Missiles in Tibet

BY CLAUDE ARPI

HANS KRISTENSEN, THE DIRECTOR OF THE Nuclear Information Project at the Federation of American Scientists (FAS) a few weeks ago posted on his blog an interesting article entitled *Extensive Nuclear Missile Deployment Area Discovered in Central China.*[1] He identifies a new deployment of medium range nuclear missiles in Tsonub Mongolian and Tibetan Autonomous Prefecture of Qinghai Province. These missiles have the capability to drop nuclear warheads on Russia and North India.

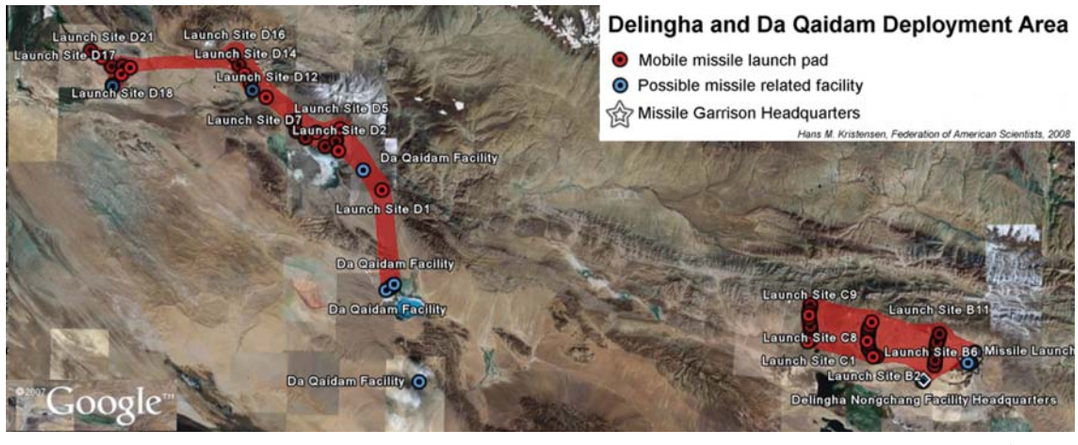
Today in China, about 67 (out of 121 deployed nuclear missiles) are said to be solid-fueled (55%) against 36% a few years back. This trend will continue as more DF-31s and DF-31As are deployed and the DF-3A and DF-4 withdrawn.

Using commercial satellite photos from *Google Earth*, Kristensen has found nearly 60 launch pads for medium-range nuclear ballistic missiles (MRBM) near the cities of Terlenkha (Chinese: Delingha) and Tsaidam che (Chinese: Da Qaidam). The scientist wrote in his blog: "The region has long been rumored to house nuclear missiles. But the new analysis reveals a significantly larger deployment area than previously known, different types of launch pads, command and control facilities and missile deployment equipment at a large facility in downtown Delingha." The news sent shivers to the Indian strategic establishment.

In 2006 already, Kristensen had written a commentary *China Reorganises Northern Nuclear Missile Launch Sites*. At that time, he believed that "The [satellite] images indicate that older liquid-fueled missiles previously thought to have been deployed in the area may have been replaced with newer solid-fueled missiles." The site was within range of three Inter-continental Ballistic Missile (ICBM) fields in Russia.

Though he had not mentioned India in 2006, it was known that the DF-21 missile could target North India (Delingha is located at about 2000 km from Delhi). The DF-21 is a MRBM with a range of approximately 2,150 kms. This first Chinese solid-fueled missile is said to be able to carry a single nuclear warhead with a yield of 200-300 kilotons. It can also be fitted with a conventional head. Operational since 1991, the DF-21 can be launched from a six-axle Transporter Erector Launcher (TEL).

On one site only, eight 13-meter trucks lined up on the launch pad were clearly visible. Though the satellite image had not enough resolution to identify the trucks, it "strongly resembles the six-axle TELs in use with the 10-metre DF-21."



More than 50 launch pads for nuclear ballistic missiles have been identified scattered across a 2,000 sq km (772 sq miles) area of Central China, according to analysis of satellite images.

photo credits: Hans M. Kristensen on his blog
http://www.fas.org/blog/ssp/2008/05/extensive-nuclear-deployment-area-discovered-in-central-china.php

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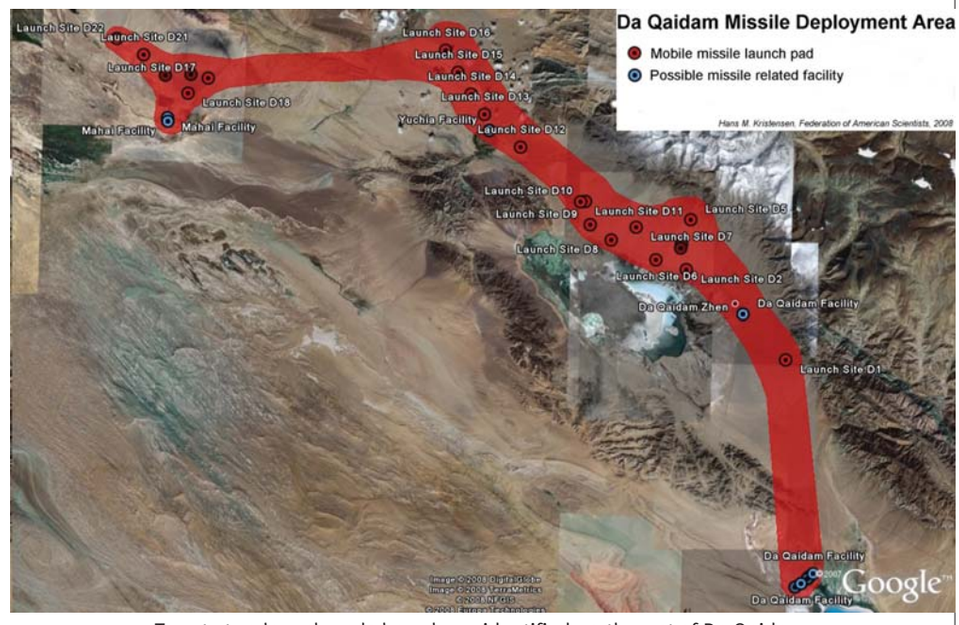
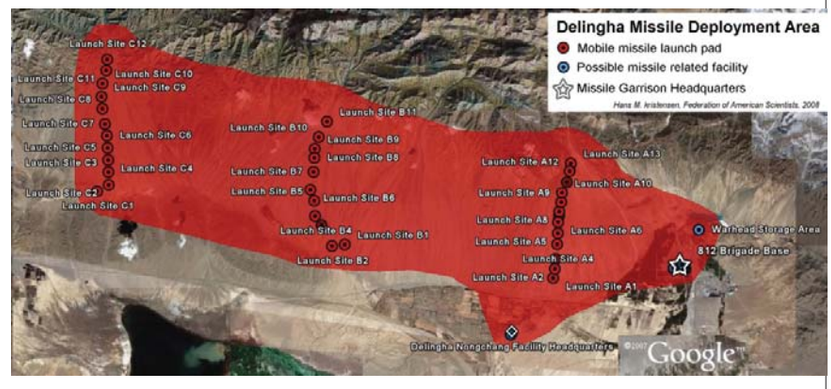
This new development raises important questions for India's security.

But a bit of geography and history is first necessary. Delingha lies at the north-eastern edge of the Da Qaidam Basin, some 500 km west of Xining, Qinghai's capital and about the same distance from Golmund.

The region was sparsely populated by Tibetans and Mongols till 1929, when Ma Bufang, the Muslim warlord of Xining thought of creating a small migrant colony at Delingha. But in the mid-fifties, a dramatic change occurred in the demography of the area. Large scale labour camps, known was *Laogai* (or Chinese Gulag) were set up by Beijing.



Twenty-two launch pads have been identified north-west of Da Qaidam.



Thirty-six launch pads and the 812 Brigade Base have been identified in and around

Qinghai and particularly Delingha became a metaphor for *laogai*. A report *Tibet outside TAR* published a few ago, explained: "Soon after the Communists gained power thousands of prisoners and other forced immigrants from China were sent by the new regime to Qinghai, where they were expected to reclaim the vast, intractable but mineral-rich desert for the building of socialism." Delingha had the first *laogai*.

The situation changed dramatically in the early eighties, when the railway line reached Delingha and later Golmund, the largest city of the Prefecture.

The PLA soon discovered the strategic importance of this remote area, equidistant from some of the ICBM bases in Soviet Union and North India.

For years, Delingha was rumoured to be a deployment area for liquid-fueled DF-4 and DF-3 long-range nuclear ballistic missiles. In 1996, the US *Defense Intelligence Agency* had predicted that by 2000, the old-designed DF-3 would start being replaced by the DF-21 models. The liquid-fueled model necessitated a large number of fuel trucks on the launching pad until shortly before launch. The discovery of Kristensen tends to prove that the liquid-fuel missiles are rapidly phased out and replaced with the solid-fuel DF-21 and DF-31 (though the latter presence has never been reported in the Delingha areas). One of the advantages of this new generation missiles is that they can be launched from a rather small 15-meter diameter pad, more difficult to detect than the large pads for liquid-fuel missiles and which could even use TELs. This would explain that four different types of pads were found by the FAS scientist and that some pads seemed to be abandoned.

Today in China, about 67 (out of 121 deployed nuclear missiles) are said to be solid-fueled (55 per cent) against 36 per cent a few years back. This trend will continue as more DF-31s and DF-31As are deployed and the DF-3A and DF-4 withdrawn.

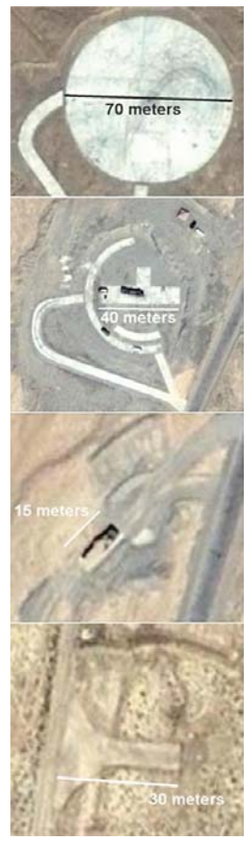
The information provided by FAS have their limitations (and Kristensen readily admits it).

Google Earth cannot replace spy satellites which have a far higher resolution and can monitor on a daily basis movements and changes on the sites. The US or Russia (and India) however never make their discoveries public.

Routinely the launching sites are changing, to avoid detection "nearly all of China's ballistic missile are mobile, and the support units are designed to follow the launchers wherever they go," Kristiansen writes.

A more drastic change occurred in July 2006 when the railway line between Golmund and Lhasa was inaugurated. In February 2001, China's Vice Minister of Railways Sun Yongfu had declared that the objectives of the project was to *"promote the economic development of the Tibet Autonomous Region and to strengthen national defence."*

Yet another development is the announcement by Beijing that the Chinese government expects to complete the Ngari Gunsa Airport in Gar County in the remote Ngari Prefecture (Chinese: Ali) by 2010. This County is located north of the State of Himachal Pradesh and east of Ladakh. The purpose of this airport is threefold: one, to bring Chinese tourists to the Kailash-Mansarovar area; two, to pour lakhs of Han migrants in this sparsely-inhabited region, thereby changing the demography of the area and three, to "strengthen the defence of the borders."



Four basic launch pad designs have been detected ranging in size from 15-70 metres.

The second objective was certainly the first for the planners in Beijing. It only took five years for China to complete the 1,142 kms railway line and as a result Delingha area is now linked to Lhasa and Southern Tibet. Let us not forget that the train could be used to transport the TELs and the command and control (C2) facilities needed to deploy the missile launcher at a chosen place.

This practically means that a DF-21 launched from Central Tibet (around or south of Lhasa) can now reach Chennai.

Other missiles such DF-15, a solid-fuel short-range ballistic missile with a 200-600 km range can be deployed in a short time and launched from the train or trucks. The missile attained notoriety during the 1996 Taiwan Strait crisis when the PLA launched several missiles towards the rebel island. Till recently the DF-15 were mainly targeting Taiwan.

Riddled like Gruyère: China's Love for Underground Tunnels

An important factor for hiding the missiles from the view of the foreign satellites (or even the local population) is China's predilection to build underground tunnels, silos and even cities. In November 2001, Craig Smith wrote in *The New Times* an article entitled *Mao's Buried Past: A Strange, Subterranean City*. He described in detail a network 10-15 feet wide tunnels in Beijing. In the early 1970's (when Communist China was getting closer to Washington), Mao had constructed a 500-bed underground hospital, a 1,000-seat movie theatre, classrooms, granaries, a barbershop and even public baths and an arsenal, under the Chinese capital. Smith said that "Beijing's total honeycomb, which took 400,000 people to complete, could reputedly hold a million people and stretched to the Western Hills, behind whose distant outline the city's sun sets each night."

Most of this underground works date from the late 1960's or beginning of the 1970's. It was meant to counter a supposedly Soviet threat. It was in fact sheer paranoia from an aging Great Helmsman who called the masses to ''deeply dig caves, extensively store rice."

Smith recounts that "major cities entered a mole-like competition to build the country's most extensive tunnel network. Almost every able-bodied adult and child took part."

It was reported that by the end of 1970's, some 75 of the largest cities had dug tunnels to hold 60 per cent of their populations. As Smith put it: "Strategic mountains were riddled like Gruyère."

There was even a four-lane underground

roadway between Zhongnanhai, the Communist Party's leadership compound and the Great Hall of the People. To dig underground silos is therefore no big deal for the Chinese engineers.

Underground Missile Storage Site in Tibet

The same digging mania happened in Tibet. A few years ago, I had interviewed a former senior Tibetan official who recounted[2]: "[When they dug], they did not allow the local population [to come close]. All the aspects of military operations were top secret. Very few [Tibetan] civilians were involved, may be when one or two were indispensable, the Chinese had [no choice, but] to get their collaboration. Either they trusted these people completely or [in other cases] they used them and later eliminate them. [The digging] was so secret! All the movements were at night, never during the day. People could only say: "We [have] heard vehicles moving, trucks moving, it must be the army", but they had not seen it."

Missile-related facilities and equipment reveal the location of the 812 Brigade Base in downtown Delingha.

"Even in Yatung [in Chumbi Valley, near the Sikkim border], they were a lot of Chinese military forces there, inside tunnels, they dug the mountains, huge tunnels, like mice living under the ground. Exactly as mice, you could not see them from outside, it was so well guarded, they did not allow anybody to go 10 km near the place, the roads were all blocked. Nobody was allowed to go there."

If this was happening near the Indian border where the intelligence gathering was comparatively easier, one can imagine that it is much more difficult to get a precise idea of what was or is happening in remote place such as Delingha (Qinghai).

Though no serious researches has been recently done on the subject, a few years ago, a Tibetan website associated with the Dalai Lama's Administration reported the existence of a base at Dhoti Phu, located 3.5 km to the north-west of Drapchi Prison and one km to the west of Sera monastery, outside Lhasa. It apparently was established in the 1970s. Trucks loaded with long shaped objects were spotted entering the sophisticated underground storage complex at night. In 1998, on the occasion of the Chinese Army Day, August 1, a number of missiles of these types were displayed on vehicles.[3]

Upgrading of Airports

Apart from the arrival of the train on the high plateau, another strategic change has recently occurred in Southern Tibet: the upgrading of the main airports in the Tibetan Autonomous Region.

The Gongkar airfield, located 97 km south-west of Lhasa, is one of three main military airfields in Tibet and the supply centre for the Chinese forces in the southern border areas (read India).

Tashi Chutter reported in 1998, that bombers were carrying out bombing exercises every autumn at a place known as Logma Thang, 50 km west of the airport.

In June 2008, a new development occurred: the first night flight trials were successfully conducted with an A319 belonging to Air China which landed at Lhasa Gongkar Airport.

According to *Xinhua*, Xu Bo, the Civil Aviation Administration's Tibet Branch head: "The history of no night flights in Lhasa ended tonight. It is of great significance to the tourism recovery and economic development in this region."

The news agency stated that the runway lighting was installed on the airport. It would allow the airport, one of the highest in the world to receive night flights for the first time since it was constructed 43 years ago.

Delingha area is now linked to Lhasa and Southern Tibet. Let us not forget that the train could be used to transport the TELs and the command and control (C2) facilities needed to deploy the missile launcher at a chosen place.

This practically means that a DF-21 launched from Central Tibet (around or south of Lhasa) can now reach Chennai.

Li Ying, an Air China official in charge of the flight declared: "The trial flight adopted the sophisticated RNP technology, which uses global-positioning satellites and onboard flight management systems to guide aircraft along precise flight paths."

The runway of the airport which can annually handle more than one million passengers was extended to 4,000 metres in 2001 at the cost of US $45 millions. This development has certainly military implications.

Other Developments in Southern Tibet

Another development is the upgrading of the Nyingtri Airport (Chinese Nyingchi airport) located 400 kms south-east of Lhasa and north of the Indian border of Arunachal Pradesh.

China Eastern Airlines opened its first passenger flight linking Kunming, capital of south-west Yunnan province and Nyingtri in summer 2007. The flight of the Boeing 737-700 lasted one hour and 50 minutes.

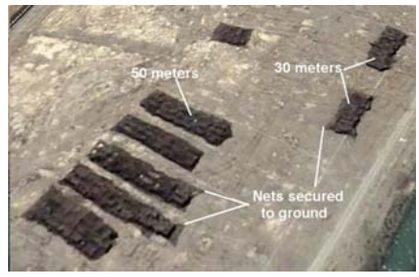
Nyingtri Airport is now the third airport in Tibet. It is said to be one of the world's most difficult airports due to the unique geographical features of its location and the often changing climate of Nyingtri.

This new 'tourism' development is particularly worrying for India because at the end of the 90's already a large underground missile storage centre was said to be located at Payi Town in Nyingtri County. Chutter mentioned that its secret code number was 809 and that it was controlled by the Chengdu Military Logistic Division. Supplies used to be brought from Chengdu, the capital of Sichuan Province which recently witnessed the tragic earthquake, while other supplies came from Lhasa.

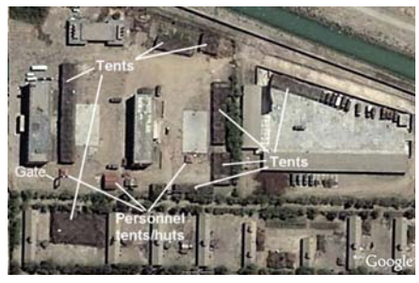
Chutter said that "a few low ceiling barracks were noticed near the foothill of a mountain in Payi where there is an entrance leading to an underground storage complex. Long convoys of military trucks belonging to the transport regiments have been observed entering the storage facility. When fresh supplies arrive at the facility, storage complex drivers replace the regular drivers inside the complex."

Tent-like structures similar to the ones detected in downtown Delingha were deployed to missile launch pads in 2005 (right) and 2006.

At the end of the 1990's, it was reported that ground-to-air and surface-to-surface missiles were stored at this site.



Equipment similar in size to launch platforms is covered by camouflage nets. Two buildings at the south end of the facility resemble service buildings for launchers.



Tent-like structures visible in downtown Delingha appear to be used by the missile launch brigade when it deploys to remote launch pads.

Though officially, the purpose of upgrading of the Nyingtri Airport (as well as Lhasa Gongkar) is to bring more tourists, the military implications are clear and should not be overlooked.

Developments in Western Tibet

Yet another development is the announcement by Beijing that the Chinese government expects to complete the Ngari Gunsa Airport in Gar County in the remote Ngari Prefecture (Chinese: Ali) by 2010. This County is located north of the State of Himachal Pradesh and east of Ladakh. The purpose of this airport is threefold: one, to bring Chinese tourists to the Kailash-Mansarovar area; two, to pour lakhs of Han migrants in this sparsely-inhabited region, thereby changing the demography of the area and three, to "strengthen the defence of the borders."

Ngari Gunsa will be the fourth 'civilian' airport in Tibet after Lhasa, Chamdo and Nyingtri. It will be built at an altitude of 4,227 meters. The runway will be 4,500 metres long and 45 metres wide. It means that it could cater for the requirements of Airbus A319 and Boeing B737-300 "and other aircraft with good plateau performance" added the spokesman of the Tibetan Autonomous Region's Civil Aviation Department.

The Chinese plan to handle 120,000 passengers a year by 2020.

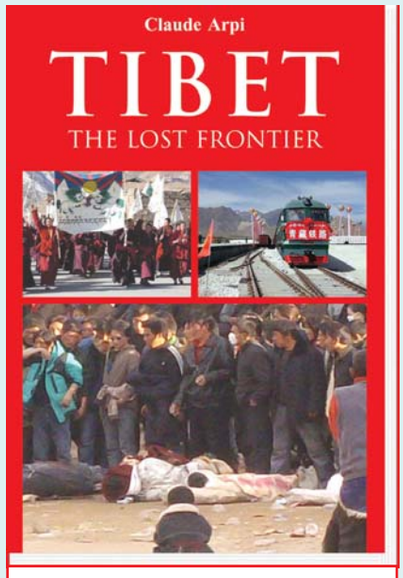
The Chinese authorities stated that the airport was a key project listed by the Tibet Autonomous Region and the Civil Aviation Administration of China for the period 2006-2010: "It will also play an active role in boosting the economic development in the Ngari Prefecture and the Tibet Autonomous Region at large."

Beijing plans to invest some US $11.4 billions in Tibet during the period 2006-2010 on 180 key projects.

Probably like the airports, most of these projects will have a military component, though it will not be shown in China's defence budget.

Notes

1. See http://www.fas.org/blog/ssp/2008/05/extensive-nuclear-deployment-area-discovered-in-central-china.php
2. Interview with Rinchen Satdutshang, 1999.
3. Chutter, Tashi. 1998. *Confidential Study On Deployment Of Chinese Occupational Forces In Tibet*, (India: Independent Publication Ltd.), p. 128.



"His knowledge of source materials combined with his extensive contacts with high Tibetan officials including the Dalai Lama allow him to write on Tibet and the India-China relations from a perspective that is not available in other works. Tibet: The Lost Frontier is an invaluable work on Tibet and its role in India-China relations."

The Pioneer

"Students, analysts and practitioners of diplomacy and strategic affairs will find this book simply brilliant."

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TIBET
The Lost Frontier

Claude Arpi

Delving deep into the history of the Roof of the World, this book introduces us to one of the greatest tragedies of modern times, its principal characters as well as the forces impelling them, consciously or unconsciously.

The main 'knot' of our 'drama' was staged in 1950. During this 'fateful' year the dice of fate was thrown. There are turning points in history when it is possible for events to go one way or the other — when the tides of time seem poised between the flood and the ebb, when fate awaits our choice to strike its glorious or sombre note, and the destiny of an entire nation hangs in balance.

The year 1950 was certainly one such crucial year in the destinies of India, Tibet and China. The three nations had the choice of moving towards peace and collaboration, or tension and confrontation.

Decisions can be made with all good intentions — as in the case of Nehru who believed in an 'eternal friendship' with China, or with uncharitable motives of Mao. Decisions can be made out of weakness, greed, pragmatism, ignorance or fear; but once an option is excercised, consequences unfold for years and decades to follow.

In strategic terms, Tibet is critical to South Asia and South-east Asia. Rather the Tibetan plateau holds the key to the peace, security and well being of Asia, and the world as such. This study of the history of Tibet, a nation sandwiched between two giant neighbours, will enable better understanding of the geopolitics influencing the tumultuous relations between India and China, particularly in the backdrop of border disputes and recent events in Tibet.

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