



National
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Flight Comment



ISSUE 2, 2024



YOUR AIR FORCE
VOTRE FORCE AÉRIENNE

CHECK SIX

Disaster at 2 A.N.S.

DOSSIER

Lessons Learned About Leadership

MAINTENANCE IN FOCUS

Tool Control

Canada

Cover – Celebrating RCAF 100 with a century's worth of photos. – 19 Wg Museum.



Hidden Hazards 8



I Learned About Leadership 20



Turning the Corner 24



Clouded Judgement 27



How is it Possible? 28



Jammed Controls 29



Photo: Cpl Ken Belwiz



Photo: Cpl Ivé Marchon

Flight Comment

TABLE OF CONTENTS

Issue 2, 2024

Regular Columns

Views on Flight Safety	2
The Editor's Corner	3
Maintenance in Focus	8
Flight Safety Report Highlighted	10
Check Six	12
Dossiers	
I Learned About Leadership From That	20
Turning the Corner	24
Lessons Learned	
Clouded Judgement	27
How is it Possible?	28
Jammed Controls	29
The Back Page	30

Awards

3 Wg Air Traffic Control (ATC)	4
Captain Jonathan Saulnier	7
Aviator Levi Higginson	11
Corporal JongWon Choi	18
Warrant Officer Scott Rhoads	19
Corporal Robert MacNeill	23
Mr. Derek Campbell	26

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Views on Flight Safety

by BGen John Alexander, OMM, MSM, CD

As I near the completion of my second year of command of 2 Canadian Air Division, it gives me time to reflect upon my first two years in command and to reflect upon the lessons I learned from Flight Safety and how it applies to my relationship as a Commander and training authority of the Royal Canadian Air Force.

Over the course of the last 35 years of my career I have had the opportunity to operate at the tactical through to strategic levels, within the Air Force, CANSOFCOM, and on international operations which included a stint with the Royal Air Force. Throughout that time, I served as a unit Flight Safety officer, the Director of flight safety and in a multitude of command positions. So, through it all, what have I learned in Flight Safety that has benefited me as a commander?

I have long been a fan the author Sidney Dekker after I had the opportunity to read one of his books entitled "The Field Guide to Understanding 'Human Error'." What struck me at the time when I first read this book, and still impresses upon me today, is that many of the lessons on how to go about conducting investigations, where "human error" is a factor, also have direct lessons in leadership and command within the military. Let me explain.

It is Sidney Dekker's thesis that human error is merely a symptom of the deeper trouble within a system or organization. Therefore, where human error is a factor in an accident or incident investigation, it serves as the starting point of an investigation rather than its conclusion. So, what is meant by this? Well, in short, the author is suggesting that humans by their very nature are motivated to do a good job and therefore your investigation into human error must dig deeper in to understanding what motivations or factors caused that human to err in the execution of their duties. It is a form of "reverse engineering" the human error that occurs – going back to understanding the factors that led to the human error vice simply identifying the human error as the cause. Once you understand the factors that lead to human error, only then can you implement the preventative measures to prevent a reoccurrence in the future.

What I have taken away from Sidney Dekker is that this same approach is as equally applicable to leadership and command as it is to Flight Safety investigations. How many times have you heard about an incident of someone doing something on your unit that begs the question, "what were they thinking?"

That's a great first question, but all too often we then leap to a conclusion not founded on facts, or at least, not all the facts. That is a part of human nature. But understanding our own preponderance to jump to conclusions, we can do something to prevent ill informed suppositions from occurring in the first place.

What I've learned is that things are seldom as they first seem. The light speed at which information now flows does not mean it must flow at that speed. Take the time to gather the facts. Take the time to understand all the contributing factors that caused Bloggins to arrive at a decision, which ultimately, everyone else on unit concludes was not the right decision.

In our various training academies within 2 CAD, you sometimes come across an incident where an *ab initio* candidate surprises you with their decisions. Part of the culturalization process within the RCAF is to understand that our members are learning how to be aviators and will make mistakes along the way. Taking the time to understand why those mistakes occurred is vital to being able to correct the member and develop a future member and leader of the RCAF. ✦

The Editor's Corner

by Maj Jill Sicard

Greetings, fellow aviators, and welcome aboard for another exhilarating journey through the pages of Flight Comment! As spring breathes new life into the air, our second issue bursts forth with excitement, featuring an abundance of captivating articles, awards, and delightful pieces of aviation history to satisfy even the most nostalgic among us. Speaking of history, this year marks the grand centennial celebration of the RCAF, a milestone we honor with a stunning mosaic cover photo showcasing a century's worth of RCAF aircraft.

But let's not dwell on the past. In this issue, we explore the crucial role of leadership and its future in Flight Safety, with riveting pieces like "Turning the Corner" and "I Learned About Leadership From That," alongside our insightful Check Six article. While these articles take center stage, examples of leadership occur throughout our edition, reminding us of the profound impact leaders have on shaping our aviation landscape.

Yet, amidst the soaring highs of achievement, we must remain vigilant against the lurking dangers below. FOD—foreign object debris—haunts our runways and cockpits, demanding our attention. Fear not, for we equip you with knowledge and awareness through articles, posters, and our new segment, *Flight Safety Report (FSR) Highlighted*, ensuring your daily routines are protected against this silent menace.

And finally, we recount tales of bravery and resilience in the face of adversity, as our Lessons Learned section navigates through in-flight emergencies, the importance of situational awareness, and the pitfalls of overconfidence. These stories serve as poignant reminders of the gravity of our profession, urging us all to remain steadfast and alert in our pursuit of safety.

So, fasten your seatbelts, and prepare for an unforgettable journey. Together, let us continue to uphold the highest standards of safety as we soar through the skies. Enjoy this edition, and may your flights be smooth and your landings gentle. ✈

Editors Note:

I also want to mention an error in the last issue which contained a Lessons Learned titled; "**You Have One Job**" the article was written by **WO Nathan C. Crosby**, not Cpl Dakota Crosby. I want to apologize to WO Crosby and thank him for allowing us to use his insightful article.



Good Show

For Excellence in Flight Safety

3 Wg Air Traffic Control (ATC)



On 12 Sep 2023, Quebec Flight Information Center (FIC) called Bagotville ATC concerning a lost civilian aircraft in a low fuel state 40 miles south of Bagotville. The aircraft was trapped between cloud layers and the pilot was not qualified or equipped to fly under Instrument Flight Rules (IFR). Once communications were established with the Terminal controller, the pilot was no longer able to ascertain how much fuel was remaining due to the fuel gauge being too low to read. At this point an emergency was declared and the emergency procedures were initiated by the Tower Data Coordinator.

Tower Crew took action to ensure both runways were cleared and available for use if required as the situation unfolded. While this was happening, both the Terminal and PAR controllers were in continuous communication with the pilot to ensure they were at the lowest safe altitude. At 10 nautical miles south of the airfield, the pilot reported seeing a break in the cloud coverage

which would allow a descent below the cloud layer to carry-out a straight-in visual approach to the prepared runway. The aircraft remained above a normal flight path until about one mile final from runway 36, where it then performed a steeper than normal descent below the cloud layer and landed safely.

The 3 Wg ATC Team encompassing Cpts Bélanger and Maxwell, 2lt Danjou, and Cpls Gagnon and Dessureault maintained effective, clear, and concise communication with everyone concerned. They were able to help build the pilot's situational awareness and effectively develop a plan to safely recover the aircraft. They exemplified a calm, reassuring, and collected leadership with the highest professionalism while offering tailored assistance and reassurance to a pilot in a very stressful situation without hesitation. 3 Wg ATC displayed the effectiveness of teamwork at its finest. It is for these reasons they are most deserving of the *Good Show* Award. 📌

Awards

SICOFAA

Canada is a member of the International Aviation Association called Sistema de Cooperación entre las Fuerzas Aéreas Americanas. This Spanish designation means System for the Cooperation of the Air Forces in the Americas (SICOFAA). Each year SICOFAA provides member countries with an opportunity to nominate a deserving unit within their individual air force. This unit must have demonstrated the highest level of dedication to the furtherance of Flight Safety and, by their actions, been an exceptional example to others. The 2023 SICOFAA Award recipient is 407 Squadron from 19 Wing Comox.



LCol Donald Jamont and Captain Brendan O'Donovan receive the SICOFAA award on behalf of 407 Long Range Patrol Sqn.

Left to right: Cpl Judi Hills, Sgt Jim Larocque, LCol Don Lamont, Capt Brendan O'Donovan, CWO Carl Tremblay, Sgt Richard Slonski and Sgt Eric Dastous.

Photo: MWO Dean Buchan

Awards

Jamaican force

RCAF MEMBERS CONDUCT FLIGHT SAFETY
TRAINING FOR THE JAMAICA DEFENCE FORCE



For Professionalism

For Commendable Performance in Flight Safety

Captain Jonathan Saulnier



On 2 March 2024, Capt Jonathan Saulnier was working as a Terminal controller at CFB Greenwood when a civilian Diamond DA-20, flying under Visual Flight Rules (VFR) and receiving flight following, encountered Instrument Meteorological Conditions (IMC). The civilian pilot was on a round-robin flight from Moncton airport. After completing the approach in Greenwood and heading back to Moncton, the pilot was transferred to Capt Saulnier for flight following. The pilot then informed him that they were in IMC and climbing to break out of cloud.

Realizing this was developing into a potential emergency, Capt Saulnier advised Moncton Centre that he would maintain contact with the pilot instead of transferring them, in an effort to avoid task saturation and reduce radio chatter for the pilot. Capt Saulnier remained ready to assist with the possibility of guiding them back to Greenwood if required and continued to reassure the pilot that there were no air traffic conflicts, as it was clear they were inexperienced based on their hesitancy and panicked voice. At 5500 feet the pilot finally exited the cloud,

but reported poor visibility and needed an initial vector from Capt Saulnier to proceed back to the Moncton Airport.

Capt Saulnier's outstanding situational awareness, quick decision-making, professionalism, and level-headedness helped prevent the potential aggravation of a serious incident. Capt Saulnier is most deserving of the *For Professionalism Award*. 🇨🇦

Maintenance

IN FOCUS

The **HIDDEN HAZARDS** in Daily Aircraft Inspections and Maintenance Checks

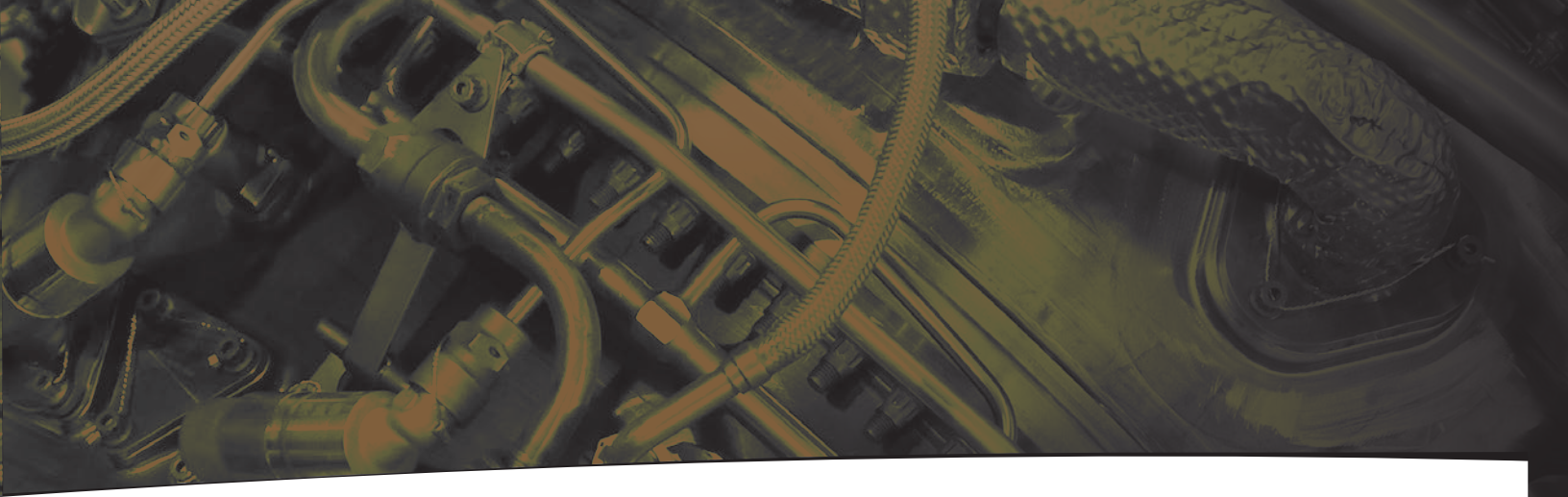
by Major (ret'd) Claire Maxwell

During your routine aircraft inspection or post-maintenance check, always be vigilant for anything unusual whether it seems out of place or even smells fishy (more on that later). Ignoring these signs can pose significant safety risks.

An analysis of the Flight Safety Investigation Management System (FSIMS) from January 1st, 2019, to December 31st, 2023, revealed that there were 607 reports related to Foreign Object Debris (FOD). Surprisingly, 68% of these reports involved incidents where FOD was

found onboard an aircraft after at least one flight. Of the airborne FOD, 20% included the migration of internal parts to other areas of the aircraft, perhaps becoming loose due to age, vibration or turbulence. The remaining majority involved forgotten or misplaced items

Photo: Cpl Jerome Lessard



like tools and personal effects. These items were found in nearly every conceivable location within the aircraft, including engines, fuel tanks, under seats, behind panels, and even taped under floorboards.

FOD was not limited to internal areas; it was also found on runways, aprons, hangar floors, and maintenance stands. Environmental debris such as gravel, ice, grass, and bird's nests also posed risks, potentially impacting engine operation and airflow.

The specific items reported as FOD include:

- Personal items such as ball caps, glasses, gloves, and earplugs.
- Writing instruments, with pens and iPad styluses contributing to 42 reports.
- Maintenance materials, with 28 reports of rags, as well as nuts, bolts, washers, screws, lock wire and tape, involving 87 reports.
- Tools, notably including screwdrivers, wrenches, hammers, pliers, flashlights, multi-tools, and even an axe, were involved in 44 reports.
- Less typical finds included eight plastic bottles (only one of which was logically placed), as well as plastic caps discovered in critical locations like gearboxes, engine intakes, and hydraulic systems.
- Some of the more bizarre discoveries included a can opener, a golf ball, and a

filet of fish lunch—explaining the earlier mention of a fishy smell.

There are still 60 reports of items that remain unaccounted for, underscoring the ongoing concern. However, it is encouraging that in 82 instances, FOD was discovered on an aircraft before it went for a flight.

The responsibility for managing FOD rests with everyone involved in aircraft operation and maintenance: ground and air crew, support staff, administrators, maintainers, operators, cadets, military members, civilians, and contractors. The culture of pointing fingers must be replaced with self-awareness and vigilance in managing personal and shared equipment.

Effective FOD management is critical, as the damage from seemingly small items can be catastrophic. For example, a wrench ingested by an engine, a pen interfering with flight controls, or a rag obstructing a fuel line can all lead to disastrous outcomes.

The study of FOD related incidents helps to identify trends and also the effectiveness of preventive measures. Often, these incidents are a result of inadequate tool control, distractions (such as eating during checks), rushing, or inexperience. Many of the "rag" related FOD reports led to briefings as the primary preventive measure, though procedural adjustments were rarely made.



Photo: Sailor 1st Class Valerie LeClair

A strong reporting culture is essential, not to stigmatize units with higher FOD rates but to maintain a proactive stance toward potential hazards lurking in aircraft or maintenance areas. While many items have been accounted for, the existence of 60 missing items reminds us that vigilance is always necessary.

Lessons learned from FOD incidents can and should be shared widely to enhance safety across all facets of aircraft operations and maintenance. By staying alert and attentive, we can prevent these unexpected hazards and ensure a safer flying environment for everyone. 🦋



AIR ACCIDENT C CATEGORY INADVERTENT MDC FIRING IN FLIGHT

**FSIMS 167417
29 JAN 2016**

During aerobatics, in the front cockpit, the pub bag became loose and triggered Miniature Detonation Cord (MDC) firing. The front seat pilot flew the aircraft home to land a straight-in approach. The aircraft shut down, and the aircrew egressed WFI.

Event Description:

In the late afternoon of 28 Jan 2016, the pilot of a Canadian Hawk Mk 115 was performing a Cuban 8 maneuver. During the inverted 45-degree portion following the first loop, the pilot's unrestrained publications bag drifted upwards (relative to the cockpit) and aft. The pilot then rolled upright and pulled 5g to complete the Cuban 8. During the 5g pull, the bag dropped down towards the aft portion of the right console and struck the MDC firing unit with enough force to activate it, fragmenting the canopy. The pilot ceased maneuvering, slowed the aircraft, and returned to base without further incident.

The pilot received minor injuries from the MDC combustion products and canopy fragments, and there was significant damage to cockpit equipment and external airframe structures. The engine ingested some of the canopy fragments but only received minor damage. The investigation identified that there were no technical issues with the airworthiness of the aircraft or fleet. The investigation also revealed that the MDC firing unit had no cover to prevent activation and required very little pressure to activate.

Investigation Outcome:

The investigation following this event discovered that the pubs storage in the Hawk was very limited. In addition, most pilots had varied opinions on which pubs they would bring in order to: 1. Have easy access to the required pubs, and 2. Have room especially in winter with the bunny pants (thicker flight pants for cold temperatures) to store them. Demonstrating a requirement for a standard and secure pub storage unit.

Secondly, the MDC firing unit was found to have no cover for the top of the mechanism, which is what the pubs bag landed on. It also only required 6-8 lbs of pressure to release it. Although the Hawk is phasing out this year, one preventative measure was to ensure there was a cover placed over the unit so it could not be easily activated.

Concerning human factors, although the pilot did confirm the pubs bag was secure prior to commencing, they did not perform a negative G check which is part of the pre-aero check and could have potentially highlighted it's "not-so-secure" state prior. The pilot could have also ceased the maneuvering immediately, roll level, and try to recover the loose pubs bag when they noticed it unsecured. Having said that, each pilot has a different thought process and this pilot in particular thought that completing the Cuban 8 would maybe allow him to recover the bag since it was in a location that was not reachable.

DFS comments:

Having loose items in the cockpit, as we have seen in recent years especially with new technological advances and many aircrew now using iPad or tablet type equipment, can have disastrous outcomes. Most RCAF aircraft are unfortunately not equipped to properly hold these items securely.

The above FSR is a good example of a small error that caused significant aircraft damage and minor injuries; the outcome could have been much worse. Loose articles in the cockpit are very dangerous, next time you fly, do a thorough check around you and ask your self "is the cockpit SECURE?" ⚠



For Professionalism

For Commendable Performance in Flight Safety

Aviator Levi Higginson



On 19 April 2023, Aviator Levi Higginson, an Aviation Systems Technician from 409 Tactical Fighter Squadron, was performing hot-refueling on CF18's as part of ongoing hot turn procedures. After preparing the site and connecting a grounding cable to a parked CF18, Avr Higginson turned around and saw fire retardant spontaneously expelling from the ground crew fire extinguisher. Having good situational awareness, Avr Higginson knew the fire extinguisher was near three running aircraft containing pilots strapped in with open canopies, and ground crew performing

the hot turns. Avr Higginson immediately responded by grabbing the fire extinguisher and expeditiously rolling it away from the immediate area.

Aviator Higginson's selfless actions prevented members of the ground crew and pilots from being exposed to fire retardant chemicals that posed a significant health risk if repeatedly inhaled. Additionally, their actions significantly minimized the amount of fire-retardant chemical that the three open cockpit aircraft in the immediate vicinity were subject to, which resulted in only one of three aircraft requiring

extensive cleaning and systems testing/checks to return it to service.

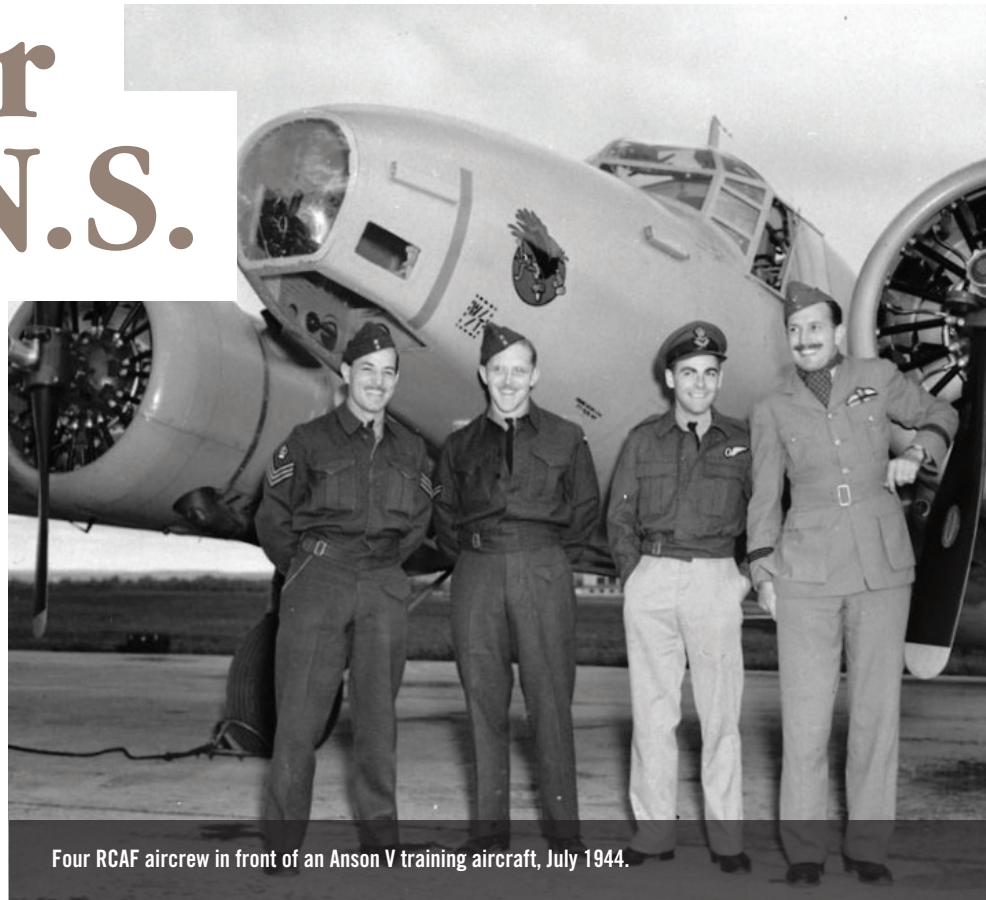
Avr Levi Higginson's identification of, and immediate response to a hazardous situation went well above the level expected of an Aviator with limited time on the CF18 fleet. Their acute recognition of the hazards of fire-retardant chemical to personnel and aircraft as well as virtuous actions proves their committed Professionalism and dedication. For these reasons, Avr Higginson is very deserving of the *For Professionalism Award*. ✦



Disaster at 2 A.N.S.

by Col (ret'd) Chris Shelley, C.D.

Chris Shelley joined the Canadian Forces in 1973. After graduation from Royal Military College he trained as a pilot, flying some 3800 hours with 424 Squadron and 408 Squadron on CH135 and CH146 aircraft. He flew on operational deployments in Central America (1990) and Bosnia (2001). He commanded 408 Squadron and 1 Wing before serving as Director of Flight Safety from 2006 to 2008. Retired since 2008, Chris retains a lively interest in aviation history and flight safety.



Four RCAF aircrew in front of an Anson V training aircraft, July 1944.

On the night of 13/14 May 1944, Number 2 Air Navigation School (2 A.N.S.) launched 24 Anson Mark V training aircraft on a night navigation exercise. Starting from their base in Charlottetown, P.E.I., the Ansons were to fly a triangular route that would take them over most of Nova Scotia and then back to base in three hours and fifteen minutes flying time. The weather worsened during the exercise, with thicker clouds, snow, rain, and strong winds. Operations issued a general recall, but only 21 aircraft returned. Three aircraft were lost in the storm, with 12 personnel killed or missing, and two injured. The subsequent investigation would reveal disturbing deficits in equipment, organization, relations between staff and line, and leadership at all levels. The RCAF considered these revelations so injurious to its reputation that it classified the proceedings to prevent their release, a highly unusual move.

2 A.N.S. stood up in Charlottetown in February 1944. It replaced an RAF unit, 31 General Reconnaissance School (G.R.S.), that had operated there since 1941. This changeover was part of a high-level decision to close RAF schools in Canada and replace or absorb them into RCAF schools. Although the mission of 31 G.R.S. and 2 A.N.S. was similar, the new school placed more emphasis on night flying and using radio navigation aids. While the CO of 1 G.R.S., an RAF Group Captain (Colonel) remained as CO of 2 A.N.S. to provide continuity, all other RAF personnel returned to the United Kingdom, and a completely new establishment, staffed by RCAF personnel, was installed. Although 2 A.N.S. was a unit of 3 Training Command (3 T.C.), Montreal, it was under the operational control of Eastern Air Command, (E.A.C.), based in Halifax. 2 A.N.S. soon received 77 Anson aircraft and embarked on a full schedule of aircrew training.

When it was certain that the three aircraft were missing, a Court of Inquiry was convened by 2 A.N.S.'s parent formation, 3 T.C. Given the gravity of the disaster, the Accident Investigation Branch (A.I.B.) at RCAF headquarters insisted the court be composed of senior officers. The President was a Wing Commander (W/C – Lieutenant-Colonel) who had formerly commanded an A.N.S.; members including a W/C who was Senior Signals Staff Officer at 3 T.C., and a Squadron Leader (S/L – Major) who was a senior accident investigator with the A.I.B. The court assembled in Charlottetown and began to take evidence. Information was soon received that one Anson had crashed at the 500-foot level of a hill near Barachois, Quebec, and that two of the five crew had survived. A few days on, all four bodies of the crew of another missing Anson were found dead in a life raft near Stephenville, Newfoundland. Later in



Photo: D.N.D. Photo/Library and Archives Canada/MIKAN 3583348



Photo: D.N.D. Photo/Library and Archives Canada/A064668

Avro Anson V.

1944, two bodies of the crew of the third missing Anson would wash ashore in Nova Scotia. Of the fourteen aircrew who had gone missing, twelve were dead or missing and two injured.

As the court interviewed aircrew from aircraft that had managed to recover in Charlottetown, a picture emerged. 2 A.N.S. Ansons were crewed for this exercise with a Staff Pilot, two student Navigators, a student Wireless Operator, and some with a student Bomb Aimer. The aircraft captains were Staff Pilots, experienced RCAF pilots who knew the area well and who were responsible for aircraft safety while allowing the students to navigate, maintain contact with base via wireless, use radio-navigation aids (both air and ground based) and conduct a camera-obscura bomb run at the end of the exercise. In good weather, this was not difficult, but in bad weather it became more challenging. Staff Pilots knew

enough to ignore bad steers received from students and could bring the aircraft back to base on their own. However, on the night in question, heavy rain and snow had impeded visibility, and very strong westerly winds had blown most aircraft off course early in the exercise. Once operations staff at 2 A.N.S. had seen the weather deteriorating and found that few aircraft were making their mandated 30-minute checks, the Officer-in-Charge of flying ordered a recall. Many aircraft failed to pinpoint themselves and wandered about the skies aimlessly, eating up precious fuel before sighting a familiar landmark and regaining the station. Some aircraft were airborne for four and a half hours before landing on the verge of fuel exhaustion. It soon appeared that 2 A.N.S. had been lucky to only lose three of the 24 aircraft launched that night.

Recovery might have been expedited had wireless transmissions and aids to navigation been effective, but this was not the case. The storm had caused considerable static on the aircraft radios, rendering transmissions impossible. The powerful Charlottetown commercial radio station was off the air at night, so could not be homed, and the ground station at 2 A.N.S. was defective. There was a High-Frequency Direction Finding (HF/DF) facility at 2 A.N.S., but its operators were unskilled and could not provide useful steers to aircraft requesting assistance. While 2 A.N.S. was supposed to have a Radio Range approach aid in operation, it was not yet set up due to equipment and maintenance issues. Thus,

*Continued on
next page*



CHECK SIX

most aircraft could only use the short-range Beam approach signals for homing the station, and only a few aircraft succeeded in doing so. Most other aircraft regained the station after making a successful pinpoint and navigating visually to the station. It had been a harrowing night!

The two survivors of the aircraft that crashed in Quebec related that the aircraft had become completely lost despite multiple attempts at pinpointing or homing the station. Knowing that fuel exhaustion was imminent, the staff pilot had climbed to 15,000 feet, intending to order a bail out. The crew then decided they would rather ditch. The aircraft descended below cloud to make visual contact with the

sea, broke out, but then flew into an unseen hill before it could ditch. The survivors had taken two days to regain civilization, the other three crew being killed in the crash.

The complete crew of the second missing Anson was discovered in a life raft off the shore of Stephenville, Newfoundland some days later. The pilot had evidently ditched successfully, but the crew had died of exposure. Significantly, the life raft's survival radio had been found intact in its packaging. Whether the crew was unable to use it due to exposure or lack of training was not explored by the court. It did hear that not all life rafts were fully equipped with survival gear, due to supply shortages.

As the court heard evidence, several factors came to light. Weather forecasting at 2 A.N.S. was deficient. Ground to air communications were unreliable. Ground based navigations aids were poor, almost non-existent. Aircraft radios were obsolete, and the aircraft lacked effective radio navigation equipment. Critical leadership positions remained unfilled, and others were disrupted by constant postings. Many leaders at the unit were inexperienced and under-ranked for their positions. At the coal face, technicians of all trades were ill-trained and in short supply. Despite these deficiencies, the pressure to produce trained aircrew went undiminished. The Station Commander had engaged with headquarters staff at both 3 T.C. and E.A.C. on all these issues but had made little progress. The court grappled with determining how this situation had come about, and what to do about it.

2 A.N.S. lacked reliable weather forecasts. The previous unit, 31 G.R.S., had two Met forecasters (Level 1) on strength, but the RCAF eliminated these positions and replaced them with Met briefers (Level 3) instead. The briefers relied on forecasts and updates prepared by E.A.C. in Halifax, as that command had operational control of all flying in that area. Although 2 A.N.S. had amended the training route for that night to avoid forecast weather to the west of the station, the briefers had not anticipated the severe storm that moved into the area later. Nor had E.A.C. warned 2 A.N.S. of the worsening weather before it struck. The Station Commander and other witnesses lamented the quality of the meteorological information available, implying that had better information been available, the aircraft would not have launched.

Further, while the Anson V aircraft was quite suitable for visual navigation exercises, its onboard radios and navigation aids were obsolete, to the extent that some witnesses regarded it unsuitable for night flying exercises. This led the court to examine why

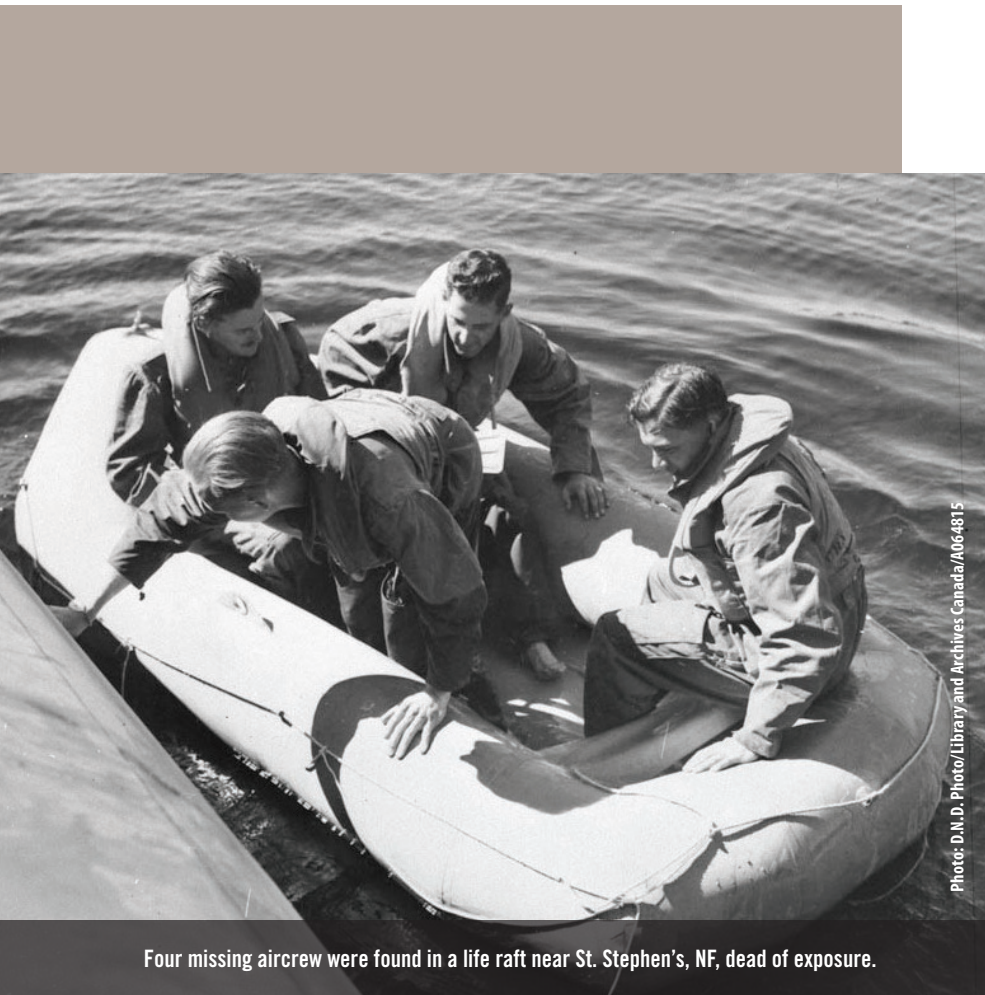


Photo: D.N.D. Photo/Library and Archives Canada/A064815

Four missing aircrew were found in a life raft near St. Stephen's, NF, dead of exposure.



the aircraft lacked such equipment and what had been done to procure it. This inquiry produced a rat's nest of claims and counterclaims.

The Station Commander was aware of the need for better radios and had made every effort to obtain them. He had even gone so far as to send an equipment party by aircraft to the E.A.C. supply depot to get them. However, while the depot staff helped complete the paperwork needed to issue the equipment, a senior officer at the depot intervened and sent the 2 A.N.S. party packing empty-handed. This was soon sorted out and radios were now being supplied, but they could not be installed on the aircraft. Why?

2 A.N.S. lacked trained Wireless Equipment Mechanics, (W.E.M.) who could install and maintain the radios. 2 A.N.S.'s strength in W.E.M.s was low, and the ones available lacked the training and skills to maintain the existing ground/air radio networks or maintain the radios currently on the Ansons. Installing new radios on the Ansons was simply a bridge too far for 2 A.N.S. Nor had 3 T.C. been helpful in posting more and better trained W.E.M.s to 2 A.N.S. Such personnel were simply not available.

Similarly, navigation aids were deficient. The main navigation aid of the period was known as Radio Range, and it formed the basis of the airway system. However, 2 A.N.S. had not installed a working ground station at Charlottetown, and the Ansons were not fitted with the receivers. The Station Commander testified that he had been requesting Radio Range equipment since February but had not received any. Nor had aircraft receivers been received. This appeared to point the finger at 3 T.C. for not coordinating the provision of this equipment from E.A.C. depots. However, the issue of Radio Range equipment was not quite as it appeared, as will be discussed later.

The problem with the HF/DF system has been mentioned above. With only a few poorly trained RCAF operators, 2 A.N.S. was unable to provide reliable steers to aircraft requesting

assistance or even provide relative bearings. The result was that pilots had little use for HF/DF, a system which under RAF operation had been highly reliable.

The overriding issue was that the RCAF leadership had decided to set up an air navigation school in a location with unsuitable weather, and then failed to ensure that it had the radio facilities and navigation aids required to assure safe and effective operations. The RAF school that had preceded 2 A.N.S. had flown mostly over-water, day visual, navigation training, so when prevailing weather made night flying or flying over land challenging it was not a serious issue. For the basic syllabus of an air navigation school, the bad weather presented a serious impediment. The 2 A.N.S. Diary is replete with entries reporting that planned flying training, day, and night, had to be cancelled due to bad weather. A rational assessment of the weather by higher headquarters ought to have resulted in the provision of adequate air/ground communications and radio navigation aids at the station. But that was not the case, and the unit struggled to meet its mission to train air navigators, wireless operators, and air bombers.

Related to the above was the tremendous pressure imposed on the school to get up and running to absorb its significant training load. In April the station had a trainee population of 250, but by end May it had hit 407 trainees, and this would later peak at 450. This was supported by 77 Anson V aircraft, requiring a large maintenance and administrative organisation. Had the station been properly staffed and organised, things might have gone well. But this was not the case. 2 A.N.S. appears to have been a very low priority for the RCAF and remained understrength in key areas.

The Station Commander complained to the court, with some justice, that with an inefficient establishment as a starting point, he was hampered further by not having those positions filled properly, and then being

robbed of the few experienced personnel at hand for higher priority taskings. Senior positions had not been filled, and in the short four months of the school's existence, almost every section head had been posted out, as well as 91 other personnel! Half went overseas, and half went to other positions in Canada. The result had been chaos.

Nor were leadership positions filled appropriately. Flying training was being supervised by one senior Flight Lieutenant (Captain) instead of the W/C and S/L authorized. Flying Control (operations and air traffic control) was authorized one S/L, one F/L and two F/Os (Lieutenants), while actual strength was four F/Os or Pilot Officers (P/Os or 2nd Lieutenants). As the Station Commander put it, "their knowledge and experience and the confidence they inspire in the aircrews is not great."

The court also heard that aircraft maintenance was deficient. The lack of trained technicians led to shortcuts. Specifically, if an aircraft's compass correction card was missing, it was recorded as a minor defect to keep the aircraft flying, instead of carrying out a compass swing and creating a new card. Missing cards meant that pilots and navigators had no assurance the compass was serviceable and were unable to apply the appropriate corrections in flight. Whether this had any effect on the missing aircraft could not be determined.

On 21 May 1944 the Court of Inquiry concluded, finding that the aircraft had crashed because they got lost in bad weather. The court added contributory findings.

First, 2 A.N.S. lacked a proper Flying Operations Organization and suffered from inferior and obsolete wireless equipment. The court recommended that Flying Operations and

*Continued on
next page*



CHECK SIX



Photo: D.N.D., Photo/Library and Archives Canada/A064672

Avro Anson V.

Flying Control be staffed with qualified and competent personnel immediately; that the establishment be changed to provide for Grade 1 Meteorological Forecasters; that aircraft wireless equipment be replaced with more suitable and satisfactory types; that the procedure for drawing equipment from E.A.C. equipment depots be clarified; and that greater recognition be made of the signals organization and the capability it can provide for the greater safety of aircraft and crew.

Upon review of the proceedings, 3 T.C. directed the Court of Inquiry to reconvene. Although considerable correspondence is missing from the historical file, it is almost certain that 3 T.C. did not agree with all the findings and wanted

the issues of equipment supply and staffing to be re-examined. The court reconvened on 31 May 1944 to hear additional evidence and re-examine some witnesses. This testimony painted a slightly different picture of 2 A.N.S. and its leadership.

The main revelation was that there had always been a good stock of radio range receivers and other radio sets at 2 A.N.S. Many of these had been transferred from the previous RAF unit, 31 G.R.S., of which the Station Commander had also been the Commanding Officer. When asked, the Station Commander stated that he had no idea that those were on the station. In addition, more capable aircraft radio sets were arriving on the station daily. The court looked

further into the matter and discovered that although the radio range sets had been transferred to 2 A.N.S., and others shipped in, they lacked batteries, serviceable vacuum tubes and other fittings for which replacements were unavailable. Moreover, the W.E.M.s on the station were overtasked and untrained, and so unable to make any progress on their installation. Probably, the personnel turbulence at 2 A.N.S. had prevented the Station Commander from having anything like a true picture of the equipment status of the unit.

The court closed on 31 May 1944 with a supplementary recommendation that parts and additional trained personnel be provided to 2 A.N.S. as soon as possible to permit the



installation of the radio range equipment on the ground and in the aircraft without further delay.

The last word on the occurrence, as found in the file, came from the RCAF's Chief Investigator of the A.I.B. on 15 September 1944:

"The Court of Inquiry, which is a confidential document and not available for disclosure outside the Service, did reveal some weaknesses in organization which have since been tackled energetically to eliminate the possibility of further accidents of this type."

Unfortunately, much of the correspondence that ought to be in the file is missing. None of the review or commentary from 3 T.C., E.A.C., or RCAF headquarters survives. Clearly, the RCAF considered the occurrence embarrassing and covered it up to the extent possible. There was a lot to be embarrassed about. The Station Commander had tried his best to carry out the unit's mission with the resources assigned but had clearly taken great risks with the weather considering the poor state of the unit's aircraft, unit organization and equipment. The fact that two higher formations, 3 T.C. and E.A.C., had responsibility for 2 A.N.S., allowed issues to fall between the cracks with no clear follow-up for their resolution. Whether the Station Commander exercised the right of access to the Air Officer Commanding (A.O.C.) 3 T.C. to lay out the scope of the problems facing 2 A.N.S. is not known. It seems that staff officers, faced with myriad challenges in matching resources to tasks, were content to let 2 A.N.S. go short. The Station Commander stated that the school had tried to submit establishment change proposals and equipment demands but had been told by staff that none would be accepted until the school had run for four or five months. The school had been operational for three months when the three Ansons went missing. This appears to have been the price paid for the staff letting the school sort itself out before taking remedial action.

Of course, staff officers don't crash aircraft directly, but they do have a role to play in preventing accidents. In this case the Station Commander clearly felt pressure to keep pumping out graduates, despite obstacles and despite having waved the yellow flag of caution with 3 T.C. headquarters. Before the accident, the staff either thought it was too difficult to solve the issues raised by the school, or simply lacked the command direction needed to re-order priorities and find a solution. Afterwards, staffs suddenly developed an interest in the welfare of 2 A.N.S. Likely the A.O.C. 3 T.C. issued clear direction to the staff to fix 2 A.N.S., and they put the appropriate focus on that. The station diary records a flurry of staff assistance visits post-crash from all branches and the deficiencies in equipment and personnel were largely made up. As for 2 A.N.S. leadership, the station diary records a propensity to wash out flying whenever there was a prospect of bad weather, so perhaps that was a lesson learned as well. In August 1944 the Station Commander was replaced by an RCAF officer, but as six-month tours of command were not unusual during the war, this change was likely not related to the occurrence. 2 A.N.S. managed to finish the war with only one further fatal accident, despite carrying out an extremely high rate of flying training.

This tale is more than a historical curiosity. Rarely, if ever, has the RCAF been in a position where resources match tasks. Staffs will always face the challenge of making bricks without straw, and might be tempted to let units struggle on, to sort themselves out, rather than getting commanders involved in issues that lack a clear solution and demand difficult choices. Yet, making such choices is the responsibility of a commander, and however unpleasant it might be to beard the lion in its den, staffs must be prepared to lay issues before commanders, along with possible solutions, risks, and the repercussions of not acting.

A more recent example would be the night-time, over-water, Cormorant crash in 2006 that killed three aircrew. The unit had experienced grave difficulty in maintaining currency due to restrictions stemming from airframe issues that restricted flying hours. The unit had flagged its concerns clearly to 1 Canadian Air Division headquarters, yet the staff had been unable to address the issues effectively and the status quo was accepted in the hope that nothing would go wrong. The investigation determined that the pilot at the controls had flown the helicopter into the water by using inappropriate control inputs that overrode the helicopter's automation. This performance deficiency had strong links to lack of flying currency and inadequate simulator training. Post-crash, ways were found to provide more and better simulator training, strengthen the use of automation, and standardize procedures such that, even with reduced flying hours, safety of flight could be maintained. These solutions might have been arrived at earlier, had the appropriate staff been successful at finding viable options.

Leaders and staff of today's RCAF face many of the same challenges faced by 2 A.N.S. and its higher headquarters in 1944: personnel shortages, equipment shortages and competing demands for support while trying to meet mission mandates. Effective leadership and the proper coordination of staff effort can go a long way to squaring the circle and ensuring that mission focus can be maintained without putting safe flight operations at risk. If at some point you feel that you are being hung out to dry and the storm clouds are moving in, remember 2 A.N.S. and Check Six! 🍀

For Professionalism

For Commendable Performance in Flight Safety

Corporal JongWon Choi

In May 2023, Cpl JongWon Choi from 435 (T&R) Squadron was conducting maintenance on the CC130, which required a routine attempt to jettison a hose. However, efforts to detach the refueling hose from the hose drum coupler proved challenging, prompting Cpl Choi to carry out a meticulous investigation of the system. His examination revealed a critical issue: the hose drum locking rod failed to engage properly, obstructing the hose drum's locking mechanism during jettison procedures thus causing the critical safety system to be inoperable.

The normal procedure would have been to replace the entire system; however this would not have solved the problem. Leveraging his expertise and acute attention to detail, he identified a detent mechanism pin that connected the hose drum locking rod to the jettison unit was placed upside down. This misalignment could cause improper locking of the drum during airborne hose jettisons. Such a failure could have resulted in rapid spinning of the hose drum, causing significant damage to the Air to Air Refuelling POD.

Despite undergoing five detailed inspections by four different technicians since the jettison unit's installation, the upside-down pin evaded notice as the CFTO inspection didn't specifically address the lock pin itself.

Cpl Choi's commitment to meticulous inspections and attention to detail, whether part of routine checks or while tackling unforeseen challenges, embodies professionalism and dedication that inspires his colleagues. It is for these reasons Cpl Choi is highly deserving of the *For Professionalism Award*. 🇨🇦



Photo: Cpl Michael Vandebroek

For Professionalism

For Commendable Performance in Flight Safety

Warrant Officer Scott Rhoads



Photo: MS Stuart Spence, CD

On 3 February 2023, WO Rhoads was scheduled as a Loadmaster for a local training flight with 436 Sqn that included airdropping personnel from a CC130J Hercules aircraft. As a requirement, he had to sign out a personal dispatcher parachute. While inspecting the kit, WO Rhoads noticed that the webbing on the parachute appeared to be improperly routed. The outer strap was inside the left hip portion, while the inner strap was on the outside.

WO Rhoads immediately initiated a Flight Safety Occurrence Report, which quarantined the parachute and started a review of past inspections and current Canadian Forces Technical Orders (CFTO). It was noted that there was lack of clarity in the CFTO regarding exact routing and verification, which led to this parachute passing several previous inspections. Due to WO Rhoads reporting this incident, the ALSE shop revised their CFTO instructions and improved best practices to prevent similar incorrect routings.

WO Rhoads' ability to recognize the inconsistency displays remarkable expertise and diligence. Had this problem not been identified, there would have been potential for injury to personnel who used this parachute. His actions prevented a hazardous condition and is an excellent example of how anyone can contribute to Flight Safety. WO Rhoads is very deserving of the *For Professionalism Award*. 🏆

DOSSIER



I Learned About Leadership From That

by Maj Jill Sicard

Back in 2011, during my first-ever deployment as a brand-new co-pilot on the CH124 Sea King, I found myself thrust into a challenging environment. Fresh off my type course, I was rushed onboard a ship, tasked with mastering the art of landing a giant helicopter on a tiny 3-D moving pad, with a hangar door a mere ten feet from my rotor blades! Despite the steep learning curve of being a new co-pilot, compounded by the operational challenges of ship life, I relished every moment. My crew was amazing, and I became instant friends with my bunk mate. Everything was dandy. I had a mentor who had several hundred hours more than me on the aircraft, and I trusted his competency whole-heartedly, as any "newbie" would. As time went on in the deployment, our routine

became just that—a routine; every day we knew what to expect, and as I was taught, I familiarized myself with those missions among the many other tasks we had to do while on the ship.

One evening, my mentor and Crew Commander (CC) told our crew that we would be landing the aircraft ashore to practise some qualifications that were about to expire for both pilots and other crew members. I had never landed in a foreign country, let alone a different airport than my home base and the ship, so this was all very new to me. However, I studied the flips and the map, and had both at the ready prior to departure. *This was my first indication of what kind of leader I wanted to be when I had enough hours under my belt.*

Although my crew was great, I felt very much alone in my preparations. In hindsight, I should have asked my mentor to go over everything with me to ensure we were on the same page, but I didn't want to be a burden either. Now with more experience under my belt, I feel that a mentor should spend the time teaching the junior pilot and making sure that both are comfortable with the situation, especially since neither of us had landed at this location before—and more importantly, it was in a foreign language as well, so that didn't help!

So off we went, departing the ship like everything was normal. The airfield was not a long transit, and it was VFR which made things a lot easier—or so I thought. As we approached land, it was a bit hazy, and the CC



Photo: MCpl David Singleton-Browne

says, "do you have a visual on the airfield?" and I said, "no visual—I see the area and lights but not the actual landing strip." Then I say, "If you want to take control, I can just look at the flips so I can orientate myself." Both my ACSO and I noticed that morning that our CC was a bit off; he didn't explain anything, and to this day we do not know if something was bothering him, but he had a very short fuse and got quite upset that I did not, for some reason, memorize my flips or "prepare properly." I advised him that we were taught not to memorize because they are supposed to be available to reference and if we make a mistake while memorizing, then that can lead to accidents with altitudes, etc. *Indication number 2 of leadership style that I learned—if something is wrong, be open with your team in a general sense, you don't have to give details but if everyone knows what head space you are in then that can help when a problem arises; your team is your support system. I always tell my husband and children when I am having a tough day, it gives them a heads up and it allows me to check in with myself before I lose my temper.*

This is not the first time he had lost patience with the crew members and not the first time it created a hostile environment that was not conducive to learning or working together for that matter. Making the crew feel as though they were walking on eggshells was not a good way to conduct a flight. I proceeded along "in control" of the helo after some yelling about the airfield situation and then the CC stated he would talk to ATC while I circled waiting for a clearance for landing. As I am flying, monitoring both outside, as we were VFR, and inside at the dials (and the CC is having a very difficult time trying to communicate to ATC his intentions due to language barriers) I noticed that the primary hydraulic system was fluctuating quite dramatically. I immediately mentioned this to the CC; however, every

time he seemed to look at the gauge, the fluctuation would disappear. He told me impatiently to just, "monitor it." At this point I got the feeling he was stressed; the cockpit became silent because everyone was afraid to speak up in fear they would be yelled at, but I had the duty of monitoring the gauge and flying and again, the gauge starting fluctuating. This time down to zero then back up to normal, so again, I mentioned it to the CC; he was still busy trying to talk to ATC, but acknowledged my concern. Before he could say anything I then pointed that we had completely lost primary hydraulics—as the gauge dropped down to zero and the warning light went on and stayed on.

At this point, he took control without verbalizing and continued to proceed with the in-flight emergency—all the while not verbally communicating anything. I was so angry that I too, verbally shut down but pulled out my checklist and followed it to make sure we were completing the checklist items in order. The checklist ended with a land as soon as possible warning. As I ran through the options quickly in my mind, we were only 2 miles out from a perfectly serviceable landing strip, and a taxiway and other usable surfaces that we were in line for anyway, so I thought he would just ask to expedite as we had an in-flight emergency but to my surprise, he spoke with ATC and accepted another 5-minute wait for other aircraft to land. So, he gave me back control and we sat there circling for five minutes. I brought up the land as soon as possible instruction for clarification and his response was "just fly the F\$#king aircraft" and I responded in anger, "I am!" Needless to say, it was a silent five minutes, followed by a normal landing without further incident. Oddly enough, as soon as we touched down, he yelled out "Emergency shutdown evacuate the aircraft" and he seemed to be in panic mode.

Continued on next page

DOSSIER

Now we were all very confused and, when he saw the crew in the back were not moving fast enough, he yelled at them to "get out of the F\$#king helo". *Indication number 3 on leadership style; communication and patience are key. First, I think everyone can say communication is the most important thing you can do when working with a crew (besides flying the aircraft of course); if your team is not aware of the situation, you are no longer on the same team. Make sure everyone understands the scenario and what to expect. Patience is a virtue; in this case, it is so important as a leader to stay cool under pressure; you need your team to have confidence in your decisions and your capability and they do that when you are calm, and you communicate effectively.*

Once we were outside the helo, we confirmed that it did, in fact, lose all primary hydraulics because it was splattered all over the exterior. Although the crew discussed this event afterwards, there was a lot of blame passed around. *Indication number 4 of a good leader, never pass blame; if your team fails, it's because you failed as a leader. Something was missing from the mission; was it your communication? Was it your direction? No matter what caused the failure, it leads back to the person in charge. A good leader takes the blame for the failures and celebrates the wins as a team.*

On a Flight Safety note—I also learned over time that I believe a great addition to both pilot and ACSO training would be a short class

on how and when to file Flight Safety Reports. Both the ACSO and I thought this situation was quite unsafe and obviously something happened with the aircraft for it to lose all the hydraulics, so we recommended we file a flight safety. . . Not really knowing the procedure as a junior pilot right out of training—we left it to the CC to submit it, which was never done. To this day, I regret not pushing that up to someone else, perhaps someone at the squadron would have followed through.

We were very lucky we landed safely, and after a "cool down period" we talked about the incident again, to try and piece together where all the breakdowns happened. The long and short of it were the three basic principles; **Aviate**—first, fly the aircraft safely. Since we were so close to the airfield we should have just landed right away, apparently the CC was worried about not being able to re-embark the helicopter on the ship in time for our departure, and was therefore considering the ship (which was not a safe landing area for such an emergency), a nearby beach location was also mentioned, and of course the airstrip, as possible landing sites. Next, **navigate**; clearly, the airstrip was the safest and fastest way to land, and we were already in contact with ATC, we should have turned towards the airfield. Lastly, **communicate**, and although

it is last on the list it is still very important because this is where things became much worse. The communication between us and ATC was stressful; however, declaring an emergency to land is universal and so that should have been mentioned. Communication between the pilots should have been better—leave the judgment and emotions on the ground and work as a team! Forget ATC for a minute and deal with the emergency as a crew. This includes informing the people in the back; they too can help with checklist items, or comms with ATC and take some of the burden, as well as being all on the same page so everyone knows what to expect and can react appropriately.

You might have a small emergency that turns into something much bigger if you don't work together and focus on the task at hand. Seeing the "big picture" of landing safely was most important here and I feel that it got lost in all of the other small things—never put your crew in jeopardy because you can't see the big picture. My big lesson learned about leadership happened early on in my career, and I try to carry it with me in every situation. ✦



Photo: Cpl Jennifer Kusche

For Professionalism

For Commendable Performance in Flight Safety

Corporal Robert MacNeill



Photo: Unknown

On 14 November 2023, Corporal Robert MacNeill, an Avionics Systems Technician at 12 AMS was conducting a Quality Acceptance (QA) Check on a Cyclone aircraft. While performing a general visual inspection of the tail components, he discovered a pinched tail gearbox oil flow sensor harness. This pinched harness was missed by multiple levels of contractor personnel during assembly and as part of their own pre-delivery inspections.

Cpl MacNeill went above and beyond inspecting the wiring of a system not related to his trade and in an area that was not

specifically identified within the QA Check. Upon making this discovery, he promptly reported the fault. It was determined that the internal wires were flattened and unserviceable because of the harness being pinched. This wire harness is not visible during normal operation and would not have been detected during a pre-flight check. With the wires pinched, pilots would not have received the indication for low oil flow in the tail gearbox, potentially leading to a loss of all oil contained in the gearbox without cockpit indications and potential loss of anti-torque capabilities of the tail rotor system.

Cpl MacNeill's keen eye for detail, professionalism, dedication, and knowledge of the CH148 Cyclone aircraft enabled him to respond appropriately to the issue. His dedication to Flight Safety is unwavering, demonstrating that he is highly deserving of the *For Professionalism* Award. 🇨🇦

DOSSIER



TURNING THE CORNER

by CMSgt (US) Jakob Kurtz

Photo: St Alexandre Paquin

The following article was kindly re-printed from our friends at The Combat Edge (TCE). This particular article from CMSgt Jakob Kurtz resonates well with our theme on leadership. We here at Flight Comment made only small edits in order to have stories and ranks relate to RCAF members. It is with gratitude that we share this impressive article and hope that our present and future leaders will absorb its important message!

According to the title, you might think this article is about the risks of operating a motor vehicle. However, despite the abundance of material on that subject, this article focuses on leadership. We will explore what we do right, what we do wrong, and the messes we leave in our wake. It also examines the impact of leadership on safety.

Let's begin with a simple idea: Leadership has a cost, and the fruits of our labor can be either good or rotten. If I am a rotten apple, every apple around me is at risk of suffering the same fate. What's true for apples is also true for us. Sadly, I believe we often fail to fully realize the influence and effects we have on others. We have the capability to destroy and tear down. Consider all the future ripple effects of poor leadership, such as neglecting our subordinates and teaching them shortcuts.

This style of leadership is an easy road to take, but its consequences are profound, potentially resulting in a hollow, ineffective military force where every member is solely out for personal gain. It promotes a self-before-service mentality.

We also have the capability to build others up. Consider technicians as an example: What would happen if we invested in them, trained them thoroughly, and genuinely cared for their well-being? Perhaps that investment would yield future leaders who can maintain standards while being fair and compassionate. More importantly, perhaps we would be left with a cohesive force and leaders who perpetuate the cycle of investment. Unfortunately, being a bad leader is not difficult; in fact, it's quite easy. The willingness to take the easy road is evident everywhere. As a safety professional, where have you seen this manifest? Let's examine a

case from the USAF where leadership was a factor in an incident.

There was a mishap involving aircraft maintenance where an Airman, working on the wing, was crushed by the flaps. The audio recording of the mishap sequence is chilling. Here we have an NCO training a new Airman in taking shortcuts. Not only did his actions lead to a fatality, but they were also a product of a culture of inadequate training.

Does this accident ring a bell to the RCAF? It should, in August 2013, we came close to losing an apprentice in Trenton under a similar circumstance. An apprentice was lock wiring the drainplug of a flap screw jack gearbox while another technician, working concurrently on the right main landing gear brake system applied hydraulic power to the aircraft. When the hydraulic system was activated, the spoiler closed onto the lock wiring apprentice, seriously injuring him. The culture at the maintenance unit was focused on meeting the operational requirements. However, meeting operational requirements was often accomplished at the expense of correcting long standing identified airworthiness and safety deficiencies thus, encouraging a culture of workarounds.

We have been very lucky that most did not end in tragedy, but don't think it could never happen to us.

Every technician, aircrew, or soldier learns according to how they were trained. I don't necessarily fault the trainer that day because I know there was a long line of trainers before him. It was easy. The shortcut saved time. The results were unintended. Nevertheless, not only did we end up with a fatality, but the trainee will also experience emotional trauma for the rest of his life. Ultimately, our actions have consequences. Poor leadership leaves a long list of victims.

"Turning the corner" is a phrase that essentially means moving past a difficult period and beginning improvement. Let's look at two pivotal points in a technician's career where

difficult transitions occur. The first is from Aviator to Corporal; the second, from Master Corporal to Senior non-commissioned member (SNCM). While the first transition is the easier of the two, its importance should not be underestimated. Initially, technicians focus on becoming technical experts. This soon shifts to leading and training others, which can feel less comfortable. The overall expectation is that you switch from purely performing tasks to supervising others. If you make it to SNCM, you really need to shift mindsets. At this point, you are no longer needed as the technical expert doing the work; you are needed to manage and lead the operation, and, depending on the size of the organization, you will need to be flexible.

Many SNCM evaluations still focus on how they are tactically performing the job, despite being in leadership roles. It's challenging to let go, and mentally, the corner is never truly turned. What does this have to do with our safety enterprise? Everything.

We are a small career field, and the effects of poor leadership are keenly felt across the enterprise. If we neglect to properly train and lead the next generation, we won't have the numbers to absorb the consequences. The traits that, in my view, characterize a bad leader might surprise you. It's not someone who's tough on upholding standards and expects excellence. The worst traits, in my opinion, **are neglect and ego**. I can't say which is worse, but I know that we don't want either in the organization. Unfortunately, humans are messy and complex. There will always be occasions when we need to address the fallout from neglect and ego. My plea is that we identify these weaknesses in ourselves and others, and work to get ahead of them. What can we do better?

First, let's check our egos at the door. As a leader, you need to adopt a servant mentality. Do you sacrifice for the good of your subordinates? You can't if you are constantly thinking about self-promotion and belittling others. One of

the best quotes I've seen on ego is this: *An egotist is not a person who thinks too much of themselves, but rather someone who thinks too little of others.* If you frequently struggle with self-importance, remember this: You are not doing anything that someone else couldn't do or hasn't done before. Many have preceded you, and many will follow.

Second, a simple request: Don't neglect the subordinates under your authority. Instead, invest in them. Roll up your sleeves and commit to ensuring they receive the best training possible. Our new members entering the career field need guidance and proper training throughout the entire process. Don't leave them to figure it out on their own. I had the privilege, late in my career, of working alongside a SNCM who was genuinely committed to properly training technicians. He made it a staple of his career. I think he trained more junior members in his time than any other SNCM I know. You could also tell it brought him joy to see others succeed. His attitude was infectious. He also knew how to enforce standards without being harsh. That kind of leader leaves all the right impressions. Be that kind of leader. What's the benefit in all this?

Let me connect the dots from a wing-level perspective. As the eyes and ears of the commander for all things safety, we are entrusted to know what right looks like. No other entity on base is required to know the things we are supposed to know. How to inspect, what to inspect, and the advice we give must be grounded in solid education and proper training. We have many complicated programs to oversee. If we don't teach them correctly, or merely treat training as a paperwork exercise, things will quickly go off the rails.

Turn the corner. Invest in subordinates. Leave the Air Force better than you found it.

Everyone has a Flight Safety Role, but first and foremost: Flight Safety is a leadership responsibility. 🦋

For Professionalism

For Commendable Performance in Flight Safety

Mr. Derek Campbell

On February 13th, 2024, servicing technician Derek Campbell was assisting with a between-flight check on a Hawk aircraft.

As taught to him by a veteran technician, Mr. Campbell gently bumped the tailplane flight control surface to check for security. He noticed that the sound was different than usual and compared it to another aircraft to confirm his suspicion. He found that the bushings for the top rudder hinge were worn and reported the anomaly to his supervisor. The aircraft was deemed unserviceable, and the bushings were replaced before the next flight.

There is an engineering action requiring this item to be checked every 500 Aircraft Flight Hours (AFH) as part of a maintenance cycle, however, this aircraft still had over 300 AFH remaining until the check was due. In addition, an SI was carried out several years earlier to check the rudder bolts, and it was found that they needed to be strengthened and all of them were replaced.

The risk with this situation is that once the bushings are worn through, the bolt will begin to deteriorate. If the bolt fails, the top half of the rudder could detach in flight, leading to catastrophic loss of control.

Derek Campbell is commended for his excellent attention to detail and initiative to resolve concerns, especially during a repetitive servicing check. In addition, his strong sense of commitment to a squadron that was about to close-down, shows his dedication to Flight Safety and making him a deserving candidate of the *For Professionalism* award. 🏆



LESSONS LEARNED



Photo: Sgt Paz Quillie

Clouded Judgement

by MCpl Corey Ramson

While I was a Precision Approach Radar Instructor, I let my comfort, familiarity, and belief in a student's abilities detract from the expeditious resolution of an unsafe situation.

During a routine ILS approach, an aircraft was showing below the glide slope in an abnormal descent pattern. The aircraft was above the minimum descent altitude but was low enough to raise alarm bells in my mind.

My student had the correct approach plate open and was clearly attentive to the aircraft's progress on the approach. I decided to let the situation progress. I had belief in the student's knowledge and control abilities. I had been this student's only instructor for months and had simulated this exact scenario many times.

After giving the student a half mile, I stepped in and instructed the aircraft to verify their altitude. The aircraft responded back, verifying that the altitude displayed on the RADAR display was correct, but that they were at the correct altitude for the approach. The pilot had an incorrect approach plate open. As I instructed the pilot to pull up and provided the correct altitude, the aircraft was slightly below the MDA.

The aircraft passed through 8 miles in a continued descent and was now approaching the minimum descent altitude. I instructed the student to check the aircraft's altitude. The student immediately responded that the aircraft's altitude was low, however, did not instruct the aircraft to verify their altitude.

I waited for another half mile. I knew the student knew what to do. The student had identified the issue and had demonstrated the appropriate actions to take when an aircraft was approaching the MDA many times.

After giving the student a half mile, I stepped in and instructed the pilot to pull up and provided the correct altitude and approach plate.

As the instructor, I let a situation progress too far due to my belief in the student's abilities, rather than resolve the situation when the student didn't take action. This served as an important lesson. Never let your belief in a student cloud your judgement. If a situation is unsafe, then the appropriate steps must be taken without delay. ⚡



How is it Possible?

by Maj David Dielmann

Photo: S1 Zach Barr

How is it possible that I rejoined for the opposite end of the runway with nobody noticing until on short final?

I took-off that sunny day in southern Saskatchewan for a routine low-level nav trip with my instructor. After completing the low-level route, followed by the mid-level mental dead reasoning (MDR) exercises with only minor errors, we headed back to the airport in Moose Jaw. As we got closer, we tuned the ATIS and copied down the current weather and runway in use. It was a clear VFR day and runway 11L and 11R were in use. This was somewhat unusual as the prevailing winds on the prairies are from the west and runway 29 was the runway in use on most days.

We then contacted tower to advise that we were inbound for the inner runway (11L) and I then proceeded to line up for the rejoin on runway 29R, still the inner runway, but from the opposite direction, just like I had done for most of my previous rejoins from the area.

I pointed the aircraft to join a "right base" for 29R and followed by a 5 mile final. I was fat, dumb and happy until I noticed the aircraft on the outer runway were flying the opposite direction from me. Well, I at least had enough situational awareness when presented with this new information to realize the colossal mistake I had made, and I immediately departed the pattern to rejoin for 11L and land without further incident.

But how did I get to that point? How is it possible for me to get to 3 miles on final going the opposite direction to traffic? Why did my instructor not say anything to me about it? Why did I not get a call from tower advising me of my error and telling me to break out of the pattern?

We need to be constantly asking ourselves, what have I missed, and reevaluating what is happening around us to ensure we don't do the impossible. We cannot rely on the other pilot with us, or ATC as they may be sitting fat, dumb and happy as well. We need to be constantly updating our air picture and be willing to act quickly if that air picture changes. Complacency, fatigue, and distraction are ugly culprits that can sneak up on anyone. Stay vigilant, your life will possibly depend on it! ⚡

Jammed Controls

by Capt (ret'd)
Gordon Wilson



The CF100 was a two-crew aircraft consisting of a pilot and an Electronic Warfare Officer (EWO). One of my secondary duties was serving as a squadron air test pilot. On September 27, 1973, I traveled to CFB Bagotville to test aircraft 100791 with Captain Rod MacPherson, following the crew's report of a suspected control problem. I found no fault and therefore flew 791 back to CFB North Bay, signing it out as serviceable. A few days later, while taking off in 791, I noticed a slight binding in the elevator control during the takeoff run. I immediately aborted the takeoff and reported the aircraft as unserviceable due to control issues, although no fault was subsequently found.

On October 25, Captain MacPherson and I were descending in aircraft 791 over CFB Chatham, New Brunswick, having been cleared to 20,000 feet. When I attempted to level out, I encountered resistance in the controls. A chill went up my spine. I reassured myself by trying

I learned to stand firm in my convictions under any pressure, ensuring a resolution satisfactory to me.

again, but the elevator barely moved, nowhere near enough to execute a safe landing.

"Rod," I said, trying to keep my voice calm despite my racing heart, "you are not going to believe this, but the elevator is partially jammed." With a sense of growing dread, I checked the other controls; thankfully, the ailerons and rudder were responsive.

I manipulated the throttles to achieve a minimal descent rate and a stable, clean speed of about 200 knots without extending the flaps. Any more power, and the aircraft accelerated downward; any less, and our airspeed dropped perilously close to a stall. As we approached 12,000 feet, I said, "Not sure what's going to happen, Rod, but nothing to lose now. I'm going to give it one last try." I exerted all the force I could muster, pushing the control column forward and then yanking it back. To my immense relief, the control column suddenly broke free, and the aircraft pitched up sharply.

"I have it, I have it!" I shouted as I leveled the aircraft. We landed safely and taxied to the parking area. After setting the parking brake and shutting down the engines, Rod asked, "Are you alright, Gord?" "Yeah, fine. You?" I replied. "OK." Beyond that, there was little to say in that moment.

The next morning, I inquired with the maintenance team if they had identified the

problem. "No, Sir. We traced the elevator control cable and found nothing," they replied. Unconvinced, I inspected the area myself, specifically behind the Martin Baker ejector seat. "Did you inspect behind there?" I asked. "No, Sir. We don't have a specially trained technician to remove it," they admitted.

After my Commanding Officer inquired about the delay, I explained that while the control was free, the cable had not been inspected under the ejection seat, and I would not test fly the aircraft until that area was checked. When a technician finally arrived and the plane was stripped down, we discovered a "Pac-Man" shaped bell crank that the elevator control cable ran on. It had a piece missing, which had broken off when I forced past the obstruction—a piece of fiberglass from a fuselage joint that had lodged in the cable run, interfering with the bell crank.

We were fortunate to have been at altitude with time to address the issue. A low-altitude control jam could have resulted in the loss of the aircraft and our lives. From this experience, I learned to stand firm in my convictions under any pressure, ensuring a resolution satisfactory to me, or I might not have lived to share this story. ♣

SPARRING WITH FEATHERWEIGHTS COULD LEAD TO A "KNOCK OUT"



BIRD AVOIDANCE STRATEGY

- ★ Check NOTAMS
- ★ Report observed flocks, airborne or static
- ★ Lights ON at or below 10,000 feet
- ★ Reduce speed
- ★ Use increased vigilance below 3,000 feet and actively monitor PIREP
- ★ Avoid known bird habitats – marshes, dump stations, landfills and fresh cut crop fields.
- ★ Report bird strikes and near misses

