To make sure that the Shanghai Passat's entry to the market is smooth, Shanghai Volkswagen and the Shanghai Auto Sales Co. have provided authorized dealers with rigorous training programs and introduced new sales services, fully reflecting the car's brand. Customers will not only acquire a high-quality product, but will also sense the unique Passat culture.



34 BEIJING REVIEW, JUNE 19, 2000

Will We Live on Mars?

By 2017, about the time that children born this year approach voting age,mankind's first tiny settlement on another world may be taking hold. Even for a supposedly spacefaring people, dreaming of Mars is dreaming big.

Back when Apollo astronauts were routinely bunny-hopping on the nearby moon, Mars seemed like an obvious next goal. But during the past 25 years, the best we've been able to muster has been a few unmanned Martian probes. After the two most recent ones famously flamed out, and after last week's scathing report blaming NASA mismanagement for the failures, even that seems beyond us.

And yet Mars is back on the cosmic itinerary. Scientists at NASA and in the private sector have been quietly scribbling out flight plans and sketching out vehicles that, so they say, could make manned landings on the Red Planet not only possible but also economically practical. The hardware, they believe, is largely in hand. The funds, they argue, could be within reach. "Within 25 years," says NASA's Bret Drake, director of mission studies at the Johnson Space Center in Houston, "I project that we could have human exploration of Mars being conducted routinely."

The key to reaching Mars is doing it smart and doing it cheap. In 1989, during the 20th anniversary of the Apollo 11 lunar landing, President Bush challenged NASA to figure out how to put human beings on Mars. The space agency came back with an elephantine 30-year plan that involved construction bays and fuel depots in low-Earth orbit and carried a jaw-dropping price tag of \$450 billion.

For the past decade, ever since NASA's 1989 proposal laid its half-trillion-dollar egg, the space community has been intrigued by a mission scenario known as the Mars Direct plan. Developed by engineers at Martin Marietta Astronautics, a NASA contractor, Mars Direct calls not merely for visiting the Red Planet but also for living off the alien land.

What makes the Mars Direct plan remarkable is how unremarkable the science behind it is. The space-craft in which the astronauts will live are descendants of the same pressurized vessels NASA has been building since the Mercury days. The boosters that will lift the ships off the ground are reconfigured engines cannibalized from the shuttle. The technology needed to distill the Martian atmosphere is the stuff of first-year chemistry texts. For this reason, Zubrin believes, Mars Direct could be surprisingly affordable: about \$40 billion for five missions, or less

我们将会在火星上 生活吗?

(参考译文)

到2017年——也就是今年出生的儿童快到有 投票资格的年龄时,人类有可能实现让少数人到 另一个星球定居。

就连美国这个表面上热衷于航天研究的国家, 关于火星的梦想也是不切实际的。早在阿波罗飞 船的宇航员忙着登月时,火星似乎就已经成为下 一个目标。但在过25年中,我们所能取得的最好 成绩不过是向火星发射了几个无人探测器罢了。 在最近两个火星探测器因故障而烧毁以及上周一 份措辞严厉的报告指责美国航天局管理不善是造 成两次失败的原因之后,就连这些似乎也开始远 离我们。

但是,火星毕竟已经回到宇宙航线上来。美国航天局和私营部门的科学家一直在悄悄制定飞行计划,设计不仅能使人登上这颗"红色星球"、而且经济上也行得通的航天器。他们相信,硬件大体上已经具备。他们认为,资金是可以解决的。美国航天局约翰逊航天中心空间研究主任布雷特·德雷克说:"我估计,用不了25年,我们就能把人送上火星,并到火星进行勘探。"

火星登陆的关键是巧妙登陆和降低成本。 1989年,布什总统在纪念阿波罗11号登月20周年 期间,要求美国航天局解决怎样把人送上火星的 问题。随后,美国航天局提出了为期30年的庞大 计划,其中包括在地球低轨道建造太空舱和燃料 补给站,并开出4500亿美元这一让人咋舌的天价。

在美国航天局1989年提出计划后的10年中, 美国航天界被一项称作"Mars Diriect"的飞行计 划迷住了。Mars Direct计划是美国航天局的承包 商、马丁-玛丽埃塔航天设备公司的工程师制定 的,它不仅提出到火星上做客,而且主张在这片 外星土地上居住。

使Mars Direct计划备受瞩目的,是这项计划 背后潜藏的科学性实在太平凡了。宇航员居住的 宇宙飞船,是从美国航天局自发射"水星"载人 飞船以来一直在研制的增压舱派生出来的。用于 推动宇宙飞船升空的起飞发动机,是用航天飞机 than half the cost of the Apollo program in today's dollars.

But is traveling to Mars on the cheap the best way to go? As the recent failures of NASA's unmanned Mars probes suggest, makeshift machines built with off-the-shelf parts may save money, but when it comes time to fly, they often fall short. At the Johnson Space Center, engineers are thus looking at other Mars scenarios that still include frugal, on-site fuel manufacturing but also call for six-person crews, bigger vehicles and Apollo-style motherships in Martian orbit. "We're trying to take the best ideas and fold them into a reasonable approach," says Drake.

Research teams from NASA and the Mars Society (a private advocacy group) are conducting expeditions to Devon Island in the Canadian Arctic?a place about as similar to the freeze-dried Martian wasteland as you're likely to find anywhere on Earth, to practice survival skills and exploration techniques. Teams at the Johnson Space Center are refining their mission scenarios and crunching their numbers to keep the costs as low as possible.

Times, April 10, 2000

Will We Travel to the Stars?

If you ask whether we will travel to the stars, the answer is probably yes, but it will take a long time. Maybe 500 years. If you ask whether any human being will travel to the stars within the 21st century, the answer is certainly no. The difference between traveling to the nearest star and traveling around our own solar system is about the same as the difference between swimming across the Atlantic and swimming across the Potomac. To get across the Atlantic you need to have a boat or an aircraft. To get to the nearest star you need to have a spacecraft that we have no hope of building within 100 years.

To scoot around the solar system and return within a few years, you need a spacecraft that will cruise at 100 miles a second. At that speed you will get to Mars in 10 days, to Pluto in 16 months. We can imagine a spacecraft carrying a big area of thin film to collect solar energy, with an ion-jet engine to produce thrust powerful enough to boost a spacecraft to a speed of 100 miles a second. It is also possible to build a nuclear-powered jet to do the same job, if the political objections to nuclear spacecraft can be overcome. The quantity of energy available from sunlight or from a nuclear reactor is large enough to take us on trips around our solar system, if we decide to spend the money to do it.

On the other hand, the nearest star is about 10,000

的发动机改造的。用于从火星大气中提取水所需的技术,是早年化学试验的产物。正是由于这一原因,Mars Direct计划所需的费用是完全可以承受的: 5次飞行大约需要400亿美元,按现在的美元计算,还不到阿波罗计划的一半。

但是,难道花钱不多的太空旅行是到火星旅行的最好办法吗?美国航天局火星无人探测器的最近几次失败表明,用现成部件临时制造的代用品也许可以省钱,但一旦轮到它们飞行时,它们常常无法准确抵达目标。因此,约翰逊航天中心的工程师正在考虑其他火星登陆方案:仍包括可节约费用的就地生产燃料,但主张采用可乘6名字航员、体积较大的飞行器和类似阿波罗的火星轨道母船。

美国航天局和火星协会的研究小组正在向位于加拿大北级地区的德文岛派出探险队,以练习求生技巧和勘探技术。德文岛与火星上寒冷干燥的荒原相似。约翰逊航天中心的研究小组正在改进飞行方案,并尽可能地把费用降到最低限度。

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我们会到恒星旅行吗?

(参考译文)

如果你要问我们能否到恒星旅行,答案是很有可能,但是要等很长时间才能实现,也许要等500年。如果你要问人类是否能在21世纪到恒星旅行,答案是肯定不能。到距离我们最近的恒星旅行与在太阳系范围内旅行,两者的区别就像横渡大西洋与横渡波托马克河(位于美国东部,流经华盛顿)的区别。要横渡大西洋,你需要一艘船船或一架飞机;要登上距离我们最近的恒星,你需要的是一艘我们在100年内也无望建成的航天器。

漫游太阳系,并在几年内返航,你需要一艘巡航速度达到每秒100公里的航天器。以这样的速度,10天可到达火星,16个月可到达冥王星。我们可以设想一艘航天器,它装载着收集太阳能的巨大薄膜,并载有一个能产生足够推力、将航天器加速到每秒100公里的离子喷气发动机。如果能克服政治上反对建造核航天器的意见,也可以为

times as far away as Pluto. A trip to the stars within a human lifetime requires a spacecraft that cruises at more than 10,000 miles a second and accelerates to this speed within 10 years. The engine would have to deliver about a megawatt of power for every pound of weight of the ship. There is no way an engine that small and that powerful could keep itself cool. Even if the fuel is something exotic like antimatter, carrying far more energy than sunlight or uranium, the problem of cooling the engine remains insuperable. Travel to the stars within this century, using any kind of engine we know how to build, is not going to happen.

How about unmanned space probes going to the stars? Unmanned probes can be much smaller and lighter than manned spaceships. That means the total power required for a probe to reach the stars is much less. But the unmanned probe still needs an engine delivering one megawatt per pound. The problem of cooling the engine remains the same, whether the ship is manned or unmanned, and the conclusion is the same. Unmanned probes are not going to reach the stars within this century.

Robert Forward, an engineer who used to work for Hughes Aircraft and now works independently, has designed a space probe that might reach the stars, not within this century but a little later. It avoids the problem of cooling the engine by not having an engine. It is a sailing ship, not a steamship. He calls it Starwisp. It is a fishnet made of very fine wires and weighing less than an ounce. The net acts as a sail and is driven by the pressure of radio waves generated by a huge radio transmitter. The transmitter stays put, with its radio beam pointing in the direction we wish to explore, and the sail travels along the beam, picking up momentum from the radio waves. This scheme works beautifully in theory, but there are some practical difficulties to be overcome. The transmitter has to be gigantic and must focus the energy of the beam on the fishnet as it accelerates. The fishnet must absorb only a tiny fraction of the radio waves to avoid being vaporized. The probe must carry instruments to collect information and transmit signals back to earth, and those instruments must weigh less than an ounce. There are enough problems here to keep engineers busy for several centuries, but one day a ship like this will fly.

Ultimately, one can imagine scaling up the Starwisp by a factor of 1 million, so that the fishnet is big enough to carry human passengers to the stars. The radio transmitter to drive it would use far more power than all the power stations on earth now generate. Some day we may have this much power to spare

航天器建造一个核动力喷气发动机。如果我们决 定耗资建造这样的航天器,由阳光或核反应堆提 供的能量就足以使我们在太阳系范围内旅行。

另一方面,距离地球最近的恒星大约是冥王星到地球距离的1万倍。在一个人的有生之年到恒星作一次旅行需要一艘巡航速度超过每秒1.6万公里的航天器,而且要在10年内加速到这个速度。发动机要为航天器的每磅重量提供大约一兆瓦的能量。一个体积如此之小、功率如此之大的发动机,要保持不升温是不可能的。即便使用诸如反物质之类的某种高热值燃料,它所产生的能量远比阳光或铀大得多,但是发动机的冷却问题仍然无法解决。要想使用任何一种我们能够建造的发动机在本世纪内遨游太空是不可能的。

那么,能派无人驾驶的太空探测器前往其他恒星吗?无人驾驶探测器可以比载人航天器小得多、轻得多。这意味着一艘探测器到达恒星所需的总能量要少的多。但无人探测器仍需要一个能为每磅重量提供一兆瓦能量的发动机。不论是载人还是无人驾驶的航天器,同样存在发动机冷却的问题,结论也就是一样的。本世纪内,无人驾驶探测器不可能到达其他恒星。

曾经在休斯 飞机公司工作的工程师罗伯特 · 福沃德,设计出一种虽然不能在本世纪但有可能 在稍晚一些时候到达恒星的太空探测器。这个探 测器没有发动机,从而避开了发动机冷却的问题。 它是一艘帆船,而非汽船。他称其为"星丝" (Starwisp)。它是由纤细的金属丝制成的、外形 类似渔网的东西,重量不足30克。这个网在一个 巨大的无线电发射器产生的无线电波压力的驱动 下, 像船帆一样运动。发射器固定不动, 它的无 线电波指向我们希望探测的方向,探测器沿着电 波的方向运动, 从无线电波获取动力。这个设计 在理论上很完美, 但是有许多实际难题有待解决。 无线电发射器必须非常大,而且在探测器加速时 必须将能量束聚集其上。为了防止被蒸发,探测 器只能吸收微量的无线电波。探测器必须装载收 集信息并将信号传回地球的仪器,而且这些仪器 的重量必须轻于30克。这些难题足够工程师们忙 上儿百年, 但可能终有一天这样的航天器将遨游 太空。

美国《时代》周刊2000年4月10日

for voyages of exploration, but not soon. Perhaps around the middle of the third millennium.

Times, April 10, 2000

Grads With a Cyberlaw Background Have a Decided Edge in the Market

Two years ago, Case Western Reserve law student Chris Gerstle went looking for a summer position that would exploit his background as a Web-page designer. He couldn't find a single law firm in the cities where he was searching—New York, Cleveland, and Washington, D.C.—that had an Internet practice. A year later, Gerstle, a competent student with a 3.5 grade point average, was interviewed for Internet-law jobs by more than 30 firms in those same cities.

Net knowledge. As rapidly as the Internet transforms modern life, it is creating enormous demand for lawyers who can figure out how a body of law written for another age applies. Few areas of practice have been left untouched: Intellectual property lawyers must grapple with protecting the ownership of ideas in cyberspace; attorneys specializing in privacy and censorship issues must calculate whether—and how—Cexisting law controls the flow of information in a revolutionary medium. How do long-standing health laws, banking laws, and securities regulations, for example, affect companies conducting business online?

For law schools, the challenge is to educate future attorneys in an area of jurisprudence that is rapidly evolving: The few casebooks written on the subject so far come with Web sites for frequent revisions. Within the past three or four years, top law schools such as Harvard, Yale, and the University of California have set up centers devoted to the study of Internet law. Courses like Cyberspace Law, Intellectual Property and the Future of the Information Society, and the Law of Electronic Commerce are offered now by nearly every law school in the country. When Mark Lemley, a professor at the University of California-Berkeley's Boalt Hall School of Law, started keeping track three years ago of professors who taught courses or seminars on the Internet, he located just 25 around the world. Today, his mailing list contains 188 names, including about 100 professors in this country representing some 75 law schools. A few institutions, such as Suffolk University Law School in Boston, offer concentrations in the field; graduates of the Suffolk program receive a certificate in high-technology law. Berkeley, whose Internet law program is one

人才市场青睐网络法 毕业生

(参考译文)

两年以前,凯斯——两保留地大学法学院的克里斯·格斯尔想利用自己学过的网页设计知识寻找一份暑期工。他跑遍了纽约、克利夫兰和华盛顿,却找不到一家有网上业务的律师行。一年后,同在这些城市,30多家公司面试了格斯尔:此时的他已是平均级分达到3.5的合格学生。

网络知识 因特网在飞速改变现代生活的同时也大大增加了对一类律师的需求:这些律师知道怎样把为另一个时代编制的法律应用于今天。几乎没有哪一个行业没有受到因特网的影响:知识产权律师必须千方百计保护网络空间中各种新想法的所有权;专业负责隐私和审查问题的律师必须估测现行法律是否应控制以及怎样控制一个革命性媒体中的信息流通。例如,长期存在的卫生法、银行法和证券法怎样影响开展网上业务的公司。

对于法学院来说,目前的问题是为这个发展 迅速的法学分支培养未来的律师: 在这方面的个 案记录是和网站共同出现的,不仅为数很少,而 且需要反复修改。在过去的三四十年中、哈佛、 耶鲁和加利福尼亚这类顶尖的法学院都纷纷设立 了因特网法律研究中心。如今,全国的法学院几 乎都有网络空间法、知识产权和信息社会的未来、 电子商务法等课程。三年前, 当加利福尼亚大学 伯克利分校博阿尔特·霍尔法学院教授马克·莱 姆利开始跟踪调查在因特网上授课或开设研讨会 的教授时,他在全世界只发现了25位。今天,他 的邮件名单上已经有188个名字,其中包括大约75 所法学院的100位教授。有几所大学——比如波士 顿的萨福克大学法学院——提供这方面的专业学 位,这个专业的毕业生可以得到高技术法律学历 证明。伯克利大学的因特网法律教学计划是全国 之最, 共有18门课, 内容包括网络法律问题的概 述、专利权诉讼和生物技术法律等方方面面。

对于许多单独设立了各种因特网法律业务的 律师行来说,持有上述学历的新律师掌握着优势。 即便那些高技术客户寥寥无几的律师事务所也要 of the nation's largest, offers 18 courses, from a general survey of cyberlaw issues to classes on advanced patent litigation and biotech law.

New lawyers with a background in the issues have an edge with the many law firms now establishing separate areas of practice in Internet law. Even firms with few high-tech clients are finding themselves in the business, as low-tech organizations from shopping malls to hospitals to securities firms seek advice on the legal ins and outs of their Web sites or online activities. The registration of so-called dot-com or domain names, for instance, has spawned hundreds of intellectual-property suits against "cybersquatters" who register trademarked company names as Website addresses and then attempt to sell them back to the companies that want to launch their own sites. Companies selling products or services online may run afoul of jurisdictional laws affecting what can be sold in one state or country but not in another. In one recent case, the German government disputed the right of online bookseller Amazon.com to sell Nazi literature to German citizens, since such works are banned in Germany. The company agreed to stop shipping Adolf Hitler's Mein Kampf there. Officials in states where gambling is illegal have challenged online gambling sites accessible anywhere in the country.

The right mix. Besides educating students in the legal issues of cyberspace, the most innovative law schools instill an understanding of its technology. At Detroit's Wayne State University Law School, students in Jessica Litman's the Law in Cyberspace course get all their class assignments on the Internet and must design their own Web page on a cyberlaw topic. In one class, students were instructed to find online examples of hard-core pornography, noxious hate speech, and dangerous or deceptive information and bring them to class. "I wanted them to look at the very difficult questions raised by censorship technologies that filter out the horrible stuff but also potentially block access to information people need," says Litman.

In Jonathan Zittrain's course on the Internet and society at Harvard, students use software that allows them to explore such vexing issues online and critique each other's positions. One exercise, for example, required students to argue whether a woman had broken the law when she unlocked a software code for a CD-ROM inserted in a magazine that contained 2,000 interviews with celebrities. Three of the interviews were available at no cost, and readers could pay to view the rest by calling a phone number. The woman was able to get all 2,000 for free.

处理这类业务: 因为像购物中心、医院和证券公 司等机构都需要有关网站或网上活动法律细节的 建议。所谓的. com或域名登记产生了成百上千 件针对"网络占地者"的知识产权诉讼案: 网络 占地者抢先用已注册的公司名称注册网址,然后 再设法把这些地址卖回给那些想开办自己网站的 公司。在网上销售商品或服务的公司可能会与某 些法律冲突:根据这些法律,在一个州或一个国 家能够销售的东西在另一个州或另一个国家却不 能销售。在最近的一个案例中, 德国政府认为, 亚马孙网上销售公司无权向德国公民销售纳粹文 学作品,因为这类作品在德国属于查禁对象。该 公司最终同意停止向德国销售阿道夫·希特勒的 《我的奋斗》一书。又比如,一些禁赌州的官员对 在全国任何地区都能接入网上赌博站点提出了疑 in .

除了教育学生网络空间中的法律问题以外,最富创意的法学院还向学生逐渐灌输对技术的理解。在底特律韦恩大学法学院杰西卡·利特曼老师的"网络空间中的法律"课上,学生们从因特网下载他们的课程作业,还必须自己设计关于网络法律的网页。在一堂课上,老师让学生们在网上寻找色情作品、表示憎恨的语句和危险或具有欺骗性的信息,并把这些例子带到课堂上。利特曼说:"审查技术虽然能过滤掉那些可怕的内容,但可能也会防碍人们获得所需的信息:我想让学生们面对这个棘手的问题。"

在哈佛大学教师乔纳森·齐特雷恩的因特网和社会课上,特殊的软件使学生们能够在网上探讨这类令人头痛的问题并对彼此的立场提出批评。例如,一个练习说,某份杂志上有2000篇名人访谈,读者可以免费阅读其中三篇,其余的访谈则需要拨通一个电话号码付费阅读;但有位妇女解开了光驱的软件密码,从而可以免费阅读所有的访谈内容。练习要求学生们讨论这位妇女是否违反了法律。

读三年级的绍莎娜·洛帕京说:"在法律的传统领域,我们有现成的条款可能依据。但我们不清楚现有的法律教义是否能应用于因特网。"洛帕京认为,那位妇女违反了法律,因为她破坏了默认的合同:付了杂志的价钱后,她只能阅读其中的三篇访谈内容。洛帕京认为,阅读所有2000

"In traditional areas of the law, the doctrine is there for us to draw on. But it is not clear that the existing legal doctrine will apply to the Internet," says third-year student Shoshana Lopatin, who decided that the woman had broken the law because she had violated an implicit contract stating that, for the price of the magazine, she could view three interviews. Taking all 2,000, Lopatin reasoned, was no different than stealing CDs from a music store. Lopatin recently accepted a position at Sidley & Austin in Washington, D.C., partly because the firm is setting up an Internet practice.

Not everyone is convinced that separate courses about cyberspace®Cor separate practice areas®Care worthwhile. In an article for the University of Chicago Law Review, Judge Frank Easterbrook of the U.S. Court of Appeals for the Seventh Circuit argued that a law of cyberspace makes about as much sense as a law of horses. Easterbrook, a lecturer at the University of Chicago, believes that legal questions that arise because of the Internet should be studied®Cand handled®Cas an integral part of general issues of law. The university itself has taken a similar stance, resisting what Deputy Dean Elizabeth Garrett calls a "trendy" approach to teaching about the issues. Starting next year, the school will require all first-year students to take a course called Technology, Innovation, and Society, which will examine such basics as contracts and torts through the lens of technology. In other courses, Chicago integrates high-tech issues into the general study of law. Garrett teaches a course on the democratic legislative process, for example, that explores privacy issues related to states' practice of putting campaign-finance-disclosure forms on the Internet.

Firms starting Internet practices stress that they are looking for attorneys with a strong general understanding of law who also demonstrate familiarity with Internet business. "The new lawyers we have hired for our Internet group have taken a good combination of Internet law classes and intellectual-property classes," says Vivian Polak. She heads the 50-person Internet group at LeBoeuf, Lamb, Greene & MacRae in New York, the 750-lawyer international firm that hired Chris Gerstle. "What is really important is someone who can instill confidence in clients because they understand the issues from a business perspective."

Balancing a law school course load with outside work in the field would be daunting for the average law student. As a result, some schools are starting to integrate work experience into the curriculum. The University of California-Berkeley, for example, sets up internships that allow students to do legal research 篇访谈和从一家音像店里盗窃光盘没什么两样。 洛帕京最近在华盛顿市的西德利—奥斯汀公司获 得了一个职位,因为该公司正准备开展因特网业 务。

并不是所有人都相信有必要单独划分出关于 网络空间的课程。美国上诉法院第七辖区的法官 弗兰克·伊斯特布鲁克在芝加哥大学《法律评论》 杂志上撰文说,一部网络空间法的意义就和一部 "马匹法"差不多。在芝加哥大学任教的伊斯特布 鲁克认为, 因特网引起的法律问题应当作为一般 法律问题的组成部分来研究处理。芝加哥大学也 采取了同样的态度,在这个问题的教学上拒绝采 用副校长伊丽莎白·加勒特所谓的"流行"方法。 该校将从明年开始要求所有一年级学生参加一门 称作"技术、创新和社会"的课程,这门课程将 通过技术的透镜来探讨合同和民事侵权等基本问 题。在其他课程上, 芝加哥大学则把高技术问题 融入了法律的一般学习。例如, 加勒特讲授的一 门关于民主立法程序的课就探讨了各州把竞选资 金来源情况透露并刊登在因特网上引起隐私权问 题。

开展因特网业务的公司强调,它们正在寻找既对法律有较好的总体了解又熟悉因特网业务的律师。纽约勒伯夫—兰姆—格林—麦克雷公司是一家拥有750名律师的国际律师事务所,该公司由50人组成的因特网业务分部的负责人维维安·波拉克说:"我们为因特网分部招聘的新律师都很好地掌握了因特网法律课和知识产权课。找到这样的律师的确非常重要:他们能够逐渐加强客户的信心,因为他们从商业角度理解这类问题。"

对于一般的法学院学生来说,要兼顾法学院的课程与这一领域的大量课外实践将是一个艰巨的任务。因此,有些学校开始把工作经验与课程结合起来。例如,伯克利加利福尼亚大学就安排学生在硅谷公司实习,而且正在考虑和商学院合作开课。伯克利大学中心负责人帕姆·塞缪尔森说,这样做的目的是让新律师学会像企业家以及他们代表的新兴行业那样思维。塞缪尔森认为,在一个长期以来始终被传统和先例控制的领域,因特网律师们掌握着千载难逢的创新良机。

美国《美国新闻与世界报道》2000年4月10日

for Silicon Valley companies and is considering offering joint courses with the business school. The trick is for new lawyers to learn to think like the entrepreneurs and growing businesses they represent, says Pam Samuelson, co-director of the Berkeley center. In a field long controlled by tradition and precedent, Samuelson believes Internet lawyers have a rare opportunity to create something new.

U.S. News & World Report, April 10, 2000

Suddenly, E-commerce Is The Hot New Specialty

Remember "irrational exuberance"? That was how Federal Reserve Board Chairman Alan Greenspan characterized the stock market's technology-driven surge back in 1996, and the Dow Jones average is up more than 4,000 points since. Until recently, most of the country's 359 accredited business schools dismissed the Internet frenzy as irrational, too. Now, virtually all of them are staking their claim in today's new economy. Consider:

- Five years ago, Vanderbilt University's Owen Graduate School of Management launched the country's first electronic-commerce concentration-with one student. Today, half the school is pursuing the subject, and the program has grown to include a dozen professors, 19 courses, and a center devoted to E-research.
- Last fall, the University of Chicago Graduate School of Business had to post monitors at the door after 225 students tried to register for an E-business strategy class that had seats for 65. Similar stampedes erupted at the University of California-Berkeley's Haas School of Business, where fire marshals intervened, and at the MIT Sloan School of Management, where a third of the student body has signed up for the new E-commerce "track."
- The Harvard Business School, which sent an astonishing 35 percent of last year's graduates to new-economy firms or the venture capital companies that support them, has never had majors-and sees no need to create one for E-commerce. But it has replaced the flagship general management course required of all first-year students with an Internet-laden offering called "Entrepreneurial Management."
- In the past year alone, a dozen institutions, including the University of Pennsylvania's Wharton School, have developed E-commerce concentrations. Scores of others are updating conventional finance and marketing courses with E-business case studies. Carnegie Mellon University unveiled the nation's first

电子商务突然间成了 热门的新专业

(参考译文)

还记得"非理性的繁荣"吗?这曾是联邦储备委员会主席艾伦·格林斯潘1996年对由技术股推动的股市高涨的描述——从那以后,道一琼斯平均指数上升了4000多点。直到最近,美国359所正规商学院中的大部分也还认为人们对因特网的狂热是不理智的。而现在,它们儿乎都在申明自己在今天的新经济中的权利。看看下面的例子:

- 5年前,范德比尔特大学欧文研究生管理学院开设了美国第一个电子商务专业——那时只有一个学生。今天,学院中的一半学生在学习这个专业,而且这个专业的规模已经扩大到包括12名教授、19门课和一个专门的电子调研中心。
- 去年秋天,芝加哥大学研究生商学院有225 名学生想要报名上一门电子商务策略课,而教室 里只有65个座位,后来 学校当局不得不在门口派 了把门的。在加利福尼亚大学伯克利哈斯商学院 和麻省理工学院斯隆管理学院也出了类似的学生 一窝蜂争着上课的情况。在哈斯商学院,最后消 防署署长进行了干预,而在斯隆重管理学院,1/3 的学生报名上新的电子商务课程。
- 去年毕业生中有高达35%的人去了新经济 企业和支持这些企业的风险资本公司的哈佛商学 院从来不设专业——因而也觉得没有必要为电子 商务建立一个专业。但该校已经把所有一年级学 生都必修的主课"普通管理学"换成了一门尽是 因特网知识的名为"企业管理"的课程。
- 单在过去一年里,包括宾夕法尼亚大学沃顿商学院在内的12所学校建立了电子商务专业。 其他儿十所学校也正在利用电子商务的案例研究 来更新传统的金融和市场营销课程。去年5月,卡 内基—梅隆重大学推出了美国第一个电子商务理 科硕士学位,结果吸引了超过3000名申请人来争夺36个名额。

在这种累积赌注似的狂热的后面,是大量的 网络初创公司的出现。这些初创公司使年轻的创 业者成了百万富翁——并引起了大学校园内学生 的丰富想象。去年在哈佛大学诞生了超过100家学 M.S. in E-commerce last May, drawing more than 3,000 applicants for 36 slots. "It's a gold rush," says the B-school dean, Douglas Dunn.

Behind the jackpot fever is the slew of dot-com start-ups that have made millions for young founders-and ignited imaginations on campus. More than 100 student ventures took root at Harvard last year, and half had funding by graduation. At the University of Michigan, where first-year students are required to complete a semester-long project, 75 worked on their own or classmates' start-up ideas.

Yet dot-com start-ups represent only a tiny slice of a "much, much larger revolution that literally is transforming every kind of company," says Joseph Morone, president of Bentley College in Waltham, Mass., whose new Information Age M.B.A. incorporates E-business into every course. Technology has squashed corporate hierarchies and streamlined supply routes.

Like the corporations that hire the bulk of their students, B-schools are adapting to this wired new world in very different ways. "The fact that [Vanderbilt] saw so early that this was worth a concentration-that awareness alone is what sold me," says E-commerce marketing major Julia Saltonstall, 29. Saltonstall's six required courses have taught her how to mine databases and Net-user demographics for shopping trends, for example. Wharton's "Managing Electronic Commerce" concentration pools 35 existing courses with E-business components from such diverse disciplines as finance and health care.

Many top-tier schools, notably Chicago, Harvard, the University of Virginia, and Stanford, prefer to weave E-commerce throughout the curriculum. Cyberworkers are discussed in the context of organizational behavior, for example, rather than in a separate course on virtual organizations. The idea is to provide a foundation of general management skills that students can apply to any kind of company. "The Internet doesn't change the way we do business," contends Edward Snyder, dean of Virginia's Darden School. "It's bringing the old paradigms into today's world."

Whichever approach appeals to prospective students, they'll want a school that emphasizes hands-on experience. Top programs of all stripes require M.B.A. candidates to tackle actual problems for real organizations. At Vanderbilt, for example, corporate sponsors like Hewlett-Packard and iVillage.com pay \$25,000 a year for teams of "consultants" to assess the markets for their products, or to develop E-commerce business plans. Bentley students recently helped the search-engine Lycos figure out a market-

生企业,其中一半到毕业时已经有了资金。在规定一年级学生必须完成一个延续一学期的项目的密歇根大学,有75个学生按照他们自己或同学的创业计划创办了公司。

位于马萨诸塞州沃尔瑟姆的本特立学院院长约瑟夫·莫罗内认为,网络初公司仅仅代表了一个"实际上改变了任何类型公司的一场范围巨大得多的革命"的一个很小方面。本特立学院新的信息时代工商管理硕士计划把电子商务知识融入每一门课程中。新技术已经粉碎了企业内森严的等级制度,并精简了供应渠道。

就像那些雇用了它们的大部分学生的企业一样,各个商学院也在用非常不同的方法适应这个以网络连结起来的新世界。29岁的电子商务营销专业研究生朱莉娅·索顿斯托尔说:"范德比尔特大学很早就发现值得把电子商务作为一个专业,这件事情——单是这种意识,就使我动了心。"比如说,索顿斯托尔学的6门必修课已经让她学会了怎样利用数据库和有关上网者的统计图表中预测未来的购物趋势。沃顿商学院的"电子商务管理"专业把现有的35门课程与金融、保健等差异甚大的科目中的电子商务成分结合到一起。

许多顶尖的学校,特别是芝加哥大学、哈佛大学、弗吉尼亚大学和斯坦福大学等,都更喜欢把电子商务的内容融入整个课程中去。比如说,学生通过联系整个组织的行为进行有关电脑工作者的讨论,而不是在一门单独的课程中就虚拟的组织泛泛而谈。学校是希望给学生提供一个在各种公司都适用的普通管理技巧的基础。弗吉尼亚达登商学院校长爱德华·斯奈德承认:"因特网并没有改变我们做生意的方法,它只不过把过去的例子搬到了今天的世界。"

不管哪一种方法能够吸引未来的学生,学生们都希望碰到一所注重实践经验的学校。最出色的工商管理硕士培养计划要求攻读者能解决实际企业中的实际问题。比如在范德比尔特大学,诸如惠普和iVillage.com等赞助个业以每年2.5万美元的报酬让一些"顾问"小组来帮它们评估产品的市场前景,或帮它们作发展电子商务的计划书。本特立学院的学生最近帮助网络搜索引擎Lycos公司起草了一份开办电子零售分公司"LYCO商店"的市场计划书。

ing plan for the launch of LYCO Shop, its E-tailing spinoff.

Good programs often ask students to identify an online niche, then write a business plan to exploit it. Dogs4you.com, the project Saltonstall worked on with four classmates last fall, would provide the buyers of 1.8 million purebred puppies sold annually with a database of reputable breeders, "head to tail" shipping insurance, chat rooms, and "puppy cams" for checking on the pets in the kennel. Expected first-year revenue of \$1.5 million from user fees and sales commissions would quickly offset \$1.7 million in start-up costs-at least on paper.

Most E-commerce programs "teach" technology by installing state-of-the-art systems and expecting M.B.A. students to use them. At Rensselaer Polytechnic Institute's Lally School of Management, which began a new E-commerce concentration this spring, an interactive lab lets students around campus or across the globe collaborate on Web projects. Every Harvard B-school course now is posted as a Web page and can include video clips or up-to-the-minute company financial statements. Carnegie Mellon's emphasis on understanding hardware and software systems sets the school's program apart. The 12-month program, which results in a master of science degree, is run jointly by the computer science department and the B-school.

In a field so new, real-time research should inform what goes on in the classroom. "If you don't have that, you don't have a program," says Vanderbilt Prof. Donna Hoffman, whose students' findings on such issues as online consumer behavior become fodder for next semester's classes. Harvard established a Silicon Valley research outpost that has churned out 50 case studies of new-economy companies in the past 18 months; Stanford plans a \$20 million E-business research center.

Corporate America is snapping up these E-commerce grads. Saks, the department store chain, hired four Vanderbilt students last year, while Dell Computer's online division snagged 22 MIT-Sloan graduates. And it's not just the "E-tailers" that need these managers: Forrester Research predicts that business-to-business E-commerce will grow to 10 times the expected market for consumer transactions this year. The typical signing bonus for Vanderbilt E-commerce grads last year was \$22,611—50 percent more than for grads in finance or marketing. As for Julia Saltonstall, someone else will have to launch dogs4you.com: She is weighing offers from Dell Computer, FedEx, a large brand management company, and a bank making its own leap into cyberspace.

US News and World Report, April 10, 2000

优秀的研究生计划常常要求学生在网上找到一个合适的市场,然后写出对此进行开发的商业计划。去年秋天索顿斯托尔和她的4名同学一起开发了一个Dongs4you.com网站项目,该网站将向每年销售出的180万只纯种小狗的买主提供有关著名饲养商的数据库、聊天室、对小狗的全程运输保险以及查看小狗在狗窝中情况的"摄影机"。预计第一年对网站访问者的收费和销售小狗的佣金收入是150万美元,这笔收入将很快抵消网站170万美元的启动资金——至少在理论上是如此。

大部分电子商务计划让学生学会电子商务技术的方法都是安装最新技术水平的系统并希望攻读工商管理硕士的学生能够使用它们。在今年春天新设立了一个电子商务专业的伦塞勒工艺学院拉里管理学院,交互式实验室使校园各处或全球各地的学生能够合作开展网络项目。哈佛商学院的每一门课程现在都以网页方式张贴出来,上面可能包括录像剪辑或最新的公司财务报告。卡内基一梅隆大学对了解硬件系统和软件系统的强调使该校的研究生计划一分为二。这项历时一年、授予理科硕士学位的培养计划是由计算机系和商学院共同管理的。

在像电子商务这样的新领域中,应该进行实时研究以便为课堂上的教学提供素材。范德比尔特大学教授唐纳·霍夫曼说:"如果你不进行实时研究,就等于你没有研究生计划。"他的学生在诸如网络消费者行为之类事情上的研究结果成了下一学期课堂上的素材。哈佛在硅谷建立一个研究站,该研究站在过去18个月里搞出了50个有关新经济公司的案例研究;斯坦福大学则计划建立一个耗资2000万美元的电子商务研究中心。

美国企业界正争相雇佣这些学习电子商务的毕业生。萨克斯连锁百货商店去年雇佣了4名范德比尔特大学的学生,而戴尔计算机公司的在线分公司要了22名麻省理工学院斯隆管理学院的毕业生。而且需要这些管理人才的不仅仅是电子零售企业:福里斯特研究公司预计今年企业间电子商务的规模将增加至预期的消费者交易市场的10倍。去年范德比尔特大学电子商务专业毕业生一般的签约酬金是22611美元——比金融或市场营销专业的学生高50%。

美国《美国新闻与世界报道》2000年4月10日

The King and His Hawk

Genghis Khan was a great king and warrior.

He led his army into China and Persia and he conquered many lands. In every country, men told about his daring deeds; and they said that since Alexander the Great there had been no king like him.

One morning when he was home from the wars, he rode out into the woods to have a day's sport. Many of his friends were with him. They rode out gaily, carrying their bows and arrows. Behind them came the servants with the hounds.

It was a merry hunting party. The woods rang with their shouts and laughter. They expected to carry much game home in the evening.

On the king's wrist sat his favorite hawk; for in those days hawks were trained to hunt. At a word from their masters they would fly high up into the air, and look around for prey. If they chanced to see a deer or rabbit, they would swoop down upon it swift as any arrow.

All day long Genghis khan and his huntsmen rode through the woods. But they did not find as much game as they expected.

Toward evening they started for home. The king had often ridden through the woods, and he knew all the paths. So while the rest of the party took the nearest way, he went by a longer road through a valley between two mountains.

The day had been warm, and the king was very thirsty. His pet hawk had left his wrist and flown away. It would be sure to find its way home.

The king rode slowly along. He had once seen a spring of clear water near this pathway. If he could only find it now! But the hot days of summer had dried up all the mountain brooks.

At last, to his joy, he saw some water trickling down over the edge of a rock. He knew that there was a spring farther up. In the wet season, a swift stream of water always poured down here; but now it came only one drop at a time.

The king leaped from his horse. He took a little silver cup from his hunting bag. He held it so as to catch the slowly falling drops.

It took a long time to fill the cup; and the king was so thirsty that he could hardly wait. At last, it was nearly full. He put the cup to his lips and was about to drink.

All at once there was a whirring sound in the air, and the cup was knocked from his hands. The water was all spilled upon the ground.

The king looked up to see who had done this thing. It was his pet hawk.

The hawk flew back and forth a few times, and then alighted among the rocks by the spring.

The king picked up the cup, and again held it to catch the trickling drops.

This time he did not wait so long. When the cup was

成吉思汗的教训

成吉思汗是举世闻名的国王和统帅。

他率领军队到过中原和波斯,并征服了许多地方,在许多国家里,人们都谈论着他的丰功伟绩。 他们说,从亚历山大以来,没有一个国王能比得上 他的威名。

一天早晨,他刚从战地回家,又骑着马到森林 去狩猎一天。许多朋友和他在一起。他们带着弓箭, 兴致勃勃地骑在马上,后面跟着很多带猎狗的仆人。

这是一支欢乐的猎队。森林里充满着他们的叫 声和笑声。他们都希望傍晚时候能够多带一些猎物 回来。

国王的手腕上歇着一只他心爱的鹰。当时,鹰 是被训练来打猎用的。主人一声令下,它们就飞到 高空,寻找猎物。当它们发现一只鹿或兔子时,就 会像箭一般迅疾地俯冲下去攫住猎物。

成吉思汗和他的朋友们骑在马上,整天在森林 中奔驰。可是,从早到晚,他们只获得了为数不多 的猎物。

傍晚时分,他们动身回家。国王时常骑马经过 那座森林,他熟悉所有的路径。当其余的人都选择 近路返回的时候,他走的却是从两山夹谷间通过的 一条较远的路。

天气炎热,国王觉得十分口渴。他那心爱的鹰 已经离开他的手腕飞去,看来他会独自寻找回家的 路了。

国王骑马慢慢前进。他以前曾在这条路边看到 过一潭清澈的泉水。这时,他多么希望能找到它 啊!但是,盛夏的骄阳早已把所有山间的溪流都晒 干了。

后来,他发现有一处岩石的边缘往下滴水,这 使他非常高兴。他知道在上面较远的地方有一潭泉 水,雨水季节,这里经常淌下一股很急的泉水,但 是现在却只有细小的水滴了。

他跳下马来,从猎袋里拿出一只小小的银杯, 用它去接那慢慢落下的水滴。

要接满一杯水需要很长的时间。国王十分口渴, 他等得有点不耐烦了。后来,快要盛满一杯了。他 把杯子凑到嘴边,正要把水喝下去。

这时空中突然响起一阵羽翅拍打的声音,杯子 从他手中被碰撞下来,水完全泼在地上。

国王想弄清究竟是什么东西在跟他捣蛋,抬头 一看,原来是他心爱的鹰。 half full, he lifted it toward his mouth. But before it had touched his lips, the hawk swooped down again, and knocked it from his hands.

And now the king began to grow angry. He tried again; and for the third time the hawk kept him from drinking.

The king was now very angry indeed.

"How do you dare to act so?" he cried. "If I had you in my hands, I would wring your neck!"

Then he filled the cup again. But before he tried to drink, he drew his sword.

"Now, Sir Hawk," he said, "this is the last time."

He had hardly spoken, before the hawk swooped down and knocked the cup from his hand. But the king was looking for this. With a quick sweep of the sword he struck the bird as it passed.

The next moment the poor hawk lay bleeding and dying at its master's feet.

"That is what you get for your pains," said Genghis Khan.

But when he looked for his cup, he found that it had fallen between two rocks, where he could not reach it.

"At any rate, I will have a drink from that spring," he said to himself.

With that he began to climb the "steep" bank to the place from which the water trickled. It was hard work, and the higher he climbed, the thirstier he became.

At last he reached the place. There indeed was a pool of water, but what was that lying in the pool, and almost filling it? It was a huge, dead snake of the most poisonous kind.

The king stopped. He forgot his thirst. He thought only of the poor dead bird lying on the ground below him.

"The hawk saved my life!" he cried; "and how did I repay him? He was my best friend, and I have killed him."

He clambered down the bank. He took the bird up gently, and laid it in his hunting bag. Then he mounted his horse and rode swiftly home. He said to himself, "I have learned a sad lesson today; and that is, never to do anything in anger." 这鹰来回飞了一阵,就在泉边的岩石间歇了下来。 国王只好拾起杯子,重新去接滴着的泉水。

这一次,他没有等很久,刚盛够半杯就举起来要喝。 可是,还没等杯子挨到嘴边,那只鹰又冲了下来把杯子从 他手中打落下去。

这时,国王开始发怒了。他试着再去接水,可是鹰又 第三次阻拦了他喝水。

现在国王愤怒极了。

"你胆敢这样放肆!"他大声叫道,"如果你在我手里, 我非把你的脖子扭断不可!"

于是他又接满了一杯水,并在喝水之前把剑抽了出来。 "好吧,鹰先生!"他说,"这可是最后一次了。"

话还没有讲完,那只鹰又猝然飞下,把杯子从他手中 击落下来。这一次他早就有了准备,当鹰飞过来时,他很 快把剑一挥,砍中了它。

顷刻之间,这只可怜的鹰就流着鲜血,死在主人的脚边。

"你这是自作自受!"成吉思汗说。

但是,当他寻找杯子时,发现杯子已经掉落在两块岩石中间,而且是他手无法够到的地方。

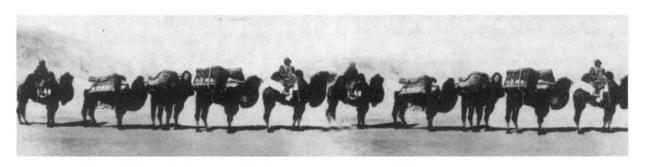
"无论如何,我得在这里喝杯水再走。"他自言自语说。 于是,他开始攀登陡峭的山崖,朝泉水滴下的地方爬去。这是一件非常艰苦的事情,因为他爬得越高,口越是 渴。

最后,他终于爬到了这一地方,那里真的有一潭泉水。 但是,他看见有个什么东西躺在水里,几乎把水潭都塞满 了。仔细一看,原来是一条巨大的死蛇——一条有着剧毒 的蛇的尸体。

国王呆住了。他忘记了口渴,一心只想着躺在崖石下 面的那只可怜的鹰。

"那只鹰救了我的性命!"他叫道,"可我是怎样报答它的呢?!它是我最忠实的朋友,可是我却把它杀死了!"

他爬下山崖,郑重地拣起这只鹰来,把它放在猎袋里。接着,他跃身上马,急驰回家。他自言自语地说:"今天我得到了一个惨痛的教训,这就是:盛怒之下,切忌妄动!"



Welcome to Shantou

Shantou (Swatow), known as the hometown of many overseas Chinese, is one of the four special economic zones China established in the early 1980s. Located on the eastern coast of Guangdong Province, Shantou has historically served as a foreign trade port for eastern Guangdong, southern Jiangxi and western Fujian provinces. It now has under its jurisdiction eight counties, one city and six urban districts, with a total population of 9.3 million. In addition, another 6 million people and foreign citizens of Shantou origin reside in reside in other countries, while over 1 million now live in Hong Kong and Macao.

Shantou boasts favorable natural conditions, including a pleasant subtropical climate, abundant water resources and fertile farmlands. Its people have rich experience in both intensive and scientific farming, giving a great impetus to agricultural developments. Its long, zigzag coastline frames teem with fishing grounds, and its soil abounds with minerals including porcelain clay, granite and non-ferrous metal ores.

Traditionally an important light industrial centre, Shantou has seen remarkable development in a variety of industries in recent years. The city has built a number of factories in new fields such as sensitive materials, supersonic instruments, electronics, plastics, textiles and foodstuffs, while maintaining time-honored production of drawnwork, ceramics, fishing nest, garments and arts and crafts. Its products sell well throughout China and 30 percent of Shantou's output is sold on the international market.

The local cuisine is also famed both at home and abroad for its flavor, color and variety. This, together with a pleasant climate and a picturesque landscape dotted with scenic spots and historical sites, makes Shantou an ideal place for sightseeing or spending a summer holiday.

Since becoming a special economic zone in August 1980, Shantou has won the interest and co-operation of businessmen from overseas and Hong Kong and Macao. Its many foreign-funded enterprises, joint ventures, co-operative enterprises and enterprises specialized in processing imported materials have yielded good economic results. With expanding markets and steadily increasing profits, these businesses have been operating to the satisfaction of all involved. In order to further implement China's policy of opening to the outside world, Shantou will adopt measures to promote co-operation and open more channels for foreign and overseas Chinese investment. The city will also import advanced technology and equipment and adopt modern management methods to energetically develop its traditional industries alongside modern industry and tourism.

In opening even wider to the outside world, Shantou will make continual efforts to create a good investment environment. With the approval of the government, preparations for the expansion of Shantou Airport are being made so that it will accommodate jumbo jets when it is completed. A container wharf is also under construction, and is due to be commissioned in August. In addition, work on a large passenger wharf

欢迎您到汕头来

编者注:《北京周报》曾和汕头合作出版了一本《汕头投资旅游手册》,这是"前言",我们转载于此供大家从事类似的翻译参考。

著名侨乡汕头是八十年代初中国新辟的四个经济特区之一。它地处广东省东部沿海,腹地广阔,公路纵横,海、河航运方便,历史上是粤东、赣南、闽西货物集散地,对外贸易的港口。现辖八个县、一个市,六个市区,九百三十多万人口。还有侨居海外的华侨华裔六百万人,港澳同胞一百多万人。

油头有得天独厚的自然条件、气候温和,水源丰富,土地肥沃,四季常青。人民又有精耕细作、科学种田的丰富经验,对发展农业生产上分有利。海岸线曲折漫长,渔场广阔,有发展海洋捕捞和水产养殖的良好条件。矿产资源丰富,以瓷土、花岗石、有色金属蕴藏量最大。

油头历史上曾是广东轻工业的一个重要基地,近年来工业门类又有了新的发展。现已建立了感光材料、超声仪器、电子、塑料、纺织、食品、抽纱、陶瓷、渔网、服装、工艺等一批骨干行业,产品畅销国内,还约有百分之三十的产品进入了国际市场。

文化教育较发达。从中等教育到高等教育, 从普通教育到各种职业技术教育,从全日制学校 到业余学校,遍及城乡,迅速发展,人才辈出。 潮油人民一向勤劳、勇敢、聪敏、劳力充裕,工 价低廉。当前,社会秩序安定,人民安居乐业, 于群团结一致,共兴"四化"大业。

潮汕名菜佳肴,色香味俱全,蜚声海内外。 气候宜人、山光水色,旖旎迷人,名胜古迹甚多, 是发展旅游观光、消暑渡假的好地方。

油头从1980年8月建立经济特区以来,得到国际人士、华侨、港澳同胞的日益关注和真诚合作,使已投产开业的外商独资、中外合资、合作和来料加工企业,取得了良好的经济效益。产品销路不断扩大,所获利润不断增加,合作双方都感到满意。为进一步落实对外开放的政策,我们将进一步采取多种形式,通过多种渠道,引进外资、侨资,引进七十年代末、八十年代初的先进技术设备和科学管理,大力发展传统工业、新兴工业和旅游业,把油头建成具有侨乡特色的经济特区。

为适应对外开放的需要, 我们将进一步创

is being stepped up. A wharf for coal, grain and sundry goods is now on the drawing board. The proposed site of a 10,000-ton-class deep-water harbor is being studied, and much has been done to prepare for the new Guangzhou-Shantou Railway.

To ensure sufficient supplies of energy, the Shantou authorities have decided to build a number of power plants in cooperation with the provincial government. Beginning in January 1985, the Guangdong power grid has been sending the city an additional 100,000 to 200,000 kwh of electricity every day, a figure which will be increased to 500,000 kwh in the second quarter of the year. Shantou has also signed agreements with a foreign business of a thermal power plant with an annual capacity of 200,00 kw.

In telecommunications, a 7,000-channel telephone switchboard is being installed in the city proper, while a microwave cable and a telex system are now under construction. A longdistance direct-dialling system to Guangzhou and Hong Kong and Macao is expected to be commissioned before the end of this year.

Shantou will adopt flexible and preferential policies towards foreign investors, including the most favorable terms on land use, workshop rentals, labor services, taxation, marketing and entrance and exit procedures. In addition, the city will further simplify formalities to raise its efficiency. It will protect investors' property, due profits, legal rights and interests as prescribed by Chinese law. Even more preferential treatment will be offered to overseas Chinese and Hong Kong and Macao compatriots who are interested in making investments.

The future of the Shantou Special Economic Zone is bright and promising. We sincerely welcome Hong Kong, Macao and Taiwan compatriots, overseas Chinese and foreign businessmen in finance, industry and commerce to visit Shantou for sightseeing, fact-finding trips or business talks, regardless of the amounts and methods of their investments. We want to create convenient conditions for you, and sincerely co-operate with you for your success.

Co-edited by the Beijing Review Editorial Board and Shantou's Publicity Department, this Handbook for Investment and Tourism in Shantou (in Chinese and English) gives a brief account of the city, its history and its attractions, which, I hope, will be of help to you.

造良好的投资环境。交通方面: 经国家批准,油 头正在筹备扩建飞机场,以便大型客机起降;集 装箱码头1985年8月可交付使用;大型客运码头 正在加紧建设;煤炭、粮食、杂货专用码头也已 进行筹备施工;万吨级深水港口码头正在选点筹 建;广州——油头铁路的筹建也作了大量工作。

能源方面: 为确保汕头电源充足可靠,我市已与省合资办电,从1985年1月起,省电网每天多给汕头10至20万度电,第二季度起,每天增至50万度,此外,已同外商签订了协议再兴建20万瓦火力发电厂。

电讯方面:市区已开始增装7千门电话交换机,同时抓紧进行微波通讯和电传通讯的建设,1985年可以实现通往广州、港澳等地长途电话用户自拨。

对客商来油投资兴办企业,我们将实行更加开放和优惠政策。土地使用、厂房徂金、劳务提供、税收、产品销售、出入境等方面,给予最优惠待遇。我们还将进一步简化手续,提高办事效率,并依法保护投资者的资产、应得利润和合法权益。华侨、港澳同胞前来投资兴办企业,我们将给予更加优惠的待遇。

汕头经济特区的发展前景是广阔、美好的, 在汕头投资兴办企业是大有可为的。我们热诚欢 迎港澳同胞、台湾同胞、华侨和各国金融界、工 商界人士前来汕头观光、考察和就各自感兴趣的 合作项目进行恰谈,投资多少,采用方式、一概 不拘。我们将为你们在汕头投资开拓事业的成功 提供便利条件,通力合作。

由《北京周报》编辑部和本市有关部门合 编出版的这本《汕头投资旅游手册》(中、英文 版),概括地介绍了本市的基本情况和投资旅游 须知,希望它对您有用。



A Couple's Cake Bet

One day a couple baked three cakes, After each ate one, they argued about the third, for both wanted it. Finally they made a bet that the one who could keep silence longest would get it.

The two were firmly silent in the beginning. Soon, however, a thief groped his way into their house, taking everything of value.

Neither one of the couple uttered a single word because of their bet.

Getting no response, the thief believed the two must be ill and thus became so audacious as to attempt to rape the woman. Still the husband made no sound. His wife, furious, couldn't help crying out, "You stupid man! For one cake you will even let a thief bully your wife!"

The man burst into laughter and clapped his hands. "Ah, you spoke at last! Well, I am entitled to the last cake."

A Smooth Talking Daughter-in-Law

Once there was a smooth talking daughter-in-law who always played petty tricks. One day at meal time she filled a bowl with rice for her father-in law, who tasted it and said "How appetizing! I should like to eat three bowls."

Hearing this, the smooth talking woman said hurriedly, "It was I who cooked the food."

But, at the second bite, a crunching sound came from the old man's mouth. He spat out the rice and complained, "There is sand in it!"

The daughter-in-law quickly countered, "It was my sister-in-law who washed the rice."

Stirring his rice with chopsticks, the old man smelled it and then asked, "Isn't the rice a bit burnt?"

This time the smooth talking daughter-inlaw replied, "It was my mother-in-law who tended the kitchen fire."

A Man with a Poor Memory

In the Qi State there once was a man with a poor memory. When walking along the street he would forget where he was, when sleeping he would forget to get out of bed. His wife was very worried and suggested, "Mr. Ai Zi is famous for being able to cure all kinds of diseases. Why not go and see him?"

"All right, I'll go right now." Mounting his horse and grabbing an arrow the man started out.

夫妻争饼

从前,有一对夫妻做了三块饼。他俩各吃了一块,剩下一块都争着要吃。于是, 他俩商定:谁一直不说话,这饼就 归谁。

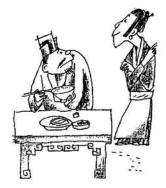
> 刚开始,两人都憋住劲,一声 不吱。后来,有个小偷摸进家里偷 东西,见值钱的就拿。夫妻俩为了 打赌的事,谁也不愿先吭一声。

小偷见他们都不说话,以为准 是有病,便胆子越来越大,竟动手去 污辱那女人,丈夫见此仍缄口不言。妻 子这回可急了,大喊起来:"你这个蠢货, 为了一块饼,就连贼欺负我,也不管呀!" 丈夫一听妻子叫出声来,立即拍掌大笑:

"哈哈,你到底开口说话了,这块饼该归我吃!"

巧嘴媳妇

有个巧嘴媳妇,善要小聪明。有一天,她给公公盛了一碗米饭。公公吃了一口,称赞道:"今天的饭真香,我可要吃上三碗。"



巧媳妇听到夸奖, 忙说: "这顿饭是俺做的。"当公公 吃第二口时, 只听"咔嚓" 一声, 公公忙着把饭吐了出 来,叫道:"哎呀, 怎么这么 多砂子!"

巧媳妇抢着说:"那是小 姑淘的米。"

公公用筷子在饭里搅了 搅,闻一闻,问道:"怎么这 饭还有点糊味呢?"

那巧嘴媳妇回答得更干脆: "那是妈烧的火!"

健忘者

齐国有个得了健忘症的人,走起路来就忘了停步,躺下睡觉便忘了起床。妻子很是犯愁,就对他说:"艾子先生医术高明,能治好疑难病症,你为什么不前去求医呢?"

丈夫听了,说:"好吧,我现在就走。"说完,便骑着马,带着弓箭出发了。

Not much later, feeling uncomfortable in his bowels,

the man dismounted, tied his horse to a tree, stuck the arrow into the ground, and relieved himself. Upon finishing, the man was greatly astonished to see the arrow beside him. "What danger! Who knows where the arrow came form! I was nearly shot."

Looking back in alarm, he saw the horse behind him and immediately his concern turned to delight. "Although the victim of a false alarm, I have obtained a horse in return."

Considering this, the man went to unfasten the horse, but stepping forward, he happened to trample right on his own feces. He flew into a rage, stamping his foot in fury and shouting "Whose dog has shit here, getting my shoes filthy!"

Then the man got on his horse again and went away in the opposite direction. Very soon he was back at his own gate. Dismounting he walked back and forth, murmuring, "Whose house is this" Is this where Mr. Ai Zi lives?"

At that moment his wife came out and was furious at seeing him. Depressed at being cursed by the woman, the man muttered, "It's unfair. We are strangers to each other, so why are you speaking to me so sharply?"

A Phlegmatic Man

A rather phlegmatic man and his friend were warm-

ing themselves by the fire in winter. Noticing a corner of his friend's coat catching fire, the first man said unhurriedly, "I should like to tell you something, but I am afraid you'll get upset on hearing it. If I don't tell you, however, it may do you great harm. So I'm wondering whether to tell you or not."

His friend asked anxiously, "What is it?"

"Your coat is on fire," said the man."

The friend hastily patted out the fire and asked the man angrily, "Why didn't you tell me earlier?"

"I knew you would get upset, and now I'm proved right," replied the man.



没走多远,他觉得肚子憋得慌,便下了马,把

箭插在地上,又把马拴在树上,就去解大手。当他解完手后,一看那枝箭,大吃一惊道:"多险哪!不知何处飞来的流箭,差点射中了我。"

正在慌乱之时,回着一看, 见了那匹马,不由得转忧为喜 地说:"虽然受了一场虚惊, 却得到了一匹马。"

说完,他再去解缰绳。刚一迈步,正好踩着自己拉的粪便,顿时勃然大怒,连连跺脚骂道:"是哪条狗在此拉屎,把我的鞋子弄脏了!"

发了一通脾气之后,他就 骑马朝来时的反方向走去。不 一会儿,又回到自己家门口。 他下了马,在门外徘徊良久, 自言自言道:"这是谁的住 所?莫非就是艾子老先生的家 吗?"

正在犹豫之际,他妻子恰 好出门,一看便火冒三丈。骂

了他一顿。他感到非常沮丧,喃喃地说:"你这个娘子,实在毫无道理,咱们素不相识,你何故出口伤 人?"

慢性子

有一个慢性子的人,冬天与朋友围炉取暖,他

看见朋友衣裳的一角被火烧着了,还是慢条斯理地说:"有一件事儿,其实我早已看见,想对你说吧,又怕你性子急;如果不告诉你吧,恐怕对你损害更大了。我是说好呢?还是不说好呢?"

朋友忙问: "究竟是什么事?" 慢性子的人这时才说: "火烧 着你的衣裳了。"

朋友一听,赶忙拍打衣裳,把 火扑灭了。他恼怒地责问慢性子的 人:"你为什么不早说?"

那人说: "我说你的性子急,果然是这样!"



剖马去肝

有位客人说: "马的肝脏有剧毒, 人吃了就会

Cut Open a Horse and Take Out Its Liver

A guest said to Yu Gong, "Horse liver is extremely poisonous. People can be poisoned to death by eating it."

Thinking this ridiculous, Yu Gong said with a smile, "Don't try to fool me. A horse is born with a liver in its belly and lives well. Why doesn't it die?"

Joking, the guest reasoned, "The very reason a horse cannot live for one hundred years is that it has a liver."

Yu Gong suddenly seemed to see the light. Hurrying home, he cut open his horse and took out its liver. The horse died at once. Dropping his knife to the ground, Yu Gong sighed with feeling: "A horse liver is really, as my guest put it, poisonous. My horse died even after its liver was taken out.

Imagine what would have happened if its liver had remained there!"

中毒身亡。"

迁公听了这话, 不禁发笑道: "你这些话完全是哄骗人的。肝 生来就在马肚里, 马为什么不 死? "

客人有意跟他开个玩笑,说: "马之所以活不到一百年,就是 因为它肚子里长着肝脏的缘故。"

迂公听了,恍然大悟,急匆 匆地回到家里,把自己养的那匹 马剖开腹部,取出肝脏,马立刻 就死了。迂公扔下刀子,连连感 叹道: "客人的话果然不错,这 马肝就是有毒! 我现在把它取出 来, 马尚且活不了, 更何况让它

继续留在马肚子里呢?"

精读文选

Rip Van Winkle (I)

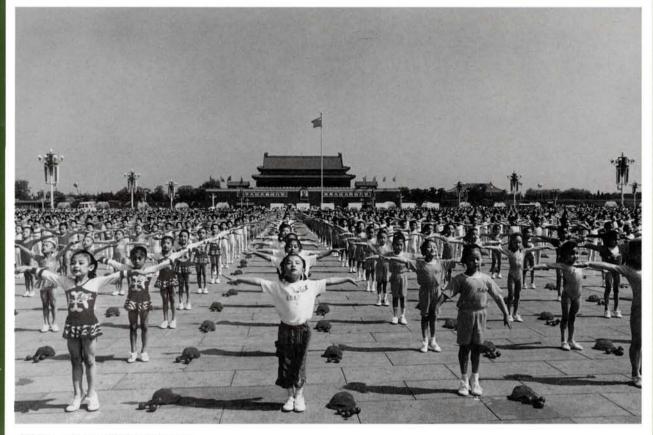
A posthumous writing of Diedrich Knickerbocker.

Whoever has made a voyage up the Hudson must remember the Kaatskill Mountains. They are a dismembered branch of the great Appalachian family, and are seen away to the west of the river, swelling up to a noble height, and lording it over the surrounding country. Every change of season, every change of weather, indeed, every hour of the day, produces some change in the magical hues and shapes of these mountains, and they are regarded by all the good wives, far and near, as perfect barometers. When the weather is fair and settled, they are clothed in blue and purple and print their bold outlines on the clear evening sky; but sometimes when the rest of the landscape is cloudless, they will gather a hood of gray vapors about their summits, which, in the last rays of the setting sun, will glow and light up like a crown of glory.

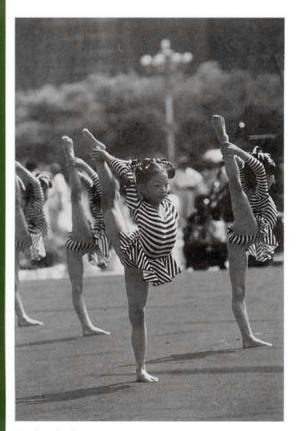
At the foot of these fairy mountains, the voyager may have descried the light smoke curling up from a village whose shingle-roofs gleam among the trees just where the blue tints of the upland melt away into the fresh green of the nearer landscape. It is a little village of great antiquity, having been founded by some of the Dutch colonists in the early times of the province, just about the

beginning of the government of the good Peter Stuyvesant (may he rest in peace!), and there were some of the houses of the original settlers standing within a few years, built of small yellow bricks brought from Holland, having latticed windows and gable fronts, surmounted with weather-cocks.

In that same village, and in one of these very houses (which, to tell the precise truth, was sadly time-worn and weather-beaten) there lived many years since, while the country was yet a province of Great Britain, a simple good-natured fellow, of the name of Rip Van Winkle. He was a descendant of the Van Winkles who figured so gallantly in the chivalrous days of Peter Stuyvesant, and accompanied him to the siege of Fort christina. He inherited, however, but little of the martial character of his ancestors. I have observed that he was a simple goodnatured man; he was, moreover, a kind neighbor, and an obedient, henpecked husband. In-deed, to the latter circumstance might be owing that meekness of spirit which gained him such universal popularity; for those men are most apt to be obsequious and conciliating abroad who are under the discipline of shrews at home. Their tempers, doubtless, are rendered pliant and malleable in the fiery furnace of domestic tribulation; and a curtain lecture is worth all the sermons in the world for teaching the virtues of patience and long-suffering. A termagant wife may, therefore, in some respects be considered a tolerable blessing; and if so, Rip Van Winkle was thrice blessed. (to be confined)



Children perform at Tian'anmen Square.



A prize-winning team.

Children's Body Building Exercise Demonstration

Before International Children's Day, nearly 10,000 children from China and the United States gathered on the Tian'anmen Square and put on a demonstration of body building exercises.

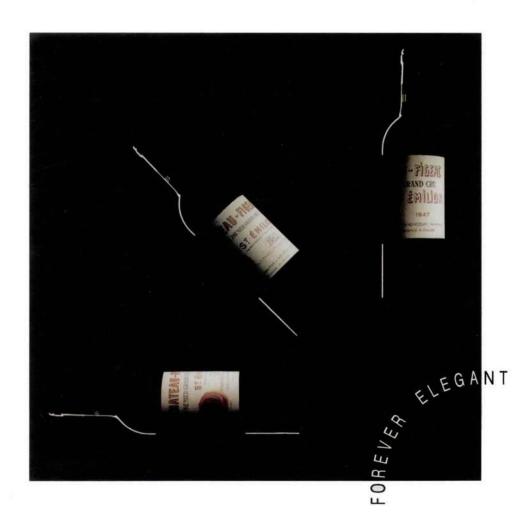
Pi Dawei

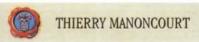


Children from the United States perform gymnastics.

CHATEAU-FIGEAC

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