



## China, a new maritime power

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Le Chef d'escadrons Pierre SANDRIN

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**There are many reports, studies and reflections on a China that could become the world's leading economic, industrial and military power in twenty years' time. The study by Squadron Leader Sandrin is a good illustration of this rise in Chinese power in a particular field, that of the maritime world. It shows us how China is leading a real offensive in shipbuilding, ocean trade and control of transport infrastructures, thus displaying its ambition to become a new maritime power.**

Keeping pace with the country's rapid economic growth, China's shipyards have recently become a world leader in the construction of transport vessels, at the same time as the military navy has become more powerful. At the same time, Chinese funds are heavily invested in the development or construction of transport infrastructure, not only in Eurasia but also in Latin America, in particular in an inter-oceanic canal project in Nicaragua. These efforts in all areas of maritime activities are naturally expected to promote the import and export flows that underpin the economic life and political stability of the People's Republic of China (PRC).

These findings thus support the hypothesis that China is jointly developing its shipbuilding and port infrastructure in order to have, in the medium term, the attributes of a major maritime power: navy, merchant fleet and control of maritime flows.

In order to clarify this, it is necessary to study the recent efforts in the field of Chinese naval armament, then the current situation of Chinese maritime trade, and finally the maritime infrastructure projects supported by Chinese investors abroad.

### Military build-up

In the service of China's strategic vision, the navy of the People's Liberation Army (MAPL) has long been limited to the thankless role of coastal defence. But the new orientations of the Chinese economy and diplomacy have, over the past fifteen years, supported a spectacular modernisation of the country's naval forces. In a context of regional rivalries, notably with Japan and India (which have modern aircraft carriers and ships) or Vietnam (which has just launched a programme to acquire six coastal submarines), MAPL continues to develop all of its naval action capabilities. The recent acceleration in Chinese military construction concerns not only the long-awaited acquisition of a naval air platform, but also the development of all operational capabilities.

The aircraft carrier is still today the tool par excellence for power projection, despite its high cost and the progress made in detection and defence against this type of large ship. In China, Admiral Liu Huaqing[1] called for an aircraft carrier programme from his government in the early 1980s, following a visit to the US Navy. At the same time, in Russia, after the first series of Kiev class aircraft carrier cruisers [2], the Admiral Kuznetsov aircraft carrier was launched in 1985. However, the Kuznetsov has a sister-ship, the Varyag, whose Ukraine-built hull was sold in 1997 to a Macau-based company, then sold to a Chinese company on the mainland after the handover from Macau. The unfinished vessel did not arrive in China until 2002, then was handed over to the shipyard in Dalian in 2005, and an official communiqué in 2007 presented her as a future training platform for pilots from the local naval academy. This type of ship in fact has a limited capacity for action[3]: Initially designed to create a defensive bubble around a small naval action area, it could deploy interceptors and anti-submarine warfare (ASW) aircraft, but not heavily loaded assault aircraft[4]. [4] Moreover, one should note the initial caution of the Chinese government, which managed after many detours to acquire an exceptional vessel, difficult to design without experience. This is why the continuation of its construction is initially presented as an experimental project, which limits the risks in case of failure and preserves a defensive display.

However, the vocation of the first Chinese aircraft carrier became clearer in 2009-2010 with the addition of a three-dimensional radar and self-defence systems; it was then officially commissioned on 25 September 2012 in the presence of Hu Jintao and Wen Jiabao, under the name Liaoning. 5] It continues its development in 2013 with an aeronautical test campaign, followed by a first operational deployment in the South China Sea. Following the eventual development of the ship, aircraft and implementation procedures, Liaoning could carry up to 24 fighter aircraft and 12 helicopters[6]. Finally, the Chinese navy does not seem to have to stop at the acquisition of a single naval air platform: according to a development plan quoted by the Western press, a second aircraft carrier would have been launched in 2013. This would be a replica of the Liaoning, this time locally built, which could be commissioned in 2020. In addition to this start of construction, there is a project for a first Chinese nuclear aircraft carrier, whose construction could begin before 2019. Given the acceleration observed in recent years, the Chinese objectives seem ambitious but credible. Admiral Liu Huaqing's dream would thus be well on the way to becoming a reality.

Moreover, the entire Chinese surface fleet has also increased in volume and quality, as if it were taking the initiative in the face of potential threats. Over the last ten years, MAPL has received 37 surface vessels, including the Liaoning (65,000 t), seven destroyers (6,800 t to 7,000 t), nineteen frigates (2,400 t to 3,900 t), seven corvettes (1,500 t) and three amphibious vessels (18,000 t), as well as other service and support vessels. Although most of these units are of modest size, their arrival at a sustained pace allows MAPL to modernise rapidly and it is therefore likely that MAPL has acquired the means to ensure its presence in all the maritime areas under its responsibility. Above all, the acceleration of

Chinese military construction seems to indicate a desire for rapid growth in all areas. Indeed, in less than four years, from the end of 2011 to mid-2014, no less than seven submarines, five destroyers, five frigates, six corvettes and two tanker-suppliers have entered into service with MAPL [7]. 7] At the current rate of construction, the replacement of all the oldest units will certainly be achieved before 2020.

Finally, the visible effort on the surface perhaps masks the priority discreetly given to the modernisation of the submarine fleet. Initially equipped with old Russian-designed submarines (bought or built locally), MAPL developed four new classes of submarines between 1990 and 2010. As a result, in less than a decade it has built a variety of more modern but numerous units, including three or four nuclear-powered ballistic missile submarines, three nuclear attack submarines and fifteen conventionally powered submarines, bringing China's submarine fleet to 63 units by 2013 [8]. 8] The increased discretion of the submarines, their anti-ship missile capability and simply their number are assets for the benefit of China's naval strategy, which is now capable of effectively countering any naval threat in its area of responsibility [9]. 9] In 2006, an anecdotal episode reported by the conservative press in Washington illustrated a change in perception towards MAPL, when the Chinese government decided that it would not be able to effectively oppose any naval threat in its area of responsibility. a small Chinese submarine is reported to have emerged, undetected, in close proximity to a US Navy naval air group [10]. 10] Today, however, the increased presence of Chinese submarines, at least in the western half of the Pacific Ocean, is helping to make MAPL the second largest naval force in Asia-Pacific.

### Maritime trade development

China's military effort, remarkable as it is, is not, however, as rapid and ambitious as the growth of its maritime transport. China's policy of reform and openness has indeed favoured the economic development of coastal regions: in just a few years, China has acquired a dominant position, both in the field of shipbuilding and in that of maritime trade.

In 2014, China has confirmed its position at the top of the world shipbuilding rankings, ahead of South Korea and Japan. Chinese shipyards have a huge building capacity and current orders ensure that they will continue to be active for many years to come. In 2011, the twenty largest Chinese shipyards had a production capacity of more than 8.8 million tonnes per year. The dominance of Chinese shipyards is illustrated by their world leadership on 1 January 2014, with 36.6 million gross registered tons (grt) on order, while Korean yards have 31.2 million and Japanese yards 13.6 million. In this ranking of shipbuilding countries, the United States is only in 8th place with <sup>1.2</sup> million GRT on order and the leading European shipbuilder is Germany (9th in the world) with 1.1 <sup>million GRT</sup> [11].

The reason for this impressive trade result is that Chinese yards have the capacity to produce simple merchant ships in large quantities, using low-cost labour and cheaper steel than in the rest of the world. For example, among the world's top 15 shipyards, the top six Chinese yards currently have orders for 53% of the number of bulk carriers (450 ships). Above all, the Chinese government is directly involved in this industrial policy: 50 Chinese yards, both public and private, have been officially selected to benefit from preferential tax and banking conditions. Thanks to these advantages, Chinese yards are being encouraged to move up-market by building specialised ships with high added



value: Chinese LNG, gas or chemical tankers are thus beginning to compete with Japanese and Korean production[12]. Moreover, the Chinese government's relatively recent effort in favour of military construction is significantly fuelling the activity of the eleven national shipyards grouped within the China State Shipbuilding Corporation (CSSC) and the China Shipbuilding Industry Corporation (CSIC), but the share of their activity dedicated to defence is not published. Finally, Chinese shipbuilding relies on a network of technological research centres to support local innovation and reduce its dependence on foreign countries. Inherited from the defence structure, some fifteen research institutes or laboratories work in all fields of naval architecture, both civil and military. The first of them, the China Shipbuilding Information Center, claims to have conducted 5,000 research programmes since the early 1960s under the motto "Creating wealth through knowledge". This work of national innovation is eventually complemented by acquisitions abroad, such as the takeover of the French diesel engine manufacturer Baudoin by one of the main Chinese engine manufacturers, Weichai [13]. 13] Thus, although Chinese yards are likely to have excess production capacity, their proactive development allows them both to promote the employment of local labour and to gain market share in all segments of the shipbuilding industry.

In terms of commercial fleets, China has become the third country in the world in terms of actual control of ships. This is the control that is effectively exercised independently of the display of a flag of convenience: after Greece and Japan, China has made strong progress in 2014 (+15%), putting it ahead of Germany in this world ranking. In total, China controls 184 million deadweight tonnes and Hong Kong controls 34 million. For the record, the United States of America's trade tonnage is less than 50 million tonnes and France's tonnage is less than 10 million. By type of vessel, the tonnage and number of Chinese vessels are fairly unevenly distributed, but still relatively large. The Chinese fleet even has the largest number of bulk carriers in the world with 1,985 vessels in 2014, closely followed by the number of Greek (1,787) and Japanese (1,672) bulk carriers. However, the average tonnage of these Chinese bulk carriers is only 60,000 tonnes, which is still far below the average tonnage of the Japanese (87,000 tonnes) and Greek (77,000 tonnes). Many Chinese vessels are therefore likely to be dedicated to local traffic. Less prodigious in specialised vessels, the Chinese fleet nevertheless ranks third in the world in oil tankers (in number and tonnage) and second in the world in number of container ships (396) with an increase of 9% in 2014, but it remains far behind Germany (1,787 ships), which controls as many as the next six countries in the same ranking. Taking all types of merchant vessels together, the Chinese fleet grew by 15% in 2014, which is the second highest increase after that of the United Arab Emirates (25%). As regards crews, the Chinese workforce is notoriously the largest, even if it is not yet the best qualified, with 13% of the executive staff population (1st in the world) and 8% of the officers (2nd in the world) according to figures <sup>published</sup> in 2010 [14]. All of this means that the Chinese merchant navy has become an essential partner for most maritime trade.

Finally, supported by the phenomenal Chinese growth over the last thirty years, Chinese ports have become the main centres of trade on the planet. On the scale of the Chinese economy, some fifteen Chinese ports today exceed 200 million tonnes of annual trade. In the world ranking of the largest commercial ports, no less than eight Chinese ports are among the top ten. They are, in order of importance: Ningbo, Shanghai, Tianjin, Guangzhou, Suzhou, Qingdao, Tangshan and Dalian. Only one other Asian port (Singapore, <sup>3rd rank</sup>) and one European port (Rotterdam, 9th rank) <sup>are included</sup> in this list of gigantism. By comparison, only one Japanese port (Nagoya) exceeds 200 million tonnes per year, the main ports in California have a total of less than 150 million tonnes, while Marseilles is down with 80 million and Le Havre is up with 68 million. The distribution of China's ports clearly shows the place of China's industrial and maritime regions, with three poles standing out: in the centre, Ningbo and Shanghai dominate world maritime trade

with a total of more than 1.5 billion tonnes transported; in the south, the Pearl River Delta with Guangzhou (Canton), Hong Kong and Shenzhen has seen almost 965 million tonnes pass through in 2014. But the strongest growth is in the ports of northern China, spread around the Gulf of Bohai and the Shandong Peninsula, through which a total of about 2.5 billion tons transited in 2014 [15]. 15] This new polarity of the world's commercial ports in fact illustrates the place taken in the global economy by China's maritime power.

### **Deployment of a global trade network**

Since joining the World Trade Organization in 2001, China's economy has become firmly entrenched in globalization and, in particular, in the maritimization of its activities. In order to support growth, Chinese investors have gradually taken control of a network of transport infrastructure abroad. This Chinese-controlled network is developing primarily to the benefit of the economy towards sources of raw materials and export outlets, but also towards potentially conflict-prone areas such as Nicaragua.

The Chinese government's peaceful economic development programme was recently unveiled as the "New Silk Road". In this case, two networks, one land-based and the other maritime, are referred to as the "Road" and the "Belt" respectively [16]. These projects aim to build a comprehensive transport infrastructure network across Central Asia and along the South Asian maritime routes, mainly to and from the Middle East and Western Europe. However, in the Indian Ocean, reception facilities for Chinese ships had already been established in about ten ports (including Gwadar in Pakistan, in the immediate vicinity of the Strait of Hormuz). This beginning of a strategic network, both commercial and military, had been described by a conservative circle in Washington as China's "pearl necklace", although this term was not officially recognised by Beijing. Yet these networks, whether assumed or not, have in common the need to tie China more firmly to its suppliers of raw materials, particularly hydrocarbons and minerals from Russia, Central Asia, the Middle East and Africa. In addition, Chinese investors can take advantage of historic opportunities to take control of commercial opportunities: during the 2008-2009 global financial crisis, Chinese funds were heavily invested in port and energy infrastructure in Greece, Spain and Portugal. Through the deployment of such networks, China is imperceptibly improving its economic position as well as its diplomatic influence[17].

17] In this recent context of widespread deployment of China's economic power, Chinese trade is mainly oriented towards nearby markets (East and Southeast Asia), the supply of raw materials (Africa and Central Asia) or export outlets (Europe and North America). Latin America, on the other hand, has long been China's lowest economic priority. Indeed, after having established privileged relations with certain Latin American countries as part of the "non-aligned" movement of the 1950s, China, as early as 1979, favoured access to the markets and investors of the so-called developed countries. It was only in the 2000s that Chinese affection shifted again in favour of Latin America, especially in search of raw materials, especially in Mexico, Argentina and Brazil. While displaying its principles of peaceful coexistence, based mainly on non-interference in each other's internal affairs, China has also resumed its development aid to Latin America in the form of "development aid". These investments are officially aimed at "carrying out projects that are both useful to the recipient country and help to secure China's supplies of strategic products" [18]. It can therefore be assumed that the interest of Chinese investors, guided by short- and medium-term economic needs, does not exclude acting indirectly on the political stability of the host country.

However, a project of a completely different nature is being developed in Nicaragua. It is notoriously different from other investments, since China's interest is not so much in its resources as in its geographical location. The project for a transoceanic canal to link the Atlantic and Pacific Oceans was announced in 2013. The canal project was officially launched in December 2014, and it is the scale of the project that inevitably attracts attention: \$50 billion in investment, 278 km long (three times the length of Panama City) and 30 m deep (twice the depth of Panama City), which should allow ships of up to 400 metres to pass through.<sup>[19]</sup> A direct competitor of the Panama Canal, this project in Nicaragua had already been planned without success due to lack of funding and local political instability. But if it were to be carried out this time, it would be primarily because of China's economic and strategic ambition. The Nicaraguan government has agreed to concede the route and operation of the canal for 50 years to a Hong Kong-based company, aptly named HKND<sup>[20]</sup>.<sup>[20]</sup> The Chinese government has denied any direct involvement, but the official discourse leaves room for interpretation, as reported by the Asian News Monitor: "This project is an initiative of the company concerned. The Chinese government is not involved" <sup>[21]</sup>.<sup>[21]</sup> This insistence does not describe the informal relations that the Chinese government is likely to establish with this project, which cannot leave it indifferent.

The argument of the contractor HKND for building this second transoceanic canal is the reduced capacity of the Panama Canal, already saturated at present, which would not be able to cope with the foreseeable increase in maritime traffic in the years to come. Nevertheless, the financial risk is not negligible, as the considerable investment in this construction is unlikely to pay off for several decades. In Nicaragua, opinions differ widely: the President, Daniel Ortega, supports the project, pointing to the local economic benefits expected from the construction of numerous port, railway and airport infrastructures linked to the canal project (50.000 direct jobs); but the political opposition and a large section of the population denounce this concession, which they say will lead to a loss of sovereignty and, moreover, will result in massive expropriations. Moreover, this project is most likely preparing for a local ecological disaster due to the inevitable inflow of sea water and the passage of very large ships into Lake Cocibolca, the largest freshwater reservoir in the region. These arguments are likely to have no effect on the determination of the Chinese investor. But from the point of view of the United States of America, the construction of a second canal could just as easily be interpreted as a provocative gesture or even as a new point of international contention. Indeed, China's takeover of a route that is essential to traffic between the two American maritime fronts would be likely to constitute a counterweight to American naval hegemony. The Chinese government is indeed particularly sensitive to its dependence on the straits, which is probably considered a weak point in its development. However, the legitimacy of the regime rests on its ability to ensure economic growth that meets the material expectations of its population. In this economic, strategic and diplomatic context, the canal project in Nicaragua makes sense because its control by China would give it the value of a strategic counterweight or diplomatic bargaining chip.

### Conclusion

Not only the now predominant position, but also the particularly rapid growth of China's maritime power can only be noted. Although the quality of construction or the technological added value of the ships still falls short of the most modern criteria, the volume of ships and the volume of Chinese trade, ports and investment are attracting attention in a remarkable way.

It remains to be seen whether this concomitant growth in several areas of the maritime sector is the result of a genuine political will combined with more or less pre-planning. It remains to be seen whether this concomitant growth in several areas of the maritime sector is the result of a genuine political will with more or less precise planning, or whether it is simply the natural consequence, in the maritime field, of the market economy logic applied to China over the last three decades. Noting the technological choices and qualitative leaps made recently and the obvious acceleration of the Chinese naval economy in the last ten years or so, one can glimpse a conscious direction of this growth with the objective of becoming a maritime power. Chinese investments along the maritime oil routes and towards trading partners in Asia, Europe and Africa are more in line with economic logic. As for the rise of the military navy, it corresponds to an essentially defensive strategic vision, which primarily concerns the Chinese coasts as well as the waters and territories long claimed by the PRC government.

But Chinese interest in commercial traffic in Central America goes somewhat beyond this obvious economic and military framework. If one day the PRC actually controlled a trans-oceanic channel between the Pacific and the Atlantic, nothing would ever be the same again for world traffic. The international image of China as a new maritime power would be permanently changed. Much more than a risky investment, the Chinese canal project in Nicaragua is therefore likely to be supported by a long-term strategic ambition. Its eventual realisation deserves to be followed with the greatest interest for the future of international relations.

1) Commander-in-Chief of the Navy and the People's Liberation Army (1982-1987)

2) Two of these decommissioned vessels were bought back by China and observed in detail in the 1990s.

3) Kuznetsov-class aircraft carriers do not have a launching catapult, which limits the take-off weight of the aircraft on board.

4) Langlois Philippe, "China and Russia, the same aeronautic and naval combat" in *Défense & Sécurité internationale*, special issue n°20, "La puissance aéronavale", October 2011, pp. 92-95.

5) The name of Shi-Lang (the Chinese admiral who subdued Taiwan in 1683), mentioned in 2007, has been abandoned in favour of the calming of relations between the island and the mainland.

6) Sheldon-Duplaix Alexandre, "Où en est le programme de porte-avions chinois" in *Défense & Sécurité internationale*, n°101, March 2014, pp. 90-97.

7) Sheldon-Duplaix Alexandre, "Chine 1er constructeur mondial" in *Marines & Forces navales*, n°145, June-July 2013, pp. 48-63.

8) Palmade Jérôme, "Asie du nord-est, la Chine affiche de sérieux ambitions" in *Défense & Sécurité internationale*, special issue n°11, April 2010, pp. 84-90.

[9] Zajec Olivier, "Submarines! Retour sur un tropisme chinois" in *Défense & sécurité internationale*, special issue n°15, December 2010, pp. 88-93

10) Marchand Stéphane, "When China wants to defeat" Fayard, 2007, pp. 215-225.

11) Le marin, special edition, "L'atlas 2015 des enjeux maritimes", 4th quarter 2014, <sup>pp. 93-101</sup>.

12) Le marin, special issue, "L'atlas 2015 des enjeux maritimes", 4th quarter 2014, <sup>pp. 93-101</sup>.

13) SHELTON-DUPLAIX, Alexandre, "Chine 1er constructeur mondial" in *Marines & Forces navales*, n°145, June-July 2013, pp. 48-63.

14] Le marin, special issue, "L'atlas 2015 des enjeux maritimes", 4th quarter 2014, <sup>pp. 63-81</sup>.

15] Le marin, special issue, "L'atlas 2015 des enjeux maritimes", 4th quarter 2014, <sup>pp. 63-81</sup>.

16] Communication by the Xinhua agency.

17] GRESILLON, Gabriel, and EKMAN, Alice, "La Chine entend ravir aux États-Unis le statut de leader de la zone Pacifique", LesEchos.fr, 05/03/2015

18] CABESTAN, Jean-Pierre, La politique internationale de la Chine, SciencesPo, 2010, p.366.

19] MARMOUYET, Françoise, "Linking Atlantic and Pacific, Nicaragua's titanic and controversial project", France24.fr, 23/12/2014.

[20] Hong Kong Nicaragua Development

[21] Translated from the English by the author

In Saint-cyrien, Squadron Leader Pierre SANDRIN served in armoured cavalry units and then in the land force command staff. He is currently studying for a technical diploma in Chinese language at the National Institute of Oriental Languages and Civilizations (INALCO).

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