Justice from Above: The Application of Militarised American Air Power in the War on Drugs

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Abstract: This paper demonstrates how the application of militarised American air power has made a demonstrable contribution as a force multiplier in the prosecution of the war on drugs in South and Central America and on the U.S. southern border. It outlines what militarisation means in a theoretical context in order to establish how this descriptor is applied to the air assets covered in the paper. The history of America's gradual militarisation of its counter-narcotics strategy is then explored chronologically, from the 1980s to the present day, and how it has applied to Colombia, Mexico and the southern United States. The examples provided throughout will demonstrate how air power, while certainly not a solution to the challenges presented by drug trafficking, has made a substantive contribution to counter-narcotics operations.

Introduction

In September 1969 Operation Intercept saw two thousand U.S. customs and border-patrol agents deployed along the Mexican border for a three-week period, during which time over five million travellers were searched for illicit narcotics.[1] This yielded little in the way of contraband but generated positive publicity for the administration of President Richard Nixon and its nascent counter-narcotics policy.[2] Growing public complaints from the Mexican government saw the initiative quietly shelved under State Department pressure. The Administration claimed that the main goal of encouraging the Mexican government to step up its own efforts at drug interdiction had been achieved, aided by a $1 million grant for the purchase of light aircraft for such purposes.[3]

This set the tone for U.S. counter-narcotics policy in South and Central American countries, as well as domestically, in the decades going forward, that of financial, equipment and training support for partner security forces. As each subsequent presidential administration took office, this policy was either maintained or amplified by increasingly adding a military dimension as more robust operational and tactical thinking was employed to target narcotics and those who would profit from them. It is an initiative colloquially referred to as the 'war on drugs'. It has resulted in vast expenditure, prompted the creation of Federal government agencies such as the Drug Enforcement Administration, and been the driver of several international treaties. Regarding the United Kingdom, the perceived threat to society posed by illicit drugs was reported as one of the motivators for deploying British troops to Afghanistan's Helmand province, the heart of opium poppy cultivation.[4]

The employment of air power has increasingly become one of the most important tools in the arsenal of U.S. drug enforcement and of Latin American allies, facilitating the interdiction of narcotics shipments, the transport of security forces, the gathering of intelligence material and even kinetic strikes. The intention of this paper is not to exhaustively chronicle every example of when air power has featured in the war on drugs. Instead, it is to broadly educate the reader as to how militarisation, and the growth of militarised air power as a deployable asset, came to have increased utility in U.S. counter-narcotics strategy in Latin America and on its southern border.

To achieve this objective, this paper will adopt a chronological approach in order to demonstrate the progressive militarisation of air power with regards to counter-narcotics. The operational period covered will be between the 1980s efforts of the Reagan Administration, to the end of the Obama Administration as the last full-term executive

[1] E. Epstein, *Agency of Fear: Opiates and Political Power in America* (New York: G.P. Putnam's Sons, 1977), p.83-84.
[2] Ibid. p.83-84.
[3] Ibid. p.83-84.
[4] *Afghanistan - Fourth Report*, drafted by the Select Committee on Foreign Affairs, 2 July 2006, located at https://publications.parliament.uk/pa/cm200506/cmselect/cmfaff/573/57311.htm, accessed 20 May 2018.

mandate on record (though some post-2016 developments in Unmanned Aerial Systems (UAS) deployment will be covered). As the war on drugs has primarily been prosecuted throughout the United States, Colombia and Mexico, there will be a degree of geographical shift as the chronology progresses. Before exploring the development of air power in counter-narcotics, however, it is important to firmly establish exactly what militarisation means in the academic and analytical context of this paper.

What is militarisation?

Militarisation is not just the physical build-up and utilisation of military assets but is a security status in and of itself.[5] The full academic principles that underpin securitisation and militarisation theory are worthy of their own paper, and so are well beyond the remit of this piece. However, it is useful to summarise the essential elements so that the reader can better appreciate the evolution of U.S. policy to become increasingly receptive to the use of military, or 'military style' air power.

Security is a contentious subject. An automatic assumption is that 'security', as a term, is rooted in public safety, intelligence and defence. Yet, upon further analysis, security can prove to be a far more flexible concept. The environmental security of Pacific islanders gradually seeing their homes disappear beneath rising sea levels is of far more concern to them than the political security risk of Russian cyber-attack. It is for this reason that security is subjective. Different audiences will perceive various security issues in different ways and the more seriously they take those threats the more sweeping or intense the measures intended to deal with them.[6] Such thinking can be best summarised by security theory pioneers Buzan, Wæver and de Wilde:

> *Security is about survival. It is when an issue is presented as posing an existential threat to a designated referent object… The special nature of security threats justifies the use of [emergency] measures to handle them. Invocation of security has been key to legitimising the use of force, but more generally it has opened the way for the state to mobilise, or to take special powers, to handle existential threats.*[7]

The term 'referent object' refers to the thing most threatened by a security issue, such as an ethnic group, a country's territory, or even something as abstract as society or culture. Whenever we act against terrorism, immigration, hostile powers, or a multitude of other threats, real or perceived, Buzan, Wæver and de Wilde's observation can be seen, and the security issue in question can be placed somewhere on the spectrum below:

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[5] I. Benneyworth, *Narco Wars – An Analysis of the Militarisation of U.S. Counter-Narcotics Policy in Colombia, Mexico and the U.S. Border*, 2016, located at **http://orca.cf.ac.uk/91408/**, accessed 20 January 2019, p.42.
[6] B. Buzan, O. Wæver and J. de Wilde, *Security: A New Framework for Analysis* (Boulder, Colorado; Lynne Rienner Publishers, 1998), p.27.
[7] Ibid. p.29.

Non-Politicised – Politicised – Securitised – Militarised – Violised (Violence of Warfare)[8]

This spectrum should be viewed as an escalating continuum, as rungs on a ladder. Any security issue can move up and down it. Let us consider narcotics in the American national discourse as a prime example, especially for the purposes of this paper.

Narcotics were widely accepted as a (Non-Politicised) non-issue for some time in Western society, with opium and cocaine (albeit in far less potent forms than today) sold across 19th Century pharmacy counters without protest.[9] However, due to increasing (Politicised) social concerns over growing numbers of addicts as such substances became stronger in the first half of the 20th Century, narcotics became subject to legal prohibition and a huge law enforcement effort to enforce it (Securitised). The drug 'threat' has continued along the security spectrum in the United States to the extent that the measures deemed necessary to counter it have become militarised.

Militarisation is the involvement of the military itself or the presence, even embracing, of military personnel, assets, or culture by outside bodies, or indeed all three in combination, but without automatic recourse to the use of violence on a war-like scale.[10] Limited, targeted violence is permissible, for even civilian organisations such as the police can employ it without sanction in certain circumstances. If the full force of a military institution, assets or militaristic culture were unleashed on a significant scale, however, then a security issue would move up the spectrum into a Violised 'war-like' state, in accordance with Iver Neumann's concept of 'violisation' as the most extreme form of securitisation, where lethal action is actually taken, as opposed to potential threats simply being articulated or promoted to audiences.[11]

In theory, it is possible to militarise any issue providing these parameters are maintained. So, for example, military assets could be employed to oversee endangered species, protect threatened natural environments, keep the peace in urban or rural settlements, monitor elections, and so on. Non-lethal military assets such as surveillance aircraft, transport helicopters or peacekeeping troops could all be utilised in these endeavours. Targeted violence could be employed, but this does not necessarily mean lethal force, as poachers could be apprehended, or pirate boats towed away or sunk after evacuation, for instance. The employment of military personnel, assets or operational culture, even if non-violent in nature, is still enough for a security issue to be militarised.

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[8] I. Benneyworth, *Narco Wars*, p.42.
[9] British Medical Association Board of Science, 2013, *Drugs of Dependence – The Role of Medical Professionals*, located at: **https://www.bma.org.uk/-/media/files/pdfs/news%20views%20analysis/in%20depth/drugs%20of%20dependence/drugsofdepend_roleofmedprof_jan2013.pdf**, accessed 19 January 2019, p.87.
[10] I. Benneyworth, *Narco Wars*, p.47.
[11] I. Neumann, "Identity and the Outbreak of War: or Why the Copenhagen School of Security Studies Should Include the Idea of 'Violisation' in its Framework of Analysis", *International Journal of Peace Studies* 3, no.1 (January 1998), pp.1-10.

Now that the essential conceptual foundations of militarisation have been covered – and how it can become a measure to tackle a threat – the history of how American counter-narcotics policy evolved to feature militarised air power as a crucial element can be explored.

From Cold War to Drug War

Concerns abounded about drug use in the United States during the 1960s, especially of marijuana by youth, with one-in-ten 18-year olds reportedly indulging each day.[12] Two-thirds of 18 to 25-year olds professed to having tried some form of illegal drug, including 22 million Americans admitting to cocaine use.[13] Such numbers meant high demand and thus significant profits to be made. By 1979, cocaine ranked as one of Florida's biggest imports, totalling $10 billion a year, and the competition between Colombian and Cuban traffickers saw a drug-related murder in Miami every day.[14]

If drugs were regarded as a moral and social concern, measured in crime figures and numbers of addicts, then the trade behind them quickly came to be viewed as a greater security threat. It had turned certain American cities into battlegrounds that posed a danger to public safety. By the early-1980s, the pendulum had swung from a market for heroin to one for cocaine. The dominance of Latin America in the production of that drug, and of spawning cartels that trafficked it and waged war over its proceeds, meant that a forceful and proactive response was required to meet this emerging threat. If President Nixon had declared what was essentially a metaphorical war on drugs in a speech in 1971,[15] then during the 1980s President Ronald Reagan would begin the process of transforming such rhetoric into action and introduce militarised elements into what had been a principally law enforcement and diplomacy-focused campaign.

Federal authorities estimated that by 1980, 70 percent of all cocaine and marijuana entering the country passed through South Florida.[16] In January 1982, the South Florida Drug Task Force was formed and steered at Cabinet level under Vice President George H.W. Bush. It was designed to squeeze the cartels logistically and financially through enforcement and interdiction and provided a template for similar task forces in other troubled areas of the country. Most relevantly, the task force marked the first time that the U.S. military – albeit on a small scale – was actively deployed for the purpose of drug interdiction, with elements of the Army and Navy mobilised to patrol the South Florida coast and surrounding waters.[17]

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[12] T. Feiling, *The Candy Machine: How cocaine took over the world*. London; Penguin, 2009), p.38.
[13] Ibid. p.38.
[14] Ibid. p.38-39.
[15] R. Nixon, *Special Message to the Congress on Drug Abuse Prevention and Control*, 17 June 1971, located at **http://www.presidency.ucsb.edu/ws/?pid=3048**, accessed 03 May 2018.
[16] G. Posner, *Cocaine Cowboys*, 2009, located at **http://www.thedailybeast.com/articles/2009/10/12/cocaine-cowboys.html#url=/articles/2009/10/12/cocaine-cowboys.html**, accessed 09 May 2018.
[17] Drug Enforcement Administration Museum, *A Tradition of Excellence: A History of the DEA*, 2014, located at **http://www.deamuseum.org/dea_history_book/**, accessed 09 May 2018.

Such initiatives highlighted the potential for military or associated assets to be used in counter-narcotics on an operational level, but the floodgates of domestic drug war militarisation were opened in 1981 with the passage of the Military Cooperation and Law Enforcement Act. This allowed extensive sharing of drug interdiction intelligence, training, tactics, technology and weaponry between the Department of Defense (DOD) and federal, state and local police departments.[18] While an additional Anti-Drug Abuse Act was passed in October 1986, which sought to implement a primarily social policy-focused effort,[19] the Reagan Administration had still sought to make early headway on the participation of the military, and justification thereof.

It did this through the issuing of National Security Decision Directive (NSDD) 221 the previous April, which deemed that:

> The expanding scope of global narcotics trafficking has created a situation which today adds another significant dimension to the law enforcement and public health aspects of this international problem and threatens the national security of the United States.[20]

To deal with such a threat, the policy implementation section charged the Secretary of Defense, in conjunction with the Attorney General and Secretary of State, to:

> Develop and implement any necessary modifications to applicable statutes, regulations, procedures, and guidelines to enable U.S. military forces to support counter-narcotics efforts more actively, consistent with the maintenance of force readiness and training.[21]

Operation Blast Furnace was one of the principal results of this directive, one of the first military air power initiatives conducted on a significant scale. Three months after NSDD 221 was issued by President Reagan, a contingent of six U.S. Army Black Hawk helicopters and 160 supporting personnel were deployed from their station in Panama to Bolivia.[22] Their mission was to provide air transportation to native counter-narcotics police in an effort to locate and destroy cocaine labs. Under the direction of civilian Drug Enforcement Administration (DEA) personnel, these U.S. army aviation assets provided the means for Bolivian counter-narcotics forces to disrupt cocaine manufacturing for the four months they were deployed, from July to October 1986, depressing coca prices below production costs.[23]

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[18] R. Balko, *Overkill: The Rise of Paramilitary Police Raids in America*, 2006, located at **http://www.cato.org/sites/cato.org/files/pubs/pdf/balko_whitepaper_2006.pdf**, accessed 08 April 2018, p.7.
[19] United States Congress, *H.R.5484 - Anti-Drug Abuse Act of 1986*, 1986, located at **https://www.congress.gov/bill/99th-congress/house-bill/5484**, accessed 20 January 2019.
[20] White House, *National Security Decision Directive 221 – Narcotics and National Security*, 1986, located at **http://www.fas.org/irp/offdocs/nsdd/nsdd-221.htm**, accessed 12 April 2018, p.1.
[21] Ibid. p.1.
[22] W. Mendel, Illusive Victory: From Blast Furnace to Green Sweep, *Military Review*, December 1992, pp.74-87.
[23] Ibid. p.76.

Considering that Black Hawk air mobility and accompanying U.S. troops were there to facilitate the counter-narcotics activities of the Bolivian security forces, not to do it for them, the short-term results seemed promising. A Central Intelligence Agency (CIA) impact assessment for the operation concluded that Blast Furnace 'had achieved considerable success in disrupting cocaine processing and trafficking operations', in addition to 'the presence of U.S. troops and sophisticated helicopters [being] a major factor' in helping to inhibit reprisal attacks by the targeted criminals.[24] Yet, in a tacit admittance that the assessment risked overemphasising the positives, the same report acknowledged that it was likely such success would be short-lived once U.S. air assets were withdrawn. So it proved, for as soon as they left cocaine production and export returned to normal levels, along with the corruption and complicity observed in many Bolivian officers while the U.S. military were in theatre.[25] Sustainability of effort became an important mission objective in future counter-narcotics assistance initiatives, with Colombia to eventually become a standard-bearer.

After Reagan left office, the successor administration of George H.W. Bush placed the war on drugs on the centre stage of its foreign policy priorities, effectively underlined by National Security Directive 18. Like Reagan's past directive, it sought to effectively mobilise the U.S. military and intelligence community in the service of drug interdiction, directing that:

> The Secretary of Defense, in conjunction with the Secretary of State, shall revise DOD policy directives and procedures to expand DOD support of U.S. counter-narcotics efforts and to permit DOD personnel to conduct training for host government personnel and operational support activities anywhere in the Andean region.[26]

It is no surprise that the directive allowed operational support activities 'anywhere in the Andean region', for as Afghanistan and areas of South East Asia are to heroin, so are the three principal countries of the Andes to cocaine, namely Bolivia, Peru and Colombia.

The crown jewel from a drug cartel perspective is Colombia, one of the largest drug producing states in the world, accounting for 60 percent of global cocaine manufacturing.[27] While tonnage production of fresh coca leaf has substantially decreased since 2005, from 555,400 hectares that year, it still stood at 146,000 hectares by the end of 2016.[28] This was despite 2010 seeing

[24] Central Intelligence Agency, *Bolivia: The Impact of Operation Blast Furnace*, 1986, located at **https://www.cia.gov/library/readingroom/docs/DOC_0000395412.pdf**, accessed 12 May 2018.
[25] M. Abbott, "The Army and the Drug War: Politics or National Security?" *Parameters*, (December 1988): p.95.
[26] White House, *National Security Directive 18 – International Counter-narcotics* Strategy, 1989, located at **http://bushlibrary.tamu.edu/research/pdfs/nsd/nsd18.pdf**, accessed 12 April 2018, p.3.
[27] UNODC (United Nations Office on Drugs and Crime), *Global Overview of Drug Demand and Supply*, 2018, located at **https://www.unodc.org/wdr2018/prelaunch/WDR18_Booklet_2_GLOBAL.pdf**, p.29.
[28] UNODC (United Nations Office on Drugs and Crime), *Colombia - Survey of territories affected by illicit crops*, 2017, located at **http://www.unodc.org/documents/crop-monitoring/Colombia/Colombia_Coca_survey_2016_English_web.pdf**, accessed 12 May 2018, p.11.

the lowest number of cultivated hectares in recent years, at 62,000, only for it to bounce back to the 2016 level.[29] Increased coca cultivation has resulted in a commensurate increase in cocaine manufacturing. Potential cocaine output reached 1,410 tons (at 100 per cent purity) in 2016, the highest level ever estimated, representing a 25 percent rise in global cocaine manufacture from 2015.[30] This demonstrates the Sisyphean task of controlling coca cultivation, one that existed just as potently in the 1980s and 1990s as now, and the increased inclination to turn to military solutions in an attempt to make some form of impact.

Following Operation Blast Furnace in 1986, which was mainly confined to Bolivia and was conducted for a limited time, Operation Snowcap was launched in 1987 as a precursor to Bush Administration efforts. It was a seven-year, broad Andean initiative, initially targeting Bolivia and Peru, before extending into Colombia in 1989 as the Bush Administration focused in on the larger strategic drug threat.[31] The civilian DEA initially took the lead with several leased DOD Huey helicopters, with the native police and military forces of the Andean countries supported and instructed in counter-narcotics tactics that involved significant air mobility. By the end of the 1980s and beginning of the 1990s, however, the DOD itself was to become one of the most prominent and powerful players in American counter-narcotics strategy.

The 1989 National Defense Authorization Act (a series of United States federal laws specifying the annual defence budget and expenditures) designated the DOD as the 'single lead agency' for detecting and monitoring illegal drugs transitioning to the U.S. by air or sea.[32] Despite initial apprehension by the Department over potentially straying into the traditional domain of law enforcement, as the Cold War wound down the Pentagon and other national security agencies gradually embraced the opportunity afforded by the drug war to keep their vast budgets intact.[33] Under this authority the DOD could utilise its enormous budget to pay for narcotics interdiction efforts, such as radar sites located around the region, surveillance flights, naval and Coast Guard maritime patrols, and intelligence gathering.[34] Interdiction was one area where significant U.S. military resources and personnel could be brought to bear against traffickers. The standard role – as per Operations Blast Furnace and Snowcap – was supporting native security forces in tackling drug production and trafficking, where often matters of sovereignty and legislative barriers prevented unsupervised actions by U.S. military personnel in foreign jurisdictions.

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[29] UNODC (United Nations Office on Drugs and Crime), *World Drug Report 2017 – Booklet 2*, 2017, located at **https://www.unodc.org/wdr2017/field/Booklet_2_HEALTH.pdf**, accessed 28 April 2018, p.58.
[30] UNODC (United Nations Office on Drugs and Crime), *Global Overview of Drug Demand and Supply*, 2018, located at **https://www.unodc.org/wdr2018/prelaunch/WDR18_Booklet_2_GLOBAL.pdf**, accessed 20 January 2010, p.28.
[31] R. Crandall, *Driven By Drugs: U.S. Policy toward Colombia* (London; Lynne Rienner Publishers, 2008) p.27-28.
[32] United States Congress, *H.R.2461 - National Defense Authorization Act for Fiscal Years 1990 and 1991*, 1989, located at **https://www.congress.gov/bill/101st-congress/house-bill/2461/text**, accessed 2 February 2019.
[33] P. Zirnite, *Reluctant Recruits: The US Military and the War on Drugs*, 1997, located at **https://www.tni.org/files/download/Reluctant%20recruits%20report_0.pdf**, accessed 2 February 2019.
[34] A. Isacson, "The U.S. Military in the War on Drugs" in *Drugs and Democracy* in Latin America: The Impact of U.S. Policy, ed. A. Youngers and E. Rosin (London; Lynne Rienner Publishers, 2005) p.28.

A primary example of when U.S. air assets intimately supported native security forces was the operation which ultimately led to the death of one of history's most notorious drug barons, Colombia's Pablo Escobar. At the same time as the Colombian government was locked in conflict with the Revolutionary Armed Forces of Colombia (FARC) in the late-1980s and early-1990s, Escobar was in open warfare with other drug barons and the state itself. The Medellin drug cartel under Escobar's leadership undertook what could be best described as narco-terrorism. It resorted to targeted murders of politicians, judiciary and police and mass casualty actions against civilians, such as car and airline bombings, in efforts to resist challenges to its primacy and to dissuade the government from extraditing traffickers to the U.S. The campaign against the latter reached a highpoint in November 1985, when cartel-sponsored guerrillas attacked Colombia's Supreme Court, burning extradition documents and leading to the deaths of half the justices in the ensuing rescue attempt.[35]

The defining incident of Escobar's narco-terror campaign was the November 1989 bombing of Avianca Flight 203, a domestic Colombian passenger flight. In an effort to assassinate César Gaviria, a candidate in the 1990 presidential elections and later president, Escobar's henchmen planted a bomb on the aircraft which detonated mid-air, killing all aboard except Gaviria, who had cancelled his flight. Among the dead were two American citizens.[36] Following this event, Escobar's capture became a priority for the United States and Colombia alike, regarded as he was by the former as a 'clear and present danger' to national security.[37] This was not an easy proposition, as Escobar's personal fortune was measured in billions of dollars, allowing him to shower his home region with largesse so that he assumed the role of folk hero, enjoying genuine support to the extent that at one point he was even elected to the Colombian parliament.[38]

With military training provided by SEAL Team Six and Delta Force, along with strict security vetting, a native Colombian unit known as *Bloque de Búsqueda* (Search Bloc) was specifically created to track Escobar down, and was substantially aided by U.S. military intelligence. A special unit known as the United States Army Intelligence Support Activity (often shortened to ISA), was deployed to Colombia to utilise their intelligence gathering and surveillance expertise.[39] Codenamed 'Centra Spike', the unit utilised fixed-wing aircraft in their surveillance and intelligence-gathering activities. While their opponents may have expected large and sophisticated aircraft overhead, in reality Centra Spike employed an ordinary Beechcraft

[35] P. McLean, "Colombia: Failed, Failing, or Just Weak?" pp.124-125.
[36] R. McFadden, *Drug Trafficker Convicted Of Blowing Up Jetliner*, 1994, located at **https://www.nytimes.com/1994/12/20/nyregion/drug-trafficker-convicted-of-blowing-up-jetliner.html**, accessed 19 January 2019.
[37] M. Bowden, *Killing Pablo* (London; Atlantic Books, 2012).
[38] A. Wallace, *Drug boss Pablo Escobar still divides Colombia*, 2013, located at **http://www.bbc.co.uk/news/world-latin-america-25183649**, accessed 05 May 2018.
[39] M. Smith, *Killer Elite: The Inside Story of America's Most Secret Special Operations Team* (London; Orion Publishing Group Ltd, 2006) pp.165-168.

300 and 350, albeit enhanced with $50 million worth of signals intelligence and direction-finding equipment.[40]

Over several years of operations, airborne monitoring and cell-phone triangulation technology allowed key members of the Medellin cartel to be identified and monitored through interception of their radiophone and cell phone transmissions. Link analysis of their organisational structure led to the gradual capture and erosion of the Medellin hierarchy until, in 1993, the location of Escobar himself was revealed, leading to his death at the hands of Search Bloc as he attempted to escape a raid on his safe house.[41]

Meanwhile, Mexico was increasingly becoming one of the main transit routes for Colombian cocaine into the United States, as shall be explored later, and the latter sought to tackle this emerging issue. From 1989 to 1996 the U.S. provided 33 UH-1H helicopters to the Mexican Attorney General's Office and 73 UH-1H helicopters to the Mexican Ministry of Defence to enhance the air mobility of a dozen specialised units involved in drug interdiction.[42] Unfortunately, like Operation Blast Furnace in the previous decade, lessons about long-term thinking had not yet been applied as they eventually would be in Colombia, for the U.S. Government Accountability Office found that the operational effectiveness of the UH-1Hs was significantly reduced at altitudes above 5,000 feet.[43] Given that most of Mexico, coastal regions excepted, lies above this level and is where the majority of drug cultivation and trafficking takes place, this presented an obvious issue. Information at the time indicated that the Mexican military still used the UH-1Hs in a counter-narcotics capacity, primarily as troop transports for interdiction and manual eradication forces, logistics support and aerial reconnaissance.[44] However, the oversight in effective operational altitude and the limitations this incurred demonstrated that increasing air mobility assets was not a catch-all solution, especially if specific theatre requirements were not properly thought through.

Besides developing air mobility, the period of 1990 to 2000 saw active cooperation between the U.S. and Mexico on a radar network designed to improve the tracking of small drug flights coming in from Colombia. However, at the very same time, lucrative cocaine flights from Mexico were crossing the border into the U.S. with impunity, just some of an estimated 3,500 annual cocaine supply sorties by 1989. A fleet of 30 Boeing 727s, belonging to Mexican drug baron Amado Carrillo Fuentes (earning him the title 'Lord of the Skies'), were provided with

[40] M. Bowden, *Killing Pablo.*
[41] M. Smith, *Killer Elite*, pp.165-168.
[42] U.S. General Accounting Office, *Drug Control: Update on U.S.-Mexican Counter-Narcotics Efforts – Statement of Benjamin F. Nelson, Director, International Relations and Trade Issues, National Security and International Affairs Division*, 1999, located at **https://www.govinfo.gov/content/pkg/GAOREPORTS-T-NSIAD-99-86/pdf/GAOREPORTS-T-NSIAD-99-86.pdf**, p.12.
[43] U.S. Government Accountability Office, *Drug Control - U.S.-Mexican Counter-narcotics Efforts Face Difficult Challenges*, 1998, located at **https://www.gao.gov/archive/1998/ns98154.pdf**, accessed 22 May 2018, p.18.
[44] Ibid. p.18.

federal protection from the Mexican government as they left and returned to the drug-transit city of Hermosillo.[45] The semi-authoritarian Mexican government of the period, and especially its security forces, were effectively complicit with the Drug Trafficking Organisations (DTOs) in profiting from the drug trade and demonstrated how institutional corruption could negate technological effectiveness.

In addition to burgeoning international cooperation with Mexico, by the late-1980s the U.S. had become increasingly comfortable in utilising its domestic air power assets in helping to secure its own airspace and facilitate interdiction. As Cold War tensions diminished, the North American Aerospace Defense Command, or NORAD, shifted substantial assets towards counter-narcotics as the Pentagon assumed the lead agency role. Along with 41 ground radar sites based in the continental United States, tethered Aerostats (radar balloons) were located in Florida and the Southwest to help detect Caribbean and Mexican-border smuggling flights.[46] Upon detecting suspected drug flights, 60 high-alert fixed-wing aircraft were ready to scramble at 30 locations, backed up by a fleet of E-3 Airborne Warning and Control System (AWACS) aircraft, with 42 percent of USAF AWACS missions at the time focused on drug interdiction.[47]

Saving Colombia

By the end of the 1990s, the Colombian cocaine trade was only growing despite the best efforts of U.S. counter-narcotics policy. In fact, the increased cultivation resulted in the production tonnage of coca leaf in Colombia rocketing, from 45,422 tonnes in 1993, to 71,958 tonnes a year later in 1994, to 165,934 tonnes by 1998, almost matching the production of Peru and Bolivia *combined*.[48] In 1990 Colombia only accounted for 16 percent of that year's global total. By 1999 it accounted for 68 percent of the total.[49] These figures demonstrated that while U.S. counter-narcotics policy in the region had, to a relatively successful degree, squeezed production in Bolivia and Peru, cultivation had instead shifted into home-grown Colombian coca. The drug cartels, FARC, the similar National Liberation Army (ELN) and the right-wing paramilitary groups that opposed them, all relied on drug profits to fund their operations,[50] and caught in the middle of rampant violence was an increasingly unstable Colombian state. In response, in 2000 the United States approved 'Plan Colombia', a $1 billion increase in aid to the Colombian military and police, including significant transfers of equipment and special forces mentoring, not least in air mobility and air interdiction capabilities.

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[45] M. Beith, T*he Last Narco: Hunting El Chapo, the World's Most Wanted Drug Lord* (London, Penguin Books Ltd, 2010), p.54.
[46] T. Bartimus, "*NORAD Tunes In to Drug War*", 1990, located at **http://articles.latimes.com/1990-09-16/news/mn-952_1_drug-war**, accessed 20 January 2019.
[47] Ibid.
[48] UNODCCP (United Nations Office for Drug Control and Crime Prevention), *Global Illicit Drug Trends*, 1999, located at **http://www.unodc.org/pdf/report_1999-06-01_1.pdf**, accessed 16 May 2018, p.42.
[49] UNODCCP (United Nations Office for Drug Control and Crime Prevention), *World Drug Report*, 2000, located at **http://www.unodc.org/pdf/world_drug_report_2000/report_2001-01-22_1.pdf**, accessed 16 May 2018, p.28.
[50] J. Otis, *The FARC and Colombia's Illegal Drug Trade*, 2014, located at **https://www.wilsoncenter.org/sites/default/files/Otis_FARCDrugTrade2014.pdf**, pp.2-4.

To understand the importance and, indeed, operational necessity of efficient and effective air mobility in Colombia, it is necessary to appreciate the extent to which the country's geography presents a challenge to central governments in extending their remit across the land. Colombia is divided by three mountain ranges, with significant portions of the east comprised of the plains and jungles of the Amazon basin, home to only one-fifth of the population, while the rest reside along the western plateaus and the valleys between the mountains and the Caribbean coast.[51] While matters have improved in recent years, at the height of Colombia's drug conflict the country's infrastructure, whether in the form of transportation links or substantial and permanent government presence, had traditionally experienced poor penetration in these hard-to-reach areas, generating significant inequality.[52] This allowed guerrillas and later drug cartels to take advantage and establish a presence, facilitated by the lack of state political and security authority. This isolation has made air mobility essential for conducting counter-narcotics operations in these areas.

From 2000 to 2013, of the over $9 billion the U.S. ultimately invested in supporting Colombia, the lion's share went towards military and security support, with $4.2 billion dedicated to counter-narcotics funding to provide training, support and resources for Colombian military and police interdiction and eradication efforts.[53] In addition to this, almost $670 million of direct weaponry and equipment transfers to the Colombians took place, including air assets, with over $400 million supporting Air Wing operations and many dozens of rotary-wing aircraft, one of the most important tactical assets at the disposal of the military and Colombian National Police in adopting swift and effective counter-narcotics operations.[54]

Plan Colombia eventually transitioned to the home-grown Colombian initiatives of 'Democratic Security' and then 'Plan Patriota', underwritten by American weapon and equipment transfers, DOD support and general interdiction support. As the Colombian government took more responsibility for its own security under both initiatives, the native budget grew to 5.2% of GDP by 2003, with total annual spending on defence rising to $6.9 billion by 2006.[55] By 2007, the Colombian army had grown by 78,000, and new military units were deployed, including 2 divisions, 6 brigades, 12 new mobile units and 6 mountain battalions. As a result, the armed forces acquired significant additions to their air mobility assets, including over two-dozen helicopters, the provision of which was again by the U.S.

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[51] P. McLean, "Colombia: Failed, Failing, or Just Weak?" *The Washington Quarterly*, 25, no. 3 (2002): p.124-125.
[52] The Economist, *Infrastructure in Colombia: Taking the Slow Road*, 2013, located at **https://www.economist.com/the-americas/2013/07/06/taking-the-slow-road**, accessed 2 February 2019.
[53] J. Beittel, *Colombia: Background, U.S. Relations, and Congressional Interest*, 2012, located at **http://fas.org/sgp/crs/row/RL32250.pdf**, accessed 18 May 2018, p.38.
[54] Ibid. p.38.
[55] USAID - United States Agency for International Development, *Assessment of the Implementation of the United States Government's Support for Plan Colombia's Illicit Crop Reduction Components* 2009, located at **http://pdf.usaid.gov/pdf_docs/PDACN233.pdf**, accessed 18 May 2018, p.10.

Increased Colombian security forces were required in order to 'clear, hold and build' contested areas and expand the remit of the Colombian state, which gradually became known as the 'Consolidation' phase.[56] There is no doubt that narcotics production and trafficking remains a major security issue in Colombia today. However, as Figure 1 illustrates, the levels of violence have generally decreased to the extent that the country no longer balances on a precipice as it did during the 1990s, with major security gains in-part attributable to the force multiplier of air power.

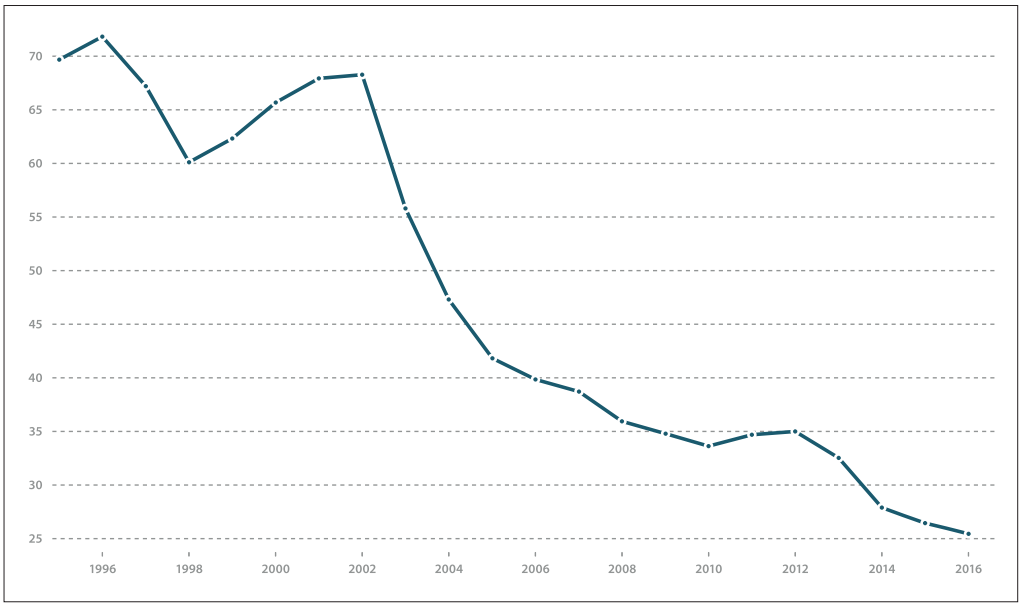

Figure 1: Intentional homicides (per 100,000 people) in Colombia[57]

The growth and development of air mobility assets in the Colombian security forces proved to be of major operational benefit in helping to re-establish some semblance of state control in ungoverned regions and disrupting drug trafficking operations. This is not to say that air mobility was, nor remains, solely responsible for recent security gains, but it has provided an important tactical capability for the Colombian army and national police, allowing counter-narcotics interdiction and destruction of drug labs deep in inhospitable and often hostile territory. It is a Sisyphean task given the sheer scale of cocaine production, yet what operations that do take place successfully deny DTOs extra funding for their operations.

[56] A. Isacson, *Consolidating "Consolidation" - Colombia's "security and development" zones await a civilian handoff, while Washington backs away from the concept*, 2012, located at **http://www.wola.org/files/Consolidating_Consolidation.pdf**, accessed 30 April 2018, p.3.
[57] The World Bank, *Intentional Homicides (per 100,000 people)*, 2019, located at **https://data.worldbank.org/indicator/VC.IHR.PSRC.P5**, accessed 2 February 2019.

While the increased air mobility of counter-narcotics security forces has had some detrimental impact on the cocaine industry, given the sheer scale of land set aside for coca growth, the most direct method of striking at the heart of Colombia's drug cultivation has usually been via the employment of air-released herbicides. The practice of aerial crop eradication is targeted at the vast coca plantations and not the populace directly. Under the auspices of the United States, the Colombians had long implemented significant aerial eradication efforts, such as Operation Condor during the 1994-1998 presidential term of the scandal-ridden Ernesto Samper, who sought to earn favour by deploying thirty-eight helicopters and twenty-one aircraft in a huge aerial campaign against illicit crops.[58] Yet this did not stop the slide into narcotics-related disorder in the late-1990s that prompted Plan Colombia. Still, as Figure 2 highlights, the number of hectares of coca cultivation were almost halved between 2000 to 2004 as Plan Colombia gained traction, indicative of success, but at the cost of creating thousands of internally displaced peoples, many already fleeing the violence of the civil conflict who also saw their main, indeed only source of income defoliated.

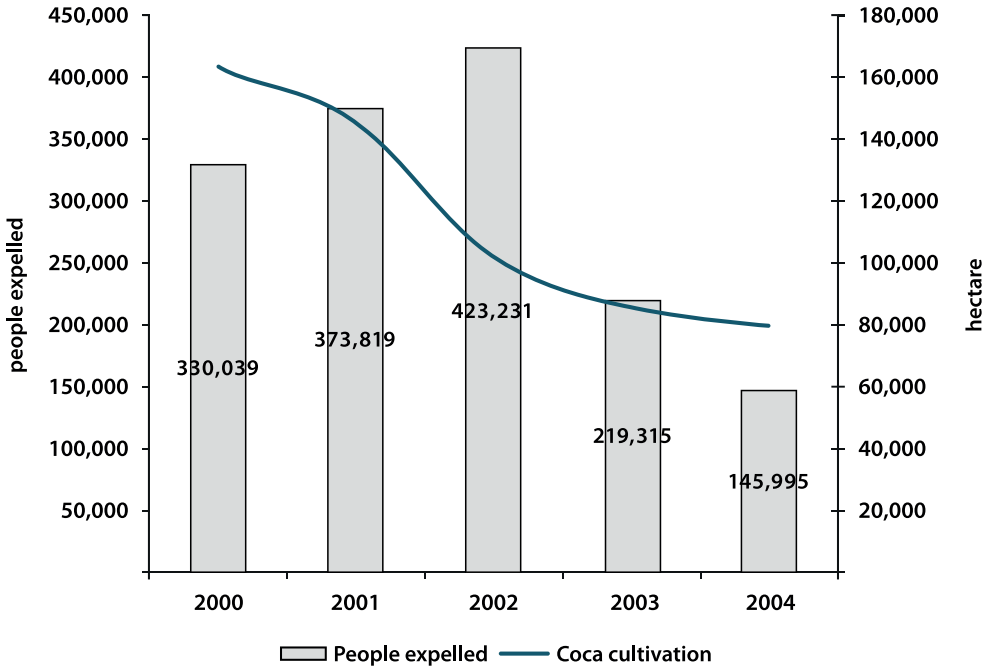

Figure 2: Number of Internally Displaced Persons and coca cultivation, 2000-2004[59]

[58] R. Crandall, *Driven By Drugs: U.S. Policy toward Colombia*, p.102.
[59] UNODC (United Nations Office on Drugs and Crime) and Government of Colombia, *Colombia: Coca Cultivation Survey*, 2005, located at **http://www.unodc.org/pdf/andean/Part3_Colombia.pdf**, accessed 27 May 2018.

As a consequence, the primary resource of the cocaine industry was depleted, but the civil damage caused meant that the economically desperate would return to cultivation and trafficking once the opportunity arose, thus doing little to tackle the narcotics industry in the long-term. This is another demonstration of how air power can be tactically effective yet must be wedded with a longer-term strategy. It would seem that the Colombians later learnt this as the security situation improved, with Consolidation allowing increased government presence and economic development to wean areas off coca cultivation. This was in conjunction with a growing confidence to disagree with the U.S., such as when the Colombian government halted aerial spraying in May 2015 due to concerns over the environmental and health effects of the chemicals used.[60]

Going to War with the Cartels

The combined efforts of the U.S. and Colombia to stabilise the country and target the South American cartels from the mid-1980s to early-2000s led to the dismantlement of these organisations and the closure or restriction of many previous air and maritime trafficking corridors. As a result, the Colombian DTOs sub-contracted the trafficking of cocaine to Mexican DTOs, making payment with the drug itself. This gradually allowed the latter to evolve from mere traffickers into the wholesalers they are today, responsible for generating their own billions of dollars in revenue rather than being subservient to the Colombians as they traditionally were. As profits soared, so too did the incentive for the Mexican DTOs to compete with each other for market share and lucrative trafficking routes into the United States.[61]

Mexican drug cartels are, by their own standards at least, increasingly militarised entities, often due to the presence of turncoat military operatives and counter-narcotics police in their ranks. The most notable example is Los Zetas.[62] Though most of the original members have been captured or killed, in their original incarnation the Zetas were recruited by the Gulf Cartel as a military and enforcement wing for operations.[63] They had training and expertise as a Special Forces unit, with some members rumoured to have undergone U.S. training at Fort Benning, Georgia.[64] The initial leaders were even able to entice members of Mexico's special airborne counter-narcotic military unit – the GAFE – into the Zeta ranks. It was a process that eventually created what was estimated to be a paramilitary army numbering 4,000 by 2010, a powerful tool that helped the Zetas turn on their former masters in the Gulf Cartel and assume drug trafficking operations themselves.[65]

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[60] W. Neuman, *Defying U.S., Colombia Halts Aerial Spraying of Crops Used to Make Cocaine*, 2015, located at **http://www.nytimes.com/2015/05/15/world/americas/colombia-halts-us-backed-spraying-of-illegal-coca-crops.html**, accessed 27 May 2018.
[61] J. Beittel, *Congressional Research Service – Mexico's Drug Trafficking Organizations: Source and Scope of the Violence*, 2013, located at **http://www.fas.org/sgp/crs/row/R41576.pdf**, accessed 27 April 2018, p.8.
[62] B. Lee, *Council on Foreign Relations – Mexico's Drug War*, 2014, located at **http://www.cfr.org/mexico/mexicos-drug-war/p13689**, accessed 27 April 2018.
[63] I. Grillo, *El Narco: The Bloody Rise of the Mexican Drug Cartels* (London, Bloomsbury, 2011) p.145.
[64] E. Vulliamy, *Amexica: War Along the Border Line* (London; The Bodley Head, 2010) p.15.
[65] Ibid. p.15-16.

In the face of an increasingly militarised and vicious opposition, the Mexican government adopted a militarised counter-narcotics strategy of its own and deployed its armed forces in *de facto* military occupations of areas of drug violence. As with the situation prior to the launch of Plan Colombia, the United States saw a rising security crisis on its Southern border and took action. Overarching counter-narcotics aid to Mexico, whether military or predominantly law-enforcement in nature, was christened the Merida Initiative and was launched in 2008.[66]

While the United States favours developing law enforcement capability in Mexico in the long-term, the Mexican military is generally perceived to be more efficient and less corrupt and so offers the better immediate partner.[67] For example, as recently as September 2018, the Mexican Army assisted in replacing the entire police force of the Pacific Coast city of Acapulco after fears that the municipal police were corrupted by drug cartels.[68] Nevertheless, in contrast to Colombia, where American military and intelligence personnel largely operated freely, the Mexicans have traditionally closely guarded their sovereignty, limiting the U.S. to an assistance and advisory role outside of Mexican territory. Yet, by 2013 the Mexican military was becoming increasingly comfortable cooperating with U.S. Northern Command in developing interdiction capability, most notably via upgrading many of its airborne platforms for counter-organised crime operations.[69]

Ever since the 1990s, when the semi-authoritarian Mexican government was complicit with its native DTOs, the U.S. government has had to adopt both a positive and cautious approach to its support for Mexican counter-narcotics. Positive, because since 2000 the Mexican government is fully democratic and recognises the national security threat that the cartels pose to it and the United States, but also cautious because levels of corruption are still endemic in parts of the Mexican security and counter-narcotics forces. It is for this reason that greater military cooperation between the U.S. and the Mexican Navy and Marines, rather than with the Mexican Army, is not coincidental. The former has demonstrated enthusiasm in working with the U.S., being far more willing to adopt American air power techniques, compared to what is regarded as the more insular and corruption-prone Mexican Army.[70]

As part of the Merida Initiative, four CASA 235 maritime surveillance aircraft, valued at $50 million each, were delivered to the Mexican Navy to help increase maritime vigilance and control over Mexican territorial waters with the aim of impeding and disrupting coastal and

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[66] C. Seelke, *Mexico: Evolution of the Mérida Initiative*, 2007-2019, 2018, located at *https://fas.org/sgp/crs/row/IF10578.pdf*, accessed 2 February 2019.
[67] B. Asch, N. Burger and M. Fu, *Mitigating Corruption in Government Security Forces: The Role of Institutions, Incentives, and Personnel Management in Mexico* (Santa Monica, The RAND Corporation, 2011), p.27.
[68] E. Malkin, *Mexican Authorities Disarm Acapulco Police Amid Corruption Inquiry*, 2018, located at h*ttps://www.nytimes.com/2018/09/26/world/americas/mexico-acapulco-police.html*, accessed 2 February 2019.
[69] U.S. Department of Defense, *Northcom Pursues Closer Engagement with Mexico*, 2013, located at *http://www.defense.gov/news/newsarticle.aspx?id=119074*, accessed 24 May 2018.
[70] J. Beittel, *Congressional Research Service - Mexico: Organized Crime and Drug Trafficking Organizations*, 2018, located at *https://fas.org/sgp/crs/row/R41576.pdf*, accessed 19 January 2019, p.7.

Caribbean drug trafficking.[71] Further supplementing this effort, an Intelligence, Surveillance and Reconnaissance (ISR) Dornier 328-JET arrived in late 2014,[72] while in 2016 the Mexican Navy also adopted its American equivalent's fondness for Unmanned Arial Systems, as it introduced the Arcturus T-20 JUMP system to enhance its surveillance and interception capabilities.[73] Additionally, nine UH-60M Black Hawk helicopters were delivered to Mexican security forces, with three going to the Mexican Navy and six to the Federal Police, along with eight Bell 412 helicopters to further supplement the Mexican rotary-wing force, like the Colombians for the purpose of mobility and interdiction.[74]

The examples detailed above concerning Colombia and Mexico have principally involved relatively benign military air asset support, from mobility to surveillance. Since the days of Operation Blast Furnace, American military personnel have traditionally adopted a 'hands-off' policy when working with native partner forces, preferring (and legally obligated in any case) to only provide mentoring and training rather than direct lethal participation in counter-narcotics operations. However, this is not to say that covert operations with lethal effect have not taken place, as the ISA's instrumental role in helping to eliminate Pablo Escobar demonstrated. Operating under a covert programme authorised by President George W. Bush following FARC's seizure of American hostages in 2003, and continued under President Obama (and falling outside the approved Plan Colombia support package, hence its clandestine nature), the CIA was able to assist the Colombian military with intelligence and, eventually, equipment to facilitate the killing or capture of FARC commanders.[75]

The CIA set up a special intelligence cell in the U.S. embassy in Bogota, where they could collect and assess intelligence on the FARC leadership and pass it on to Colombian forces, facilitated by U.S. Special Forces trainers. Lethal, direct military air support was introduced when – after legal approval was granted – the CIA were authorised to provide the Colombian air force with the Enhanced Paveway II, a relatively inexpensive guidance device that could convert a standard 500 pound drop-bomb into a targeted smart bomb.[76] In order to ensure that the use of such ordnance remained under U.S. control and was strictly limited and targeted, the CIA liaisons to the Colombian forces maintained possession of the encryption codes necessary to activate the smart bomb conversion equipment, freeing them up only with

[71] U.S. Embassy – Mexico 2013, *Fact Sheet: The Merida Initiative - An Overview*, 2013, located at **http://photos.state.gov/libraries/mexico/310329/docs/Merida-Initiative-Overview.pdf**, accessed 22 May 2018.
[72] C. Seelke and K. Finklea, *Congressional Research Service - U.S.-Mexican Security Cooperation: The Mérida Initiative and Beyond*, 2017, located at **https://fas.org/sgp/crs/row/R41349.pdf**, accessed 22 May 2018, p.13.
[73] UAS Vision, *Mexican Navy Begins Operations with New UAV*, 2016, located at **https://www.uasvision.com/2016/08/08/mexican-navy-begins-operations-with-new-uav/**, accessed 22 May 2018.
[74] C. Seelke and K. Finklea, *Congressional Research Service - U.S.-Mexican Security Cooperation: The Mérida Initiative and Beyond*, 2017, located at **https://fas.org/sgp/crs/row/R41349.pdf**, accessed 22 May 2018, p.13.
[75] D. Priest, *Covert Action in Colombia*, 2013, located at **http://www.washingtonpost.com/sf/investigative/2013/12/21/covert-action-in-colombia/**, accessed 19 May 2018.
[76] The Guardian, *Covert CIA program helped Colombia kill rebel leaders*, 2013, located at **http://www.theguardian.com/world/2013/dec/22/cia-helped-colombia-kill-rebel-leaders**, accessed 19 May 2018.

permission from above and when legitimate targets were confirmed.[77] It was this combination of actionable intelligence and lethal capability that allowed the Colombian military to locate, attack and kill almost two-dozen guerrilla leaders between 2007 to 2013, further compounding FARC's strategic troubles, eventually forcing them to the peace table and, if not eliminating then at least severely compromising one of Colombia's main DTOs.[78] In terms of the security spectrum, while lethal violence was indeed deliberately applied, it was highly targeted and not executed on a mass scale, and thus still constitutes militarised and not violised use of air power.

Fortress America

The final link in the drug supply chain that extends from the Andean region up through Central America, is the southern border of the United States. The border has presented an increasingly salient security issue for the U.S. long before the Trump Administration's recent concerns. Illegal immigration has always been on the agenda, but as the Mexican DTOs took over from the Colombians as the greater threat, their efforts to infiltrate their northern neighbour has led to the militarisation of U.S. border security, on the ground and in the air, as illustrated below.

In 2007 the U.S. Customs and Border Protection agency (CBP) formed the U.S. Border Patrol's Special Operations Group (SOG) – headquartered in El Paso, Texas – to direct the operations of the Border Patrol Tactical Unit (BORTAC) and the Border Patrol Search, Trauma, and Rescue Unit (BORSTAR).[79] While BORSTAR is a tactical medical and search and rescue unit that utilises rotary-wing aircraft, BORTAC is, for all intents and purposes, the Border Patrol's in-house Special Forces unit, modelled on its military counterparts, with similar rotary-wing-based transport and insertion. Formed in 1984 to serve a civil disturbance function following rioting at several Immigration and Naturalisation Service detention facilities, the unit quickly evolved to undertake specialised roles in 'high-risk warrant service; intelligence, reconnaissance and surveillance; foreign law enforcement/Border Patrol capacity building; airmobile operations; maritime operations; and precision marks-man/observer'.[80] The unit has even served in American theatres of operation, including Iraq and Afghanistan, as part of Mobile Training Teams. The CBP operates a vast fleet of air assets in support of its mobility and interdiction operations involving BORTAC and regular agents, from traditional fixed-wing and rotary-wing aircraft to the latest UAS, as detailed later. These are broken down into Air Branches and Units distributed along the Southwest Border region, either alone or alongside marine assets, as Map 1 details.

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[77] Ibid.
[78] Ibid.
[79] U.S. Customs and Border Protection, *Border Patrol Special Operations Group (SOG)*, 2014, located at **http://www.cbp.gov/sites/default/files/documents/Border%20Patrol%20Special%20Operations%20Group.pdf**, accessed 14 May 2018.
[80] U.S. Customs and Border Protection, *Border Patrol Tactical Unit (BORTAC)*, 2014, located at **http://www.cbp.gov/sites/default/files/documents/Border%20Patrol%20Tactical%20Unit.pdf**, accessed 14 May 2018.

Map 1: CPB Air and Marine Infrastructure in the Southwest Border Region[81]

The CBP primarily operates fixed-wing aircraft for intelligence-gathering, situational awareness and interdiction operations, though it also utilises aircraft such as the Super King Air 350ER (MEA) to move personnel and equipment.[82] A significant portion of the CBP's rotary-wing fleet is utilised for air mobility, transporting personnel such as BORTAC to swiftly intercept suspected trafficking operations. The fleet includes such military stalwarts as the Bell UH-1N 'Huey', the Sikorsky UH-60 Black Hawk, the Sikorsky S-76 and the Bell UH-1H Huey II.[83] As well as allowing crews to operate in the heat and terrain of the American southwest, aircraft such as the Hueys and Black Hawks are ideally suited to missions associated with air mobility. These include external lifts via sling loads, the insertion of CBP forces via fast rope and rappel, and general access to inaccessible terrain, search and rescue taskings, air crew rifle operations, and aerial patrols.

In addition to air mobility, the CPB also utilises former military airborne situational awareness assets. The aforementioned Aerostat programme still endures after four decades, having been transferred from the U.S. Air Force to Customs and Border Protection in 2013. As Map 2 illustrates, a chain of eight fixed-location Tethered Aerostat Radar Systems (TARS), to give them their proper name, allows continuous and detailed monitoring of aerospace on the U.S. southern border, detecting aircraft at a range of 200 miles, even light smuggling aircraft that would have previously flown low or through mountainous terrain or valleys to avoid detection.[84]

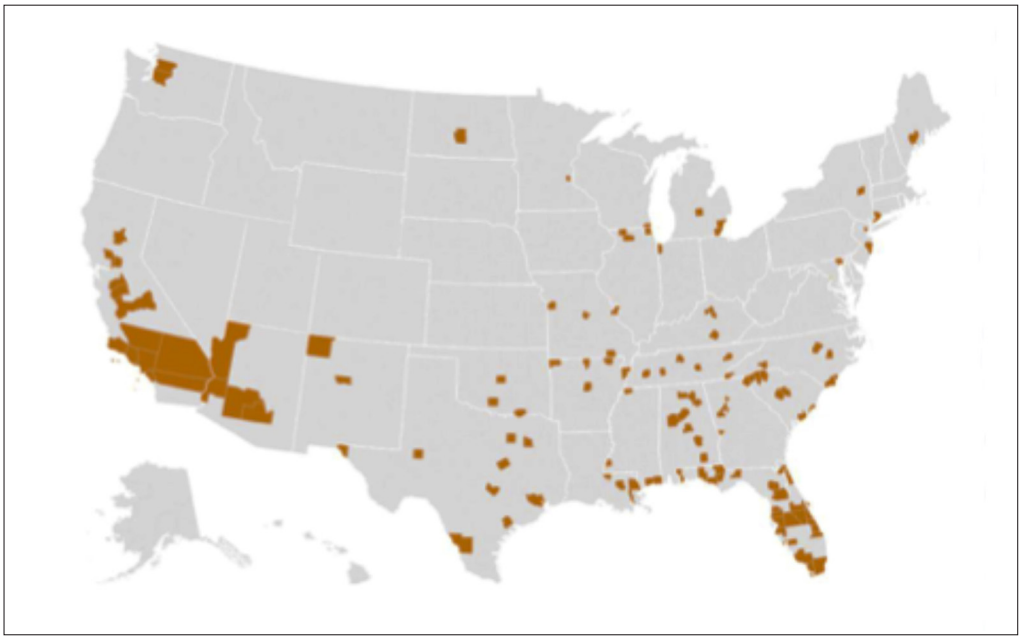
[81] U.S. Customs and Border Protection, *Air and Marine - Southwest Border Region*, 2013, located at **https://nemo.cbp.gov/air_marine/FS_Southwest_Border_Region.pdf**, accessed 22 May 2018.
[82] U.S. Customs and Border Protection, *Multi-Role Enforcement Aircraft - Super King Air 350ER*, 2018, located at **https://www.cbp.gov/sites/default/files/documents/FS_2015_MEA_Fact%20Sheet_FINAL.pdf**, accessed 22 May 2018.
[83] U.S. Customs and Border Protection, *Air and Marine Operations Assets*, 2018, located at **https://www.cbp.gov/border-security/air-sea/aircraft-and-marine-vessels#wcm-survey-target-id**, accessed 22 May 2018.
[84] U.S. Customs and Border Protection, *CBP's Eyes in the Sky*, 2015, located at **https://www.cbp.gov/frontline/frontline-november-aerostats**, accessed 11 May 2018.

Map 2: Tethered Aerostat Radar Systems coverage in the United States and Caribbean[85]

Wireless capability allows each TARS to upload radar data to the Cloud, which is combined with data transmitted by its cousins. The data is in turn downloaded to the Air and Marine Operations Centre (AMOC) in Riverside, California, where it is fed into the Air and Marine Operations Surveillance System. The system allows AMOC to integrate over 700 sensor feeds, allowing simultaneous tracking of over 50,000 aircraft in flight over the U.S., Central America, the Caribbean and relevant parts of South America.[86] Due to the efficiency of TARS, it is claimed that the number of unidentified aircraft flying over the border has dwindled from 8,500 in the early-1980s to less than 10 per year by the mid-2010s, the assessment being that drug traffickers are now landing well short of border airspace and switching to land-based smuggling, making them notionally easier to interdict.[87] However, the CBP acknowledge that the TARS system may suffer operational outages for up to 25 percent or more of the time, due to an inability to operate in poor weather conditions, with a spokesman admitting that 'there is no 100 percent coverage. They can't monitor the entire airspace.'[88] Therefore, while the statistics noted above are seemingly impressive, they cannot be taken as absolute fact.

[85] Ibid.
[86] Ibid.
[87] Ibid.
[88] M. Browne, *US Radar Has Detected Hundreds of Illegal Low-Flying Aircraft Attempting to Cross Border From Mexico*, 2016, located at **https://www.cnsnews.com/news/article/mark-browne/us-radar-has-detected-hundreds-illegal-low-flying-aircraft-attempting-cross**, accessed 2 February 2019.

The CBP are not the only civilian organisation to have had former DOD assets, such as TARS or aircraft, transferred to their control. A continuing legacy of the Clinton Administration's 1997 National Defence Authorisation Security Act, which allowed surplus military equipment to be transferred to civilian law enforcement, has seen serious military hardware being operated by large urban police departments to small rural sheriffs.[89] Alongside assault rifles, night-vision equipment and armoured vehicles, a significant number of air assets have been purchased by law enforcement in various counties nationwide, but especially those along the main drug trafficking routes into the United States.



Map 3: Counties which acquired former-DOD fixed and rotary-wing aircraft, 2006-2014[90]

As Map 3 highlights, over one hundred counties throughout the United States purchased former-DOD aircraft between 2006 to 2014, both fixed-wing and rotary, though mainly the latter to assist law enforcement with similar counter-narcotics operations as the CBP. El Paso County, which mirrors the violent Mexican drug city of Ciudad Juarez, purchased eight helicopters to complement its efforts, while Los Angeles County, experiencing significant trafficking and drug-related gang activity, purchased 15 helicopters to enhance its air mobility, surveillance and interdiction efforts.[91] Counties in Florida and the Southwest generally show healthy aircraft purchases, reflecting the recent revival of older drug trafficking routes through

[89] R. Balko, *Overkill*.
[90] T. Giratikanon, A. Parlapiano and J. White, *Mapping the Spread of the Military's Surplus Gear*, 2014, located at **http://www.nytimes.com/interactive/2014/08/15/us/surplus-military-equipment-map.html**, accessed 22 May 2018.
[91] Ibid.

the Caribbean and up through South Florida, in order to avoid the violent Mexican border regions, and increasingly securitised American side of the border.[92]

Imagery collection is vital in developing the intelligence and situational awareness that contributes to securitising and militarising the border. With the apparent successful application of the main Aerostat system, the CBP is assessing the potential of smaller, more tactical variants to supplement its border security operations. In-keeping with previous initiatives, the DOD transferred tactical aerostats to the CBP following use by military forces deployed in Afghanistan. There are three models of tactical aerostat; the Persistent Threat Detection System; the Persistent Ground Surveillance System, and the smallest, the Rapid Aerostat Initial Deployment system, all of which operate from 500 to 5,000 feet and utilise infrared and electro-optical cameras as well as radars in order to monitor ground activity and produce imagery intelligence.[93]

While the CBP utilises fixed-wing aircraft such as the Beechcraft King Air 200 and C-12C, and the Lockheed Martin P-3 Orion Airborne Early Warning, amongst others, for intelligence-gathering and situational awareness, like the DOD it has also embraced the UAS revolution, in the form of the Predator system, albeit the unarmed B-Class variant used for surveillance and reconnaissance. The programme began in 2005 and by 2011 there were six Predator-Bs covering most of the U.S.-Mexico border.[94] By 2018 this had increased to nine, yet analysis by the Government Accountability Office found that the Predators were airborne only 6.4 percent of available hours per year from 2013 to 2016, whether as a consequence of cancelled flights due to inclement weather, or a desire to minimise flight time in order not to excessively erode operational lifespan, among several reasons.[95] By contrast, despite the admitted coverage issues during poor weather, the TARS system operated around 60 percent of the time,[96] perhaps explaining why the CBP is increasingly interested in acquiring smaller, tactical TARS in order to supplement this superior efficiency.

Nevertheless, just as with these tactical TARS, the CBP has recently been assessing the operational utility of smaller Unmanned Aerial Systems, or sUAS, via a test programme conducted between the Autumn of 2017 to the Spring of 2018. The CBP tested AeroVironment's Raven and Puma UAS systems, as well as PSI Tactical's InstantEye quadcopter,

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[92] W. Gibson, *Shifting drug smuggling routes bring contraband to Florida*, 2014, located at **http://articles.sun-sentinel.com/2014-04-05/news/fl-drug-smuggling-routes-20140404_1_central-florida-south-florida-cocaine-shipments**, accessed 13 April 2018.
[93] U.S. Customs and Border Protection, "*CBP's Eyes in the Sky*".
[94] W. Booth, *More Predator drones fly U.S.-Mexico border*, 2011, located at **http://www.washingtonpost.com/world/more-predator-drones-fly-us-mexico-border/2011/12/01/gIQANSZz8O_story.html**, accessed 11 May 2018.
[95] D. Bier and M. Feeney, *Drones on the Border: Efficacy and Privacy Implications*, 2018, located at **https://www.cato.org/publications/immigration-research-policy-brief/drones-border-efficacy-privacy-implications**, accessed 12 May 2018.
[96] Ibid.

all of which could be equipped with regular or infrared cameras and be operated by a ground controller. The Puma is the largest of the trio, weighing in at 14 pounds with a 9.5 foot wingspan, while the Raven comes in at four pounds with a 4.5 foot wingspan, while the InstantEye quadcopter weighs a mere 0.7 pounds, meaning that the larger devices could be carried on a vehicle whilst the smallest would fit in a backpack.[97] As with the tactical TARS, such devices are already in use by the U.S. military in surveillance and force protection roles and would enable CBP agents to conduct surveillance, reconnaissance and tracking activities in areas potentially too hazardous for manned flight or ground operations, which is often why drug traffickers traverse them.

Additionally, much like how the main TARS system uploads data to the Cloud to combine with other information to form a clearer operational picture, the U.S. government has sought to marry the versatility of the sUAS with the huge criminal database it possesses. In 2017, the CBP solicited proposals from the consumer drone industry for sUAS with facial-recognition capability which theoretically could cross-reference captured imagery with hundreds of millions of photographs held by federal law-enforcement databases.[98] The upshot is that CBP agents could be forewarned when recognised traffickers, potentially with histories of armed violence, were in the vicinity and adjust their procedures accordingly. Additionally, if other recognition technology were also employed, the sUAS could identify if certain areas of vegetation showed disturbance that may indicate the passage of traffickers, or if such groups were armed or not by analysing their persons. If properly realised, this would all dramatically enhance the intelligence picture for counter-narcotics operations on the U.S. southern border.

Conclusion

This paper has sought to demonstrate how the application of military air power, or civilian air assets of a military nature, have facilitated the prosecution of the war on drugs in South and Central America and on the U.S. southern border. While no means exhaustive, the examples offered demonstrate that the principal benefit of air power has been as a force multiplier. Whether interdicting traffickers in the air or ground, rapidly inserting counter-narcotics forces, providing valuable intelligence and situational awareness, or attacking the primary resource and leadership of DTOs, the application of air power, especially as technology has improved, has allowed the United States and its partners to prosecute their counter-narcotics campaigns with an effectiveness that would have been impossible to achieve without air assets.
This is not to say that air power is a panacea for the fight against illicit drugs. The drug war is fought on multiple fronts, involving society, culture, economics, public health and law enforcement. Based on the evidence presented in this paper – and on the wider assessments

[97] M. Rockwell, *CBP tests small drones for border surveillance*, 2017, located at **https://gcn.com/articles/2017/09/18/drones-border-tests.aspx**, accessed 12 May 2018.
[98] R. Brandom, *The US Border Patrol is trying to build face-reading drones*, 2017, located at **https://www.theverge.com/2017/4/6/15208820/customs-border-patrol-drone-facial-recognition-silicon-valley-dhs**, accessed 12 May 2018.

conducted by American agencies, international organisations and think tanks from which much of this evidence is gathered – the 'war on drugs' is essentially unwinnable based on current strategy. Management is the best that can be hoped for. Yet without the advantages progressively offered by air power over the past three decades – especially in mobility, intelligence and situational awareness – such management as has taken place would arguably have been unachievable. Therefore, if air assets are not helping the United States to ultimately triumph in the fight against narcotics, then they are certainly preventing it from losing.

The direct incorporation of military air assets into the drug war, or their transfer to civilian authorities, is contentious. At a base level the military exists to destroy the enemy while law enforcement is designed to keep the peace. They should be mutually exclusive, but recently the lines have blurred. Indeed, once militarisation is reached on the security spectrum and effectively becomes institutionalised through budget growth, resource allocation and organisational culture, it is extremely difficult for de-escalation to occur and for matters to return to a securitised status, let alone politicised or non-politicised. The ramifications of this for wider civil societies in which militarisation occurs outside of wartime will require much analysis and discussion in future. Yet, as this paper has demonstrated, there is strong evidence to suggest that operational lessons and technological development attributed to the military has utility for drug enforcement if applied responsibly and with due consideration. If the drug war is fought on multiple fronts then so too are there multiple ways to dispense justice, whether on the sea, on the ground, or increasingly from above.