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MOAB ON AFGHANISTAN: SHOCK AND AWE

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On 13 Apr 17 at 1502 GMT, USAF dropped the largest non-nuclear bomb, the Mother of All Bombs, MOAB, in Achin district of Nangarhar province of Afghanistan. The bomb was used against caves and bunkers housing militants of the Islamic State in Afghanistan. Initial estimates put the casualties at 36 terrorists killed.¹ The figure has now been revised to 94 killed.² The number of people injured is not known. Although, news channels initially reported no civilian casualties in the MOAB strike, some local reports have suggested civilian infrastructure up to four kilometres away may have been damaged by the MOAB.³ The strike was reportedly conducted to minimise the risk to joint Afghan and US Forces conducting clearing operations in the area while maximizing the destruction of the IS fighters and facilities.⁴ The airstrike in Afghanistan comes soon after the US missile strike on a Syrian air base in response to a chemical attack carried out by the Syrian regime.⁵ The employment of the MOAB comes at a time of increasing violence in Nangarhar- in

particular, the rise of a local affiliate of ISIS called Wilayah Khorasan, often referred to as ISIS-K.⁶

Nangarhar's Achin district is separated from Pakistan by a range of high mountains, one of the areas where Taliban and Al Qaeda fighters fled to when the United States first intervened in Afghanistan in late 2001. U.S. officials say militants affiliated to the Middle East-based ISIS network have fortified caves in the region in an effort to hold off joint operations by Afghan and U.S. forces. ISIS-K's recent activities can be traced back to a steady flow of Pakistani Taliban (TTP) militants across the border into Nangarhar province of Afghanistan between 2010 and 2014. Following a largely successful counterinsurgency offensive by the Pakistani military in early 2010, TTP fighters began moving across the Durand Line (the Afghan-Pakistan border) in large numbers. By mid-2015, after a violent campaign against community rivals- including skirmishes against local Afghan Taliban elements- the newly formed ISIS-K began to grow exponentially. Achin district in particular, is one of the largest opium poppy districts in Eastern Afghanistan

with mountainous terrain. It provides a convenient base of operations for ISIS-K near the Durand Line, providing the militants commercial and strategic opportunities for further expansion in Nangarhar province.⁷

MOAB, which was used to bomb this area in Nangarhar province, stands for 'Massive Ordnance Air Blast'. Its nomenclature is GBU-43/B and it weighs 21,600 pounds (9,797 kg) which is equivalent to 11 tons of TNT. GBU-43/B, a GPS-guided munition, was dropped by a C-130 transport aircraft. The MOAB is not a penetrator weapon and is primarily an air burst ordnance intended for soft to medium surface targets covering extended areas and targets in a contained environment such as a deep canyon or within a cave system.⁸ According to the Pentagon, the 'Mother Of All Bombs' has been used in combat for the first time. The 'MOAB' was first designed and tested in March 2003, around the time of the US-led invasion of Iraq, but it was never used in combat earlier. MOAB replaces the Vietnam-era "Daisy Cutter," a 15,000-pound bomb. The U.S. Air Force dropped several BLU-82s (Daisy Cutter) during the campaign to destroy Taliban and Al-Qaeda bases in Afghanistan to attack and demoralize personnel and to destroy underground and cave complexes. American forces began using the bomb in 2001 during the Battle of Tora Bora.⁹ However, MOAB is not the largest bomb ever made. Russia, in 2007, tested the Aviation Thermobaric Bomb, nicknamed as the 'Father of All Bombs (FOAB)',

which is reportedly four times more powerful and bigger than the 'MOAB' with a blast yield equivalent to 44 tons of TNT. The bomb is so powerful that its result and potential is comparable to nuclear weapons.¹⁰

The rare strike against ISIS fighters with a weapon of this size has turned the spotlight on the world's biggest and largest contemporary non-nuclear bombs, primarily held only by US and Russia. As ISIS losses have mounted, they are using IEDs, bunkers and tunnels to strengthen their defences. General Nicholson, Commander of the Resolute Support Mission in Afghanistan said in a statement, "This is the right munition to reduce these obstacles and maintain the momentum of our offensive against ISIS". Pentagon said the strike was "designed to minimize the risk to Afghan and U.S. Forces conducting clearing operations in the area while maximizing the destruction of ISIS-K fighters and facilities. The military did what it could to avoid civilian casualties and collateral damage".¹¹

Analysis

The mountainous region of eastern Afghanistan is becoming a safe haven for militant groups. It was vital to cause attrition and severe damage to the IS elements taking refuge in the Nangarhar area which mainly consists of tunnels and cave complexes. Considering the peculiarities of the target area, sending troops in would have resulted in a prolonged battle and attrition to the US forces. Conventional and

precision targeting with aircraft and drone strikes has been the norm over the years of conflict in Afghanistan, however, not much has changed. In light of this, the selection of MOAB by US forces seems to be ideally suited for the target system. MOAB detonates before hitting the ground and causes destruction by sending shockwaves due to air compression up to a distance of over a mile in all directions. Apart from the blast effects, it may also cause caving in of the tunnels. Being an air dropped weapon from high altitude, there were no chances of attrition to the launch aircraft. Reliable intelligence to pinpoint location on ground and GPS guidance of MOAB for accuracy avoided collateral damage. Apart from the swift offensive action and demonstration of capability in Afghanistan, the MOAB is also perceived as a message to North Korea and Syria of America's intent and willingness to take offensive action. This event has brought into focus one of the undeniable characteristics of Air Power, which is 'Shock Effect'.

(Disclaimer: The views and opinions expressed in this article are those of the author and do not necessarily reflect the position of the Centre for Air Power Studies [CAPS])

Notes

¹Ipsita Sarkar, "Mother Of All Bombs': 10 Things To Know About GBU-43, The Largest Non-Nuclear Bomb", April 14, 2017, <http://www.ndtv.com/world-news/mother-of-all-bombs-all-you-need-know-about-gbu-43-the-largest-non-nuclear-bomb-1681180>, accessed on April 14, 2017.

² GBU-43/B Massive Ordnance Air Blast, [https://en.wikipedia.org/wiki/GBU-](https://en.wikipedia.org/wiki/GBU-43/B_Massive_Ordnance_Air_Blast)

[43/B_Massive_Ordnance_Air_Blast](#), accessed on 17 April 2017

³C August Elliott, "MOABs win battles but they don't win wars" April 15, 2017, <http://www.abc.net.au/news/2017-04-15/moabs-win-battles-but-they-dont-win-wars/8445710>, accessed on April 15, 2017

⁴Ibid, n-1.

⁵Christine Wang, "Trump calls Afghanistan bombing a 'very successful mission'", April 13, 2017, <http://www.cnn.com/2017/04/13/trump-calls-afghanistan-operation-a-very-successful-mission.html>, accessed on 15 Apr 17.

⁶Ibid, n-2.

⁷Ibid, n-3.

⁸ Ibid, n-2.

⁹ BLU-82, <https://en.wikipedia.org/wiki/BLU-82>, accessed on April 14, 2017

¹⁰Rahul Singh, "World's biggest bombs: India's SPICE no match for America's MOAB or Russian FOAB", April 14, 2017, <http://www.hindustantimes.com/india-news/us-drops-gbu-43-in-afghanistan-india-china-pakistan-s-non-nuclear-bombs-no-match/story-xgziqIBj1LDwUjh9mLldPN.html>, accessed on April 14, 2017.

¹¹ Ibid, n-5.