

AIR WAR COLLEGE

AIR UNIVERSITY

ADVANTAGE NARCOTRAFFICKERS: MITIGATING THE
THREAT OF THE SELF-PROPELLED SEMI-SUBMERSIBLE
PLATFORM

by

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Contents

Certificate.....	i
Contents.....	ii
Introduction.....	1
Chapter 1.....	3
Traditional Drug Transport Options.....	3
Chapter 2.....	6
Emergence of the SPSS platform.....	6
Chapter 3.....	11
Deterring and Defeating the SPSS Challenge.....	11
Conclusions and Recommendations	18
Bibliography	25

Introduction

"Every time we turn around, the smugglers are extraordinarily creative, extraordinarily adaptive" **Rear Admiral Joseph L. Nimmich, Commander, Joint Interagency Task Force-South**

Drug traffickers in Colombia have taken to a new tactic to transport large amounts of drugs from the west coast of Colombia to Central and North America. Built in factories located in the Colombian jungles, traffickers have constructed self-propelled semi-submersible (SPSS) vessels that are difficult to detect visually and with radar, have extensive ranges, and can in excess of five tons of cocaine. Senior military leaders, noting the increased use of these vessels, have called for action in deterring and defeating these semi-stealthy platforms. In his 2008 posture statement to the House and Senate Armed Services Committees, Admiral James Stavridis, Commander, U.S. Southern Command (USSOUTHCOM), noted the increased threat to Central American countries (as well as to the U.S.) that these platforms present.¹ Admiral Thad Allen, Commandant, U.S. Coast Guard, also noting the threat to regional and U.S. safety and security, has called for a multi-pronged approach to defeat this new challenge. Given the “failure of imagination” that led to the events of September 11, 2001 (and without trying to sound alarmist), the potential for serious national security implications is enormous. Admiral Allen proposes focusing on four areas to successfully counter the SPSS threat: increased cooperation with regional partners; increased intelligence sharing in the drug source and transit

¹ U.S. Congress, Armed Services Committees, *The Posture Statement of Admiral James G. Stavridis, Commander,*

zones; stepping up interdiction in the transit zones; and enacting legislation that will impose harsh penalties on SPSS crews operating the unmarked stateless craft.²

The lesson here is that the creativity and sophistication that drug traffickers show in getting their product to market is continually evolving. The estimated societal cost from drugs in the United States ranges in the billions, according to Admiral Stavridis, and continues to grow at an annual rate of five percent.³

The thesis of this paper is that drug trafficking organizations (DTOs) in the transit zone have evolved to the point where the current level of U.S. effort is inadequate; more robust cooperative measures must be taken to provide a stronger defense in depth, and additional funding from the U.S. plays a great role in that.

Chapter 1 will address the current drug transport environment with respect to maritime, air, and land domains. Chapter 2 will address the advent of the SPSS and the potential threat it poses to the U.S. and the region. Chapter 3 will propose solutions to address the SPSS challenge. Finally, the conclusion will address security implications regarding the nexus of semi-submersibles and DTOs, and the potential role the platform can play in the proliferation or employment of weapons of mass destruction. Broad recommendations will be proposed to mitigate innovative measures taken by DTOs to move illicit drugs through the maritime transit zone.

United States Southern Command, 110th Congress, March 21-22, 2007.

² Admiral Thad W. Allen, "Tools Needed to Prosecute Drug Traffickers Using Subs," *Leadership Journal*, July 21, 2008, <http://www.dhs.gov/journal/leadership/2008/07/tool-needed-to-prosecute-drug.html>.

³ Admiral James G. Stavridis, "What Ever Happened to the 'War on Drugs'?" *Joint Forces Quarterly*, Issue 51, 2008: 109.

Chapter 1

Traditional Drug Transport Options

Drug transport by aircraft brings advantages normally touted by air power advocates: range, speed, flexibility. Depending on the type of aircraft used, they can originate deep in Colombian, Venezuelan, or Peruvian territory, and proceed to countries in Central America or the Caribbean for further transport to the lucrative U.S. market. The vast spaces, coupled with the minimal airborne resources of the region's nations, make airborne interception difficult, but not impossible. The Air Bridge Denial (ABD) program, initiated by the U.S. and in conjunction with Colombia and Peru (in 2001 and 2003, respectively) attempts to prevent aircraft suspected of trafficking cocaine from reaching their intermediate drop-off points by forcing them to land short of their destination. Suspect aircraft are initially detected by powerful U.S.-based radar and the information passed to partner nations to complete the intercept. If a determination is made that the aircraft is suspicious, attempts will be made by fighter aircraft to force the suspect aircraft to land.⁴ It appears the ABD program has had partial success deterring would-be traffickers, at least over Colombian territory. The number of radar tracks detected has gone down, but to be fair, the number of actual intercepts and force-downs was low to begin with. Of 390 targets pursued by Colombian aircraft in 2003, ABD interceptors *located* a mere forty-eight.⁵

One of the most perplexing aspects of aircraft use is their ability to exploit ungoverned space in fairly short time, and ungoverned spaces exist in great abundance in the source and

⁴ Government Accountability Office, Air Bridge Denial Program in Colombia Has Implemented New Safeguards, but Its Effect on Drug Trafficking Is Not Clear, GAO-05-970, (Washington, D.C.: GAO, September 2005): 2-3.

⁵ Ibid., 11-12.

transit zones. The drug trade is so lucrative that traffickers can afford to dispose of aircraft after making a single delivery of illicit drugs. In the ungoverned spaces of Colombia and Venezuela, rudimentary airstrips are carved from the jungle by burning the forest and smaller brush and require no infrastructure other than what is required to transport the drug cargo from the landing sites. The Laguna del Tigre National Park in Guatemala near the southern Mexican border is an illustrative case in point. Clandestine airstrips dot the landscape, as do the carcasses of numerous aircraft destroyed by drug traffickers after having used them to make their one-way deliveries. Squatter communities have sprung up in the park, their sole existence being to support the drug trade. The squatters provide security and follow-on transport via ground or river for the final leg of the journey through Mexico to the United States.⁶

The ABD program faces the same issue in Colombia. Clandestine fields number in the hundreds and are sometimes located as far as 250 miles from the base (Apiay Air Base) where the A-37 interceptor aircraft originate,⁷ which translates into roughly one hour of flight time. The challenge of getting law enforcement there in a timely manner is nearly impossible, particularly when complicated by the fact that the aircraft drop from radar coverage as they descend for landing and can unload, refuel, and takeoff again in less than 30 minutes.

Around 2001, it became obvious that maritime drug trafficking was increasing in the eastern Pacific, a reflection of counterdrug success in the Caribbean. After drug-trafficking operations shifted to the vast unmonitored spaces of the eastern Pacific, it was estimated that roughly fifty percent of U.S.-bound cocaine now passed through the area. On the positive side, it reflected the success of the Joint Interagency Task Force – South (JIATF-S) in deterring

⁶ General John Craddock and Barbara Fick, “The Americas in the 21st Century: The Challenge of Governance and Security,” *Joint Forces Quarterly*, Issue 42, 2006: 12.

⁷ GAO-05-970: 11, 16.

traffickers in the Caribbean transit zone.⁸ On the negative side, the shift in effort to a much larger area with fewer counterdrug assets presented a greater detection challenge, a result not lost on the U.S. Congress particularly in the wake of the September 11, 2001 attack. As a result of reallocating surface and air assets to the homeland defense mission and counterterrorism, the eastern Pacific has become a better gamble for traffickers to get their product to Mexican coastlines for offload and subsequent overland transport to U.S. markets.⁹ By 2005 much of the by-sea transport effort in the eastern Pacific was done either by fishing vessels operating as far west as the Galapagos Islands using multiple at-sea transfers. Traffickers, however, did not abandon shallower waters as an avenue to Mexican shores. By late 2006, the littorals of Central America had become a favorite for go-fasts because it complicated the coordination efforts between nations participating in the counterdrug effort. It was a tactic refined in execution that would transfer to the evolution in drug transport, the self-propelled semi-submersible. Additionally, the impending closure of the cooperative security location on Manta Air Base, Ecuador will deprive U.S. forces of a forward operating location (FOL). That will likely mean shorter—or no—air patrols in the eastern Pacific as a result of longer transit times if the replacement FOL is located in Colombia or Central America.

⁸ Ben Fox, “Drug Traffickers Switching Focus to Pacific Routes, Authorities Say,” *Los Angeles Times*, February 11, 2001. <http://articles.latimes.com/2001/feb/11/local/me-24000> (accessed 19 November, 2008).

⁹ House, remarks by the Honorable Dan Burton, *Hearing and Briefing before the Subcommittee on the Western Hemisphere to the Committee on International Relations*, House of Representatives, http://commdocs.house.gov/committees/intlrel/hfa24517.000/hfa24517_0f.htm, (accessed 19 November, 2008), 8.

Chapter 2

Emergence of the SPSS platform

The increased use of the SPSS platform has recently generated enormous concern within the military, law enforcement, and congressional legislative communities. First-generation versions (initially seen in the mid-1990s) were sealed, unmanned platforms. Towed behind powered watercraft, the relatively unsophisticated platforms were designed to be quickly jettisoned and sunk if approached by law enforcement vessels. The next-generation SPSS was an adaptation of existing technology. Traffickers simply camouflaged go-fasts or Boston Whaler hulls with plywood or fiberglass to preclude surface or aerial visual detection. Reducing the radar signature from the keel upward was a logical, sophisticated (and probably unforeseen) progression and speaks to the foresight, motivation, and innovation of the drug-trafficking world.¹⁰ Fiberglass and wood frames are still common, but advanced steel construction hulls that endure greater stress are being increasingly discovered. Additionally, U.S. law enforcement agencies are now finding in captured vessels advanced electronics that help in avoiding detection.¹¹

The performance specifications of current generation SPSS are impressive, considering they are built in crude facilities located in the FARC-controlled jungles just off Colombia's littorals. Capable of speeds of up to 13 knots and an unrefueled range of 2,500 miles, they can carry up to 10 metric tons of cargo. Typical loads, however, have been in the 3-6 metric ton

¹⁰ Captain Wade F. Wilkenson, USN, "A New Underwater Threat," *Naval Institute Proceedings*, October 2008, Vol. 134: 33-34.

¹¹ US Coast Guard's official web site, All Hands Message, "Self-propelled Semi-submersibles", www.uscg.mil/Comdt/all_hands/docs/SPSS%20Background.pdf.

range.¹²

The noticeable increase of SPSS events between 2002 and today speaks to the increasing preference by drug traffickers for the SPSS as a delivery platform. The USCG reports knowledge of only 23 SPSS events between the first quarter of 2001 and September 2001. The subsequent three reporting quarters saw a jump to 62 events, with an estimated total of 80 events projected for fiscal year 2008. Semi-submersibles now account for a stunning (estimated) 32 percent of cocaine flow in the maritime transit zone. That estimate is based on what is being caught and not the actual number of semi-submersibles in the transit zone.¹³ The true numbers are unknown, but one can surmise that the rapid rise in usage reflects a significant cost-benefit advantage for the drug-trafficking organizations by using semi-submersibles over traditional surface vessels.

Why semi-submersibles? A simple answer: they are expendable, cost-effective, and perhaps most valuable of all, difficult to detect while carrying a prodigious payload. Colombian officials captured two partially completed vessels in 2007, but the captured workers knew little more than the fact that this particular facility was FARC-controlled. What is still unknown is who produces the vast majority of vessels, and DTOs have been particularly effective in keeping that knowledge secret.¹⁴

Designed for one-way trips, the semi-submersibles are destined for the scrap heap from the time they embark on their voyage. Quarters are austere, and ventilation is poor.

They lack navigation lights (naturally) and are increasingly being equipped with sophisticated GPS navigation suites. Functionality trumps crew safeguards and comfort. They are equipped with scuttling valves that allow the crew to quickly sink the vessel in the

¹² Ibid.

¹³ Ibid.

¹⁴ Wilkenson, 34.

event of an interdiction effort, thus depriving law enforcement of the evidence necessary for prosecution. In fact, the vessels sink so rapidly it becomes hazardous for both traffickers and law enforcement crews attempting to abort the sinking. Interdictions can quickly become rescue missions as both the narcotraffickers and interdiction crews scramble to safely exit the SPSS before it sinks with its cargo. In such cases where the ship and cargo is lost to the depths, U.S. Coast Guard crews can only set the traffickers free as they lack the evidence necessary for successful prosecution.¹⁵

Like aircraft used in the drug trade, the SPSS, despite the time and effort spent in building them, are a relatively cheap means to a lucrative end. Comments by Captain Wade Wilkenson, special assistant to the Commander of U.S. Southern Command, speak to the high return on investment garnered from producing and operating the platforms:

“In Colombia, for example, a kilogram of cocaine costs about \$1,800. That same kilogram is worth at least \$20,000 wholesale in the United States. Experts conservatively estimate that each SPSS costs roughly \$1 to \$2 million to build, equip, and crew, so a ten-metric ton SPSS, fully loaded, is a \$20 million investment. Deploy five vessels at a combined total lay out of \$100 million, successfully deliver one, and you double your investment. Having all five successfully reach their destination nets a nine-fold return on investment. Such astronomical profit potential drives innovation, allows ruthless thuggery to thrive, and encourages habits of waste.”¹⁶

The SPSS platform is becoming a favorite with the traffickers, if the interdiction numbers are to be any indication of their effectiveness as a stealthy mode of transport.

JIATF-South's maritime cocaine interdictions decreased significantly in 2007, after experiencing annual record-setting years from 2001 to 2006. Reasons for the decline are threefold. First, the SPSS plays an ever important role in detection avoidance. Interdiction

¹⁵ Ibid., 33.

¹⁶ Ibid., 34.

missions are finding and stopping less than an estimated ten percent of the *known* SPSS platforms. That said, maritime drug interdiction history suggests the vast majority of the semi-submersibles are getting through undetected. Second, the shift away from large payloads carried by easily detected fishing vessels and toward numerous smaller payloads increases chances that payloads will get through. Traffickers are betting on odds that are clearly in their favor. Finally, traffickers are making extensive use of littorals along their voyage to Mexico, complicating interdiction and coordination between partner nations.¹⁷ Apparently the risk of operating in the littorals with higher traffic densities and the greater potential for collision with commercial shipping is an acceptable risk.

Perhaps the most worrying aspect of the SPSS is its potential to carry something of greater national security implication than illicit drugs. In the wake of the September 11 attacks, much attention was paid to the tri-border area in southern part of the Latin American continent, but no substantiated link between narcoterrorists or DTOs and WMD sponsors has been found for now. However, as things stand, the potential nexus between future proliferators, porous Central American and U.S. borders, and cash-rich DTOs equipped with stealthy platforms is simply a weakness awaiting exploitation. It is entirely feasible to envision transport of fissile material across the weak Guatemalan border into southern Mexico, then on through some point along the extensive southwest U.S. border, to any major American city. The material need not be explosive in the form of a worst-case nuclear bomb; a relatively simple “dirty bomb” will challenge any city’s consequence-management teams. Moreover, the repercussions for the economy and the national psyche will be marked, particularly in light of the recent sea-based attacks in Mumbai, India. In the recently released report from the Commission on the Prevention

¹⁷ Ibid., 35.

of Weapons of Mass Destruction Proliferation and Terrorism, chairman of the commission and former senator Bob Graham succinctly concludes, “Ours remains a world at risk and our margin of safety is shrinking, not growing.”¹⁸ Even more disturbing is the conclusion by the commission that “...it is likely that a weapon of mass destruction will be used in a terrorist attack somewhere in the world by the end of 2013” unless the world community takes concrete actions to prevent such an attack.¹⁹

No less important is the threat posed to Latin American countries where transnational actors cross even weaker national borders to engage in illegal activities. Unfortunately, many countries, particularly those in Central America, lack the financial and technical resources to effectively search or detect illicit WMD. Even those with the political will and technological capability to confront DTOs—Brazil, example—find themselves grappling with the pervasive nature of drug trafficking. Sao Paulo continues to experience increased drug use and resultant crime rates as traffickers look to other markets in addition to the lucrative ones to the north.

¹⁸ The Report of the Commission on the Prevention of WMD Proliferation and Terrorism, *The World at Risk*, xv, <http://www.scribd.com/doc/8574914/World-at-Risk-The-Report-of-the-Commission-on-the-Prevention-of-WMD-Proliferation-and-Terrorism-Full-Report>.

¹⁹ *Ibid.*, xv.

Chapter 3

Deterring and Defeating the SPSS Challenge

The increased use of the SPSS has spurred some recent U.S. efforts to enable interdiction efforts in the maritime transit zone. Whereas traffickers in the past relied on scuttling evidence to avoid prosecution, they no longer have that option as a means of escaping punishment. In October 2008, The Drug Trafficking Vessel Interdiction Act of 2008 became law, giving the Coast Guard authority to detain persons operating or traveling in semi-submersible or unregistered *submersible* vessels even if no contraband is found. The Coast Guard, having had a front seat in observing essential evidence sink to the ocean floor, played an instrumental role in pushing through the legislation. The inclusion of submersibles in the legislation is pre-emptive, and reflects recent intelligence that newer generation vessels being built will be able to cross the transit zone completely submerged. The legislation allows for convicted persons to receive up to a maximum of 15 years imprisonment and a \$1 million fine.²⁰

The Customs and Border Protection (CBP) agency recently equipped its P-3 aircraft with new maritime surveillance radars (called Sea Vue) better able to detect and track SPSS platforms from greater standoff distances. In the period between 30 December 2008 and 9 January 2009, the Sea Vue-equipped aircraft interdicted three SPSS's carrying a total of 18,000 kilograms of cocaine in the vicinity of Ecuador and the Galapagos Islands. All three semi-submersibles were scuttled during interdiction efforts, but with the passage of the Drug Trafficking Vessel

20 Matthew Harwood, "New Law and Bilateral Agreements Help U.S. Stop Semi-Submersible Drug Smuggling," *Securitymanagement.com*, 19 November 2008, <http://www.securitymanagement.com/news/new-law-and-bilateral-agreements-help-u-s-stop-semi-submersible-drug-smuggling-004869>. (accessed 21 January 2009).

Interdiction Act the traffickers' efforts were futile.²¹ All personnel were recovered and will be subject to the newly enacted legislation, which has proved to be a great tool in increasing the prospect of prosecution without physical evidence.

Much of what occurs in intelligence sharing regarding the SPSS threat resides in the classified arena. Suffice it to say, however, that it appears that much is being shared between Colombia, Mexico, and the United States, as is indicated in open-source reporting. According to Nicholas Kolen, section chief for the Drug Enforcement Agency's Latin American and Caribbean division, Colombia has given the U.S. Coast Guard authority to operate within its territorial waters alongside its military and law enforcement agencies.²² Mexico's navy also cooperates closely with the U.S. Coast Guard. Following a recent visit to Mexico, Joint Chiefs chairman Admiral Mike Mullen emphasized the strong military-to-military ties between the two neighbors, adding that "intelligence sharing and intelligence, surveillance, and reconnaissance capabilities are two areas where the United States military can help Mexican forces."²³ While these countries are the current major players with respect to the SPSS threat, the Central American countries will likely become greater players if DTOs find themselves squeezed by a U.S.-Mexican-Colombian effort. The U.S., if it is not doing so, needs to move now to establish working relationships with future potential partners.

At the operational level there is no doubt that a sense of urgency exists. Remarks by Admirals Stavridis, Allen, and Nimmich reflect as much. However, in general it appears that public and political focus is drifting from the "war on drugs." Emphasizing the decrease in public

²¹ Michael C. Kostelnik, Assistant Commissioner, *A New Weapon in the Hunt for Self-Propelled Semi-Submersibles*, Letter, January 2009: n.p.

²² Harwood. Online.

²³ Jim Garamone, "Mullen Praises Military Cooperation Between Mexico, U.S.", News article, 7 March 2009, <http://www.defenselink.mil/news/newsarticle.aspx?id=53381> (accessed 24 March 2009).

awareness, Admiral Stavridis recently noted that “[a]rticles dedicated to the issue [the war on drugs] are relegated to the back pages, or they are at least six clicks away from the home page online.”²⁴ His observation reflects the decline in public awareness today, compared to the 1980s when drug kingpins and their trade were fodder for popular culture. Public awareness and discourse serve as a catalyst to political action, which, in turn, drives the effort for adequate funding. That said, the recent rise in drug-related violence along the U.S.-Mexican border is raising public awareness of the proximity and severity of the problem. It is not uncommon nowadays to hear commentaries in the media, from politicians and citizens alike, about the need to adequately resource the “war” along the southwest U.S. border.

A key characteristic of any U.S. effort to deter or defeat the SPSS threat is that it must be multilateral; the U.S. simply does not have the manpower, the requisite number of detection and monitoring platforms, nor enough intelligence sources necessary to ensure unilateral success. Partner nations with limited resources will have to be sufficiently funded to the point where they can make a significant and measurable difference. Unfortunately, proposed FY09 funding of the Andean Counterdrug Program (ACP) has been reduced by more than fifty percent of the FY07 budget, dropping from \$721 million²⁵ to a \$315 million (\$10 million below the President's FY08 request).²⁶ Ironically, this decrease in the ACP budget was enacted by the Fiscal Year 2009 State and Foreign Appropriations legislation that, in part, “advances international security.” Subcommittee chairman Senator Patrick Leahy noted that the legislation reflected a replenishment of the foreign assistance budget, which ostensibly has suffered as a result of U.S.

²⁴ Stavridis, “What Ever Happened to the ‘War on Drugs?’”: 109.

²⁵ US Agency for International Development, *Economic Support Fund*, <http://www.usaid.gov/policy/budget/cbj2009/101425.pdf>.

²⁶ Senator Patrick Leahy’s official web site, <http://leahy.senate.gov/press/200807/071708c.html>, (accessed 1 December 2008).

efforts in Iraq and Afghanistan. That said, one is left questioning the prioritization of the funding. As an example, while the FY09 ACP funding was reduced (presumably because of recent Colombian successes against the FARC), the Broadcasting Board of Governors received \$693 million (\$23 million above the requested amount) to fund broadcasting in languages like Russian, Kazak, Uzbek, and Tibetan, “where freedom of speech remains restricted and broadcasting is still necessary.”²⁷ That prioritization hardly seems to square with the “war on drugs” in which thousands of U.S. lives are lost each year in the Americas. Not that the Broadcasting Board of Governors is unimportant in “advancing international security,” but one can easily argue that funding the ACP would garner more international security for the U.S. and nearby Latin America than would radio broadcasts into foreign countries where, at a practical level, sovereign governments wield more influence than does American ideology. Senator Leahy’s focus on distant issues is, to a degree, illustrative of the decrease in public and political awareness emphasis on the issue in recent years.

Enacting new multilateral agreements between can be time-consuming, and DTOs, as we are seeing, are particularly adept at countering technical and legislative hurdles. Leveraging existing agreements between partner nations to engage suspect vessels allows for immediate interdiction action without having to start from scratch. The Proliferation Security Initiative (PSI), for example, is an existing multilateral interdiction effort that can be used as a vehicle for Central American countries to search for and detain surface vessels, as well as SPSS platforms, transiting their littorals en route to Mexican drop-off points. The mere operation of an SPSS does not constitute an illicit activity, despite the questionable nature of the platform. PSI events against an SPSS platform or fishing vessels can be initiated based on the “broken tail-light

²⁷ Ibid., <http://leahy.senate.gov/press/200807/071708c.html>.

scenario,” which essentially means any plausible reason can be used to direct a suspect vessel to a participating nation’s port where a more detailed examination can take place within that nation’s domestic legal framework.²⁸ Originally envisioned as a way to prevent proliferation of weapons of mass destruction (WMD) or related materials, the potential for the SPSS to be used in such a manner makes it all the more appropriate as a PSI target.²⁹ As unflagged non-state vessels, they certainly do meet the broad PSI criteria to allow partner nations:

“...at their own initiative, or at the request and good cause shown by another state to board and search any vessel flying their flag in their internal waters or territorial seas, or areas beyond the territorial seas of any other state, that is reasonably suspected of transporting such cargoes to or from states or non-state actors of proliferation concern, and to seize such cargoes that are identified.”³⁰

Consequently, the PSI can serve as a stopgap until more robust cooperative measures are put in place with other Central American nations that may choose a greater degree of engagement in the future.

As stated above, the U.S. does not have the number of assets to monitor the vast maritime domain of the eastern Pacific. Consequently, reliance on partner nation capabilities is essential in widening the detection-and-monitoring (D&M) net. The Government Accounting Office reports that “[f]rom fiscal year 2003 through fiscal year 2007, the United States provided over \$950 million to directly or indirectly support counternarcotics activities in transit zone countries, excluding Mexico.”³¹ The estimated number of SPSS platforms evading detection and the increased use of fishing vessels to circumvent the D&M net simply means the U.S. and its

²⁸ Eben Kaplan, Council on Foreign Relations, “The Proliferation Security Initiative,” <http://www.cfr.org/publication/11057/#2> (accessed 3 December 2008).

²⁹ CRS Report for Congress. Proliferation Security Initiative, January 14, 2005, np. Available at <http://www.fas.org/spp/starwars/crs/RS21881.pdf>.

³⁰ CRS Report for Congress. Proliferation Security Initiative, 7 June 2005: 6. Available at http://www.nti.org/e_research/official_docs/other_us/crs060705.pdf.

³¹ Government Accountability Office, Drug Control: Cooperation with Many Major Drug Transit Countries Has Improved, but Better Performance Reporting and Sustainability Plans Are Needed, GAO-08-784, (Washington,

partners must increase the number of patrol platforms. While it may be cost-prohibitive to train, equip, and sustain every country in Central America with maritime patrol aircraft (MPA), it is entirely possible for the U.S. to leverage unmanned platforms that are rapidly becoming cost-effective and near ubiquitous as a result of operations in the Middle East.

The use of unmanned aerial systems (UAS), particularly the RQ-4A Global Hawk, allow for persistent, unobtrusive surveillance from altitudes that preclude interference with commercial airline traffic. Additionally, the missions can originate from the U.S., thus denying traffickers any knowledge of any on-going surveillance mission. In 2001 Northrop Grumman conducted a test mission in which an RQ-4A flew along the coastlines of Mexico, Central America, and along or over other South American countries before returning to land in California. The flight lasted 30 hours.³² Assuming that to be the length of a typical Global Hawk mission, it roughly triples the length of a P-3 MPA mission, which frees up manpower and other MPA assets to cover other maritime areas that might otherwise go unmonitored. It is a force multiplier of extraordinary capability.

Based on Northrop Grumman's Global Hawk platform, the U.S. Navy's proposed Broad Area Maritime Surveillance (BAMS) system is specifically designed "to conduct continuous open-ocean and littoral surveillance of targets as small as exposed submarine periscopes,"³³ making it ideal for use against the low radar and visual profile of the SPSS. However, these large platforms are expensive and will likely be procured in relatively small numbers, which will mean they will be hard to come by on a regular basis. To get the most efficient use out of them, they need to be

D.C.: GPO, July 2008), <http://www.gao.gov/new.items/d08784.pdf> (accessed 14 December 2008).

³² Northrop Grumman news release, available online at http://www.irconnect.com/noc/press/pages/news_releases.html?d=15376. (accessed 3 December, 2008).

³³ Global Security web site, Broad Area Maritime Surveillance, <http://www.globalsecurity.org/intell/systems/bams.htm>. (accessed 3 December 2008).

cued by intelligence gathered by human sources (HUMINT). A potentially better platform might be the cheaper and more ubiquitous RQ-1 Predator fitted with advanced foliage penetrating radar (FOPEN) that can detect structures under triple-canopy jungle from distances of over 50 miles. Here again HUMINT can play a significant role in cueing overhead sensors to a general area in which sensor operators can further refine their search. Partner-nation intelligence and law enforcement agencies on the ground, in concert with U.S. technical capabilities, may stand the best chance of infiltrating DTOs to determine the general search area. Host-nation law enforcement, upon finding them, can then destroy facilities and vessels well before they are operational.

Conclusions and Recommendations

The operational characteristics of the SPSS give non-state actors great capability to circumvent detection by numerous countries during their voyage. To date, it appears the primary role of the SPSS is the transport of illicit drugs. However, the potential to carry something far more lethal—biological or radiological—is one that cannot be ignored. Funding from illicit drug crops is readily available should any non-state actor choose to purchase or steal even a rudimentary bio-toxin or “dirty bomb” capability for delivery to U.S. or partner-nation shores.

The thinking within the region, it should be noted, is that Islamist terror is not a primary concern to sovereignty.³⁴ Other challenges—poverty, weak governance, and gang activity—rank as more immediate. However, such regional shortcomings may provide an opening through which future antagonists can establish proxies (criminal or ideological) who would attack the U.S. or its partners if such actions serve their objectives. Consider, as an example, the 2007 plot to attack New York’s John F. Kennedy International Airport. The plot’s conspirators were spread between the U.S., Trinidad, and Guyana.³⁵ Whether or not the plot would have been successful is debatable.

The point is that extremist intent—Al Qa’ida inspired or not—exists in the region. Given the opportunity to partner with like-minded criminal organizations that can financially afford evolving forms of transport like the SPSS, it is possible future attempts against the U.S. will continue. The Central Intelligence Agency notes that Al-Qa’ida-inspired actors can acquire

³⁴ Fraser McArthur, “Latin America: Mutating Threats,” *International Relations and Security Network*, <http://www.isn.ethz.ch/isn/Current-Affairs/Security-Watch/Detail/?ots591=4888CAA0-B3DB-1461-98B9-E20E7B9C13D4&lng=en&id=91912>.

³⁵ Federal Bureau of Investigation, Press release, <http://newyork.fbi.gov/dojpressrel/pressrel07/plot060207.pdf>.

rudimentary WMD capabilities with relative ease.³⁶ With the potential for collaboration between future bad actors in the region, the U.S. and its partners must increasingly pool resources for mutual benefit. To leverage partner-nation search capabilities in the transit zone, the U.S. has at its disposal a legal framework that is appropriate for the interdiction of non-state vessels: the PSI.

The guiding principle of the Proliferation Security Initiative is the prevention of WMD proliferation within the existing legal frameworks, domestic and international, as appropriate. In executing PSI interdictions, the U.S. Navy, or any participating nation's navy, can board suspect vessels in search of WMD components. Though the Navy has the preponderance of firepower to enforce a maritime interdiction operation (MIO), it lacks law enforcement authority to execute arrests. By contrast, the U.S. Coast Guard is lightly armed, but has the authority to conduct lawful arrests for subsequent prosecution. Today it is common practice for the two services to combine their strengths, with the Navy conducting the interdiction while carrying Coast Guardsmen who will execute the final law enforcement phase of the MIO.

An essential legal prerequisite to executing a PSI event is the existence of a justifiable interdiction. The 1982 United Nations Law of the Sea Convention allows warships to conduct interdictions of ships that, among other things, are without nationality or are engaged in illegal narcotics trafficking.³⁷ More likely than not, semi-submersibles operating off the Central American littorals or the East Pacific will meet both criteria, giving any participating PSI country legal justification to conduct a MIO. The point to all this is that participating nations effectively expand the size of their navies by benefitting from other nations' interdiction efforts.

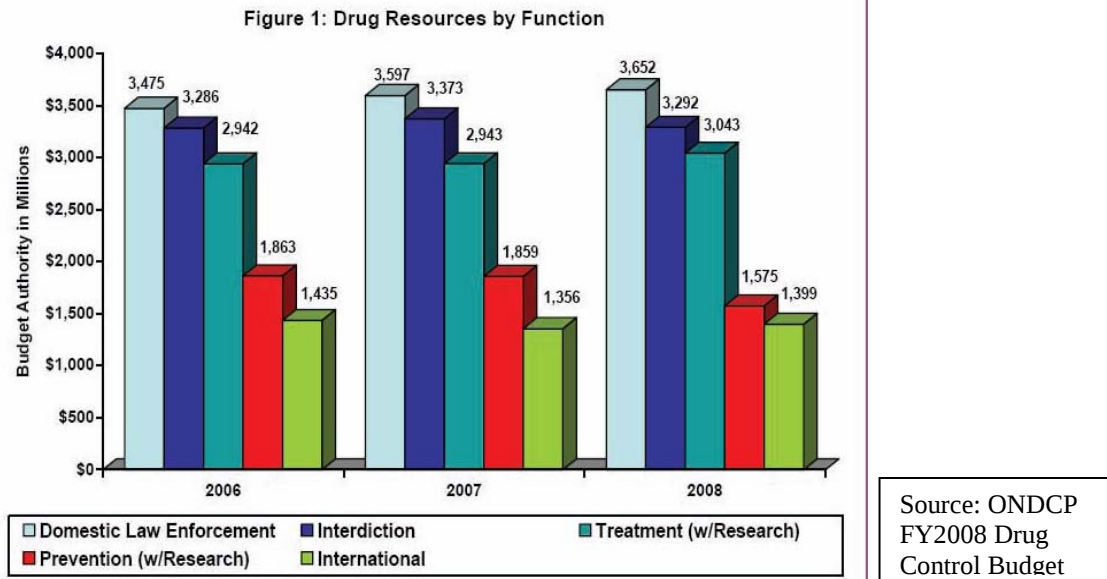
Today's challenging global and domestic economic environments present a dilemma for U.S.

³⁶ Central Intelligence Agency, Terrorist CBRN: Materials and Effects, https://www.cia.gov/library/reports/general-reports-1/terrorist_cbrn/terrorist_CBRN.htm.

³⁷ United Nations Convention on the Law of the Sea, http://www.un.org/Depts/los/convention_agreements/

national leadership. With so many competing high-priority requirements it is understandably difficult to determine where in the U.S. national security schema limited resources ought to be first applied: recapitalizing defense, saving banks, propping up automobile manufacturers, or combating drugs beyond our borders? With the understanding that there will always be competing requirements that Congress has to juggle (least of all, those of their constituents), it appears that funding for interdiction has not been commensurate with the level of illicit transportation.

Funding over the last three years has remained relatively flat (likely a function of funding other priorities like our efforts in the Middle East), and the relatively paltry \$13 billion (see Fig.1) does not reflect a degree of effort commensurate with the degree of effort DTOs are expending to ensure their success. If we are to see tangible efforts in deterring, not just interdicting, drug trafficking the U.S. needs to increase funding as a first step. At some point you simply do less with less, despite exhortations to the contrary. That funding, in addition to fielding new technical capabilities for U.S. agencies, needs to go to building and increasing partner-nation capability and capacity.



The U.S. cannot do this on its own. It needs the help of its southern neighbors, who, in turn, need help in building capability, if not capacity. But serious issues remain with our partners, as noted by a recent GAO report:

“We noted several factors relating to U.S. assistance programs that have impeded international counternarcotics efforts. In particular, nations’ limited ability to sustain assistance programs, limited political support of U.S.-funded initiatives, as well as corruption have kept these nations from becoming full partners in the international counternarcotics effort...”³⁸

Though the reference to a lack of political support applies to Latin American countries (specifically Venezuela), we can argue it applies to U.S. politicians as well. Any effort to increase funding to specific countries needs to come with clear expectations that those countries will be accountable for any U.S. financial support. U.S. diplomats need to convey to partner nations that corruption is a serious obstacle to be overcome by and within sovereign institutions if those nations are to continue being recipients of U.S. funding. Colombia, though there is still room for improvement, is an excellent example to emulate.

³⁸ GAO-08-784, 2.

The U.S. needs to fund more partner-nation intelligence capacity and capability, specifically on the HUMINT side. Intelligence is the *sine qua non* in the drug war: you cannot interdict what you do not know about. Many of our past success resulted from intelligence sources being cultivated in the right places. These sources need to be host nation personnel, not American; knowledge of cultural intricacies plays a significant role in getting into drug organizations. As of 2007, only one Central American country—Guatemala—had a significant intelligence-gathering and investigation agreement with the United States.³⁹ Establishing information-sharing agreements with the remaining six Central American countries will play a critical role in closing intelligence gaps.

New legal mechanisms need to be developed to cope with emerging technologies, or existing ones need to be tailored to encompass new threats (for example, the earlier recommended PSI). The GAO recommends using the Container Security Initiative as a means to search containers for drugs, but has encountered pushback from the Department of Homeland Security, which argued that such action exceeds the original mandate. Such bureaucratic infighting detracts from what ought to be a synergistic effort between agencies. A CSI interdiction effort to find WMD is not a wasted effort if drugs are found instead.

Equipping our partners comes right along with funding them. To that end, the Regional Aircraft Modernization Program (RAMP) spearheaded by USSOUTCOM's 12th Air Force is designed to assist Central American nations acquire new helicopters and fixed-wing aircraft. , Given the expense of the program, a portion of the acquisition cost is absorbed by the United States. To ensure RAMP's long-term viability, training and maintenance contracts are included as integral parts of the program. RAMP's ultimate goal, according to General Norm Seip, 12th Air

³⁹ Ibid., 22.

Force's commander, is to "enable a host of sovereign options...as well as, military and law enforcement capacity for partner nations."⁴⁰ Complimenting, but not directly associated with, the RAMP program is an effort to create an "integrated and cooperative multinational/multiagency air domain" in the region. The Regional Airspace Integration (RASI) seeks to enhance situational awareness of participating nations, not only in the civil aviation arena but in cooperative law enforcement and military endeavors.⁴¹ Once complete, both programs will play complimentary roles in bolstering partner nation capabilities and adding to the overall detection-and-monitoring network in the Central American region.

In sum, the innovative nature of traffickers coupled with a flat-lined counterdrug budget has placed the United States behind where it ought to be in its interdiction efforts. The potential nexus of self-propelled semi-submersibles, rudimentary WMD, narcotics funding, and non-state actors presents an increasing threat to the United States. Non-state actors, funded by illegal drug profits, now possess the means by which to transport WMD of varying sophistication and lethality literally to the shores of America. Given the porous nature of the southwest U.S. border, the vessels do not even need to reach the continental United States; Mexico or Guatemalan shores may well be close enough. The sophistication of evolving semi-submersible platforms is surely an indication of the confidence DTOs have in their ability to avoid any existing deterrent in the transit zones. To be sure, there are signs of domestic success in the "war on drugs." Drug use is down in some demographics, and drug busts in the transit zone and southwest border are up year after year. Yet the national costs continue to rise despite notable success, and that speaks

⁴⁰ Nathan D. Broshear, "AFSOUTH hosts Air Chiefs during Regional Air Chiefs Conference," Public affairs release, 12th Air Force official Website, <http://www.12af.acc.af.mil/news/story.asp?id=123137318> (accessed 24 March 2009).

⁴¹ Christina Mundy, "Regional demonstrations encourage bright future." Public Affairs release, USSOUTHCOM official Website, <http://southcom.mil/AppsSC/news.php?storyId-631> (accessed 24 March 2009).

volumes to an effort not adequately funded. More than ever the U.S. needs to re-focus its efforts on the evolving nature of the threat in the transit zone. Given the post-9/11 security environment, there is more at stake than just drug interdiction.

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