## **RED DRAGON 'FLANKERS'**

## China's Prolific 'Flanker' Family

## Andreas Rupprecht

Harpia Publishing, 2022, 253pp, £39.99. Defence aerospace publisher, Harpia has built a respected niche in the specialist book world resting on the quality of its authors. Of these, the two stand-outs are Piotr Butowski, whose series on Russia's Aerospace Forces are essential reference volumes for anyone interested in the trials and tribulations of Moscow's air power, and Andreas Rupprecht, whose volumes on Chinese air power mirror those of Butowski's in quality and in being required reading. In one sense, Rupprecht has faced a harder challenge. Butowksi has until recently been able to travel regularly to Russia for more than 30 years and discuss with the Russian industry, their programmes and aspirations. Rupprecht, has for the most part, had to build his extensive knowledge from a distance, and with an industry opaquer than its Russian counterpart.

Rupprecht's volume on China's Flanker family is a welcome addition to English-language texts on Sukhoi's marque aircraft. While the Su-27 and its derivatives have been well covered regarding Soviet and Russian developments, this has not been the case with the history of the aircraft in Chinese service. *Red Dragon Flankers* fills this gap admirably.

The volume has a clear structure with chapters covering single-seat fighter variants and associated two-seaters, two-seat multirole variants, carrier aviation variants, weapons and stores, with a last chapter on operational units. This section begins helpfully with an explanation of the People's Liberation Army Air Force (PLAAF) system for serial numbering of aircraft. As such, the volume serves both as a history of Chinese Flanker developments and as a reference to units operating Flanker variants.



Rupprecht frames the acquisition of the Flanker in the context of the PLAAF's combat aircraft ambitions with unfulfilled early discussions in the dog years of the Soviet Union, and the then opportunity presented by the collapse of the USSR. The parlous state of the Russian economy in the 1990s gave Beijing a window of access as Moscow's defence industry struggled to survive. The provision of the Su-27SK Flanker B from 1992 and access to related Russian and Ukrainian aerospace technology during that decade and into the 2000s provided the basis for China to build not only its own Flanker family, but to boot-strap the whole sector. The author details these early years in the first section of the book and is refreshingly unafraid to admit where information or knowledge is limited. Similarly, he addresses the issue of intellectual property abuse with even-handedness, offering a number of explanations concerning China's manufacture of the J-11BS, J-15, and J-16 derivatives of the Flanker.

The chapter on the air-launched weapons provides a useful reference to the Russian and Chinese systems fielded by the PLAAF and what the PLA Navy's Flanker units were (now being transferred to the PLAAF as part of a wider restructuring - excepting the carrier-borne J-15). The chapter also underscores the continuing challenge of studying the PLAAF in open source, and the judgements that must be made on, at best, partial evidence. For this reviewer, the author underplays the role of Russia's air-launched weapons industry in the development of the PL-12 (CH-AA-7a ADZE), but this is a quibble in what is a valuable volume from the best Western author now focusing on the development of Chinese air power.

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