

# ISAS Insights

No. 448 - 2 August 2017

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## The United States-India Drone ‘Deal’: Regional and Global Implications

*During India’s Prime Minister Narendra Modi’s visit to Washington in June 2017, he and the United States (US) President Donald Trump agreed to a ‘deal’, whereby India would purchase 22 Unmanned Aerial Vehicles, also known as drones, from the US. This partly reflects the burgeoning importance this platform is acquiring globally in the sphere of defence and security. This paper examines the drone phenomenon and argues that, given their potentially deadly capabilities, there is a need for an international regime with regard to the manufacture, transfer and use of drones. This issue poses a challenge to the international institutions and leadership.*

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### Drones and Deterrence

The visit by India’s Prime Minister Narendra Modi to the United States (US) in June 2017 was perhaps most rewarding for New Delhi in terms of enhancing defence cooperation than in any other area of bilateral relations. The high point of the Modi trip was clinching the ‘deal’ with regard to the Indian purchase of a number of Unmanned Aerial Vehicles, also known as drones.

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It will, of course, be subject to the US Congressional approval and the final acceptance by the Indian side. The package comprises the sale of 22 Predator Guardian drones, long considered by the Indian navy to be a desirable platform and a force multiplier to advance its intelligence, surveillance and reconnaissance (ISR) capabilities. This particular variant of Predator B is said to be able to stay in the air for 27 hours and fly at an altitude of 50,000 feet, giving it the capacity to cover a very wide area, not just over the Indian Ocean, but also over the territory of any perceived adversaries, including China. The arrangement of transfer of these drones will fall under the aegis of the US-India Defence Technology Transfer Initiative. India considers this capability essential to its defence requirements, although in the past it was “famously wary of forging strategic alliances.”<sup>2</sup>

From the American side, the penchant of the current Trump administration for ‘transactional benefits’, which increasingly appears to be the main driving force for any of its bilateral relations, was also satisfied. To the US, the sale would fetch around US\$2.3 billion (approximately S\$3.12 billion), and when completed, the bilateral defence trade with India would increase to nearly US\$19 billion (approximately S\$25.84 billion), creating “thousands of American jobs”.<sup>3</sup> This would also narrow the trade deficit with India, a major concern of Trump.<sup>4</sup> However, the fact that it would empower, to some extent, India vis-à-vis China would be an additional boon for Washington, though such a strategy has not clearly evolved as yet in Trump’s or his administration’s articulations, as was the case with President Barack Obama’s so-called ‘tilt to Asia’.

India is, however, probably not getting what it really wanted. The kind of drones the Indians would have preferred is the Unmanned Combat Aerial Vehicles that are capable of firing missiles and precision-guided munitions on enemy targets and, thereafter, returning to home bases.<sup>5</sup> The version, called MQ-9 Reaper, which is an armed remote controlled aircraft, would have fitted the bill. Instead, it is being sold the unarmed (largely, though a payload of weapons can be fitted in, though the maximum capacity for this is said to be 1,746 kilogrammes). This is a modification of the standard Reaper with communications enhancements and an added

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<sup>2</sup> ‘With Modi in Washington, China and India ‘Jostle’ on Their Border’, *New York Times*, 27 June 2017.

<sup>3</sup> Modi-Trump Meet, India Gets Guardian Drones to Check China in Indian Ocean’, *Business Standard*, 27 June 2017.

<sup>4</sup> Yashwant Raj, ‘Trump orders investigation of countries with trade deficit with US, India on the list’, *Hindustan Times*, 3 April 2017.

<sup>5</sup> ‘US clears sale of Guardian Drones to India’, *Economic Times*, 28 June 2017.

Raytheon SeaVue Marine Search Radar.<sup>6</sup> This would, of course, be useful in tracking alien submarines but it would lack the bite of the more deadly versions. The main difference between a Predator and Reaper is that the latter is larger in size and seen as a ‘hunter killer’, carrying significantly more ordnance. The Predator’s primary role, on the other hand, is ISR (though dual-role as a combat craft is a possibility).

## **Recent Uses of Drones**

Drones are in huge demand globally. Weaponised MQ-9 Reaper technology, a more sophisticated version, was procured by the United Kingdom (UK) from American sources in 2007. In 2016, the US State Department approved their sale to Italy. Spain and Canada are said to be interested but the transfer of technology to them is still awaiting clearance by the appropriate US authorities. It is worth mentioning that the US is a signatory to the Missile Technology Control Regime (MTCR), an arms control agreement that dates back to 1987. While originally crafted with cruise missiles in mind towards the end of the Cold War, the language of the agreement is applicable to the larger and longer-range varieties of drones as well. The MTCR strongly discourages the sale and export of airborne technologies that can travel more than 185 miles (296 kilometres) and carry payloads of 1,100 pounds (495 kilograms). While the agreement is an impediment, it is not possibly, like others of its kind, an insurmountable one. It is, of course, technologically possible to fit a much smaller weapon to a model aircraft, which makes for its accessibility to non-state actors as well.

It is, therefore, rational for many countries to either seek procurement from more-accessible sources – we shall come to China shortly – or build crude versions of their own, which can improve precision and ‘kill-probability’ with the advance of relevant technology. This, more than anything else, is a function of time. Received wisdom has it that, besides the US, the UK, China, Israel, Pakistan, South Africa, Iran, Iraq and even Nigeria already possess them, in one form or another.<sup>7</sup> Pakistan, Nigeria, and Iraq have been known to use small but weaponised kinds for combat against domestic ‘terrorists’ or, at any rate, insurgents.

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<sup>6</sup> <http://www.firstpost.com?india/india-to-purchase-22-predatorguardian-drones-all-you>. Accessed on 17 July 2017.

<sup>7</sup> Clay Dillow, ‘All of these Countries Now Have Armed Drones’, *Fortune*, 12 February 2016. <http://fortune.com/2016/12/these-countries-have-armed-drones/>. Accessed on 17 July 2017.

## Sourcing from China

Within a month of the Modi-Trump accord in Washington, on 14 July 2017, China flight tested the latest drone of its Caihong (also known in English as ‘Rainbow’) series, the CH-5. Whether the timing is coincidental or by design, China’s demonstration of its capabilities was swift. The Chief Designer of its manufacturing company, China Academy of Aerospace Aerodynamics, the country’s largest drone exporter, Shi Wen claimed that the craft “was as good as the US made General Atomics MQ-9 Reaper, a hunter-killer drone often deemed by Western analysts as the best of its kind.”<sup>8</sup> This has been billed as being ready for the world market, and under the circumstances, the most-likely interested parties would be Saudi Arabia, the United Arab Emirates (UAE), Bahrain, Egypt, and Qatar – all protagonists in the current Gulf Crisis – and of course, Pakistan, perhaps China’s closest strategic ally, which is also bound to keep a wary eye on Indian procurements. Its capabilities are much greater than what China already manufactures and markets, the CH-3 and CH-4.

Twice as large as the other crafts of the family, the CH-5 can stay in the air for 60 hours, almost three times more than other Chinese models, and has a range of 10,000 kilometres, considered strategic under any circumstances. Its weapon payload capacity is one metric ton, which would enable it to carry as many as 24 missiles on a single mission, sufficient to take out a convoy of armoured vehicles. The earlier model, CH-4, which is visually similar to MQ-9 Reaper, can carry around 500 pounds (225 kilogrammes) of ordnance and fly around 770 miles (1,232 kilometres). The capacity to carry weapons of the yet smaller model CH-3 is 150 pounds (67.5 kilogrammes), including at least one AR-1 laser-guided missile comparable to the AGM-114 Hell Fire missile of US drones.<sup>9</sup>

While the price tag of a CH-5 unit is not known, analysts presume that it would be far less than that of comparable US models. The earlier models, for instance, are said to be priced at one million US dollars apiece, a quarter of the comparable US Predators. In pure saleability terms, there are markets for both the superior and comparatively inferior varieties. It depends on the

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<sup>8</sup> Xia Zhenqi, ‘China’s powerful drone ready for global market’, TECH & SCI 16 July 2017. [https://news.cgtn.com/news/3d67544f3363444e/share\\_p.html](https://news.cgtn.com/news/3d67544f3363444e/share_p.html). Accessed on 18 July 2017. The article also contains other relevant information, some of which have been cited, about the drone’s capabilities.

<sup>9</sup> Clay Dillow, ‘China: A rising drone weapons dealer to the world’, PRO WATCHLIST, Special to CNBC.com, 5 March 2016. <http://www.cnbc.com/2016/03/03/china-a-rising-drone-weapons-dealer-to-theworld.ht>. Accessed on 17 July 2017.

purpose for which militaries seek to use them. In most cases, the ones with lesser, though sufficiently deadly capabilities, satisfy the requirements. For instance, for usage against domestic insurgencies, or non-state actors. State adversaries will, of course, require the more sophisticated versions. Trump's US is not likely to be too constrained by the values or spirit of the MTCR. Yet, the fear of the technology falling into wrong hands, such as those of the Islamic State or the Taliban, would cause them to be circumspect of who they are selling to. China, a non-signatory to the MTCR, is morally and legally unimpeded, not being a party to any agreement barring drone sales.

As of now, there are some available statistics from American sources as to who are queuing up to buy Chinese production. These countries are Pakistan (20 units of CH-3 between 2013 and 2016), Egypt (18 units of ASN-209 between 2012 and 2014), Myanmar (12 units of CH-3 between 2014 and 2015), Nigeria (five units of CH-3 in 2014), Iraq (four units of CH-4 in 2015), Jordan (two units of CH-4 in 2016), Kazakhstan (two units of Wing Loong 1 in 2016), Saudi Arabia (two units of CH-4, and two units of Wing Loong 1 in 2015), Turkmenistan (two units of CH-3 and two units of WJ-600 in 2016), and the UAE (two units of Wing Loong in 2013).<sup>10</sup> These figures predate the successful test-flight of CH-5 which would be expected to provide an additional fillip to the sales spree.

## **Other Players: Israel, India and Pakistan**

There are other players in the global market place for drones, principal among them being Israel. It has been said that the Israeli sales matched and even exceeded those of major manufacturers like the US and China, though this situation may be changing, as these major powers focus more on such manufactures and exports. Israeli drone manufacturers like Israel Aerospace Industries and Elbit Systems have led Israel to earn at least US\$4.6 billion (approximately S\$6.25 billion) worth of sales over the last eight years, exceeding the figure of US\$3 billion (approximately S\$4.08 billion) for American companies within the same time span.<sup>11</sup>

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<sup>10</sup> These numbers have been gleaned from Jeremy Page in Beijing and Paul Sonne in Washington, "US allies use China's military drones", *Wall Street Journal*, 18 July 2018.

<sup>11</sup> Israeli figures, and other information on Israel, have been taken from Josh Aaron, 'Why Israel dominates drone exports', *Quartz*, 10 July 2013, <https://qz.com/102200/why-israel-dominates-global-drone-exports/>. Accessed on 18 July 2017.

While some Middle Eastern countries may still be wary of purchasing weapon-grade platforms from Israel, a situation which may alter with the current intramural Arab conflicts, Israel has steady markets. More than 50 per cent of its drone exports go to Europe, 33 per cent to the Asia Pacific countries, including India and Azerbaijan, 11 per cent to Latin America, 3.9 per cent to the US, and 1.5 per cent to Africa. The principal destinations are the UK, India and Brazil.

At the same time as importing from overseas, India is taking urgent steps to boost domestic capacity of manufacturing drones. The Modi government's 'Make in India' policy should add impetus to its programme. A milestone was the flight-testing of Rustom 2 prototype, re-designated as Tapas 201. It is slow with a maximum speed of 225 kilometres per hour, but can fly for 24 hours with the ability to operate at an altitude of 35,000 feet.<sup>12</sup> Indian armed forces have an ambitious plan to induct 200 armament capable drones over the next decade (all drones are not armament capable). Indian firms like Tata Advanced Systems Ltd, Reliance Defence and L&T Heavy Engineering are taking advantage of the current government's initiative to expand domestic manufactures. However, in the near future, external procurements from the US and Israel will remain key.

Pakistan announced its first fleet of indigenously developed surveillance-capable drones in November 2012, called Barraq and Shahpar, and inducting the systems in its army and air force, calling the production "a landmark and historic event, wherein a very effective force multiplier has been added to the inventory of the armed forces."<sup>13</sup> Thereafter, in September 2015 its military fired, for the first time, a laser-guided air-to-surface missile Barq from a Barraq drone in a live-battle operation.<sup>14</sup> In any case, Pakistan is likely to always have a ready supplier in China, and will doubtless be eyeing the most recent CH-5.

## **Global Agreements and Ramifications of Proliferation**

Unlike in the case of nuclear weapons or other weapons of mass destruction, such as the Non Proliferation Treaty of 1968 or the Chemical Weapons Convention of 1993, drones are not

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<sup>12</sup> See Group Captain Joseph Noronha, 'The Age of Drones: All you need to know about India's Attempts to Produce Unmanned Aerial Vehicles, Defence, 27 February 2017. <https://swarajyamag.com/defence/the-age-of-drones-all-you-need-to-know-about-indias>. Accessed on 18 July 2017. Data on India are largely based on this article.

<sup>13</sup> 'Pakistan introduces fleet of locally developed drone', *DAWN.COM*, <https://www.dawn.com/news/1058493>. Accessed on 18 July 2017.

<sup>14</sup> Group Captain Joseph Noronha, *op. cit.*

specifically covered by any global agreements. The MTCR, as earlier stated, was aimed more at missiles. As drones proliferated towards the end of the Obama Administration in the US, under the US aegis, a declaration by more than 40 countries was issued on the use and export of armed drones. However, the new administration of Trump dithered over it.<sup>15</sup>

The declaration urged exporters to be transparent about sales in order to prevent fuelling conflict and instability and to ensure that buyers observe laws of war. China, arguing that it affected only exporters – others pointed to domestic productions as those of Israel getting off scot free – refused to sign on. In the foreseeable future drones are set to proliferate and exports and purchases are set to increase phenomenally. It is unlikely that any international constraining mechanism will be in place anytime soon, and the United Nations in New York or the Conference on Disarmament in Geneva are unlikely to get any support or encouragement towards this end from the key global players.

## **Relation to Deterrence**

The theory of deterrence was first devised in global military strategy with regard to nuclear weapons. It was meant to dissuade a potential adversary from taking action by acquiring a particular capability, and signalling that the capability would be used with unacceptable consequences if military action on the part of the other is resorted to. During the Cold War, for instance, the US and the Soviet Union maintained nuclear arsenals to prevent each other from using them. Bernard Brodie, a pioneer thinker in this regard, argued in 1959-60 that one must always be at the ready but never use.<sup>16</sup> Thereafter in 1966, Thomas Schelling sold the idea of the use of power to inflict hurt as a bargaining power.<sup>17</sup> While at the strategic levels weapon systems may deter one another, drones, whatever their sophistication and travel range are at best tactical weapons and cannot have the same role. Its acquisition and use are unlikely to deter an adversary from doing the same. Of course, deterrence will come into play should any

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<sup>15</sup> See, Aaron Mehta, 'Uncertainty at State Department holding up new agreement on armed drones', Defense News, 21 March 2017. <http://www.defensenews.com/articles/uncertainty-at-state-holding-up-new-agreement-o>. Accessed on 18 July 2017.

<sup>16</sup> Bernard Brodie, known as the American Clausewitz, after the famous European military thinker, has many publications to his credit. A relevant one in this case would be *'The Future of Deterrence in US Strategy'*, Security Studies Project, University of California, 1968.

<sup>17</sup> Thomas Schelling, American economist, security expert, game theorist, and a Nobel Laureate, wrote a number of seminal works along this line, including *The Strategy of Conflict* (1960), *Arms and Influence* (1966), and *Micromotives and Macrobehavior* (1978).

party consider the use of tactical nuclear weapons by using drones as platforms, which in any case would be unwise because these crafts are far from being delivery systems at par with missiles or sophisticated bombers.

So, the race for the manufacture, acquisition, export, deployment and use of drones now may have become a fact of life. As they grow deadlier in their destructive capabilities, there will be a need to monitor and bring under a regime of control their production, transfer and use. It will become an important subject of global arms control discourse, and the capacity to address this adequately and effectively will increasingly become a challenge to global institutions and leadership.

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