

# The Train to Lhasa

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The Olympics are over. The tourists and sportspersons from all over the world who flew to Beijing are back after being dazzled by the massive sporting infrastructure of a new China. Years of preparations and US \$40 billion later, a new Beijing had been created for the showcase games with grandiose centrepieces like the Bird's Nest Stadium. Somehow, the Chinese always had a penchant for the grandiose. As early as circa 210 BC, the Qin dynasty had created a huge army of thousands of life-sized Terracotta Warriors. Around the same time, between 220 - 200 BC, the first Emperor of China, Qin Shi Huang built the Great Wall of China. Successive dynasties further improved upon it, creating a massive 6,400 kilometres long wall - the only man-made feature which can be seen from the moon. The imperial dynasties have been since replaced by the communists, and Peking is now called Beijing, but the huge projects continue in quick succession. Among these colossal projects are the US \$25 billion Three Gorges Dam and an ambitious South-North Water Transfer project. However, another massive and recently operational infrastructure project went almost unnoticed. This 1142 kilometres long Golmud – Lhasa rail link is all set to change the logistics, demography and the military complexion of the Tibetan plateau. The American strategists have compared it with the historic completion of the rail link between the east and west coasts of the United States in 1869. The worried Tibetans are terming it as '*the Second Invasion of Tibet*'. Closer home, this massive project has thrown Indian strategic and logistic calculations in a tizzy. While a quietly worried government has sanctioned new mountain

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divisions for the Indian Army and redeployment of Sukhoi fighter aircraft squadrons in North-East, there are other ramifications of this development which go much beyond the infrastructural aspects.

The reasons are not difficult to fathom. Golmud used to be a forlorn military outpost in the Qinghai Province of China. It is called *Gormo* in Tibetan and was part of the Amdo region of the erstwhile Tibet. It was catapulted into a key link in 1979 when the first phase of the Beijing – Lhasa railway line was completed which led from Qinghai's provincial capital of Xining to Golmud. The 814 km Xining to Golmud railway was initially open for only military movement. Later, other trains began to ply on an improved track in 1984. Today, Golmud has major natural gas extraction and shipping facilities, and Israeli firms have been hired to enhance irrigation and farming in the desert that surrounds the city. The fortunes of this town are changing further. On 1<sup>st</sup> July 2006, at the brightly decorated Golmud Railway Station, Chinese President Hu Jintao cut the ribbon and waved to the *Qing I* train which set out for Lhasa amidst much official fanfare. It was more than significant. Just five decades back Lhasa was a *Forbidden City* to which the yak caravans reached after tiring weeks of journey and crossing of treacherous mountain passes. In 1959, when the Dalai Lama fled from his Potala Palace in Lhasa southwards to India, remoteness of the area kept the Chinese at bay. In another few years, railway lines emanating from Lhasa will crisscross the remaining Tibetan Plateau in all directions. A few of them will lead right up to the doorsteps of India and a now red Nepal, slicing across the mighty Himalayas. We will have to find means other than remoteness to keep the Chinese at bay.

## The Chinese Plan

*"Where there's a road, a railway can be built."*

-Dr. Sun Yat-sen, first president of the Republic of China.

The first idea to connect Lhasa to the Chinese railway system was

mooted by Dr Sun Yat-sen in early 1900s in his capacity as the Director General of National Railway. However, the Republic of China (ROC) and Tibet shared quite a different political relationship in those days and the idea was termed 'fanciful'. In 1950, when the People's Republic of China (PRC) invaded and the troops of the People's Liberation Army (PLA) occupied Tibet, the need for a railway was again felt to supply the PLA troops and the Han Chinese settlers which followed in the wake of the army. The development of railway transportation was vital for the expansion of China's political and economic frontiers in Tibet and elsewhere. In 1959, the line from Lanzhou reached Xining, marking the first arrival of a train to the Tibetan plateau. It entered the landmass at one of its lowest elevations and laid the foundation for the more difficult extensions planned ahead. For many years Xining remained the western outpost of the Chinese railroad. Another beginning was made in 1979 by laying tracks from Xining to Golmud. Much of this construction work was done by prisoners. Lack of finances and deteriorations in Sino-Soviet relations delayed further progress for many years. However, for the Chinese Communist Party (CCP) hierarchy the railway construction remained a key element of territorial integration.

The plans to extend the railway till Lhasa were dropped after Deng Xiaoping assumed power and a liberal Communist Party Secretary Hu Yaobang attempted reforms in Tibet. The issue was thus kept dormant till early 1990s. In July 1994 the Third National Forum for Work in Tibet was held at Beijing by the Communist Party. It exhorted officials to dismantle Tibet's isolation from China and help create “an inseparable organic link” between the two economies<sup>1</sup>. Soon, on the 7<sup>th</sup> October 1994, the push towards Lhasa was formally announced. Under China's Ninth Five Year Plan (1996-2000) a preliminary route survey and feasibility studies were conducted. The Number One Survey and Design Institute of China's Ministry of Railways was instructed to prepare blueprints for a Golmud-Nagchu-Lhasa route and an alternative Lanzhou-Nagchu-Lhasa route<sup>2</sup>.

The recommendations of the State Planning Commission were approved by China's State Council in February 2001 and funds disbursed in the Tenth Five-Year Plan (2001-2005). The work began in early July 2001 on the selected Golmud – Lhasa route. Sun Yongfu, the then China's Vice Minister of Railways, commented that the new rail link from Golmud to Lhasa will have “far-reaching impact in political, economic and military terms”<sup>3</sup>. He was proved to be quite understating the facts.

### Costs and Compulsions

The estimates on the cost of this project vary from US \$3.68 billion (Chinese official figure) to US \$4.2 billion (western estimates). The Tibetans were understandably upset over the negative impacts of this project on their precarious demography and ecology, particularly when the Chinese claimed that it will boost the economy of Tibet. The Tibetans refuted that the limited (ethnic) population of Tibet did not warrant such a massive project. They feared that it will only increase the number of Han Chinese in Tibet and further sharpen the income divide. Independent data shows a wide gap between the 1,861 Yuan per capita income of the rural majority of Tibetans accounting for 85 per cent of the total population and the 8,200 Yuan 'disposable income' of those living in urban areas where there is a high concentration of Chinese immigrants. Further, the Human Development Index, which uses indicators such as education, income and health, of Tibet is only a meagre 0.39, placing Tibet amongst the bottom of 49 officially recognised least developed regions of the world. In stark comparison, the Golmud-Lhasa rail link has been completed at more than three times the amount Chinese government has spent on health care and education in Tibet during the past fifty years<sup>4</sup>. The Chinese, of course, perceive the railway quite differently.

In the Tenth Five-Year Plan (2001-2005), an outlay of 270 billion Yuan (US \$33 billion) was kept for various railway projects in China. Approximately

100 billion Yuan (US \$12.5 billion) of this was spent in the 'western regions', including Tibet. This railway extension in Tibet fits the bill in the "Great Western Development" campaign (*Xibu da kaifa*), initiated by President Jiang Zemin in 1999 to close the economic gap between China's prosperous eastern coastal area and its poor western inland regions. This ambitious program aims to develop the vast and relatively underdeveloped western region, primarily Xinjiang (Sinkiang Uighur Autonomous Region) and Tibet Autonomous Region (TAR). It also covers other Chinese provinces of Qinghai, Sichuan, Yunnan and Gansu, all having significant Tibetan population. The Chinese authorities hope to achieve the goals of this campaign by pouring money into these two regions for local development and encouraging the Han Chinese, the country's dominant ethnic group, which comprises 92 per cent of China's population, to settle there. Essentially, from a heavily populated east with a burdened railroad network, the long-term aim is to shift population, industry and infrastructure westwards into the huge but sparsely populated areas with the railways playing a pivotal role in this shift.

Similar shift in the military assets is expected as China prepares to play a greater role in the Central Asia, besides keeping the Indians under pressure. The cooling temperatures across the Taiwan Strait and a pacifist leadership in Japan have convinced the Chinese to look westwards after having secured their eastern front. China is concerned that its central Asian neighbours are drawing closer to America<sup>5</sup>. In the ongoing Afghanistan campaign, Uzbekistan (from its Kandabad air base at Karshi) and Tajikistan offered invaluable assistance to American forces. The other western neighbour Kyrgyzstan has also permitted a US military base since 2001 at Manas, near the Kyrgyz capital Bishkek. This projection of the American power into the centre of the Eurasian land has been viewed as contradictory to the long-term Chinese strategic and energy interests. Further, in Afghanistan, a relatively pro-America (and pro-India) government has emerged which has reduced ties with Pakistan, potentially

limiting China's influence in the South-East Asia. Therefore, the Chinese need to now focus on its western frontiers justifies the 29.46 billion Yuan (US \$3.68 billion) investment in the Golmud – Lhasa project at an average of over US \$3.22 million per route km.

Economically, the Chinese are likely to break even in few years with the railway projected to double tourism revenues by 2010 and reduce transport costs for goods by 75 per cent in Tibet. On 30<sup>th</sup> August 2006, two months after the railroad opened, William Mellor of Bloomberg News wrote that “shares in listed companies that do business in Tibet have climbed as much as 300 per cent in anticipation of new markets, cheaper freight rates, and increased tourist numbers.” In 1980, visitors to Lhasa numbered only 1,059, and 95 per cent among them came from abroad. In 2002, an estimated 140,000 visited Tibet. With 1.22 million visitors arriving in 2004, there was an increase of over 1,000 times from the 1980 level. An overwhelming 92 per cent of these visitors were Chinese tourists. The contrast could not be starker. By 2020, Tibet expects 10 million tourists annually (or about four times the current level of the country's entire population). Apart from tourists, the new railroad will bring freight - 7.5 million tons a year by the year 2010, or about three tons for each of Tibet's 2.8 million residents<sup>6</sup>. In return, it is expected to carry almost an equal tonnage of mineral resources in the reverse direction. The railroad will also be used to accelerate mining activities in Tibet. In the past few years, 13 copper belts, with an estimated reserve of over a million tons, and two cobalt deposits, with a combined reserve of 20,000 tons, have been discovered in the vicinity of the railway line. Tibet also holds vast reserves of iron, lead, zinc and other minerals vital to China's economic growth.

More changes are in the offing. With limited industrial capacity in Tibet, the Tibetan economy heavily relies on industrial products from the more developed parts of China. Transportation of goods in and out of Tibet was earlier mostly through the Qingzang Highway (Lhasa-Golmud, National

Highway 109) connecting Tibet to the adjacent Qinghai province. The length and terrain have limited the capacity of the highway, with less than one million tons of goods transported each year. With the construction of the Golmud-Lhasa railway, the cost of transportation of both passengers and goods has been greatly reduced, allowing for a massive increase in volume. It has been ascertained that the cost per ton-km has been reduced from 0.38 Yuan to 0.12 Yuan due to the railway. This 0.12 Yuan (1.4 cents) per km for one ton of cargo is also the official cost for cargo transportation on the Golmud – Lhasa railway, greatly boosting trade and reducing costs. Similarly, a *hard seat* on this train from Beijing West to Lhasa costs merely 389 Yuan (US \$46) for the 4064 km long journey, making it the most inexpensive yet fast travel option for Tibet. As of now, the railway is scheduled to carry 16 trains a day between Golmud and Lhasa on its single track, transforming Lhasa from a *Forbidden City* to another Chinese boom town. Tibetans fear that they may soon be a symbolic minority in Lhasa, carefully preserved for the western tourists. These days many western tourists, disappointed in their quest for a *Shangri-La*, have already begun to report that Lhasa resembles a Chinese provincial city on the make.

## Chinese Engineering Prowess

The Chinese call this project as the Qinghai - Tibet Railway (QTR). QTR has demonstrated a quantum jump in the technological and engineering abilities of the Chinese to the world - a projection of its great power status. The completion signifies that the Chinese trains now run on the highest railroad in the world, traversing a region known for high-intensity earthquakes and low temperatures. The railway has no parallels in the world in terms of difficulty of construction, except the 3150 km long Baikal - Amur Mainline (BAM); the 1991 extension of the Trans-Siberian line in the eastern Russia. According to Chinese Government sources, this project involved the permanent employment of 67,000 Chinese technicians and workers and another 16,000 workers seasonally employed

locally. Only a handful of them were Tibetans. A train from Beijing to Lhasa takes 48 hours and crosses some of the most inhospitable terrain in the world including the five major passes of Kunlun, Hoh-Xil, Fung-ho, Tanggula and Nyenchen Thangla. Among these passes, Tanggula at 5072 meters is the highest railway point in the world. In fact, much of the line is between 4000 and 5000 meters altitude with a long stretch of 550 km from Xidatan (in far north) to Anduo (Amdo) in permafrost terrain, presenting unique engineering challenges. In all, 960 km of its tracks are located 4,000 meters above sea level and the highest point at 5,072 meters is over 200 meters higher than the Peruvian railway in the Andes, which was formerly the world's most elevated rail. The QTR boasts of many other world records; the Tanggula Railway Station at 5,068 meters is the highest railway station in the world, the Fenghuoshan Tunnel at 4,905 meters is the world's most elevated tunnel on frozen earth and the Kunlun Mountain Tunnel, running 1,686 meters, is the world's longest plateau tunnel built on frozen earth.<sup>7</sup>

Further, there are about 30 km of tunnels and 675 bridges with the bridges totalling to a length of 160 km. The newly constructed line runs from Golmud, roughly south-south-west, through Nanshankou, Kunlun Mountains, Tanggula Mountains passes in Yushu and Haixi ,Tuotuo Heyan, then over the Qinghai - Tibet border southwards to Amdo, Nagqu (Naqu), Damxung and Yangpachen (Yangbajing), before turning southeast into Lhasa. The railway line runs more or less along the Golmud to Lhasa highway, pipeline and optical fiber cable line. It has two main junctions (Golmud and Lhasa), eight stations and 20 other crossing points. The trains use pressurised passenger cars and special locomotives. Canada's Bombardier Transportation provided the 361 high-altitude sealed passenger cars with oxygen facilities for US \$ 181 million for the project. These passenger cars have special enriched-oxygen and Ultra-Violet (UV) rays protection systems. The General Electric (GE), from its Pennsylvania plant, supplied the 78 custom-built 3,800-horsepower locomotives, at a cost of about US \$150 million.



## Further Extensions

In the long-term Chinese plans, Lhasa will be only a key junction on the Tibetan plateau and not the railhead. From Lhasa, the rail link will be extended in all directions on the Tibetan plateau in the next ten years for which US \$ 1.2 billion has been already earmarked. The first extension being planned is westwards to Shigatse (*Xigaze*). Shigatse is the Tibet's second biggest town and the Tashilhunpo Monastery in the town is the traditional seat of the Panchen Lama, the second highest religious figure in the Tibetan Buddhism. The Shigatse prefecture also borders India, Nepal and Bhutan. Work has already begun in July-August 2008 on the construction of a branch line linking Lhasa with this important town which lies 280 km to the south-west of Lhasa. This will be the first branch line for the QTR and is scheduled to be operational in 2011. Further extensions are also to be built to link Shigatse to Zhangmu, and Shigatse with Yadong<sup>8</sup>. The extension of these lines from Shigatse shall make it a crucial railway junction, located quite close to India. Yadong, the projected Chinese railhead for India, is a major trading town near the India-China border. Also called Yatung (or *Chomo*), it is situated at the mouth of the Chumbi valley and is connected to the Indian state of Sikkim via the Nathula Pass. Incidentally, according to the Convention (between Britain and China) of 1890-93, the market at Yadong was opened to (British) India, and the conduct of the Tibetans in building a wall across the road between Yadong and Tibet was one of the incidents that led up to the famous British mission of 1904 to Tibet, led by Lieutenant Colonel Francis Younghusband.

China has unveiled its plans to extend the Chinese National Rail Network to the border with India. After the opening of Nathula pass in Sikkim for trade in July 2006, Sun Yuxi, the then Chinese Ambassador in India informed the media that China plans to extend its railway linking Beijing to Tibet to a newly opened border point in India's northeast and possibly link it

to India's east coast. The envoy said "From Yadung, the Indian border area is only a few dozens of kilometers away. Then, anytime we feel the need we will link it. If the train got through all the way to Kolkata, that will be something. Lots of potential, opportunities will develop there". On the Indian side, New Delhi has plans to build a railway to Sikkim and once complete, the missing rail link between India and China would be less than 100 km. This railway link to Sikkim is expected to branch-off from New Jalpaiguri (West Bengal) towards Gangtok. From Gangtok, the Nathula is 56 km away by road, towards east.

The next major extension under planning by the Chinese is to link Lhasa with Nyingchi in the east. The rail link will head eastwards from Lhasa along the Yarlung Tsangpo River (*Brahmaputra*) to Nyingchi (*Kongpo*)<sup>9</sup>. According to the Chinese's claim, the Nyingchi Prefecture also includes part of the Indian state of Arunachal Pradesh. Bayi Town, the administrative capital of the Nyingchi Prefecture is an important trading town located north of Arunachal Pradesh, at the tri-junction with Myanmar. The Sichuan-Tibet Highway also passes through the Nyingchi County. From Nyingchi this rail link is further scheduled to link up to Dali in Yunnan province. The arrival of rail link at Dali will complete the circuit of the Chinese National Rail Network, linking it up with the existing Western Region Railway network. Dali is connected by rail to the Yunnan's capital Kunming via Guangtong. It is also connected to Chengdu via Guangtong and Xichang.

This Lhasa - Nyingchi - Dali route is strategically important for the Chinese as it runs in an east - west direction almost parallel and quite close to the Arunachal border. It will enable the 14 Group Army (Unit 35201) of the Chinese Army located at Kunming, with its divisions at Dali, Kaiyuan and Kunming to rapidly move westwards from Yunnan to TAR by railway. Similarly, the 13 Group Army (Unit 56005) from its locations in the

Sichuan province shall be able to utilise this linked railway network to move to TAR. It may be noted that this Yunnan - Tibet route, due to its strategic utility, was the main competitor with the Qinghai - Tibet route for the initial link up with Lhasa. In the end, the Golmud - Lhasa route narrowly scored over the Yunnan - Tibet route because of its lower construction time and the lesser cost factor<sup>10</sup>. The 1594 km rail link from Dali in Yunnan province to Lhasa would have cost the Chinese US \$7.7 billion and the construction of 601 km of bridges and tunnels. Further, this route may not have been completed before the Beijing Olympics. However, in a booming Chinese economy, cost will soon cease to a deciding factor.

The QTR has also an extension plan to Nepal. In a meeting between Chinese and Nepalese officials on 25<sup>th</sup> April 2008, the Chinese delegation announced their country's intention to extend the Qingzang railway from Lhasa for another 770 km to Khasa on the Nepalese border. This border town of Zhangmu (Khasa in Nepali and *Dram* in Tibetan) is located 31 km south of Nyalam and is one of the major land entry routes in Tibet from Nepal. Opposite Zhangmu (located in Nyalam County), is the Nepalese town of Kodari with the Friendship Bridge on the Bhote Kosi River connecting the two towns. In fact, the 750 km Sino-Nepal Highway (Friendship Highway) from Lhasa to Kathmandu through Quxu, Shigatse (*Xigaze*), Lhaze, Dingri and Nyalam enters Nepal at Kodari through Zhangmu (Khasa) and the railway is expected to follow the same route till Kathmandu. Nepal had requested that the railway be extended to enable trade and tourism between the two nations. The construction of this extension is planned to be completed by 2013. The likely alignment of this Tibet – Nepal rail link shall be along the Friendship Highway from Shigatse to Khasa, and further till Kathmandu. The Chinese have already commenced work from Lhasa to Shigatse on their side of the project. The progress of this project is likely to be facilitated by the helpful presence of a communist government in Nepal.

## Indian Response

While China is mid-way to linking up with India and Nepal, the Indian response is only limited to planning and feasibility studies. Presently, the trucks carrying Indian goods from Birganj to Kathmandu have to travel 220 km. A train from Birganj to Kathmandu that cuts through the mountains will be a mere 80 km, cutting travel time and costs. India does plan to expand its rail links with Nepal, proposing to extend across the Nepal border to Kathmandu the rail line at present connecting Raxaul with Birganj. Birganj in Nepal is located south of Kathmandu along the Tribhuwan Highway and just across the Indo-Nepal border in Bihar, lies the Raxaul Junction (Broad Gauge) of the Indian Railways. The technical and financial feasibility of five other routes viz; Nautanwa in India to Bhairahwa in Nepal, Nepalgunj Road to Nepalgunj, Jogbani to Biratnagar, New Jalpaiguri to Kakrabitta and Jayanagar to Bardibas is being studied<sup>11</sup>. India also plans to run rail links to Bhutan, which like Nepal is landlocked and sandwiched between India and China. There are plans to connect Hasimara in India with Phuentsholing in Bhutan, Banarhat to Samtse, Rangia to Samdrup Jongkhar, Kokrajhar to Gelephu and Pathsala to Nanglam. The plan to link Sikkim has not been yet formally announced but the alignment is expected to follow the existing road link from Siliguri (with its railway station at New Jalpaiguri) to Gangtok. Presently, Sikkim has no railway network and a poor road density of 28.45 km per 100 square km against the national average of 84 km. No plans for development of railway network in Arunachal Pradesh have been yet intimated by the Indian government. This border state has an even poorer road density of just 18.65 km per 100 square km.

## Military Logistics

Logistically, Tibet is a difficult place for troop movement and sustenance. Lack of ground communication facilities rather than shortage of troops

have been the limiting factor for military operations on the entire Tibetan plateau. Before the railway was constructed, the principal route into Tibet was the 1160 km long Qingzang highway (National Highway 109) which connects Tibet to the neighbouring Qinghai province. It was built in the 1950s and has limited load carrying capacity, apart from numerous bottlenecks. The travel time on this highway between Golmud to Lhasa via Nagqu is 72 hours. The other important land route is the National Highway 318 (connecting Linzhi and Lhasa) which is in fact the southern section of the Sichuan-Tibet Highway (Chuanzang Highway). In the event of war or future large-scale riots in Tibet, this highway will be the key passageway for combat troops from the Chengdu Military Region (CMR) to enter Tibet. However, this key highway runs across the Minjiang River and the Daduhe River in a region with an average altitude of 4,250 meters above sea level, making it susceptible to natural disruptions or assault by organised rioters. China has also recently commissioned the construction of a US \$ 3.5 billion western highway network linking Lhasa with Urumqi in Xinjiang province. The fully metallic highway will be extended to Kasghar bordering Central Asia and Hotan, and it will be capable of carrying loaded battle tanks and heavy armoured carriers, while selective commercial activity will be allowed on it to enable the Chinese to transport their products to the neighbouring countries. In the recent years, China has also made great effort to revamp the Qinghai-Tibet highway and the Sichuan-Tibet highway. The National highways 214 (Lanzhou – Xining – Yuchu), 317 (Chengdu – Nagqu – Lhasa) and 109 (Qingzang highway) – the shortest routes into Tibet by land from China, are now all asphalted, but the road communication is far from reliable.

The construction of the QTR has altered much of these military logistics. The travel time from Golmud to the Tibetan capital has been drastically reduced from 72 hours to 16 hours with a direct impact on the troop movements. As reported by Xinhua (New China News Agency), the

Chinese government itself has touted the railway as a means of transport for troops, saying that not only will the railway improve the efficiency of the army, but the army will improve the efficiency of the railway. Lhasa is now connected by train right till Beijing and Shanghai. There are trains everyday scheduled for Lhasa from, among other places, Chengdu, the capital of southwest China's Sichuan Province. It is also the headquarters of the Southwest Military Region, called the Chengdu Military Region (CMR). It is one of the seven Military Regions of China - an equivalent of an army command, which faces India in the North East. It is reported that in the recent unrest in Tibet in March 2008, the T-90 / 89 armoured personnel carriers (APCs) used in Lhasa were from the 149<sup>th</sup> Mechanised Rapid Reaction Division (Unit 56016) of the CMR. These APCs were transported first from Chongqing (Chongqing) to Xining by rail/road, and then to Golmud and Lhasa by train on the QTR. This deployment reportedly took only about 48 hours as the 1956 kilometres distance between Xining and Lhasa was covered on QTR.

Analysts point to the military implications of the railroad, saying it could be used to beef up China's already heavy military presence in Tibet, including the deployment of tactical nuclear weapons. In 2001, Jane's Intelligence Digest reported that 'the PLA considers it necessary to build up a network of roads and mule tracks to bring military hardware and troops to the forward areas of the disputed border (with India).' According to defence expert William Triplett: 'With even a single line, the PLA could move about 12 infantry divisions to central Tibet in 30 days to meet up with their pre-positioned equipment.'<sup>12</sup> Most of the military experts agree with this assessment that in military terms, this rail link gives China the capability to mobilise up to 12 divisions (approximately 12,000 men make a Chinese division) a month. Up North in the Qinghai province, Golmud, the start point of the QTR, has now been turned into a major military base with rail connectivity. It is located strategically to cover both the unrest-prone provinces of Tibet and Xinjiang. Further, the Lanzhou Military

Region (LMR) with its headquarters at Lanzhou in Qinghai province is also in proximity of Golmud and connected with Golmud by rail on the Longhai Line, the major East-West railway of China. LMR covers a vast area covering the Xinjiang, Qinghai, Gansu, Ningxia, and Shaanxi provinces. In Indian context, LMR is responsible for the Aksai Chin and the other Chinese areas in Xinjiang across the Eastern Ladakh. The International Institute for Strategic Studies attributes the Military Region with an estimated 220,000 personnel including the 12<sup>th</sup> Armoured Division (Unit 84701) at Jiuquan in Gansu province. The movement and rapid deployment of this equipment-intensive division will be greatly facilitated by the QTR.

Presently, the annual transport capacity of the QTR is approximately 5 million tons, which is projected to increase to 7.5 million tons by 2010. This translates into an average capacity of 13,888 tons per day. The average load capacity of one Chinese train car is normally 60 tons, with about 20 cars in each cargo train. This would mean that each train could transport 1,200 tons, and thus 11 trains travelling both ways would be enough for each day. In time of war, the actual number of trains running on the QTR could double to roughly 20 trains both ways each day. In a war scenario, calculated on the basis of being able to transport most of the heavy equipment of a whole mechanised division, within 48 hours the PLA would be able to transport approximately 10 light mechanised divisions and some heavy mechanised divisions through the railroad to Tibet from the LMR and CMR within 30 days.<sup>13</sup> Further, considering that the total weight of the equipment and combat material needed for one rapid reaction division of the Chinese army is around 15,000 tons, the QTR could transport a whole rapid reaction division on one average day. In other words, within every one-and-a-half to two days, China could move one rapid reaction division from the CMR or one rapid reaction division from the LMR to Tibet.<sup>14</sup> Thus, the railway would now allow the 61<sup>st</sup> Plateau Rapid Reaction Motorised Division of No. 21 Group Army under the LMR

to enter Tibet within a much acceptable time-frame. This Division (Unit 84802) is located at Baoji on the Longhai railway line between Lanzhou and Xian.

The railway also features prominently in the operational plans of the PLA's Rapid Reaction Forces (RRF). The PLA has established a regiment-level Army Special Force (ASF) in every Military Region (MR) as an RRF unit, directly under the MR headquarters command. The total strength of ASF may be as high as seven regiments and twenty-four battalions, or approximately 25,000 personnel. The RRFs are meant to be quickly deployed in the conflict-prone peripheral areas of China, such as Xinjiang, Tibet, Taiwan, and the South China Sea. The PLA has conducted various exercises since 1995, concentrating particularly on long-range and intraregional rapid mobile deployment. To this end, RRF combined exercises were carried out in 1995 and 1996 in the Gobi desert, the Tibetan and Xinjiang highlands, and in the south-western tropical forests to enhance the RRF's adaptive survival capabilities. It is learnt that in the LMR, a 1000-mile railway transport rapid-deployment exercise was held in August 1996. The purpose of the railway transport based exercise was to enhance mobile deployment capability<sup>15</sup>. Post completion of QTR, the operational readiness as well as the deployment timings of RRFs (ASF) in LMR and CMR have been further boosted.

### Internally Stabilised Tibet

China's *Qinghai Daily* has described the railway as the "political frontline in consolidating the south-western border of the motherland"<sup>16</sup>. The completion of QTR has clearly tightened China's grip on Tibet, which is much prone to unrest due to various restrictive policies of the Chinese hierarchy. In 1989, when a major unrest occurred in Tibet and the curfew was imposed in Lhasa, the 149<sup>th</sup> Division was the first PLA combat unit to arrive on the scene. The 149<sup>th</sup> Rapid Reaction Motorised Division of No.13



Group Army of the CMR is located at Leshan/Emei in Sichuan province. At that time, the army troops entered Tibet via the Sichuan-Tibet highway which imposed considerable delay. However in March 2008, within 48 hours of the start of the riots in Lhasa, T-90/89 armoured personnel carriers (APC) and T-92 wheeled infantry fighting vehicles (IFV) of the 149<sup>th</sup> Division appeared on the streets. This is indicated by the fact that the PLA soldiers on the T-90/89 vehicles on the streets of Lhasa were all wearing the “leopard” camouflage uniforms specifically designed for mountain warfare operations. These uniforms have appeared in the video footage of the 149<sup>th</sup> Division during exercises. This rapid arrival of the Division using QTR relieved pressure from the troops of the No. 52 and No. 53 Mountain Brigades, which are located comparatively closer to Lhasa at Linzhi and Milin respectively for quicker response in case of unrest.


The political stability of Tibet is a demanding yet necessary pre-requisite for any military build-up against India. It is a historical fact that one of the main reasons for the PLA to withdraw in November 1962 after a one-month occupation of Arunachal Pradesh and Ladakh was the serious unrest in Tibet at the time. This has been documented by the late Panchen Lama, the highest Tibetan authority after the Dalai Lama's flight to India in 1959, in a 70,000 character petition to then Premier Zhou Enlai. The petition is politely called '*A Report on the Sufferings of the Masses in Tibet and other Tibetan Regions and Suggestions for Future Work to the Central Authorities*'<sup>17</sup>. Presently, anywhere between 300,000 to 500,000 troops are stationed in Tibet, including 200,000 permanently stationed in the TAR. China also has 14 military airfields and 10 missile bases in Tibet. In TAR itself; according to the Dhramshala based Tibet's government-in-exile,<sup>18</sup> called the Central Tibetan Administration (CTA), there are six sub-military districts, having two independent infantry divisions, six border defence regiments, five independent border defence battalions, three artillery regiments, three engineers' regiments, one main signal station and two signal regiments, three transport regiments and three independent

transport battalions, four Air Force bases, two radar regiments, two divisions and a regiment of para-military forces (referred to as *Di-fang Jun* or 'local army'), one independent division and six independent regiments of People's Armed Police (PAP). In absence of any Indian threat as such, many of the regular army formations, particularly the rapid reaction divisions were stationed primarily to quell any rioting in Tibet. The two mountain infantry units of the Xizang Military District, which forms the Tibet garrison, are also used for internal security. However, the recent movement and deployment of PLA units for internal security was very rapid, wiping out any Tibetan hopes for any sustained armed uprising. The use of QTR meant that there was minimum requirement of air support from the 2<sup>nd</sup> Army Aviation Regiment, based at Fenghuangshan in Sichuan province. Therefore, the recent improvement rail infrastructure on the Tibetan plateau has thus greatly assisted China in maintaining its grip over Tibet and gaining moral ascendancy over the disaffected Tibetan groups. Further extensions of QTR may permit the PLA troops in Tibet to hand-over the internal security tasks completely to PAP and focus their attention on India.

## Conclusion

The Golmud – Tibet railway is a reality, all set to visibly alter the logistics, economics and military dynamics of the region. It is also a prelude to the massive military build up in the central and western parts of China by asset relocation and military readjustments. The May 2008 discovery of a massive new Chinese missile base at Delingha in central China where the Chinese army Second Artillery Corps 812 Brigade has deployed nuclear tipped DF-4 and DF-21 missiles is a pointer in this asset relocation. Also, the commencement of the QTR has marked the end of Himalayas as a barrier to Tibet, and in fact to anywhere else including India. In another decade, the planned extensions will also be reality. Apart from the southern extensions towards India and Nepal, it is also planned that in the next

twenty years, the QTR network will reach northwards to the Inner Mongolia Autonomous Region. The construction of the railway lines and the roads in China have always been prelude to greater developments. The building of motor-able roads into Tibet began as early as 1950. It was in consonance with Mao Zedong's orders to the PLA as it prepared to annex the territory: "*Advance while building roads.*" It may also be recalled that it was the issue of Western Highway passing through Aksai Chin which acted as the trigger for the 1962 war with India. This China National Highway 219, connecting Tibet and Xinjiang was built as a reliable and an all-weather land route to a rebellious Tibet, as well as to keep the volatile and Muslim majority Xinjiang province under check.

Similarly, the strategic, military and political reasons have scored over the economics of the QTR. The railway has tipped the logistics of troop deployment, mobility and sustenance overwhelmingly in favour of the Chinese on the Tibetan plateau. This has direct military implications for India which has a persisting and almost intractable boundary dispute with the Chinese. The recently renewed Chinese posturing in Arunachal Pradesh and Sikkim may either turn out to be a merely a pressure tactics or an ominous precursor of conflict. Either way, the initiative is with the Chinese. However, infrastructure development on a similar scale on the Indian side can prevent the Chinese using the communication and logistics advantage to further their military interests. This will sharply boost the trade volumes; a proven antidote to conflict, particularly in the Chinese context. Indian investment in infrastructure shall also prevent the communities inhabiting the Sino-Indian borders to look towards China as a vastly superior and tempting economic model. The train to Lhasa can be heard on the Indian frontiers. In the coming years, when this gleaming train reaches the Indian borders, whether it shall be greeted by the existing mule-tracks or by another train from New Delhi shall be the fulcrum of future relationships with China. 

Notes

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