

Comparing Russian and Chinese Aircraft Carrier Ambitions

Written by James Bosbotinis

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JAMES BOSBOTINIS, OCT 16 2011

Traditionally perceived as continental powers, Russia and China are increasingly looking to invest significantly in the development of their maritime capabilities, most notably through the development and deployment of aircraft carriers. This reflects an aspiration broader than that of simply enhancing their respective naval strength. A developed, worked-up and operationally credible (with a particular emphasis on the latter) carrier capability constitutes an emphatic statement of how a nation perceives itself, and how it wishes to be perceived in the international system. Admiral Liu Huaqing, Commander of the Chinese People's Liberation Army Navy from 1982-88 and subsequently vice chair of the Central Military Commission from 1992-97, stated in his memoirs in 2004 succinctly: 'Aircraft carriers *symbolize a country's overall strength* [emphasis added]. They are also the core of the navy's combined-arms sea operations...' [1]

Further, an aircraft carrier does not operate in isolation; it deploys with escorting warships, support ships and submarines – as best exemplified by a United States Navy Carrier Strike Group (CSG) – to provide a self-contained highly mobile demonstration of state power. The Commander-in-Chief of the Russian Navy, Admiral Vladimir Vysotsky, in this regard, described the role of Russia's planned aircraft carriers thus:

"Russia's aircraft carrier fleet should be an element in a single missile, air and space defence umbrella and should organically fit into its structure ... It is a powerful, diverse nucleus of both general-purpose forces and an element of strategic arms that can tackle the most broad range of tasks." [2]

This paper examines the rationales underpinning the Russian and Chinese aspiration to develop an aircraft carrier capability; the extent of those aspirations; and the challenges facing Russia and China as they seek to realise those aspirations. It will also consider the implications, contingent on the extent to which the respective Russian and Chinese programmes are successful, for the US, NATO, and the Asia-Pacific of Russian and Chinese carrier ambitions.

Rationale and Aspirations

The development of an aircraft carrier capability requires a substantial long-term investment both financially and in terms of human resources. It also has significant implications for the disposition of a state's navy and potentially other armed services (for example, its air force) and can be politically controversial and or destabilising – domestically and internationally. The influence of domestic factors, in particular the waxing and waning of political and military constituencies in favour of, or opposed to, aircraft carrier construction is significant with regard to both Russian and Chinese aircraft carrier ambitions. At present, political and military support for a carrier programme in Russia *appears* to be less certain than in recent years, although as will be discussed below, Russia may have adopted a more cautious and incremental approach to developing its naval aviation capabilities via the acquisition and licensed production of French *Mistral*-class helicopter carriers. In contrast, the development of aircraft carriers enjoys explicit support in China as a component of a wider Chinese resurgence. The State Oceanic Administration in its 2010 Annual Report is cited as stating that 'asserting China's sea power is indispensable to accomplishing the great resurgence of the Chinese people' and that the possession of aircraft carriers is required to compete with the United

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States and heighten patriotic sentiment.[3]

The thinking underpinning both Russian and Chinese interest in the development of aircraft carriers is to a significant extent common; indeed it is common, albeit to varying extents, to all countries that seek an aircraft carrier capability. In general terms, the possession of an aircraft carrier enables the provision of organic air cover to maritime operations (that is, operations at or from the sea); this can range from a handful of fighter aircraft for local air defence through to combined air-groups of fighter, attack and specialist support aircraft. Moreover, this is not dependent on having secured access, basing or over-flight rights from another state, thus enabling expeditionary operations with a minimal onshore footprint. At the strategic level, both Russia and China view developing a global maritime presence as a necessary component of their resurging influence. For example, Admiral Vysotsky has stated:

Russia's status as successor to the great Soviet Union means that it must have a powerful and balanced ocean navy to defend its interests in any part of the world ocean where such interests exist, and they exist everywhere.[4]

Similarly, Captain Wang Xiaoxuan, Director of the Naval Research Institute of the People's Liberation Army, states with regard to the requirement for a Chinese aircraft carrier:

"China has disputes over islands and its maritime boundary. Besides, its foreign-based institutions, personnel and assets are not effectively protected. Its strategic shipping routes are not well protected either, making the smooth supply of fuel vulnerable. Given such challenges, China's navy should shoulder more responsibilities and expedite its modernization drive to pave way for the country's peaceful development."[5]

The above quotations both emphasise the presence and importance of global interests as drivers for naval modernisation, however, the nature of Russia's and China's respective global interests differs quite markedly. Russia identifies its interests as the close correlation of political, military and economic factors operating at the global level; this is described fully in the *Foreign Policy Concept of the Russian Federation*. [6] Russia wants to be recognised as 'a world power which seeks to maintain strategic stability and mutually beneficial partnership in a multipolar world', [7] and perceives a Russian military role in protecting strategic stability, including from US activities, in particular relating to missile defence. [8] In the military domain, Russia defines the US and NATO as the principal threat to Russian security and prioritises high-intensity war-fighting as the main focus for the Russian Armed Forces. [9] Thus, in the naval context, the long-term basis for formulating military policy is focused on enhancing the striking power of the fleet and its ability to contribute to continental operations:

"The naval forces ... will be able to conduct operations not only in the ocean and sea zones, but also on the continental theaters [sic] of operations owing to considerably enhanced capabilities of *aircraft-carrier forces* [emphasis added], equipping surface combatants and submarines with cruise missiles." [10]

In other words, Russian thinking toward a future carrier capability includes an aspiration toward having the means to undertake high-intensity maritime power projection operations. The focus on high-end war-fighting is apparent in arguments for investing in aircraft carriers: Admiral Vysotsky in 2010 stated that it was necessary for Russia to have aircraft carriers because:

If, for example, we do not have an aircraft carrier in the North, the battle capability of the Northern Fleet's guided-missile submarines will be reduced to zero after Day One because the submarines' principal adversary is aviation... [11]

Although not explicitly stated, the adversary in the above scenario is most likely NATO and again reflects Russia's identification of NATO and the US as its principal threats and benchmark for military planning.

The focus on high-end war-fighting and Russia's desire to be a great power has contributed to shaping an ambitious vision of a future Russian aircraft carrier. The plans articulated in the course of 2008, 2009 and 2010 centred on the construction of four to six nuclear-powered, 75,000 ton ships configured for catapult-assisted take-off but arrested recovery (CATOBAR) operations [12] with the embarked air-group to consist of a naval variant of the Sukhoi T-50

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fifth generation multi-role combat aircraft, helicopters and unmanned air vehicles.[13] It was stated that construction of the first-of-class would commence in 2012-13[14] with an in-service date of circa 2020; Admiral Vysotsky himself stated that design of the ship would be complete by the end of 2010 and funded from outside the state defence order.[15]

This programme, if implemented as outlined by above, would be massively expensive and extremely difficult for the Russian defence industry to execute. It is beyond the scope of this paper to discuss the Russian defence industrial base but cases such as the *Bulava* strategic missile system, the overhaul and conversion of the ex-*Gorshkov* aircraft carrier for India, and the construction of destroyers and frigates for the Russian Navy provide pertinent examples of the difficulties facing Russian industry. It is perhaps a realisation of the immense challenges that would confront the above carrier programme that prompted the Russian Defence Minister Anatoliy Serdyukov to state in December 2010: 'We need to decide what the ship will look like, how much it will cost, what our enterprises can do and whether the production of an aircraft carrier is feasible at all...'[16] Serdyukov has since stated that design work for a future carrier has begun but no decision taken as to whether a carrier is needed;[17] this followed a statement by Roman Trotsenko, President of the United Shipbuilding Corporation, that construction of a carrier was to begin in 2018 and be commissioned in 2023.[18] In addition, the acquisition of the *Mistral*-class helicopter carriers can be seen as contributing to the aircraft carrier programme, in particular with regard to developing onshore infrastructure and improving construction facilities and techniques; this was alluded to by the then First Deputy Defence Minister, Vladimir Popovkin.[19] However, the return to the Russian Presidency of Vladimir Putin in 2012 and a possible shift toward a more assertive foreign policy may prompt a reconsideration of Russia's carrier plans.

The Chinese are rather less assertive with regard to their international posture and continue to emphasise the notion of a 'peaceful rise', albeit with the exception of countering 'foreign interference' in affairs concerning Taiwan. It must be noted that due to China's increasingly globalised economic interests, the realisation that those interests require globally-capable armed forces, in particular naval forces, to secure them, is increasing.[20] The distribution of those economic interests, especially critical energy interests – 95 per cent of Chinese seaborne oil imports come from Africa and the Middle East[21] and thus transit the Indian Ocean – points toward the need for a relatively robust maritime power projection capability. However, in contrast to Russian statements which discuss the roles and value of aircraft carriers in high-end war-fighting scenarios, Chinese thinking appears to be more focused on regional contingencies, in particular vis-à-vis competing regional powers in the South China Sea. In this regard, Daniel Kostecka, a senior analyst for the US Navy, cites a comment from a Shanghai-based military expert:

"Our carrier will definitely not engage with powerful U.S. aircraft carrier fighting groups. But it is enough to be a symbolic threat among neighboring [sic] countries like Vietnam, Indonesia, and the Philippines who have territorial disputes with China." [22]

Kostecka also cites a range of Chinese doctrinal publications which indicate a focus for utilising aircraft carriers in the defence of sea lines of communication and convoys, the provision of local sea control for covering amphibious operations especially in the context of a 'coral-island assault campaign' (that is, in the South China Sea), and potentially in fleet air defence and counter-carrier operations.[23] Although these are traditional roles for aircraft carriers and would be applicable to both scenarios in the South China Sea against regional adversaries and in the Indian Ocean and or western Pacific, it is most likely that the near-to-mid-term focus for China will be on local scenarios in the South China Sea. This is due to the need for China to develop all the requisite components required to deploy an aircraft carrier task group operationally. This of course requires an operational aircraft carrier: the ex-*Varyag* is described as a 'platform for scientific research, experiment and training', [24] but it also requires escort ships, support ships and most importantly, competence in command-and-control, task group operations and critically, anti-air warfare, anti-surface warfare and anti-submarine warfare (ASW – a major Chinese weakness[25]). These elements will take significant time and effort to develop and thus will serve as a constraint on Chinese ambitions.

This does raise the question as to what Chinese ambitions actually are. Unlike Russia, there have been no detailed statements from senior Chinese figures – political or military – detailing thinking on the type of, or numbers of carriers to be sought for the People's Liberation Army Navy. With regard to type, the use of the ex-*Varyag* as a research and

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training vessel indicates that China may pursue in the near-term, a short take-off but arrested recovery (STOBAR) carrier option. This would enable the Chinese carrier to provide a reasonable contribution to efforts at ensuring local sea control using its embarked J-15 fighters (a Chinese indigenous carrier derivative of the *Flanker*) for air-to-air and anti-surface missions and helicopters for ASW. The ex-*Varyag*, sister of the Russian *Admiral Kuznetsov* may be capable of carrying as many as thirty-six J-15s[26] and would thus provide a potent capability vis-à-vis regional powers such as Vietnam and the Philippines. In the longer-term, due to China's interests in the Indian Ocean and further afield,[27] and the requirement to deter US intervention in a Taiwan contingency, a large CATOBAR carrier would be more effective. Reports of work to develop a carrier-borne airborne early warning aircraft akin to the US E-2C *Hawkeye*[28] and potentially a fifth generation strike fighter (possibly designated the J-14)[29] plus an agreement with Brazil for access to the Brazilian Navy's carrier *Sao Paulo* for training purposes,[30] indicates an intention to acquire large CATOBAR carriers. In terms of numbers, Chinese thinking towards its amphibious forces provides a useful comparator. Richard Fisher, a senior fellow with the International Assessment and Strategy Center, suggests China may acquire up to six Type 071 landing platform docks and six Type 081 helicopter carriers,[31] potentially forming three amphibious task groups.[32] If accurate, this would indicate the requirement for between three and six carrier groups. Kostecka cites the publication *Winning High-Tech Local Wars: Must Reading for Military Officers* as stating the requirement for one or two carrier groups to cover an amphibious operation.[33]

Implications

The realisation of both Russia's and China's aircraft carrier ambitions is going to take at the minimum one to two decades to implement; it must be emphasised that the development of a carrier capability means far more than simply building a ship or ships. Russia and China could both likely build CATOBAR carriers by 2020; however, it will require a substantial investment in time, training and infrastructure to realise a *credible* operational capability, that is, the means to *safely* operate fixed wing aircraft from a moving ship in varying weather conditions by day and night. In addition, the ships will have to be integrated with the accompanying task group and proficiency in task group operations attained plus the necessary shore infrastructure developed to maintain the carriers.

In political terms, a new Russian or Chinese aircraft carrier is going to prompt regional concerns regarding Moscow's or Beijing's intentions and may stimulate further defence cooperation with other regional states and or the US; this is especially so in the Asia-Pacific. Were Russia and or China to have the means to deploy a credible carrier group for 'out-of-area' purposes, for example, to the Middle East, in the event of a crisis where interests differed from those of the West, the potential for tensions with the West would increase. That is, what would be the implications of the presence of a Russian and or Chinese carrier group in the Arabian Sea in the event of a US-Iran confrontation? Again, this would require a certain level of credibility on the part of the Russian and or Chinese navies.

In military terms, Russia has operated aircraft carriers since the 1970s (the *Kiev*-class vertical/short take-off and landing carriers and the *Kuznetsov* STOBAR carrier) and thus it is likely that countering a Russian aircraft carrier group is a well-established part of NATO planning. Should Russia actually achieve to a significant extent, its planned naval modernisation,[34] NATO and the US would have to respond appropriately both politically and militarily. This would necessitate a strengthening of NATO maritime forces, in particular European forces. It would also have implications in the Far East, where the US and its allies would need to take account of a substantially stronger Russian Pacific Fleet. In this regard, the development of a Chinese carrier force would create the situation, where for the first time since the Second World War, the US and its allies did not enjoy quantitative naval supremacy in the Asia-Pacific. However, with respect to both Russia and China, it would be unlikely that either could mount a sustained challenge to the US; this being due to the superiority in US technology, training and experience in naval operations. Furthermore, mutual suspicions between Russia and China may increase and result in renewed confrontation and thus mitigate their respective room-for-manoeuvre elsewhere.

The above is necessarily a very general and brief discussion of the implications of Russia and China's carrier ambitions: much would depend on the extent to which their carrier plans were realised, the degree of operational credibility achieved and the political intentions governing their roles and potential use.

Conclusion

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The interest in developing aircraft carriers in Russia and China reflects a marked shift in their respective national outlooks. This is because, as noted at the beginning of this paper, both states have traditionally been regarded as continental powers in which maritime forces have tended to be regarded as secondary to the army. The interest in developing aircraft carriers as a component of wider maritime force enhancements is based on the desire to undertake a more active global role; only maritime forces can provide an independent, self-sustaining forward presence in regions away from the home base and thus protect and influence increasingly global interests (this is especially important for China which is dependent on seaborne energy imports). The ambitions which Russia and China (especially the former) hold will require a substantial long-term investment to achieve but would, if successfully achieved, even if only partially, constitute significant achievements. There are major obstacles facing both Russia and China; political and military support has to be maintained; industrial and technological challenges overcome; and most importantly, finance ensured. Should the ships be built, the challenge of operating them, their air-groups and developing an operationally credible capability will need to be addressed. If successful, Russia and China will have acquired assets capable of projecting influence, and if required power, at extended, potentially global, ranges and thus the means to credibly back their respective state's claims to great power status.

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[34] See Bosbotinis, 'The Russian Federation Navy: An Assessment of its Strategic Setting, Doctrine and Prospects' for a full discussion of Russia's naval modernisation plans.