Flying Under the Radar

The Men, the Mission, and the Aircraft of the Department of State Air Wing, 1983–2013 Paul F. O'Sullivan Jr.

©2022 Paul F. O'Sullivan Jr.. All rights reserved. No part of this publication may be reproduced or used in any form or by any means, graphic, electronic or mechanical, including photocopying, recording, taping, or information and retrieval systems without written permission of the publisher.

To protect the privacy of some individuals associated with this story, their names have been changed.

Published by Hellgate Press
(An imprint of L&R Publishing, LLC)
72 Dewey St.
Ashland, OR 97520

Book design: Michael Campbell Cover design: Paul F. O'Sullivan III

email: sales@hellgatepress.com

ISBN: 978-1-954163-49-2

Printed in the United States of America 10 9 8 7 6 5 4 3 2 1

FLYING UNDER THE RADAR

The Men, the Mission, and the Aircraft of the Department of State Air Wing
1983–2013



PAUL F. O'SULLIVAN JR.

Deputy Director, Department of State Air Wing, Retired

To the men and women of the Air Wing, specifically to those deployed downrange in harm's way.

And even more specifically to the spray pilots and helo crews from the Colombia program, who risked their lives every time they launched; and to them, it was just part of the job.

Finally to those of the Air Wing who gave their lives in the performance of duty — ranging from being shot down to lost at sea, from tree strikes to mountainflying crashes, from accidental discharge of a minigun to flight line accidents on a busy and active ramp.

For those individuals, I will borrow a line from the West Point Alma Mater:

And when our work is done,
Our course on earth is run,
May it be said, "Well done,
Be thou at peace."



CONTENTS

FOREWORD XIII
INTRODUCTION
PROLOGUE: A DAY IN THE LIFE OF AN AIR WING SPRAY PROGRAM
Part I: The Early Days
Chapter 1: The War on Drugs
Chapter 2: John McLaughlin and the Founding of the DOS Air Wing
Chapter 3: Pre–Air Wing State Department Aviation Counternarcotics Programs
Chapter 4: The State Department, the Air Wing, and Vendor Contracts
Chapter 5: The Right Aircraft
Chapter 6: The Right Men
Chapter 7: Trying to Change the Existing Burma and Mexico Programs
Part II: The Air Wing in Latin America
Chapter 8: Air Wing Spearheads Spray Operations 61
Chapter 9: Operation Snowcap: The Air Wing Expands into Interdiction
Chapter 10: The Peru Program, the First Full-Service Contractor, and the PASA Program
Chapter 11: Peru Under DynCorp
Chapter 12: The Bolivia Program, the "Red Devil Task Force" 136
Chapter 13: The Guatemala Program and Follow-On Honduras Program

Chapter 14: The Jamaica Program and Deployments to Paraguay, Venezuela, and Ecuador
Chapter 15: The Changing of the Guard: NATI to DynCorp 185
Chapter 16: The Colombia Program, 1983–1998 189
Chapter 17: Colombia on the Edge, 1999
Chapter 18: Plan Colombia, 1999–2000
Chapter 19: Air Wing in Colombia Hits Its Stride 273
Chapter 20: Colombia on Fire
Chapter 21: The End of an Era for the Air Wing, 2003 299
Chapter 22: Colombia, 2003–2019
Part III: The Air Wing in the Middle East
Chapter 23: The Pakistan Border Security Program 343
Chapter 24: Air Wing Proposes an Afghanistan Spray Program 363
Chapter 25: A Different Afghanistan Program Gets Approved 373
Chapter 26: Embassy Air
Chapter 27: The Iraq Program
Chapter 28: Air Wing Missions in Libya, Egypt, Syria,
Lebanon — and a New Site in Cyprus 425
Chapter 29: A Critial Look Back at the Air Wing 438
Chapter 30: The Mission Continues
EPILOGUE
AUTHOR'S NOTE
ACKNOWLEDGMENTS
ACRONYMS AND ABBREVIATIONS 479
WHERE PEOPLE WHO CONTRIBUTED ARE TODAY 497
BIBLIOGRAPHY
ABOUT THE AUTHOR

THE FOLLOWING AIR WING PERSONNEL GAVE THEIR LIVES IN SERVICE TO THE AIR WING:

LEE WALKER, PSC, Mexico, 1987, T-65 crash

JOHN KNAPP, NATI, Peru, 1989, C-208 crash

BILLY McDONALD, NATI, Peru, 1989, C-208 crash

DENNIS EISLER, NATI, Peru, 1989, C-208 crash

JOHN VAN ZANDT, NATI, Peru, 1989, C-208 crash

DAVID WEBSTER COREY, NATI, Guatemala, 1990, T-65 mountain spray crash

JAMES SWEENEY, DynCorp, Peru, 1992, UH-1H crash

ROBERT HITCHMAN, DynCorp, Peru, 1992, UH-1H crash

JAMES BOHANNON, DynCorp, Peru, 1992, UH-1H crash

DAN CARSON, DynCorp, Peru, 1992, UH-1H crash

PIERRE POTES, PNC Contractor, Colombia, 1995, T-65 crash, shot down

ROBERT MARTIN, EAST, Inc., Colombia, 1997, T-65 crash

GARY CHESTNUT, EAST, Inc., Colombia, 1998, T-65 crash

WAYNE MULGREW, EAST, Inc., Colombia, 1998, T-65 crash

GUIERMO SIERRA, EAST, Inc., Colombia, 1999, T-65 mountain spray crash

JUAN CHACON, DynCorp, 2000, Colombia, accidental discharge of a minigun

JULIO VALDES, EAST, Inc., Colombia, 2001, T-65 crash (lost at sea)

MARTIN ALLEN, EAST, Inc., Colombia, 2002, OV-10D crash

ALEXANDER ROSS, DynCorp, Colombia, 2002, ground accident on ramp

EDUARDO GIL, DynCorp, Colombia, 2002, UH-1N NVG crash

LARRY CANTRELL, EAST, Inc., Colombia, 2003, T-65 mountain spray crash

MARIO ALVARADO, EAST, Inc., Colombia, 2003, OV-10D crash, shot down

ORLANDO BONFANTE, EAST, Inc., Colombia, 2005, T-65 crash, shot down

NICOLAS MORELLI, DynCorp/SIL, Colombia, 2005, Huey-II crash
HENRY RAMIREZ, DynCorp/SIL, Colombia, 2006, Huey-II crash
KEVIN BYNUM, EAST, Inc., Colombia, 2013, AT-802 crash, shot down

^{*}The list does not include those who died of natural causes.

There's a Legion that never was listed,
That carries no colours or crest,
But, split in a thousand detachments,
Is breaking the road for the rest.

Our fathers they left us their blessing—
They taught us, and groomed us, and crammed;
But we've shaken the Clubs and the Messes,
To go and find out and be damned
(Dear boys!),
To go and get shot and be damned...

Then a health (we must drink it in whispers),

To our wholly unauthorized horde—

To the line of our dusty foreloopers,

The Gentlemen Rovers abroad...

RUDYARD KIPLING
"THE LOST LEGION," 1895



FOREWORD

At the 21st Street entrance to the State Department, behind two American flags, is a memorial to those who gave their lives overseas on active counter-drug and law enforcement service. Twenty-six of the names on the four illuminated plaques belong to members of the State Department Air Wing. Ironically, most people in the State Department do not even realize they have an Air Wing. The double irony is that the Air Wing is the most extraordinary State Department organization that no one has ever heard of. They should.

Comprised mostly of former military aviation personnel and equipped frequently with hand-me-down aircraft older than their pilots, the Air Wing deploys to some of the most dangerous and inhospitable countries in the world. The deserts of Iraq and Afghanistan? They were there. The cartel and guerrilla-controlled jungles of Colombia, Peru and Bolivia? They were there, too. Gang controlled territory in Central America? Yep, there also. Not to mention secret flights into Libya as the country disintegrated, or test flights into Beirut in the expectation that we would have to evacuate our embassy in an emergency.

The Air Wing history is like the legendary stories of U.S. aviation in the Pacific in the Second World War. They often deployed under field conditions and slept in tents; they operated equipment that the Armed Forces would not touch; they never had the budget support that their military counterparts received. And they did an outstanding job wherever they deployed. Paul O'Sullivan Jr. has written an exceptional book about exceptional men and women. Hollywood should take note.

[—]Ambassador Bill Brownfield former Assistant Secretary of State for Drugs and Law Enforcement

INTRODUCTION

This is the story of a little-known U.S. government aviation program located in the Department of State (DOS). It was originally a counternarcotics aviation program. The first director, a former U.S. Air Force pilot named John McLaughlin, firmly believed the best way to stop drugs from entering the U.S. was by eliminating them at their source through aerial eradication — spraying illicit narcotic-producing crops with herbicide to kill them. It began in 1983 with one aircraft and one pilot. By July 1999, it consisted of twenty-seven government personnel, 289 contractors, sixty-six aircraft, and cost just under \$50 million a year. At its peak in 2012, it cost the U.S. taxpayers about \$1 billion a year and operated over 160 aircraft — a combination of fixed-wing aircraft and helicopters — around the world, and consisted of approximately ninety government personnel and over seventeen hundred contractors. Interestingly, all the while it was flying under the radar of most Americans.

From its very first days, it became evident that a group of crop duster pilots and spray aircraft were unusual in the State Department. The differences between the Air Wing and "Main State" became more pronounced as more active duty military officers were assigned for a tour of duty to it. As early as 1990, it was recognized by the assistant secretary of state as "an enterprise that is more or less foreign to the culture of the institution in which it is functioning."

A clash of cultures did exist between an aviation outfit led by mostly former or active military officers assigned to the State Department, conducting operational missions in the field, generally in hostile areas, and its parent organization with a mission of conducting diplomacy to further U.S. interest abroad and negotiating treaties. Observers predicted such a disparity could occur, and not to disappoint, it did.

The emphasis shifted over the years. Although initially founded as a dedicated aerial eradication program, it rapidly added helicopter interdiction capability to support the Drug Enforcement Administration (DEA) that was working overseas with host nation law enforcement counterparts. From 1987 until 1994, Peru was the focus. In the early 1990s, Guatemala got a good bit of attention as well. By the mid-1990s, Colombia was ramping up, and ramping up fast. From 1996 through 2008, Colombia became the center of gravity. After 9/11 occurred, the program shifted its resources and adopted new missions in the Middle East: Pakistan, Afghanistan, Iraq, and even Cyprus.

By 2012, the Air Wing operated in six countries. Two of the new Middle East country programs were in war zones. By strict definition and legally-approved rules of engagement (ROE) and rules for use of force (RUF), the Air Wing does not fly combat missions. However, it does fly into combat zones with armed aircraft, armed aircrews, and in some countries it is equipped with both electronic countermeasures for missile defense and state-of-the-art miniguns similar to some elite military aircraft.

The program flew, and still flies, a surprising mix of aircraft, both during daytime and on night vision goggles (NVG). The aircraft ranged from cargo aircraft to top-of-the-line agricultural aircraft ("crop dusters"), from the venerable Vietnam-era Huey helicopter, with nylon troop seats and door-mounted miniguns, to modern multiengine regional commuter aircraft, as well as completely refurbished medium-sized passenger helicopters. The personnel lived in prefab hootches in the jungles of South and Central America, on host nation army or police bases, and prefab containerized housing units (CHUs) in Iraq, and more prefab units in Afghanistan.

They flew into areas controlled by various armed insurgents: Sendero Luminoso (SL) in Peru, the Unidad Revolucionaria Nacional Guatemalteca (URNG) in Guatemala, the Fuerzas Armadas Revolucionarias de Colombia (FARC) and the Ejercito de Liberacion Nacional (ELN) in Colombia, the Balochistan Liberation Army, bandits, and jihadists in Pakistan and Iraq, and the Taliban in Afghanistan.

I consider myself fortunate to have worked with the Department of State Air Wing, in a series of jobs, first as an active duty military officer, then as a contractor, then as a State Department civil service employee, for close to twenty years. Having been in the field flying with them on missions and managing a field program, then later on the government staff planning and supervising the field programs, gave me unusual access to both the contractors and, of course, the civil servant staff. As director of operations for the Air Wing, and later as deputy director of the Air Wing, I still visited the field, flew with the contractors — many of them old friends — who were doing the actual job. I was able to see the proverbial "big picture" from the policy level, as well as the view from the cockpit of the men executing those policies.

When I began to write this book, I thought it would be about the organization itself. However, every organization is only as good as the people who are in it. More than most, the DOS Air was built on a colorful group of highly experienced civilian pilots, mechanics, aviation managers, loggies, computer geeks, and search-and-rescue (SAR) personnel. They have followed in the footsteps of other U.S. government aviation programs flying in high-risk areas in support of national policy, such as the Flying Tigers and Air America.

This book is for them, the brave men and women of DOS Air Wing.

A last note: Many of the organizations and locations included in this book are foreign entities. The spelling and punctuation for these names reflects the Americanized treatments, minus the accent marks and particular nationalized symbols. Throughout this book, I have used the terms "gringo" and "Indian country," exactly like we did for all those years in the Air Wing. I have intentionally used those terms to accurately portray the tenor of the times.

Paul F. O'Sullivan Jr. Melbourne, Florida

PROLOGUE: A DAY IN THE LIFE OF AN AIR WING SPRAY PROGRAM

From late December 2000 until early February 2001, the Colombian government forces and the DOS Air Wing conducted air-and-ground counternarcotics operations in Colombia's Departamento of Putumayo, a longtime stronghold of the FARC, the leftist Revolutionary Armed Forces of Colombia. During this period, approximately twenty-five thousand hectares of coca was sprayed, or about six months' worth of spray done in a normal year. (Twenty-five thousand hectares of raw coca equates to roughly 150 tons of refined cocaine; 150 tons that were never produced, which never made it to the streets in the USA or any other country.)

The Putumayo in Southern Colombia on the border with Ecuador had not been controlled by the central government for a number of years. As well as being predominantly controlled by the FARC, the Putumayo contains the largest growth of coca in the world, estimated at some sixty thousand to eighty thousand hectares. For several years now, it has been the breadbasket of the coca trade, and for that same several years, the Air Wing had wanted to do a full-court-press sprayeradicating campaign in the Putumayo, but the Colombian government, fearing major civic uprising, has denied it. An estimated 70 percent of the three hundred thousand-plus residents of the Putumayo make their livelihood from coca. In 1996, a similar Air Wing spray effort in the Departamento of the Guaviare led to a major civic uprising that virtually closed down the department capital of San Jose del Guaviare, and the government of President Pastrana did not want a repeat of this in the Putumayo. The government wanted to reestablish a semblance of control in the Putumayo before allowing the spray campaign to start.

A confluence of four things in late 2000 allowed the spray-and-ground operations to take place in late 2000 and early 2001. First, the balance of power in the Putumayo changed between September and December 2000. Whether by intent or by chance, the right-wing paramilitary units ("Paras") moved into the Putumayo and took on the FARC in their own backyard. The fighting brought any normal activity in the Putumayo to a standstill; roads were closed by both sides in the paro armado (armed strike) as the Paras and the FARC fought each other and brutally killed suspected sympathizers on either side. Second, as the Paras and the FARC fought each other, the Colombian Army (COLAR) reinforced their garrisons in the area.

Third, by mid-December, the Colombian Army was ready to start "counterdrug" operations using the newly activated CD Brigade largely funded by the United States government (USG) and trained by U.S. Special Forces (SF) advisors, and the Air Wing was about to be released to spray in the heaviest coca growth region at that time in Colombia—the Putumayo.

Fourth, the joint DOS Air Wing/Colombian Army assault helicopter unit of eighteen UH-1Ns, manned by DOS Air Wing pilots in command (PICs) and COLAR copilots (CPs) and door gunners, had a year of operational experience and was ready to support the big push into Southern Colombia.

This prologue was originally a long, detailed journal entry written in early 2001 by the then-serving Air Wing director of operations. He wrote it after a field visit to Colombia as an attempt to better explain the environment in the field to the HQ staff who never saw what the men in the field were doing and the risk that they were taking every day. His firsthand account, with all of its individual nuances and styling, follows:

Larandia Army Base, Caqueta, Colombia. Forward Operating Location for the DOS Air Wing

o400 comes early in the houses used by the Air Wing personnel at Larandia, but considering even the night owls are lights out by 2130 the night before, the early get-up is tolerable. The houses used are in fact Colombian Army quarters on loan to the Air Wing; row houses, single story cinder block plastered over, corrugated tin roofs, louvered narrow open-air windows near the tops of the walls for air flow. They have been reconditioned to "gringo" standards: hot water, window sealed with Plexiglas, air conditioners installed, good bunks, Direct TV, a kitchen area with a stove, fridge, and microwave.

The houses vary a bit, but all have several bedrooms turned into bunk rooms that hold anywhere from 4 guys to 8 guys, a common living area with some sofas and a TV, a "two-holer" latrine with stalls made of frosted plastic, and then in the rear a walled-in courtyard service area with showers stalls, another "two-holer" latrine, a few washers and dryers, and then a kitchen in the back for cooking. In a few of the four Air Wing houses, additional rooms have been built back in the service area to hold more personnel. What was meant to house a single Colombian family now holds up to 20 guys or more when we surge.

The crews are on generally for a 15-day shift. They arrive in Bogota from CONUS via commercial air, "commute" to the FOL the next day on an Air Wing C-27 cargo plane, work for 13 days, fly back to Bogota, and leave country on a break for 13 days. That's the cycle; it's called being "on rotation."

I had arrived the day before on our C-27 dressed in my "go-to-the-field" garb: jeans, hiking boots, a gray T-shirt, baseball cap, my Eagle 3-day rucksack (my field equivalent to my briefcase) and my duffel bag with my flight gear. I have learned to immediately jump in a truck for the ½ mile trip to the houses from the strip — the early birds get the lower racks if any are empty. I bunked in with the SAR team in an empty lower rack vacated by a SAR team member leaving on the flight I arrived on; lucky

timing. While not quite on rotation, I'm there often enough that the SAR guys know me.

The SAR team consists of two personnel: both normally retired or former Special Forces troopers. One member is a security technician, and one is a medic — generally a SF 18D; way beyond what the term "medic" implies. An 18D is about as just shy of a doctor as you can find. Their mission is to recover any downed aircrew if we have a bird go down on a mission. If needed, they will go to ground from the SAR helicopter, secure the area, treat injuries, get the downed airman into the SAR helicopter, or protect and E&E [Editor's Note: escape and evade] with the downed aircrew until pickup can be made. They control the personal weapons carried by the aircrews — M-9 9mm Berettas — and issue them to arriving personnel. I had thrown my duffel bag down, pulled out the polar fleece sleeping bag liner I use to sleep in and spread it on the empty rack, threw my little camouflage color travel pillow on the bed, got my duffel and ruck up off the floor and onto the top rack out of the way, and headed out to find the FOL manager. When I got back, the SAR guys who knew I'd need an M-9 had placed one with slide locked back to the rear and two full 15 round mags beside my pillow, with the hand receipt for me to sign.

By 0400 the early riser in the group has already rolled out and started a pot of coffee. Others are drifting out to the service area out back where there are a few sinks to shave at. Lights come on in the separate bunk rooms at different times, and no one is making much noise. The rooms have different reputations. Some rooms are for the serious snorers; some rooms crank the air-con to the point you could hang meat in the room, some rooms are purely mechanics, some purely pilots, some mixed. Some guys are up and making light breakfasts. The first trucks leave for the flight line at 0430, and practiced economy of motion is seen. Everyone is in the routine.

I rolled out of the rack, pulled on my flight suit and boots, had a coffee with the SAR guys, went out back to the service area and shaved quickly. I gathered up my gear for the day: survival vest with M-9 now holstered in it, Level-4 (will stop high caliber rifle fire) body armor known to all helo

pilots as "chicken plate," helmet bag with helmet, gloves, knee board with the mission sheet for the day, two spare bottles of water and some snacks. I'm good to go. The SAR team likes to be in the first truck to the flight line to set up their equipment so they go on ahead, and I link up with the SAR pilot in command I'll be flying copilot for. It is BMNT — before morning nautical twilight, the gray light before dawn when the sun is not yet up, but enough light is coming over the horizon to see by — and it looks like it'll be a good day.

The helo crews get picked up out in front of the houses by an old beat up blue Ford van that is mostly stripped inside. Helmet bags and body armor get piled in the back, and the first three or four guys get a seat on a make-shift bench seat bolted alongside the van wall, behind the driver's seat. The rest of us sit on the wheel wells or on the floor for the short trip to the flight line. Once there we link up with the SAR team, do a fast pre-flight of the SAR aircraft, get our helmets hung up over our seats, snap-link our helmet bags behind our seats, and go to the ops trailer for the mission brief.

The brief is conducted by either the OV-10 Bronco lead pilot or the FOL manager. Today it was the Bronco lead who did it. It followed a standard army five-paragraph field order, and covered the mission very well. The mission is to spray in "Area Alpha" of the Putumayo. Area Alpha is an area defined by the national police. It is a rectangle about 10 nautical miles long and 8 nautical miles wide. Its southern end is at Rio San Miguel, the border with Ecuador. Its eastern border is a hardball road, military slang for a paved road, and it runs mostly north-south. It's one of the few paved roads in the Putumayo. There will be five OV-10's, two Air Wing "Cuervo" gunship helicopters, two national police "Halcon" gunship helicopters, and one Air Wing SAR helo. The OV's will spray back and forth north to south, at 207 miles an hour in formation, in a perfectly straight line, at about 10 feet off the treetops, spraying only when they come over the coca fields. They carry 350 gallons of chemical, and can spray it out in 104 seconds if they spray continuously. In missions where the fields are small and scattered, it takes a half an hour to spray for the minute and

34 seconds; in the Putumayo where the fields are "industrial strength," they anticipate getting the load out in a matter of minutes. The formation will be echelon right — each OV will be exactly 170 feet apart, flying off the right wing and slightly behind the one in front of him. They will be using very precise differential GPS, and following visual signals from a "light bar" installed on the top of the nose of the aircraft out in front of the cockpit that will keep the pilot within 3 feet of his selected path. The same system will precisely record both the OV's flight path and when it sprays chemical. This information will later be downloaded and plotted on a geo-referenced map of the fields produced by the Air Wing's Multispectral Digital Imagery System, showing exactly where the coca is, and where the OV's flew and sprayed. It was the Air Wing's MDIS or "Camera Bird," call sign "Mustang," a gray C-208 Cessna Caravan that produced the imagery of the fields that the OV's used to plan today's mission.

The OV's will fly back and forth from Larandia where they will refuel and re-load chemical. The helos with less range and speed will fly out to the spray area, support the initial passes, then when the OV's head back to Larandia for re-fuel, the helos will fly to a closer Police Base, Villa Garcon, about 25 minutes away for the helos, for re-fuel. That way the slower helos can refuel and be back on station when the OV's get back.

The Cuervos will fly escort on either side at very low altitude, normally 50–100 feet off the trees, while the OV's spray. Each Cuervo has a GAU-17, 7.62mm caliber, six-barrel minigun manned by national police gunners. The Cuervo pilot in command is an Air Wing pilot, and the copilot is a national policeman. He is the Colombia government representative who can direct the gunner to fire. The Cuervo mission is two-fold. If the OV's receive ground fire, the Cuervos respond with suppressive fire with their miniguns so the OV's can leave the area. In addition, if anyone goes down, the Cuervos orbit and secure the specific area so that the SAR bird can go in and make the pickup. While at 110 knots the Cuervos will not be able to stay abreast of the OV's the entire pass. They will time it so they are covering them the majority of the pass and can provide suppressive fire in a matter of seconds if the OV's take ground fire. The Cuervos often

fly so close to the spray formation that their windshields get covered with the spray.

The Halcones are similar to the Cuervos, but manned solely by national police. They will orbit at and secure the end points of the spray run — called the A point and the B point — while the OV's pull up to a few hundred feet and do a sweeping 180 degree turn back for the next spray pass. They normally orbit at about 1,000 feet, up out of the way if the OV's and clear of the Cuervos, but able to roll in and respond to ground fire quickly.

On the other side of the eastern boundary of Area Alpha, a similar spray package but of Air Wing owned and National Police flown T-65 Turbo-Thrushes will be operating, also with support of national police helos. In addition, we can expect to see flights of 14 UH-1Ns from the Air Wing/Colombian Army assault helicopter unit. This unit will be doing air assaults putting troops into known or suspected FARC locations, attacking labs and going after specific targets. We all figure the threat will go one of two ways. Since it's the FARC's homeland, it is reasonable to expect heavy ground fire. However, the FARC has never been known to fight a pitched battle, preferring massive odds in their favor. With the new Counter Drug brigade and the air mobility provided it by the DOS N model unit, the rules changed. Some think the FARC my fade away to fight another day. As they say: "Pues, vamos a ver," or "Well, we'll see." Either way, it's going to be a busy day in the Putumayo.

Bronco lead and the SAR pilot in command confirmed times to crank and launch — the Broncos are much faster, so the helos will have to crank and launch 20–30 minutes before the Broncos to be on station when the Broncos arrive. The code word and number combination needed for recognition and rescue in case you are forced down is confirmed one last time. If someone is forced down and in contact with his rescuers with his survival radio, the code word and number combination must be used before friendly forces will land to do the pickup. If you are in radio contact with the rescuers and don't use the code word and number combination, it will be assumed you are under duress (i.e., in the hands of the bad guys)

and the rescuers will not land. There are no more questions, so the crews depart for their respective aircraft.

Back at the UH-1N SAR bird we do a last walk-around, a crew brief, and make sure the PNC gunner who will man the door gun understands the mission. The SAR bird is heavy, just under the max gross weight allowed of the UH-1N. It has a crew of five — two pilots, two SAR team members, and the gunner. It has an electric rescue hoist equipped with a jungle penetrator, two sets of STABO ropes [Editor's Note: definition of "STABO" varies, but it consists of a rescue rope lowered for a downed aviator to hook up to and be lifted out on], a litter, the medical kit of the SAR medic, a chain saw that will cut metal, a case of bottled water, the rucksacks of both SAR team members, the door gun and 1,500 rounds of ammo, and an auxiliary fuel tank with some 600 pounds of fuel in it. Add main fuel tanks fully topped off, and the SAR is very heavy. In the words of the helo pilots, it's a real pig until it burns off a good amount of fuel and is lighter. It has fuel for just over three hours of flight.

In the event of an emergency—a downed aircraft or pilot who has to eject—the first option is land right on the spot if terrain allows and recover the pilot. The second option is to lower the hoist to a hopefully ambulatory downed pilot if we can't land the helo due to trees, etc. The third option is to lower down by our hoist the SAR medic to treat an injured downed pilot, and if need be lower the SAR security technician to assist and protect the medic and pilot, then hoist them all back up. The fourth option, to be used if time is very limited (such as under fire or hostiles closing in on the downed pilot), is to throw down the STABO rope, let the downed pilot hook it up to his extraction harness built into his survival vest, and lift him out at the end of a 120-foot long, 7/16 inch thick rope. Better than any ride at Disney World.

The SAR package cranks — starts engines — at the designated time, and radio checks are made on the numerous frequencies for the day — the airto-air UHF, the VHF used to talk to Larandia tower, then the VHF used for the "work" frequency, then the VHF used as the "company" frequency, the HF used to talk long range to Larandia from the "work area" and

finally the FM. The Cuervos call Larandia tower for takeoff "to check the toys" — local slang for testing the miniguns. They take off and fly about a half-mile over to the nearby river, where there is a sand bar used for a target. When both Cuervos call the toys are good and they are orbiting the sand bar, SAR calls for takeoff.

Takeoff for the helos is 0615, for the OV's 0640. The SAR pilot in command is an old friend nicknamed "Chino." [Editor's Note: Latin American politically incorrect slang for a Chinese male, a "Chinaman."] We flew together in Guatemala some years ago. He's a good Southern boy, and got his nickname because the locals can't understand either his English or his Spanish. He lets me fly it out to the work area. We run through the before takeoff checklist ending with all secure in the back and we're clear around the aircraft. I pick the N model up to a hover, pulling over 90% torque, and slide it out to the center of the PSP ramp. We get a 4 foot hover check in the direction of takeoff, and I nudge forward cyclic to start accelerating forward for the takeoff. We sink a bit just before going through effective translational lift, and I pull in about 98% torque to keep it up off the ground. We clear the low trees off the end of the ramp by an uncomfortable few feet, and slowly start climbing out, still holding over 90% torque. I reduce power to just below max continuous torque and continue climbing and accelerating to follow the two Cuervos and the Halcones. For the first 10 minutes we are more of a gaggle than a formation, but we gradually close in to about 3-5 rotor disks and look respectable.

Chino has already plotted the A and B points in the GPS and announces we are 64 minutes from the A point. As we proceed to the southwest, we climb out to about 3,500 feet and climb over a broken layer of clouds. Once over the fence at Larandia, we are flying over contested territory. There is little or no central government representation. In Colombia, given the choice of flying below the clouds and lower than a minimum of 1,500, or above the clouds, you go above. Our minimums require at least a 1,500 feet ceiling, and it's not because we worry about popping into weather by mistake — it's to keep the helos above small arms fire range. We have had aircraft hit at above 2,500 feet AGL, but to have any hope of launching to

get the missions done we go with a minimum of 1,500 feet. The deck below gets pretty solid, and we start thinking we may have a problem getting back down through it when we arrive in the work area. Fortunately "Mustang," our Cessna C-208 imagery aircraft, is out in the work area already getting some more Multi-spectrum digital imagery. A quick call to him confirms that the work area has a broken deck at about 3,000 feet, and we'll have no trouble getting down.

As soon as the main tanks show we've burned about 300 pounds of fuel, we start pumping from the auxiliary tank into the mains. The mains are self-sealing, the aux is not. You get the fuel out of the aux into the mains as soon as you can. Bottom line is if the aux gets hit, you lose the fuel that's left in it, whereas the mains you don't. Best to empty the aux as soon as possible.

Sometime later we hear the OV's calling to Larandia for takeoff. We continue on course for the A point, our GPS showing we are 36 minutes out.

Another ten minutes and we get our first call from Bronco lead. "SAR, this is Bronco Lead, 30 minutes." Bronco lead is telling us he's 30 minutes from the A point.

"Bronco Lead, SAR, 26 out," we answer.

"Roger 26 out, good timing, we'll speed it up a tad." Bronco lead will speed up his flight just a bit to close in and arrive with us having minimum loiter time at the A point; no need to advertise where we plan to spray. If it looks like we'll be early, we'll take a few leisurely 360 degree turns to kill some time. We continue to cruise in a flight of five helos at 100 knots and 3,500 hundred feet straight for the work area.

"SAR, Bronco lead. Let's go to work frequency."

Everyone changes from the "company" VHF to the "work" VHF frequency and checks in one at a time. Using a separate work frequency separates admin radio traffic from actual work traffic and helps minimize radio traffic. When shots are fired, it gets confusing enough on the radios without having miscellaneous non-essential calls coming in.

"Bronco lead, SAR is 12 minutes out."

"SAR, Bronco lead is 15, we'll adjust."

The helo flight starts slowly coming out of altitude through the broken deck. At five miles from the A point, the Cuervos make a call. "SAR, Cuervo lead is five miles out, descending to the A point."

We roger the call and watch as the two Cuervos form a line astern formation and take it down from their current altitude and heading to below 100 feet heading for the A point. They are now going very deliberately into harm's way, the guns are "hot"—all switches on, pull the triggers and they shoot—and the pilots and gunners are scanning for all they're worth for threats. They will hit the A point and turn onto the spray heading of 180, and stay in trail formation until the OV's pass them for the first time. Then Cuervo Two will cross behind the OV's and take up his position on the other side of the OV's. When the OV's reach the B point and call "saliendo," or leaving to start their turn, the Cuervos will both mirror the OV's and do a 180 degree turn to reverse direction, shift to the east or west depending on where the next swaths will be, and start up the spray area again on either side of the OV flight.

We are just about at the A point, at 2,000 feet, when the SAR medic calls on intercom. "OK, I've got the flight of five OV's at 9 o'clock, about 2 miles, looks like maybe descending…"

Almost simultaneously, we get a call from Bronco lead: "Bronco flight, this is lead. I'm established on the line, and I'll be doing a target speed descent to the A point." This means his light bar on the nose is showing he is lined up on his swath, and he is descending holding his spray airspeed of 207 MPH to his work altitude of 10–15 feet off the trees. His flight, also lined up on their respective swaths, follow suit.

The Cuervos roll onto a heading of 180 degrees and head down through Area alpha. "Cuervos, this is Bronco lead, have you both in sight, move about 200 feet left..." The Cuervos comply and get out of the OV's path. They now know exactly where the OV's will be and can judge their spacing from them. Now is when it gets busy in all the aircraft; Cuervos watching for ground fire or possible threats, the OV's flying the light bar and staying on the line as close as possible while not hitting any obstacles, then

setting up their next swath while in the turn, and the SAR trying to keep everyone in sight.

Chino was still letting me fly. I keyed up on intercom: "OK, I've got both Cuervos in sight, and the Halcon at the B point, I lost the OV's when I turned to 180. I'm gonna put the Cuervos out my door so I can watch them. Everyone keep an eye out for the Halcon at the A point; last time I saw him he was a few mile to the north and at about 2,500 feet."

Marc, the SAR medic, came back immediately. "Roger, I have the OV's behind us low; just started on their runs... the Halcon at A is way north, no factor."

For the next 10 minutes, everyone in the SAR is trying to keep everyone else in sight. It's a constant craning of necks and short comments on intercom.

"OK, I just lost Cuervo One... I had him, and he flew over the trees and I lost him." No answer, I guess everyone lost him. One of the SAR guys keyed up with "OV's just passed under us, should pop out from under your chin bubble in seconds."

"OK, I got Cuervo One again, got the OV's, anyone got the Halcon at the B point?"

"Negative on the Halcon... uunnnhhh, no, I got him, way west of the B point, who knows what he's looking at..."

The lead Bronco calls leaving and turning in Spanish. The Cuervos start their turns to match up.

"OK. I got the OV's in the turn, and both Cuervos... make that one. Anyone got Cuervo Two?"

"OV's rolling in on the line again." As they pass under us and proceed north, you can see the spray from them long after you can see the aircraft itself, so they are not hard to keep track of.

"I see T-65's spraying about 5 miles to the east, with helos..."

"Hey, we got a flight of 7 N models, COLAR, at about our 10 o'clock, heading east, no factor."

"There's both Cuervos, two is crossing over that field about a half mile north, see him?"

"Roger, got them all now, OV's passing under us... Good fields, look at that spray."

The OV's are spraying intermittently, sometimes all five of them, other times any different number of them. They only spray when they are over a field, so depending on the size of the field it may be any number of them. If all five are spraying, it means it's a pretty damn big field, since they are 170 feet apart and therefore cover an area the length of almost three football fields.

Bronco lead makes a call. "Bronco lead is empty." He has sprayed out his 350 gallons, meaning he has sprayed 50 hectares of coca. A hectare is about 2½ acres. The OV flight checks in. "Bronco Two needs one more pass."

"Three is out."

"Four is out."

"Five needs another pass."

"SAR, Bronco lead, one more pass and we head for Sand Base." Sand Base is the radio call sign the spray aircraft used for Larandia before the COLAR helicopter unit arrived and started putting an army Air Traffic Controller on a radio, who calls it "Larandia" instead of Sand Base.

"Roger, Bronco lead, SAR copies."

The last pass was uneventful. The Broncos called leaving, pulled off to altitude, and headed for Larandia for refuel and to load more chemical. Bronco lead makes a last call to SAR.

"SAR, this is Bronco lead. See you in 1+30." Bronco lead has figured his round trip plus refuel/load chemical time to be an hour and thirty minutes.

"Bronco lead, SAR, roger 1+30. See you then. Break; Cuervos, let's head to VG." We repeat the same in Spanish for the Halcones, and the Cuervos and Halcones lead off for the 24 minute flight to the northwest back to the police base at Villa Garson for refuel. SAR always trails along last, in case someone has a problem.

As we head northwest, Chino works out the math: "OK, 1+30, so he'll be back at 0905; so we need to leave Villa Garson at 0845, so crank at 35 past the hour... we have plenty of time to get there and refuel."

Villa Garson is a remote national police base in the Putumayo, on a north south "main" road that runs up to Mocoa. The road has been closed for some time due to the paro armado and FARC and/or paramilitary activity. The police base is right between the runway and the road. It looks like a Viet Nam era Base camp. A bunkered perimeter, grenade screens hanging from the bunkers to detonate any RPG's fired at them, a protective wall pretty much around the base, a checkpoint on the road outside the gate to check vehicle traffic, and large home-made claymores on the grass between the base and the runway.

We land at the fuel point inside the perimeter. As we land in refuel, a flight of four T-65's back-taxi down the runway for takeoff. They have just refueled at three refuel points outside the perimeter and on the edge of the runway set up specifically for this operation. I pick up the N model to leave refuel after we tank up — it's a pig again — hover over the berm protecting the fuel bladder from direct fire, and hover down the runway behind the T-65's to park in the grass between the base and the runway.

One of the SAR guys comes over the intercom. "Don't park on those sandbags; that's a command detonated mine..."

I park it about 50 feet from the mine, and we shut it down to wait. As the gunner ties down the blade, the flight of four T-65's takes off one at a time. They pass within 100 feet of us on takeoff roll, tail already up in the air, weight on the main gear, looking like a cross between a WWII fighter airplane and a Saturday morning cartoon airplane with their long pointed snout, chemical hopper in front of the pilot and behind the engine, and oddly short tail. The pilots, with right hand on the stick and left on the throttle, give us a nod as they go by. A custom built ag aircraft, the Air Wing was instrumental in its evolution to a more powerful and lighter weight turbine powered aircraft from the earlier recip model.

We are unable to raise Larandia via HF to see if the OV's are on schedule, so the SAR team breaks out the VSAT, a satellite phone system to try it. It's new equipment for us, and we're testing it for feasibility. It looks remarkably like a lap-top computer. The top opens and is the antennae, and where the key board would be is a handset in a cradle. And it works

like a champ. We establish solid communication with the FOL manager at Larandia and find the OV's are on schedule. I use the Sat phone to call back to Patrick AFB, to check the quality of the communications. I talk for a few minutes with the Deputy Director of Operations for Air Wing, update him on what we're doing and where, and the comms with the Sat phone is excellent. Like talking to him from across town. The SAR medic has walked into the police base and come back with a half dozen cokes and some packaged cookies. I have to hand it to Coca-Cola. In most any little jungle town in South and Central America, you can find a Coke. They have done an amazing job of marketing.

At 0835 we crank and head back out to the area. The first mission is repeated. The flights link up on time, descend, and spray out the load in less than 15 minutes. We see some of the largest coca fields any of us have ever seen out there. The OV's depart for another load, and we return to Villa Garson to refuel and wait for them.

Weather remains good for the third mission of the day, with puffy fair weather cumulus starting to build a bit. The OV's are almost out of chemical, and only two of the five need to do one more spray run. The lead Bronco has already called this would be the last pass of the day, as the wind was picking up. When the wind exceeds 4 miles per hour, spraying it terminated due to possible wind drift and damage to non-coca crops in the area.

SAR is overhead the spray package, flying right in the middle and behind the Cuervos. The Broncos are heading north on the pass, almost to the A point.

"LIMON! LIMON!" comes over the VHF, with the sound of a minigun firing in the background.

Limon [pronounced in Spanish as "lee-moan"] is the code word for shots being fired, and is called when ground fire is seen or hits received by one of our aircraft. If a radio is keyed up in the Cuervo while the guns are firing, the noise of the guns is picked up in the microphone and transmitted as well — the minis are that loud.

Things pick up a bit in the SAR. "OK, who's calling 'limon'?" All heads are looking below them for activity. The OV's pull off the pass, heading to altitude straight ahead.

The SAR security tech on the left side of the SAR keys his mike. "It's Cuervo One, he just broke hard left and his right hand minigun was firing..."

Bronco lead is the air mission commander until shots are fired, and then SAR takes over. Chino was flying and turned toward Cuervo One as soon as the SAR tech identified him as the one in trouble. He immediately called him. "Cuervo One, SAR; what's your status..."

"Standby..." Cuervo One was still trying to sort out if he had damages. He started to climb up out of small arms range, as did the other Cuervo and the Halcones. The pilot, who went by the nickname "Armando" because the Colombians couldn't pronounce his real name, was a retired pilot from the Army's 160th SOAR. He had been flying in the program since the early 1990's.

"SAR, Cuervo One; gauges look OK, controls feel OK; we heard the shots and felt two or three hits. I'm heading for Orito to check for damage."

Orito is a small oil refinery town about half way back to Villa Garson. There is a small army garrison there. Not the kind of town we'd want to stay overnight in, but OK to land at and check out the aircraft.

"Roger Orito, heading looks good, we'll get the time to it from the GPS," replied Chino to Cuervo One.

"SAR, Bronco lead. Do you want me to leave an OV on station over Orito as a radio relay?"

The Broncos were already at altitude well clear heading home, but Bronco lead had a good point.

"Bronco lead, SAR. We have that Sat phone, but go ahead and leave one till we make sure we can get through with it again, thanks."

"Roger, Bronco Four, go ahead and stay over Orito to relay."

"Four roger, I'll be at 5,000 feet over Orito."

"Cuervo One, this is SAR. I'm showing 12 minutes to Orito, how's your aircraft?"

"SAR, Cuervo One, I'm showing 11 minutes, aircraft seems OK. I'll shut it down and check it over there."

There was no point in holding the Halcones, and if we got stuck till evening they did not have NVG capability to help them get home. Chino told the Officer in Charge that we didn't need them and they could head to Larandia if needed. The officer in charge said they'd hang around for a while just in case. Good troops.

We arrived at Orito uneventfully and everyone shut down the helos. Cuervo One has taken two rounds in the belly of the aircraft, one of which had cut about 50% of his tail rotor control tube. It was a pretty impressive ding; dimpled the metal for about five inches, then punched a ripping hole through it. If the tube failed, he would not be able to control the pitch in the tail rotor. The aircraft was not flyable until the tube was replaced. The other round had only done sheet metal damage. The SAR team got the Sat phone up and running and passed it to the pilot in command of Cuervo One, who explained the damage to the FOL manager who then had to work up an aircraft recovery plan. Meanwhile Chino called the orbiting OV and thanked him for staying and told him he could head back to base, that we had solid comms with the Sat phone.

True to form, the afternoon weather came in and we sat in the helos while a pounding rain storm came in and visibility went down to about a quarter mile at best. The FOL manager was sending the C-208 imagery bird with a mechanic and some spare parts, but we figured he'd have to delay due to the weather. It was looking like we'd have to leave the Cuervo for the night and send a crew back tomorrow to recover it, and that we'd likely have to recover back to Larandia on NVG that we always carried when the weather lightened up a bit and the C-208 appeared on final in the rain. "Mustang" told us he'd been holding a ways to the east for about 10 minutes watching the storm over the field, and that the weather between Orito and Larandia was in fact good, and that it was a local storm over Orito and was moving to the west.

The mechanic didn't have enough equipment or tools to repair the damage, but was able to ensure he knew what would be needed tomorrow.

The crew of Cuervo One got in the C-208 with "Mustang" and the mechanic, and SAR, Cuervo Two, and the two Halcones all cranked and took off for Larandia. About half way back, Mustang passed us en route. For me as a visitor from the Air Wing HQ, it had been a long day. For the team in Colombia, it was routine. What they call "Ops Normal," or operations normal. Just another day.