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Japanese security turns to the stars

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Japanese policymakers fretted for many years over the 'slow death' of techno-nationalism and its impact on national security. Rather than entirely bow to demands to 'buy American' in defence equipment, Japan is searching for new ways to maintain the centrality of techno-nationalism in its security strategy.



Specifically, Prime Minister Shinzo Abe's emerging doctrine seeks to use techno-nationalism for national-security ends while exploiting new avenues of international collaboration — including outer space technologies — to revitalise and sustain the model.

In 2014, the Abe administration ended previous bans on the export of weapons technology, allowing Japan to depart from the earlier <u>Yoshida doctrine</u> and engage with partners beyond the United States. Japan and the United Kingdom signed a Defense Equipment Co-operation Framework in 2013 and have been working on plans for joint development of air-to-air missiles and a future combat fighter system. Japan is exploring similar defence and military technology cooperation with France, Germany and Italy.

But Tokyo's principal political and commercial efforts for the transfer of arms technology outside the US–Japan alliance focus on <u>ties</u> with Australia. Japan and Australia, as part of their 'Strategic Partnership' signed in July 2014, concluded an 'Agreement Concerning the Transfer of Defense Equipment and Technology'. Japan subsequently entered the competition for Australia's tender to replace its six *Collins*-class submarines with up to 12 new boats by 2030, yet the contract went to France.

Such limited success suggests Japanese policymakers and defence contractors must gain experience in competing and bidding in international markets, develop an offset strategy and lose a general wariness to license and share their technologies with international partners.

Beyond traditional international collaboration, Japan is increasingly exploiting a second avenue for techno-nationalism — one that could achieve the more assertive Abe Doctrine: the application of dual-use technology in outer space.

Japan's space program generally attracts attention for its civilian applications, such as in February 2019 when JAXA, the Japanese space agency, landed the *Hayabusa-2* probe on an asteroid 300 million kilometres from earth. But Japan's 'civilian outlook' in space disguises the fact that many of its burgeoning space programs also serve techno-nationalist purposes for national security. Most space technologies are inherently dual-use, and over the last two decades Japan has consistently invested in an impressive national space security architecture.

The increasingly important position of space in Japan's military planning is evident in a number of policy measures. In 2008, the National Diet passed a Basic Space Law that enabled the use of outer space for defensive military purposes. The new law overturned the 1969 Peaceful Purposes Resolution that limited Japan's space activities to non-military uses. Since 2009, successive versions of the Japanese government's Basic Space Plan have openly accepted the need to use space for security. Japan's National Security Strategy now notes the connection between space and national security.

The 2019 National Defense Program Guidelines went further and positioned space as a key strategic military domain. The Japan Self-Defense Forces (JSDF) are now to engage in 'cross domain operations' that enable all three services to move beyond the confines of land, sea and air operations and work together to counter threats in outer space, cyberspace and electronic warfare.

Japan has also built an impressive array of dual-use space systems that support military functions. Starting in the mid-1980s, Japan began developing a civilian space launch capability with the H-II liquid-fuelled rocket series. From the 1990s, these efforts extended to the M-series and *Epsilon* solid-fuelled rockets for 'scientific' launches. Solid-fuelled rockets are rarely developed solely for civilian purposes.

The *Epsilon* in particular is considered to be a mobile, launch-on-demand rocket for military payloads such as tactical satellites.

In the late 1980s, Japan initiated a program to build and launch a domestic-built information-gathering satellite (IGS) constellation using optical and radar technologies. The government termed the IGS 'multipurpose' to justify its introduction, but they are in effect spy satellites.

The principal reason for Japan's development of techno-nationalist capabilities is to use it as leverage in the <u>US-Japan alliance</u>. Space capabilities add a means for Japan to hedge within the alliance against abandonment, while offering their integration with US systems as a way to cement bilateral cooperation. Ballistic-missile defence has long been the centrepiece of this approach but under the Abe administration this effort has been stepped up.

Japan and the Unites States have convened an annual Comprehensive Dialogue on Space since 2013. The revised US–Japan Defense Guidelines of 2015 devote — for the first time — an entire section to bilateral military space cooperation. Both sides agreed that Japan will provide its space assets and the Quasi-Zenith Satellite System systems to substitute for those of the United States if US assets are degraded in a conflict situation. Japan and the United States are also committed to two-way space situational awareness and maritime domain awareness information-sharing.

Japan's nurturing of indigenous space capabilities also reinforces a degree of defence autonomy to hedge against the alliance. Even if the formal defence budget is constrained, the JSDF benefits from the 'hidden' military space budget. This will be an advantage as they begin to use space to facilitate cross-domain operations.

Meanwhile, through its development of launch vehicles, re-entry systems and targeting and sensor systems, Japan has quietly marshalled the components for an intercontinental ballistic missile capability to support an independent nuclear deterrent, if deemed necessary in the future.

The implication is that Japan's security strategy is entering a space age.

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