10 years after 9/11
Dedicated to the preservation, promotion and presentation of Canada's aviation heritage.

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About this issue

THE COMMON THREAD OF THE THREE MAIN ARTICLES IN THIS issue is that the stories are first-person or personal memoirs. Two writers recall 9/11. The third writer goes back to a much earlier era to describe how he launched his career in aviation. Ten years ago the terrorist hijackings of September 11 forever changed civil aviation. The idea of hijacking four airliners in the space of one morning and then crashing them into targets on the ground was a scenario too fantastic for even fiction writers to conceive. But on this tragic day, fiction became reality.

Brock Mason, a retired Canadian businessman, took off from Richmond, Virginia on a sunny morning expecting an uneventful flight back to his home in Ontario. He flew into the airspace directly affected by the hijackings. When it was all over, he concluded that his flight path had brought him within a mile of the airliner that crashed in Pennsylvania. Barry Rempel, currently president and CEO of the Winnipeg Airports Authority and a senior executive with the Calgary Airport Authority in 2001, tells us (with recollections from professional colleague Paul Benoit of the Ottawa MacDonald-Cartier International Airport Authority), how the hijackings upended an international meeting of airport managers and intruded on a visit by the U.S. ambassador. Both articles provide different, but complementary, perspectives on 9/11 a decade later.

Bob Moore, one of the leading members of the restoration department, started his long career in aviation maintenance in 1946 when he landed a job at MacDonald Brothers Aircraft at age 16. It was a time when aircraft mechanics learned their skills on-the-job by working alongside experienced mechanics. In this excerpt from his memoir, The Voodoo and I: From wind-in-wires to Thunder in the Sky, Moore describes how he changed jobs to acquire the experience he needed to qualify for certification.

The cargo charter service launched by Pacific Western Airlines (PWA) in 1967 quickly set a worldwide standard for the movement of large and unusual shipments. PWA was the first Canadian airline to acquire a licence to fly the Lockheed L-100, the civilian version of the Hercules. In its 16-year history, the PWA cargo fleet logged more than 90,000 air hours and 26 million miles of travel into climates from minus 68ºF in northern Canada to plus 134ºF in African deserts. The people who served with this service still meet for reunions. A brief history of that service is in this issue.

In May, museum volunteers were treated to a recognition reception at Government House hosted by Lieutenant-Governor Philip Lee. The lieutenant-governor presented certificates to 10 volunteers who collectively accounted for 5,658 hours of the 24,972 hours logged by all museum volunteers during 2010. While we salute their contributions, we also mourn the loss of two members of this top-10 group: Estelle Eaton and Dick Thornhill – both passed away mere weeks later. Their contribution to the museum is briefly noted in this issue.

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On the cover:
One of the stars in the museum’s aircraft collection is CF-AAM, a Fokker Super Universal. This aircraft was reconstructed using the parts of four wrecked airplanes by Clark Seaborn and his team of friends. After 17 years of restoration, the Fokker flew July 24, 1998, but it took another year of proving and paperwork to gain a coveted airworthiness certificate. CF-AAM then embarked on an eight-year tour on the vintage aircraft circuit covering over 35,000 miles before coming “home” to the museum in 2005. In its heydey, this aircraft was luxurious – with comfortable mohair upholstered seats, mahogany cabin paneling and sliding glass windows. The enclosed cockpit was truly a remarkable enhancement for its time. CF-AAM was captured in this photo on one of its flights by Canadian aviation photographer Peter Lubig, whose work is featured in an exhibit called Light and Shadow, currently on display at the museum.
Altitude welcomes your comments. E-mail us at altitude@wcam.mb.ca or write to Altitude:
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For verification purposes, please include your address and daytime phone number. Letters may be edited for length and clarity.
Among the more than 500 people who turned out to see the F-86 Sabre was a Grade 6 class from the Bruce Middle School in the St. James School Division. The school group had signed up for the Take Flight program and their encounter with the Sabre was a unique bonus. Pilot Dan Dempsey posed with the school group while their teacher found a place in the pilot's seat.

OUR THANKS TO VINTAGE WINGS for allowing us to host the beautiful F-86 Sabre for a couple of days in June. A specific thank you is extended to pilot Dan Dempsey who gave an inspiring talk to the $100-ticket seat holders and then spent the next 2 ½ days, with few breaks, meeting more than 500 visitors during the public visiting hours. All visitors thoroughly appreciated the opportunity to climb up and into the cockpit and talk to him. A very happy Grade 6 class, which was in for our Take Flight program, received the rare opportunity to see the famed jet fighter up close and to have their picture taken with the aircraft and pilot.

While we had a steady flow of visitors, the numbers were nowhere near those recorded for the Lancaster bomber visit. The fact that viewing hours were scheduled for mid-week and that the Sabre is not as well known an aircraft as the Lancaster may have made a difference. However, having the Sabre come to us was well worth the effort of bringing another piece of Canada's history to our members and the public. Thank you also to the many museum volunteers, the airport tower, Winnipeg Airports Authority and our airport neighbours for ensuring everything ran smoothly.

We are now into high gear preparing for the Out of the Blue gala dinner, our main fund raising event of the year. Proceeds assist the museum in fulfilling its mission to preserve and exhibit Canada's unique aviation heritage. We have sold out the last six years – so mark your calendars for Saturday, October 29, and purchase your tickets now! Tickets are $175, while Patron tickets are $200 and corporate tables are $1,500. Please also consider being a donor (up to $1,000) or a sponsor (over $1,000). We need your help. The gala, black tie (optional), is held under the wings of our historic aircraft. Once again we have the ever-popular Ron Paley Band providing the dance music, while our fantastic dinner will feature food by Chef Craig Guenther of Urban Prairie. In addition, there will be a wide selection of “goodies” for you to win.

New this year, in a special category, is an opportunity for you to win a luxurious ladies’ or men’s Rolex watch from Independent Jewellers ($7,000-10,000 value).

On the silent auction table, thanks to Destination Churchill and its partners, is a $10,000 trip for two that includes cruising with beluga whales, dog sledding with Wapusk Adventures and tundra buggy touring.

Back by popular demand is the Air Canada raffle ($10,000 value) for a trip for two anywhere in the world that Air Canada flies. Tickets are NOW available – with only 2,900 tickets printed your chances are excellent. The draw will be made during the evening of the gala but you do not need to be in attendance to win.

Needless to say, we have many other outstanding items on the silent auction tables, from wonderful paintings, meals, luxury hotel accommodations, tools, home furnishings, as well as a ride in a Harvard aircraft.

Support the Western Canada Aviation Museum and purchase a Patron ticket even if you cannot attend or become a donor or sponsor. Your name will be listed in the gala program and you will receive a tax receipt for the full amount.
9/11 forever changed passenger flying into a much more complicated experience

The terrorist attacks stranded executives at a Montreal conference and interrupted the U.S. ambassador’s visit to Canada.

Barry Rempel, now president and chief executive officer of the Winnipeg Airports Authority, was president and CEO of Tradeparks Development Corp, the land and business development subsidiary of the Calgary Airport Authority in 2001. On September 10 and 11 of that year, he was involved in a series of events in Calgary that involved the U.S. ambassador’s visit to Canada. At the same time, one of his professional colleagues, Paul Benoit, now president and CEO of the Ottawa McDonald-Cartier International Airport Authority, was a delegate at the conference of Airports Council International in Montreal.

Although written primarily by Barry Rempel, the following memoir of September 11, 2001, also incorporates the recollections of Paul Benoit.

There are events which so impact our world that everyone recalls precisely where they were and what they were doing at that very moment. For previous generations perhaps that event may have been VE Day that ended the Second World War in Europe, or the day of John F. Kennedy’s assassination. For most of us, however, that day is the one we now know simply as “9-11.” It’s become almost a cliché but for those of us involved in aviation, September 11, 2001, truly rocked and then changed our world – changes that shifted our focus and translated into a more complicated and less-friendly environment for our customers.

The terrorist aircraft attacks of September 11, 2001, grounded all air travel as soon as the potential implications of the hijackings became clear to security authorities. Every means of communicating the shutdown were used. This message on the sign leading to the Calgary airport was one example.
The day is also remembered by the world’s airport executives as the day when, for good reason, they were all in the wrong place. It was the annual gathering of Airports Council International (ACI) members in Montreal. ACI represents airports around the globe and nearly all member airports were represented at the conference.

It was a day divided into the impact it had on the ACI delegates gathered in Montreal and on the people “back at the shop.” Both groups saw the events transpire in a 24-hour interconnected CNN world. They were, at the same time, confused by why and what it all meant.

At the international gathering, the day unfolded much as it did for many other non-aviation related people – glued to televisions to witness the events of the day. A major difference was the very personal nature of the involvement by people whose very livelihood is putting people on airplanes.

Around 8:30 a.m. on 9/11, Paul Benoit, then chair of the Canadian Airports Council, was on the stage of the Palais des Congrès de Montreal introducing David Collenette, then Canada’s Minister of Transport. The minister’s presentation explored the importance of aviation to our economies. Part way through Collenette’s address, there was an unusual increase in the number of journalists in the hall as Louis Ranger, Canada’s associate deputy minister of transport, sent the convention chair a note. It was a simple yet stark message stating that an aircraft had struck the World Trade Center in New York. The note also asked the chair to try to end the minister’s speech – now! The minister left the stage, took no questions, and departed with his staff immediately back to Ottawa – by car.

Back in the Palais des Congrès, an announcement was made describing what had just occurred in New York. Those present gathered around two large television screens and watched in shock as events continued to unfold. Reporters’ comments were only beginning to sink in when one of the towers began to do the unthinkable – it collapsed, in what seemed to be slow motion, to the ground.

Some, including the then president of ACI-North America and former director of the Port Authority of New York and New Jersey, watched dumbfounded as their former offices and presumably the very people they had worked with for years, were directly impacted by the tragic event unfolding before their eyes. Emotions were overwhelming. Subsequent announcements made it clear that one aircraft into a tower was not the whole story. A second plane crashed into the second World Trade Center tower, a third hit the Pentagon in Washington, D.C., and a fourth aircraft crashed into a Pennsylvania field.

Slowly the realization dawned that beyond a shadow of a doubt, this was the result of a coordinated attack. Shock turned to action among those gathered at Montreal; Canadians, in particular, realized that as airspace closed they would be playing “host” to unanticipated guests from around the world. Phone lines began to hum, some attempting to make alternate travel arrangements and

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some to bark instructions to staff back home. Mostly, the “instructions” were unnecessary – this was not in anyone’s emergency response scenario; but thankfully, the crisis plans that were in place provided a framework for action. Upon hearing what was transpiring, most of our new guests worked with airport staff to make the best of the situation. Communications, access to televisions and telephones were critical. It wasn’t long and North American airspace was completely shutdown.

On the ground at most Canadian airports, activity was brisk. Team members not accustomed to certain roles stepped up and handled everything that came their way.

Back in Montreal, most of the world’s senior airport management was now stranded; the majority for several days until airspace reopened. Rooms were set up at the Palais and conference delegates were regrouped geographically: the European, Asia Pacific, Americans and Canadians in separate rooms.

Those of us not gathered in Montreal lived a different experience that day. My own story actually began September 10th, a day when my role as chair of the Calgary Chamber of Commerce afforded me the opportunity of joining the U.S. ambassador to Canada for a day of recreation and an evening awards ceremony to recognize those involved in North American tri-lateral co-operation. In retrospect, it today strikes me as a timely precursor to the reality of the true international cooperation required of us the next day.

The following morning’s breakfast meeting at the chamber was interrupted by staff who strongly suggested we turn on the television – just in time to see replays of the first aircraft hitting the first of the twin towers, and then, unbelievably, live and in living colour, seeing the second aircraft crash into the other tower. Calls were made. The U.S. consul general was already moving the ambassador to the designated “safe house.”

In stunned silence we sat as the television blared the story – live, then as recorded re-runs, and back to live. The original chamber meeting never officially ended nor were minutes recorded. We watched and our conversation provided little help to understand who, what, where, when, why or how.

By the time I returned to the airport offices the new signage at the Calgary airport already carried words no one ever anticipated seeing on the reader board, nor hoped would ever want to see again – “all flights cancelled until further notice.”

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9/11 was a “good day” for flying that ended in tragedy

10 years after the terrorist attacks, a Canadian pilot remembers how close he came to seeing United Airlines flight 93 crash in Pennsylvania

Tuesday, September 11, 2001, dawnt as a glorious late summer day in Richmond, Virginia. It was the kind of weather Virginians would describe as a “most magnolia day.” Around 8 a.m., Brock Mason was at the Richard E. Byrd International Airport preparing a vintage twin-engine Piper Apache for what he expected would be a quiet three-hour flight in near-perfect weather to Hamilton, Ontario. He took off at 8:40 a.m. into the airspace most directly affected by the terrorist aircraft attacks of what is now called “9/11.” It was only after the day was over that Mason discovered how close he came to seeing United Airlines flight 93 crash into a field at Shanksville, Pennsylvania. Here is his memoir of that unique day.

By Brock Mason

IT WAS JUST AFTER 9:30 A.M. WHEN I got the first clue that something was wrong, but not anything to make me more than just slightly curious. I heard the Washington Centre controller advising an airliner bound for New York to divert to another destination. In the exchange with the airliner pilot, the controller said “it’s pretty terrible up in New York.” Though some bad accidents occur in clear blue skies, and air traffic around New York City is congested, the exchange seemed odd nevertheless.

My curiosity was quickly interrupted when the same controller handed me off to Cleveland Centre. After the usual acknowledgements, my headset remained silent for several minutes. I flew on, enjoying the view of the Shenandoah Mountains, a clear blue sky and the hypnotic muted rumble of two very smooth running Lycoming engines set at low cruise power. Ahead of me was that spectacular view that only those who are pilots are privileged to see.

Radio silence was broken by the voice of a lady controller at Cleveland Center who issued a terse instruction for me to land at Johnstown, Pennsylvania. I acknowledged and also asked why. The controller said there was a very good reason for me to land at Johnstown, but she did not tell me what it was! In all

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my years of flying I had never received such an unusual instruction from air traffic control. I quickly concluded that something serious was unfolding and that I would follow instructions.

Johnstown airport is on a plateau south of the city at 2,284 feet above sea level. As I continued flying at 6,500 feet on a heading of 355-356 degrees, I also heard Cleveland Center divert other aircraft to Johnstown.

About 10 miles south of Johnstown, Cleveland Centre called again to direct me to make a right-turn to a heading of 180 degrees. I was already into the turn as I acknowledged. After agreeing to land at Johnstown for reasons unknown, I found myself heading in the opposite direction. After several minutes of radio silence at 180 degrees, I called Cleveland to ask if I am still supposed to land at Johnstown.

There was an immediate “Yes. Mike Delta Echo. Turn immediately back to your heading to JST, make it a left turn. Make it a steep turn.” The controller’s voice was completely normal in volume and cadence. There was no hint of urgency. I complied and do not recall acknowledging. No air traffic controller had ever told me to make a “steep” turn.

As I stood the old Piper twin on its wing into a steep left turn, I saw no immediate or obvious problem facing me and decided to go with the flow. I levelled my wings back on a heading of 355 degrees towards Johnstown and I clearly remember the next call from Cleveland Center: “Mike Delta Echo. Cleveland. Jet traffic you’re five o’clock, 6,000 feet descending fast.” Her voice was cool, matter-of-fact, and professional. But what a message! Jet traffic out here in the boonies at 6,000 feet! Descending fast! Why so low? Here was another first: I had never heard such a traffic advisory before.

Normally jets in this mountainous area would be climbing to altitude after takeoff or descending to land at a standard rate descent. A jet should not be descending fast from 6,000 feet far away from an airport!

I looked to my five o’clock and replied at the same time: “Mike Delta Echo. I’m looking. I’m looking negative contact.” On my present heading, five o’clock was southeast and into the morning sun. I did not look at my watch but working back from my landing time, which I always record, it would have been a few minutes after 10 a.m. I continued to look to my five o’clock, into sunlight and haze, and I did not see the traffic. The instructions from Cleveland Centre and my flight path of the previous 15 to 20 minutes were highly unusual.

On my northbound heading, I quickly realized I was almost on top of Johnstown and still at 6,500 feet. I turned my attention to landing. Cleveland Centre told me to descend at my discretion and to contact Johnstown tower. I called Johnstown and was cleared to land number two behind a USAir Jetstream.

I also asked Johnstown tower what was going on. The reply: “Mike Delta Echo. You are cleared to land. There has been a major terrorist attack in New York.” I later learned that Johnstown tower was reduced to a skeleton staff because of fears that flight 93, in its low-level meandering path, might select it as a last resort target.

I touched down after a tower-directed 360 degree turn on a short final approach in order that the Jetstream ahead of me could clear the active runway. I looked at my watch as the Piper rolled – it was 10:22 a.m. A guy on a golf cart with a “follow me” sign led me to a parking ramp, which was already crowded. As I shut down my engines, the cart driver appeared on my wing. I opened the door to hear him ask, “Do you know what’s going on?”

“Not really,” I replied.

“There’s been a major terrorist attack in New York and Washington. You’re going to be here for a few days. The other crews are in the flight lounge.” He pointed to the nearby hangar and then drove away. The Shankesville crash had not yet been reported and no one noticed the black column of smoke on the horizon a few miles south of Johnston.

Any sense that this was a normal and beautiful late summer morning ended the moment I entered the crowded crew lounge. It was silent except for the TV. All eyes were riveted to its screen.

In all my years of flying I had never received such an unusual instruction from air traffic control. I quickly concluded that something serious was unfolding and that I would follow instructions.

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What do James Bond, the full moon, Oshawa, Ontario, Sir Winston Churchill and Winnipeg’s Sir William Stephenson have in common? They all come together in a top-secret organization whose mission was to encourage and facilitate espionage and sabotage behind enemy lines. And they’re part of our latest exhibit called: Secret Agents, Spies and Moon Planes, now showing at the Western Canada Aviation Museum.
9/11 was a “good day” (cont’d)

All eyes were riveted to the TV screen. Stunned faces struggled to comprehend the enormity of what was happening. The horrific images, which have since become too familiar, were hard to believe. The commentary was nonstop.

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The first reports of the crash of United flight 93 referred to Somerset, Pennsylvania, and then amended to Shanksville once local emergency responders found the crater site. It took only a little while for me to realize that the site of flight 93’s end was precisely where I had been flying.

Because no one knew how many airplanes might be in terrorist hands, the U.S. Federal Aviation Administration made the monumental decision to ground all U.S. air traffic. Approximately 4,000 aircraft were flying in U.S. airspace at the time of the first attack in New York and all were ordered to the nearest airport. This decision was courageous and correct. In accordance with instructions, I landed at Johnstown airport and found the closure order also applied to all civilian ground transportation. Stranded.

I called family members to say I was safe. My partner in Richmond, however, was the only one who knew I was flying on September 11, 2001. She was glad to hear I was on the ground.

Pennsylvania State troopers together with Johnstown police were now in charge of the airport. A big friendly sergeant of the local force told me to get a hotel room and they would provide the ride. I made my reservation and, together with a couple of guys from Massachusetts travelling to Kansas, piled into a state trooper’s highway cruiser to be chauffeured to the hotel. No sirens!

In my hotel room I watched television to see this already unbelievable story develop further. For the remainder of that Tuesday afternoon, and for the next couple of days, I reviewed my charts and times in relation to news media reports. I concluded that United flight 93 crashed very close to my flight path. I also visualized flight 93, a big Boeing 757, as an out-of-control aircraft, descending at high speed, probably at a steep bank angle or perhaps even inverted, plunging into the countryside beneath me!

A year later, in the spring of 2002, I visited the flight 93 memorial in Shanksville to pay my respects. I also corroborated, by way of ground reference, my position on that fateful day.

The U.S. Secretary of Transportation reopened U.S. airspace on Thursday, September 13 in order that commercial operators could relocate airplanes to hubs for the resumption of normal operations. General aviation IFR (instrument flight rules) resumed at noon Friday. I left Johnstown at 1 p.m. The rest of my trip to Hamilton was pleasant, quiet and uneventful.

There was no opportunity to talk to the air traffic controller at Cleveland Center who guided me through my little adventure. The Johnstown tower manager, who was most helpful, told me the FAA ordered controllers and other personnel not to talk to anyone pending a review of all events of September 11. Nevertheless, on my departure on Friday afternoon, I asked the male Cleveland Center controller if the lady I talked to on Tuesday was on duty. She was not.

What was her intent? I know she would have been concerned with my safety and would have tried to avoid any midair collision. However, I do believe it would have been tempting, since I just happened to be there, to put me in a position to observe the big airliner in such an unusual and menacing flight path. That said, I am still glad that I did not see Flight 93 crash into the Pennsylvania countryside.

I do remember media coverage in the aftermath of September 11 that included many interviews with people recalling where they were and what they were doing on that fateful day. Every time I hear one of these interviews my reaction has always been the same: I have a much better story! 😊

Brock Mason is a life member of the museum currently resident in Oakville, Ontario. He learned to fly at the Winnipeg Flying Club and in his more than 2,500 hours of flying, he earned his IFR and multi-engine licenses. Retired from a business and investment career, he particularly enjoys flying his Beechcraft Model 58 Baron.
Westland Lysander was chosen as the working aircraft for clandestine flights into Nazi-occupied Europe during the Second World War because of its high-lift, short takeoff and landing capabilities as well as being able to operate from improvised airstrips. To enhance their range, Lysanders were stripped of all unnecessary equipment. Painted matte black for maximum night invisibility, the Lysanders were designed to carry one passenger in the rear cockpit, but in case of urgent necessity up to three people could be carried in extreme discomfort. In this photo of the diorama display in the museum, the Lysander has landed and the secret agent is seen meeting with local resistance members. Over the course of the war, two SOE squadrons, 138 and 161, transported 101 agents into Nazi-occupied territory and recovered 128 agents.

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Now showing
Westland Lysander performed clandestine flights into Nazi-occupied Europe during the Second World War – See longer story on page 19

Planning an event?
For parties up to 200, put the Aviation Museum on your itinerary. Guests will enjoy the vast prairie sky through wall-to-wall windows and a spectacular view of the sunset – all overlooking the airport runways. Free parking on site. Ask about our catering and liquor license options. Visit our website wcam.mb.ca.

For information, call 786-0734 or email events@wcam.mb.ca.

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From money to monkeys, PWA’s cargo service moved anything that fit into a Hercules

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**The Poor Benefitted When**

International aid agencies chartered Pacific Western Airlines to fly relief supplies to disaster zones in Africa, Asia and South America. The rich, for their part, chartered PWA to move racehorses and luxury goods to their private enclaves.

While moving freight in support of oil and gas exploration in Canada’s north was the most important aspect of the charter service’s business plan and the motivation behind PWA’s acquisition of the L-100, the firm’s worldwide cargo charters included every type of domestic livestock, monkeys and other wildlife, killer whales and exotic fish, nuclear reactor parts, military equipment, explosives, money, beer and Christmas cake, wigs and anything else a load master could fit into the cavernous hold of the Lockheed L-100. The company’s brochure on load planning told customers “no matter what shape your cargo comes in, we’ve got a shape it can go in.”

For the several hundred people who served as pilots and support crew, being part of the cargo charter service provided a unique opportunity to see the world. The quality of their accommodations during their downtime was as diverse as their cargo and their destinations – they shared tents on arctic ice, dined in some of the finest night spots on the planet and enjoyed the best flying experience any group of aviators and ground crew could ever dream of.

PWA’s cargo charter service was started in 1967 and operated from its base in Edmonton. PWA was the first commercial air carrier in Canada licensed to fly the Lockheed L-100, the civilian version of the Hercules C130 military cargo lifter. PWA continued this charter service until 1983.

The people who were part of the cargo charter service developed a bond with each other that continues. For example, crew members who served in the cargo service organized their first reunion three years after its end. Since then, they have held a reunion every four years, the most recent in June 2011.

John (Gus) Bonner, who volunteers in the museum library, was part of the PWA air cargo service for most of its short history and recalls those years with affection. He was first a load master and later a project manager. He said that the air cargo crew members genuinely...
worked as a team, where members respected each other because of their expertise and also helped each other without regard for job description.

Bonner said that the air cargo’s assignment to fly relief supplies into Biafra, a secessionist state in southeastern Nigeria that precipitated civil war in 1968, was one of the high points in the air cargo’s history but also one of the more intense operational periods. One Hercules aircraft on that mission logged an impressive 428 hours of flying time in a month, averaging almost 14 hours in the air every day on flights between London and Lagos, Nigeria.

Another assignment that illustrates the challenge facing both the crew members and the equipment was when PWA was chartered to move a drilling operation in Ethiopia within a 10-day deadline. Bonner said they completed the mission in seven days. He said the on-ground process of loading/unloading as well as refuelling took about 30 minutes. Just over 110 flights were required to complete the move. Bonner said if sand wasn’t blowing in the wind it was being churned up by the Hercules’ propellers, finding its way into every orifice (human and machine) and clogging air filters so quickly they were cleaned or replaced after every flight. And, yes, it was “bloody hot.” At the end of this Ethiopian mission, Bonner said there was time left over to find a resort to rest and wash the sand out of their bodies and their aircraft.

Oil rig movements for PWA were not limited to Africa. Bonner said there were many missions to move drilling equipment in the Arctic, where cold weather caused completely different problems. A typical arctic oil rig relocation involved more than 100 flights.
From money to monkeys (cont’d)

90,000 air hours and 26 million miles of travel, carrying more than 800,000 tons of widely varied cargo. The aircraft landed and took off from paved and unpaved landing strips in temperatures ranging from minus 68°F in northern Canada to plus 134°F in African deserts.

Over its 16-year history, the PWA charter service recorded only two accidents. One Hercules crashed in Zaire, killing all on board, and the other Hercules crashed on landing in Peru with all crew surviving.

PWA’s air cargo charter service stands out because company management and Hercules crews were committed to operating a high-quality cargo service and creatively developed a wide range of skills and techniques that exploited the unique features of the L-100 in a way that established the company as a world leader in cargo airlifts.

The six Lockheed Hercules aircraft in the PWA fleet consisted of one L-100-10, four L-100-20 aircraft, and one L-100-30. Of the three models, the L-100-20 was mid-size in terms of cargo capacity; it was able to carry 52,000 pounds in a cargo hold of 4,785 cubic feet over a distance of 1,300 nautical miles.

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A lunch-time encounter lands a job fixing aircraft engines

In the days before trade school courses, aviation repair and maintenance was something that was learned on-the-job by working with skilled mechanics.

Bob Moore began his long career servicing aircraft when he landed his first job at age 16 in 1946 at MacDonald Brothers Aircraft. His first work assignment took him to Gimli, Manitoba where he joined a company field crew servicing surplus Second World War aircraft for storage.

In this excerpt from his memoir, The Voodoo and I: From Wind-in-the-wires to Thunder in the Sky, Moore describes how he landed his second job, at Standard Aero Engine, because he wanted to work where he could get the experience he needed to qualify for his aircraft maintenance and engineering certificate.

It was common knowledge that Allan Dyne, superintendent of Standard Aero Engine, always ate his sandwich lunch with a beer at the Airport Hotel in St. James on Ellice Avenue across the street from the MacDonald Brothers shop. Moore and Dyne had met each other when MacDonald Brothers projects intersected with those of Standard Aero. Moore’s memoir begins with his lunchtime encounter with Dyne.

MR. DYNE WAS THERE AS EXPECTED, sitting alone, so I sat down beside him. He enquired why I wasn’t at work and I told him I had left MacDonald’s and was looking for aero engine work in order to gain experience on engine troubleshooting, repair and overhaul, so I could eventually write the A and E aircraft maintenance license exam. He thought for a minute before replying that he could only pay minimum wage because of my lack of experience, but that he would make sure I learned what I needed to know about aircraft engine repair and overhaul. He got up from the table and told me to report for work the next morning.

That evening, after I had seen Mr. Dyne, I told Dad what I had done. He commented that I was going to be working for one of the best-known aero engine engineers in Canada and a man who had a vast knowledge of aircraft engines.

Thus began my two-year learning experience with Standard Aero Engines.

(continued on page 16)
Mr. Dyne started me in the engine disassembly area and told the lead hand mechanic what I had to learn – basically how to strip a large aero engine by myself in one day. This was in the days before power tools! All nuts and bolts were removed with either a wrench or a socket set and a speed handle.

True to his word, Mr. Dyne moved me into the various engine repair sections. He always made a point of telling the senior mechanics why I was moving along through the different jobs. This paved the way for them to point out shortcuts and the “no-no’s,” which helped me considerably.

I stayed in the engine department until I was totally able to rebuild a nine-cylinder aircraft engine by myself. The shop foreman had a couple of other chaps helping me when it came to jobs impossible for one man to lift or torque.

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This journey through the different shops took me about a year and a half and I was greatly anticipating my next move. That moment arrived in early 1950 when I was sent to the engine test house as a helper for Jimmy Pearn, the test house chief. Pearn taught me all the steps necessary to prepare a rebuilt engine so it would be ready to pull an aircraft through the air. Every overhauled engine was mounted to a test frame and outfitted with a carburettor, fuel pump, starter, fuel and oil lines, temperature and pressure sensors. After mounting a test “club” propeller, the engine was primed with oil to make sure every moving part and oil gallery was lubricated. Once the fresh engine was running and circulating oil, it was inspected for leaks, abnormal noises, proper gauge and thermocouple readings and magneto function, etc. Then began the run-in routine where pressures and temperatures were recorded at set intervals. Once the engine achieved and maintained the required benchmarks at cruising power, Mr. Dyne was called over to the test house to review the test data and witness the engine’s operation and instrument readings at a maximum power (takeoff) setting. If satisfactory, he would sign-off on the engine run-in.

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After a couple of weeks in the test house, I was occasionally left alone to carry out all the functions myself. On one such occasion, I started a fresh engine and watched its oil pressure quickly fall to zero. I shut it down and pulled the oil filters where I found an accumulation of fuzz, which was blocking the oil flow. Pearn’s investigation revealed that in an effort to save money, the purchasing department changed “wiper” suppliers. It was shop practice to wipe all engine parts prior to assembly and the new wipers left an invisible fuzz residue that was then picked up by the circulating internal oil and captured by the filters during the engine run. Use of the poor-quality wipers was, needless to say, discontinued.

I continued in the engine test house until I was recalled by the 6th division military reserve (RCCS) to active military duty to provide telephone and wireless communications in support of the Winnipeg flood in the spring of 1950. Following demobilization and on my return to Standard Aero, I found the firm running out of engine overhaul work. Government money was being diverted to A.V. Roe to support the CF-100 program. Because lay-off’s were being contemplated, a co-worker and I asked for our notice so that older and married men might be able to hold onto their jobs.

Les Dean, the shop foreman at Standard Aero, directed me to a showcase manufacturing business in St. Vital where his brother would give me employment. I worked there until the outbreak of the Korean War.

In late 1950, the RCAF base at Gimli was reactivated and MacDonald Brothers, because of its previous activities at the base, was awarded a contract to remove all aircraft and gliders from the base by December 31. I re-applied to MacDonald Brothers and was re-hired. I was sent first to Gimli and then to Portage la Prairie in early December, where I oversaw the arrival of all aircraft being flown out of Gimli.

Shortly after, the Portage la Prairie assets were moved to the airbase at Carberry, which was converted to a full-scale stored reserve facility for aircraft and gliders. MacDonald Brothers supplied the aircraft mechanics while the RCAF handled base maintenance. I was appointed by the military flight sergeant as aircraft crew chief, a position I held from the spring 1951 until August 1954, when I moved to Winnipeg to take charge of the aircraft involved in training radar operators/navigators.

Moore stayed with MacDonald Brothers following its purchase by the Bristol Aeroplane Co. Ltd. of England. With company encouragement, Moore enrolled in a four-year University of Manitoba course in Industrial Management and Administration (CIM), graduating in 1970. Management responsibilities were added regularly and Moore was ultimately appointed director in charge of all aircraft, helicopter, miscellaneous components and afterburner activities. Retiring in 1991, he joined his good friends Paul Latocki and Ed Juzak in the restoration department of the Western Canada Aviation Museum.
Autumn at the museum

Secret Canadian agents and WWII spy stories

THE PILOTS THAT FLEW AGENTS INTO Nazi-occupied Europe during the Second World War on espionage and other secret “special” operations are a chapter in aviation history that provides a rich source for stories of individual bravery and an insight into the intelligence and political objectives of wartime planners.

An exhibit called: Secret Agents, Spies and Moon Planes, located in the museum foyer, shines a light on these shadowy activities through stories, photos, large-scale model aircraft, and real spy gadgets. Canada was the location of a “spy camp” and Canadians served as spies, analysts and managers of these secret operations.

The secret war and its Special Operations Executive (SOE) brought together an unusual mix of talent – an eclectic group of poets, businessmen, mathematicians, musicians, artists, engineers, scientists and clockmakers. They were among the brilliant minds that wrote and broke codes, trained operatives and designed ingenious devices for secret agents and resistance groups.

In addition to Sir William Stephenson, who lived in Winnipeg as a youth and who rose through the ranks of the army and air corps to become a leading member of SOE, the exhibit features two lesser-known Manitoba “spies” who were parachuted into France and ultimately captured by the Nazis:

Frank Pickersgill, of Winnipeg, was a freelance journalist who joined the newly created Canadian Intelligence Corps in 1942. Fluent in German, Latin, Greek and especially French, he was loaned to the SOE.

Francois Deniset, of St. Boniface, studied history and economics in anticipation for a career in the foreign service. Days before the declaration of war, Deniset joined the Royal Canadian Artillery and was recruited by the SOE to be trained as an arms instructor. Both Pickersgill and Deniset were executed soon after their capture.

SOE chose the Westland Lysander for its clandestine flights into Nazi-occupied Europe because of its high-lift, short takeoff and landing capabilities as well as being able to operate from improvised air strips (often illuminated by a handful of torches). To enhance their range, Lysanders were stripped of all unnecessary equipment and fitted with an under-belly drop-tank. They were painted matte black for maximum night invisibility. They were designed to carry one passenger in the rear cockpit, but in case of urgent necessity up to three people could be carried in extreme discomfort. The Lysanders flew from secret airfields at Newmarket and later Tempsford, but refuelled at regular RAF stations for the actual crossing. Over the course of the war, two SOE squadrons, 138 and 161, transported 101 agents into Nazi-occupied territory and recovered 128 agents.

The Oshawa connection is Camp X, which was established as a training school for clandestine wartime operatives. Around 2,000 British, Canadian and American covert agents trained there from 1941 through 1945 and were sent to Spain, Portugal, Italy, and the Balkans as well as Africa, Australia, India, and the Pacific.

Haunted hangar with old aircraft

TRICKS AND TREATS FROM plane-to-plane are part of the annual Haunted Hangar Halloween family event that returns for a third year. The fun begins at 6:30 p.m. on Saturday, October 22 at a cost of $5 per person. A variety of activities focussing on the Halloween theme will entertain all ages.
OUT OF THE BLUE is our key fund raising event. Proceeds from this prestigious Gala assist the Museum in fulfilling its mission to preserve and exhibit Canada’s unique aviation heritage. Taste the wonderful food of Chef Craig and dance to the fantastic music of the Ron Paley Band.

**New this year** is an opportunity for you to win a luxurious ladies’ or men’s Rolex watch from Independent Jewellers ($7000-$10,000 value).

On the silent auction table, thanks to **Destination Churchill**, is a $10,000 trip for two that includes Cruising with Beluga Whales, Dogsledding with Wapusk Adventures and Tundra Buggy touring.

Back by popular demand is the **Air Canada raffle** ($10,000 value) ‘trip for two anywhere in the world Air Canada flies.’ Raffle tickets now available.

If you have not purchased a ticket, booked a table for friends or colleagues, become a donor or a sponsor (over $1000), please consider doing so - even if you cannot attend. We acknowledge our supporters and tax receipts are available.

<table>
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<tr>
<th>Dinner ticket</th>
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<th>$200</th>
<th>Corporate table</th>
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786-5503 for tickets
Happenings

Museum volunteers honoured at Government House reception

The vital contribution of volunteers to the operation of the museum was recognized in a special reception on Tuesday, May 10 when more than 50 museum volunteers filled Manitoba’s Government House. During the evening Lieutenant-Governor Philip S. Lee presented certificates to the 10 volunteers whose combined volunteer hours at the museum in 2010 totalled 5,658 hours.

Executive Director Shirley Render thanked the lieutenant-governor for hosting the evening with the volunteers and went on to say, “we have been blessed with volunteer support since our first day. In fact, if it were not for our five volunteer founding members, we would not have WCAM. They formed this museum to preserve, exhibit and tell the story of Canada’s unique aviation history. From our small beginnings in 1974, we have become an award-winning organization and Canada's second largest aviation museum.”

Render said that over the past five years, volunteers have logged more than 125,000 hours of service, which at $10 an hour represents a $1.25 million financial contribution. “It is really impossible to put a value on our volunteers because they bring a wealth of skills with them and perhaps, most of all, they are here for the overall advancement of the aviation museum. What is also great about them is that if we have a special event outside their regular routine that needs volunteers they don’t say ‘sorry, find someone else.’ Instead, they step up to the plate.”

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The 10 people selected to receive certificates from Lieutenant-Governor Lee were:

- Bob Moore, restoration, with 679.5 hours.
- Steve Kinch, volunteer driver, 660.5 hours
- Bob McCreadie, restoration, 653 hours
- Heinz Lampe, restoration, 650 hours
- Ellen Eaton, restoration, 630 hours
- Gary Boggs, restoration, 566 hours
- Ed Kubara, restoration, 515 hours
- John Bonner, library and archives 467 hours
- Dick Thornhill, restoration, 421 hours
- Thomas Baldwin, restoration, 416 hours

Since the May reception, the museum has lost two devoted volunteers through the deaths of Estelle Eaton and Dick Thornhill. Their obituaries are noted elsewhere in this issue.
The airspace did open again, stranded aircraft returned to normal duties and schedules, but September 11th changed aviation. Many of the changes had already been considered, but the speed with which these initiatives were implemented was something no one thought could happen. Aside from the hardened cockpit doors, identity checks, air marshals and the creation of the Canadian Air Transport Security Authority, what really changed was our focus and costs. We moved from an era which today appears to be almost naïve: from an era where customer service was the “new way” and Canada’s recently devolved airports were going to enhance the travel experience, to one where the political and bureaucratic leadership are committed to an environment of security above all else. Flying is consequently no longer a pleasurable experience. The biggest disappointment for many has been seeing how we appear so willing to sacrifice everything for the theatre of security. With the good, there is now an immediate reaction to everything that happens. When you look at the costs and restrictions on citizens, you almost have to wonder if the terrorists have accomplished at least one of their goals.

Ben Franklin has been quoted as saying, “They who can give up essential liberty to obtain a little temporary safety, deserve neither liberty nor safety.” So in achieving liberty and safety, we still have some work to do. It’s time to focus on the customer’s needs again.

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Dick Thornhill

Richard Thornhill, a restoration volunteer who was best-known to friends and family as Dick, died at age 91. He enjoyed three careers each lasting about 20 years, and all involving his skill and talent as a machinist. During the Second World War he joined the Royal Canadian Air Force, serving first as a ground crew member and later as a flight engineer on Lancaster bombing missions. He re-enlisted in the air force in the 1950s and settled in Winnipeg in 1970 following his retirement.

He then joined the rehabilitation engineering and special devices department at the Health Sciences Centre, retiring for health reasons in 1990. Dick then returned to his love of aviation by volunteering at the Western Canada Aviation Museum, where his machinist skills were especially valuable in aircraft restorations. In 2010, he logged 421 volunteer hours in the restoration shop. Dick is survived by his wife of 58 years, Ida, and three children.

Estelle Eaton

Estelle Eaton, a long-time restoration volunteer, died June 2 at age 82. In the museum’s restoration section, Eaton was the resident specialist in restoring fabric-covered aircraft to their former glory. Her mastery of the techniques of cutting, shaping, sewing and then “doping” the cotton fabric combined with her attention to detail resulted in aircraft components that were historically accurate and exquisite examples of an almost forgotten hand craft.

In 2010, Eaton logged 620 hours in the restoration shop. Eaton became part of the museum’s restoration program after her husband, William, retired as a pilot and discovered the museum. His enthusiasm was so infectious that she soon joined him in his regular work sessions in the shop. Her unique skills in aviation fabric were acquired during these retirement years. She is survived by her husband, William, three children and their families.

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