



Winnipeg Police Service Flight Operations Unit

2014

Operation Report

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Winnipeg Police Service Flight Operations Unit

OPERATION REPORT 2014

1. REPORT SUMMARY

The following document presents an operation report of the Winnipeg Police Service Flight Operations Unit (FOU) for the period of January 1 – December 31, 2014.

2. OPERATION

Police Helicopter:

On December 6, 2010, the Service publicly unveiled the EC120B helicopter, delivered by Eurocopter Canada Limited, which became Airbus Helicopters Canada Limited as of January 31, 2014. The EC120B is a Canadian law enforcement air support favourite and has become a benchmark for police operations.

The five-seat, 1.6-ton single-engine EC120B has the latest generation technologies, featuring high maneuverability, excellent visibility, a large cockpit and a low noise signature. The EC120B features a quiet main rotor system with all composite blades and a shrouded Fenestron tail rotor which is very reliable, safe and quiet. Flying over at 1,000 feet above ground level (agl), the EC120B has a perceived noise of 68 dB, which means it is difficult to detect. It's the quietest helicopter in its class, and its engine emissions have low levels of pollutants.

Mission Equipment:

FLIR (Forward Looking Infrared) This unit consists of a gyroscopically stabilized camera with zoom as well as the thermal imagery which tracks people or evidence by heat signatures.

Nightsun (Spotlight) Provides for effective search with a 30 million candle power light that can be slaved to the thermal imagery camera.

Police radios Allow for communications with all agencies and frequencies.

Moving Maps GPS-based Augmented Reality mapping system that lets Tactical Flight Officers know where they are so as to give accurate directions to ground resources.

- Public Address System** Powerful loudspeaker to address public gatherings.
- Rear View Monitor** Allows those in the rear to see exactly what the Tactical Flight Officer sees, used for training and strategic ride-alongs.
- Dual Controls** Permits flight training to occur within the aircraft.
- Video Downlink** Enables transmission of live aerial video feeds to a police or fire department supervisor on the ground.

CONTRACTS

Engine: Turbomeca Canada

The Winnipeg Police Service entered into a “Support by the hour” (SBH) services contract with Turbomeca Canada, which is an engine insurance plan to ensure there is a fully operational engine in the airframe regardless of the issue. The EC120B has a Turbomeca Arrius-2F engine which is completely overhauled every 3000 hours of operation, resulting in an engine that is virtually new. On January 5, 2013 we replaced our Arrius-2F S/N 34189 engine which had timed out with an Arrius-2F S/N 34535 engine. We remain under the SBH services contract.

Maintenance: Novex Helitrades Incorporated

Originating from Bid Opportunity 587-2010, the one-year contract with up to 4 one-year extensions was awarded to Novex Helitrades Incorporated. The Aircraft Maintenance Engineer Services which operates out of Edmonton Alberta was renewed under a one-year extension agreement. The final extension of the original contract concluded on December 31, 2014.

As a result of the expiration of the initial contract, Request for Proposal 905 – 2014 was posted on September 25, 2014. On December 3, 2014 Novex Helitrades Incorporated was awarded the one-year contract with provisions of 4 one-year extensions.

Fuel: Kelly Western Services Ltd., in partnership with the Province of Manitoba

Bid Opportunity for Supply and Delivery of Aviation Fuel (JetA1) in the amount of 200,000 litres for the period of October 1, 2013 – September 30, 2015 was awarded to Kelly Western Services Ltd.

Unit Office and Hangar: 17 Wing Winnipeg

In October 2010, the Winnipeg Police Service entered into an agreement with the Department of National Defense 17 Wing Winnipeg that established a cooperative working arrangement for rental space of hangar and office to house the police helicopter and Flight Operations Unit. A one year lease agreement was signed with additional one year renewals. This lease was renewed.

Insurance

As organized through the City of Winnipeg Insurance Branch, the insurance underwriter for the Flight Operations Unit provides coverage of \$2,640,000 USD for the customized EC120BB helicopter. This insurance has been secured through November of 2015 and as a result of timely renewal was not impacted by the forecasted increase to aircraft insurance premiums set to take effect across the industry in 2015.

STAFFING

Under the Command of the Inspector and Staff Sergeant, Division 50 Operational Support, the staffing complement for the Flight Operations Unit is:

- Administrative Police Patrol Sergeant – one
- Chief Pilot (permanent civilian employee) – one
- Pilots (1 civilian employee and 1 sworn police employee) – two
- Tactical Flight Officers (TFO) police Constables – four
- Aircraft Maintenance Engineer (AME) under contract – one

The minimum operational “flight crew” consists of one TFO and one Pilot.



Tactical Flight Officer (TFO)

In November 2013, the FOU offered information sessions to the Service membership, followed by an application process for interested TFO candidates in order to fill vacancies at the spring 2014 Service transfers. As a result, in March 2014 three TFO were selected, one of which had previous TFO experience. The FOU returned to full staffing level by spring 2014.

Pilots

A selection process for a new Sworn Police Pilot was undertaken in the fall of 2013 in anticipation of the retirement of the first Sworn Police Pilot. In January 2014 the second Sworn Police Pilot joined the FOU and initiated his commercial rotary wing license in June 2014. October 2014 saw the first Sworn Police Pilot commence his retirement leave, which resulted in the Chief Pilot assuming Line Pilot duties pending the completion of training, early in 2015, by the new Sworn Police Pilot. Unlike in previous years, however, 2014 saw a steady state with both the Chief Pilot and civilian Line Pilot remaining in the FOU.

TRAINING

Pilots

The Chief Pilot and Civilian Line Pilot attended Canadian Helicopter-HNZ Group in Penticton, British Columbia for annual re-current training on the EC120B, where they are exposed to and tested on a series of in-flight emergency procedures.

Tactical Flight Officer (TFO)

In 2014 FOU ran its largest TFO training course, resulting in certification of five members including the Unit Commander. To further develop the tactical flight officer skills and knowledge base, three TFOs received training from Canadian Helicopter-HNZ Group for inflight emergency procedures and hover exit manoeuvres.

In September the Senior TFO attended the Airborne Law Enforcement Association (ALEA) Canadian Regional Safety Seminar.

Flight Crew (Pilot & TFO)

K9 transport and deployment was developed and trained. Several non-standard missions to rural areas and airports outside the City were trained.

In partnership with the Canadian Forces Air Force Training Centre, AIR1 and K9 assisted in non-standard mission search training in a rural environment.

In support of the WPS Ground Search and Rescue (GSAR) Unit, AIR1 conducted training with the Project Lifesaver Manitoba initiative.

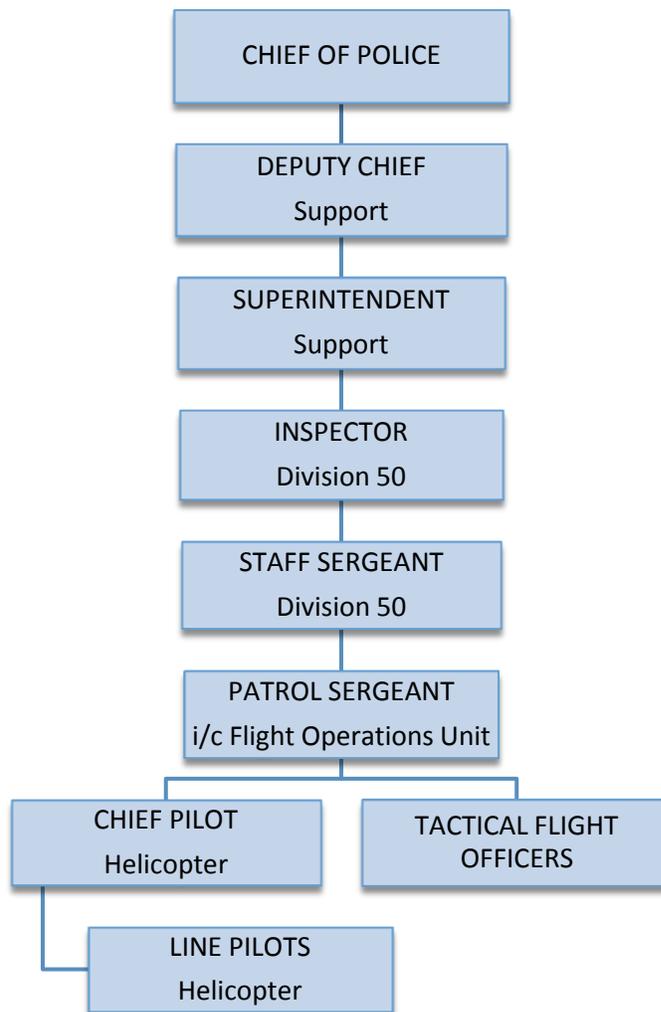
In conjunction with the Winnipeg Fire Paramedic Service Flight Crews completed water rescue interoperability scenario training on the Red and Assiniboine Rivers.



Unit Supervisor

The Administrative Patrol Sergeant attended the Airborne Law Enforcement Association (ALEA) Canadian Regional Safety Seminar, and also completed the Unit Managers Course.

UNIT ORGANIZATION CHART



FLIGHT OPERATIONS UNIT OBJECTIVES

The primary purpose of the Flight Operations Unit is to support all operational and investigative Service units in the detection of criminal acts and the apprehension of suspects. The Unit has budgeted to fly 1000 hours a year on missions with a variety of scopes. Flight crews are able to provide assistance with the following, weather permitting:

- response to crimes in progress for aerial containment and investigation
- infrared searches for suspects and evidence, and co-ordination of ground response
- tracking and surveillance of suspect vehicles during police pursuits and subsequent co-ordination of ground resources
- illumination of crime scenes, collision scenes, vehicle stops, search areas, disturbances, and foot pursuits

- aerial searches for missing or lost persons
- aerial reconnaissance and photography or videotaping of crime scenes, traffic collisions, high-risk incidents or remote areas
- aerial platform for Emergency Services for major fires, environmental disasters, or other major incidents
- Forward Looking Infrared (FLIR) scans to provide evidence of illegal grow operations relating to drug investigations
- rapid deployment of K9 Unit members to remote locations under exigent circumstances



SAFETY

The issue of Flight Safety is taken very seriously by the Winnipeg Police Service. The location of the Unit on Canadian Forces Base 17 Wing has engrained a safety culture since inception. The Winnipeg Police Service and 17 Wing Winnipeg work together to ensure the highest safety standards are followed and participate collaboratively in the Wing Commanders Safety Program. As well, the Chief Pilot is a qualified Flight Safety Officer and Basic Investigator Level II as designated by the Royal Canadian Air Force. These designations, achieved after successful completion of the Flight Safety Officer Course at 17 Wing Winnipeg, combined with industry experience, provide meaningful oversight of the Flight Safety Program.

Due to the ongoing and collaborative nature of the working relationship between FOU and 17 Wing, we anticipate additional training in various aspects of Flight Safety on an ongoing basis. By gleaning the institutional knowledge from the Royal Canadian Air Force, in combination with a robust internal safety culture, FOU works to identify risk in advance, thereby preventing incidents and continuing an accident free operation.

LASER INCIDENTS

Nav Canada conducted an operational analysis between September 2009 – August 2012 of laser attacks on aircraft within 20 nautical miles of either landing or departing airports in Canada. The top ten airports reported 451 incidents which created a hazard for aircraft and passengers, with Winnipeg reporting 22. The frustrating reality for pilots in these incidents is they did not have the ability to track the source of the attack.

Prior to the launch of AIR1 there was no local capability to address the problem of lasers or other forms of projected bright light being shone at aircraft arriving or departing from the Winnipeg area. As a result of the Winnipeg Police Service working together with Nav Canada and Transport Canada, new protocols have been implemented to streamline all stakeholder response to reports of aircraft, including AIR1, being struck by lasers.

As a result of this partnership, AIR1 has successfully directed ground units to locate and identify suspects who violate the Air Regulations and Aeronautics Act of Canada, and create hazardous flying conditions for pilots. Since inception in 2011 through the end of 2014, AIR1 was targeted 23 times with eight suspects identified and apprehended.

Transport Canada logged a total of 502 aircraft lasering incidents nationwide in 2014, six of which were reported through the Winnipeg James Armstrong Richardson International Airport (CYWG). One of those six incidents targeted AIR1.

Summary of Incidents 2014

DATE	TIME	RESULT	TYPE	SUMMARY
2014-07-04	2359 hrs	Location identified and investigated	Green Laser	a few attempts, 1 direct strike

NOISE COMPLAINTS

Tracking and addressing citizen noise complaints was identified as an important issue for the Flight Operations Unit. All citizen complaints which are reported to the WPS are directed to the Unit Supervisor to research and arrange for a member of the Unit to personally speak with the reporting person.

By providing an explanation of operational activity, educating citizens on our mission and mandate, along with making operational adjustments, we have been able reduce complaints.

- In 2011, 20 separate complaints were made by 17 reporting persons.
- In 2012, 10 noise complaints were received.
- In 2013, 4 noise complaints were received.
- In 2014, 3 noise complaints were received.

Of the three noise complaints received in 2014, two were determined to have occurred at times when AIR1 was not flying.

OPERATIONAL HIGHLIGHTS

ROBBERY AGGRAVATED ASSAULT

In April 2014, AIR1 was on routine patrol in the downtown area when a report of a serious assault in a bus shelter in the vicinity of Fort Street and Graham Avenue was voiced. The aircrew arrived on scene quickly and identified an individual fleeing the scene running away on foot.

The quick arrival at the scene was a key in associating the fleeing suspect's association to the area of the crime. The Tactical Flight Officer directed ground units to the vicinity of the culprit who was taken into custody and charged with robbery and aggravated assault.

WATER RESCUE AT THE FORKS

In April 2014, Winnipeg Police Service and Winnipeg Fire Paramedic Units were dispatched to the area of the Forks in relation to a female who was in the frigid spring waters of the Red River. AIR1 immediately attended scene and began to search the area. The pilot in command requested clearance for a low altitude search to enhance the probability of finding the victim.

After several minutes of searching, the victim was located floating down the river on an ice flow by AIR1. The TFO directed the Water Rescue Unit to secure the female.

Winnipeg Fire Paramedic Service Platoon Chief Don Black summarized AIR1's involvement in the incident as follows:

“Without your quick response this successful recovery would not have been possible, the patient was hypothermic and only seconds away from unconsciousness when pulled into the boat. A Post Incident Analysis was conducted at the scene with all attending crews, we were all in agreement without the support of AIR1, the outcome of this event would have ended in a tragedy. It has been proven on a number of occasions that AIR1 is a major asset to our Water Rescue Program.”

ROYAL VISIT

From May 20 – 21, 2014, Winnipeg was visited by Their Royal Highnesses The Prince of Wales and The Duchess of Cornwall. This joint operation between the Winnipeg Police Service and the Royal Canadian Mounted Police was facilitated by the video downlink support provided by AIR1.

From motorcade escort to venue over watch, AIR1 provided real-time video to Event Commanders from both agencies in the integrated command centre. Command staff used this information to proactively deploy ground resources and contain known agitators who had attended the event with the intention of being disruptive.

PARA-GLIDER ARREST

In May 2014, Winnipeg Police Service Flight Operations Unit was contacted by the Civil Aviation Enforcement Unit of Transport Canada in relation to an unlicensed para-glider operating within the Winnipeg control zone. The operator, who had been cautioned by Transport Canada, refused to cease operation over the city.

The Flight Operations Unit was contacted by Transport Canada and entered into an investigation. In June 2014, the suspect was again flying within the control zone. Coordinating with the Winnipeg Air Traffic Control tower, AIR1 located the glider. Using the public address system, AIR1 directed the operator to the ground where he was taken into custody and now faces charges under the Aeronautics Act and the Criminal Code.

This investigation represented the first coordinated investigation between Nav Canada, the Transport Canada Civil Aviation Enforcement Unit, and Winnipeg Police Service Flight Operations Unit and ground units.

STOLEN VEHICLE PURSUIT

In September 2014, a victim of a stolen vehicle emerged from their residence to find suspects, in possession of keys from the stolen vehicle attempting to steal another vehicle from their residence. The culprits were confronted by the registered owner and fled in the originally stolen vehicle. Police were contacted and AIR1 responded to the area.

As the aircraft approached the area, a vehicle matching the suspect vehicle description was located. For over twenty minutes, AIR1 maintained visual containment of the vehicle while guiding and directing ground units in the area. By keeping police vehicles in the area but out of sight of the suspect vehicle AIR1 mitigated the aggressive driving of the suspect vehicle. The suspects proceeded to a quiet residential area where suspects abandoned the vehicle and fled on foot. Once outside the vehicle, AIR1 directed units to the area and both suspects were taken into custody.

CANADIAN MUSEUM FOR HUMAN RIGHTS OPENING

The Canadian Museum for Human Rights opening at the Forks in September 2014 represented the first time a Federal Museum has been opened outside of the National Capital Region. AIR1 was deployed in support of this event, providing live video downlink of the event. The event, which was a major security operation, required the coordination of multiple agencies. Once again, AIR1 was the platform that allowed event command staff to view real-time video during the course of all events at the museum.

During the actual opening ceremonies this real-time intelligence allowed for rapid deployment of ground resources to facilitate peaceful demonstration while concurrently allowing the opening ceremonies to go on unencumbered. Using images from AIR1, the Event Commander was able to make decisions based not only on information relayed via the radio, but also observe what was being reported and formulate the response plan based on those observations.

ASSISTANCE TO OUTSIDE AGENCIES

Since inception, AIR1 has supported and assisted a number of internal and external stakeholders, both operationally and in training. AIR1 has worked with the Department of National Defense, Royal Canadian Mounted Police (RCMP), Manitoba Justice and Winnipeg Fire Paramedic Service.

PUBLIC DISPLAYS

- Winnipeg Police Service Half Marathon
- Royal Canadian Air Force (RCAF) Run
- Steinbach Flying Club

PRESENTATIONS

- Several internal presentations to Winnipeg Police Service Units, including shift briefings
- Winnipeg Police Board

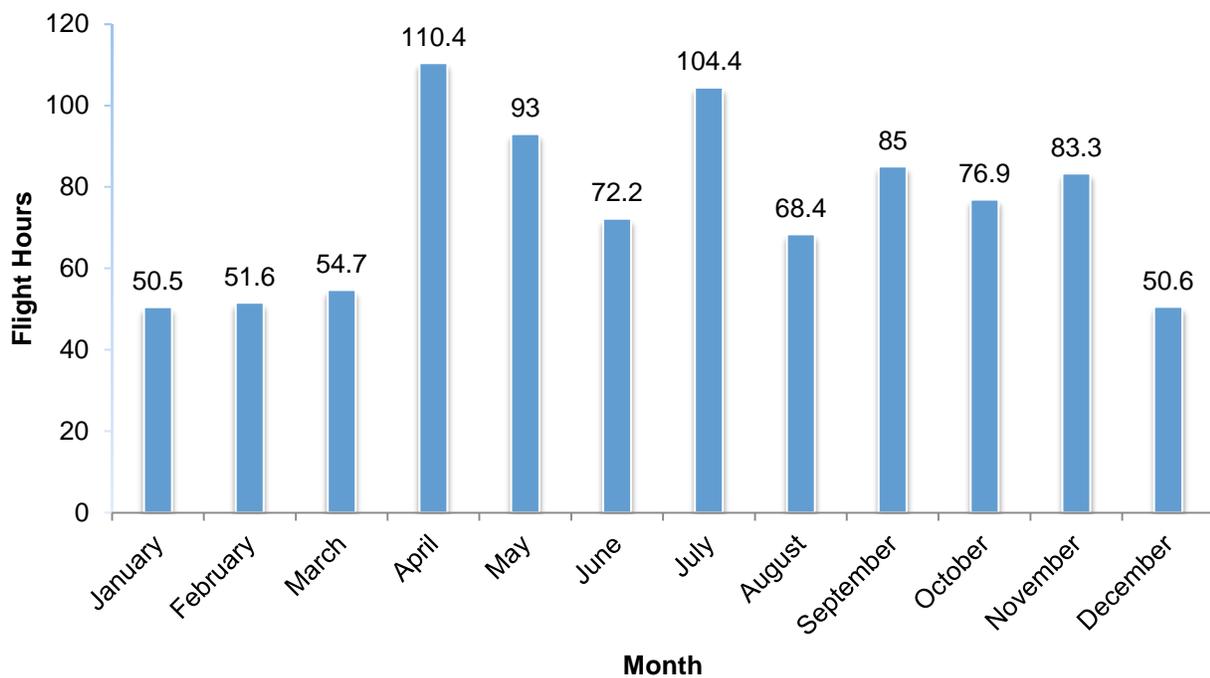


3. PERFORMANCE

QUARTERLY SUMMARY OF FLIGHT HOURS

	Q1	Q2	Q3	Q4	2014
Total	156.8	275.6	257.8	210.8	901

FLIGHT HOURS BY MONTH



Throughout 2014, the Flight Operations Unit logged 901 flight hours. While the above table illustrates the distribution of flight hours by month, the Unit achieved a monthly average of 75.08 flight hours.

In January, our scheduled 500 hour maintenance and severe winter weather conditions impacted operations. In February and March there were several scheduled and unscheduled maintenance events to both equipment and airframe. In June and December, the Unit was affected once again by weather which affected the hours of operational flight time.

QUARTERLY SUMMARY OF FLIGHT TIME LOST (BY DAY)

Factor	Q1	Q2	Q3	Q4	2014
Weather	9	18	9.5	20	56.5
Maintenance	33	11	16	12	72
Staffing ¹	4	7	9	5	25
Total	46	36	34.5	37	153.5



PHOTO BY DAVE SWIECICKI

¹ Staffing shortages first tracked in 2012.

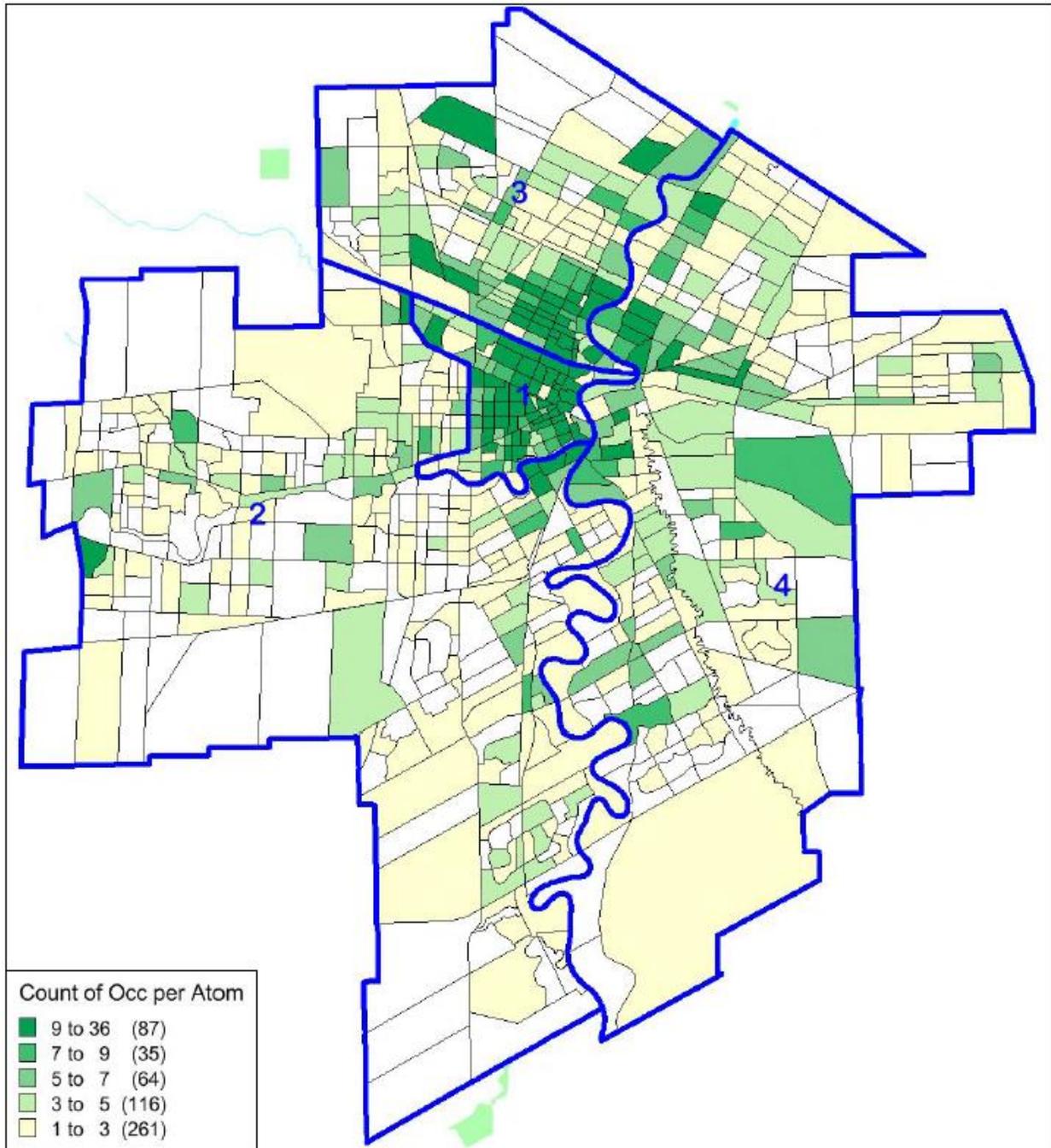
SUMMARY OF INCIDENT TYPE BY ACTIVITY JANUARY 1, 2014 TO DECEMBER 31, 2014

The following table contains a summary of the most frequently attended incident types:

DOMESTIC DISTURBANCE	202	MEDICAL CALL	16
TRAFFIC STOP	198	CHILD SAFETY	14
SUSPICIOUS PERSON	192	MISSING PERSON ASSIST	14
WELLBEING	169	SUBJECT STOP	14
DISTURBANCE	122	B&E -OTHER	13
ASSAULT	116	VICE	13
FIGHT	79	DISPUTE	10
TRAFFIC	72	ALARM -RESIDENTIAL	9
B&E- RESIDENTIAL	67	TRAFFIC PURSUIT	9
FAMIL TROUBLE	67	SPI HOTSPOT	8
ALARM -BURGLAR	63	SUBJECT PURSUIT	8
SHOTS FIRED	50	PROWLER	7
WEAPON	50	SEXUAL ASSAULT	7
ROBBERY -PERSON	47	SPECIAL ATTENTION	7
GUN SEEN	46	DISC	6
SUICIDE THREAT	43	STOLEN VEHICLE LOCATED	6
ALARM -DISTRESS	38	EMERGENCY 911 HANG UP	4
B&E -COMMERCIAL	37	GUN SHOT WOUND	4
DANGER	37	MHA- MENTAL HEALTH ACT	4
IPDA	36	NOISE	4
STABBING REPORTED	36	SPECIAL EVENTS	4
ASSAULT WITH WEAPON	32	WARRANT EXECUTION	4
DAMAGE	32	OFFICER	3
FIRE	31	ALARM -LOCAL	2
ASSISTANCE REQUIRED	30	FRAUD	2
IMPAIRED DRIVING	30	INSECURE PREMISIS	2
ROBBERY -COMMERCIAL	29	SHOPLIFTING	2
MVC	28	SPI SUBJECT	2
BREACH	26	ANIMAL	1
STOLEN VEHICLE	25	BOMB THREAT	1
THREAT REPORTED	20	ESCORT	1
FOLLOW	18	GRAFFITI	1
THEFT	18	INDECENT ACT	1
ALARM -HOLDUP	17	SUDDEN DEATH	1
WARRANT EXECUTION	17	STALKING	1
GUN KNOWN	16	TOTAL	2341

AIR1 FLIGHT ACTIVITY - DENSITY OF OCCURRENCES BY ATOM

January 1, 2014 to December 31, 2014



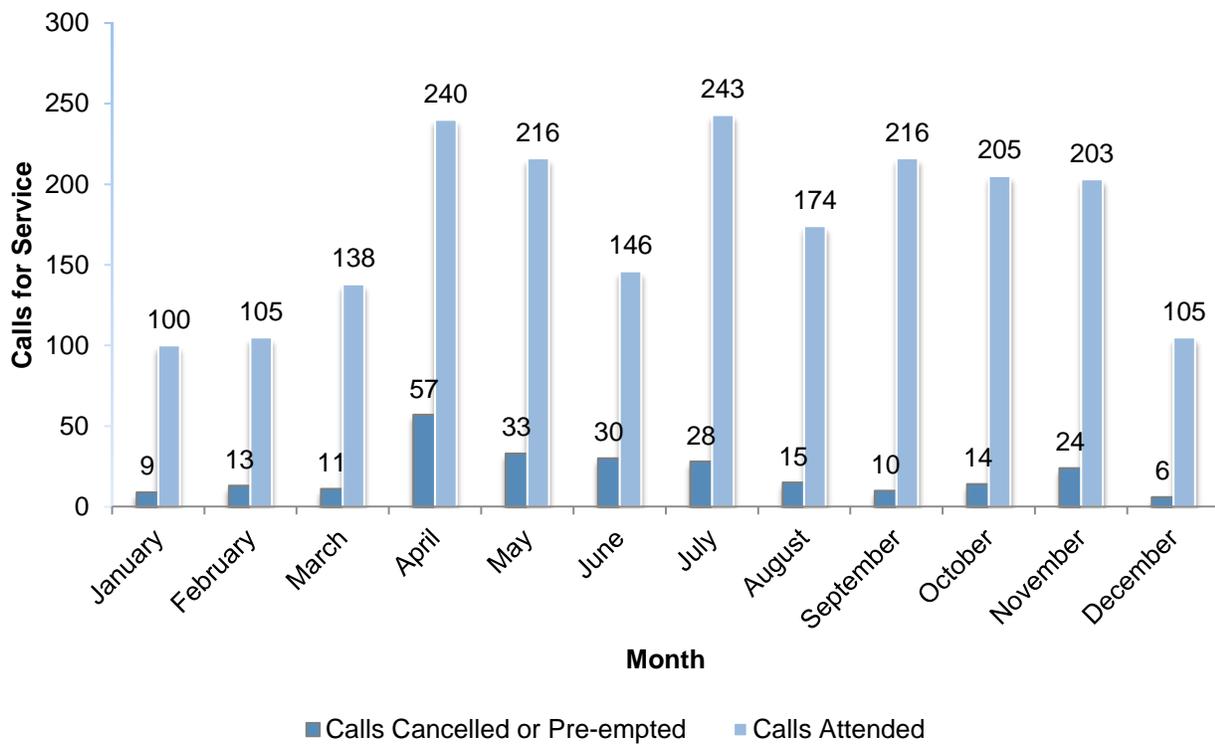
Overview of AIR1 density of occurrences in Winnipeg (795 Atoms total)

- 232 atoms had zero calls for service where AIR1 responded

QUARTERLY SUMMARY OF INCIDENTS ATTENDED

	Q1	Q2	Q3	Q4	2014
Total	343	602	633	513	2091

TOTAL INCIDENT VOLUME BY MONTH



QUARTERLY SUMMARY OF DISPATCHED INCIDENTS

	Q1	Q2	Q3	Q4	2014
Total	376	722	686	557	2341

Note: Total dispatched incidents (2341) includes all calls that AIR1 attended (2091) as well as the total events that were cancelled or pre-empted (250) prior to arriving on scene.

CALLS FOR SERVICE

AIR1 continues to have a dramatic influence on the outcome of calls for service. As detailed in the Unit records, the helicopter attended 2091 events. As a direct result of this presence, AIR1 was instrumental in identifying/apprehending 187 persons of interest.

PURSUIITS

2014 Pursuits 42 total

AIR1 Dispatched, involved 5 – resulting in 4 apprehensions
 AIR1 Dispatched, arrived post pursuit 4 – due to short duration of event
 On Duty, not involved, grounded 22 – due to short duration of event
 Off duty 11

FINANCIAL CONSIDERATIONS

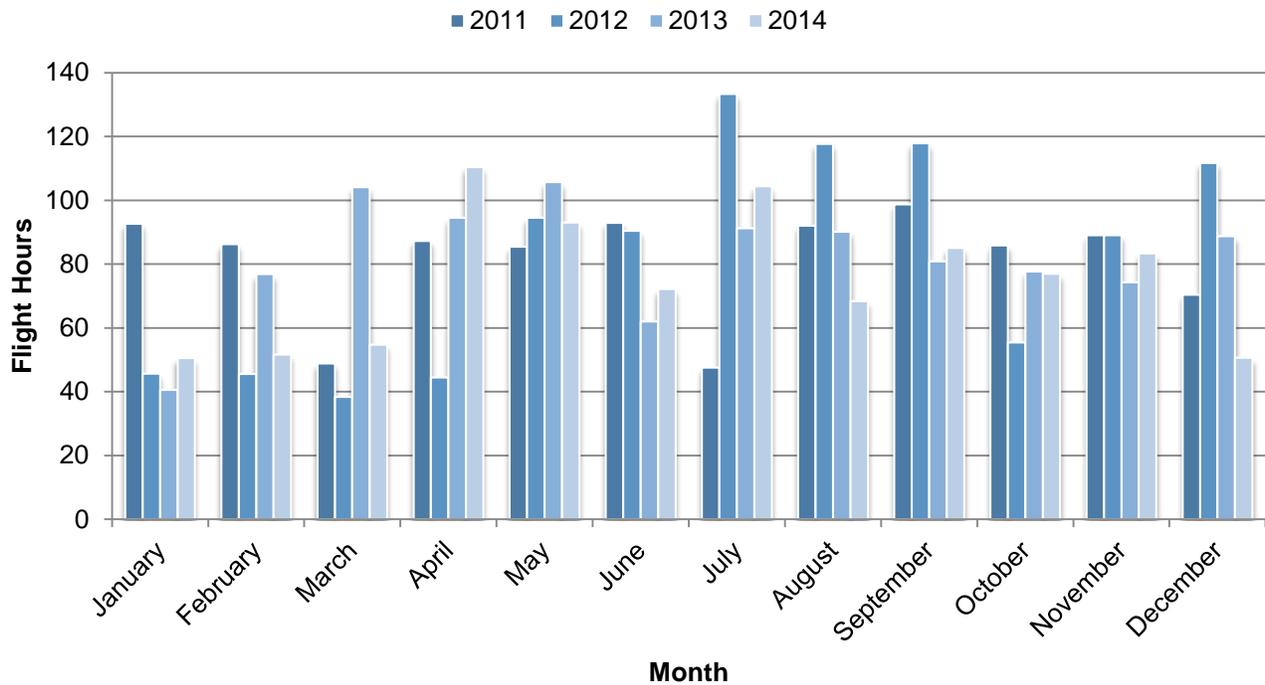
- 2011 Flight Operational Unit costs billed to the Province of Manitoba = \$1,196,693.90
- 2012 Flight Operational Unit costs billed to the Province of Manitoba = \$1,327,590.33
- 2013 Flight Operational Unit costs billed to the Province of Manitoba = \$1,515,820.85
- 2014 Flight Operational Unit costs billed to the Province of Manitoba = \$1,752,514.89

4. YEAR TO YEAR COMPARISONS

FLIGHT HOURS QUARTERLY: 2011 – 2014

	Q1	Q2	Q3	Q4	Total
2011	227.6	265.5	238.2	244.9	976.5
2012	129.4	229.3	368.7	256.1	983.5
2013	221.4	262.2	262.1	240.5	986.2
2014	156.8	275.6	257.8	210.8	901

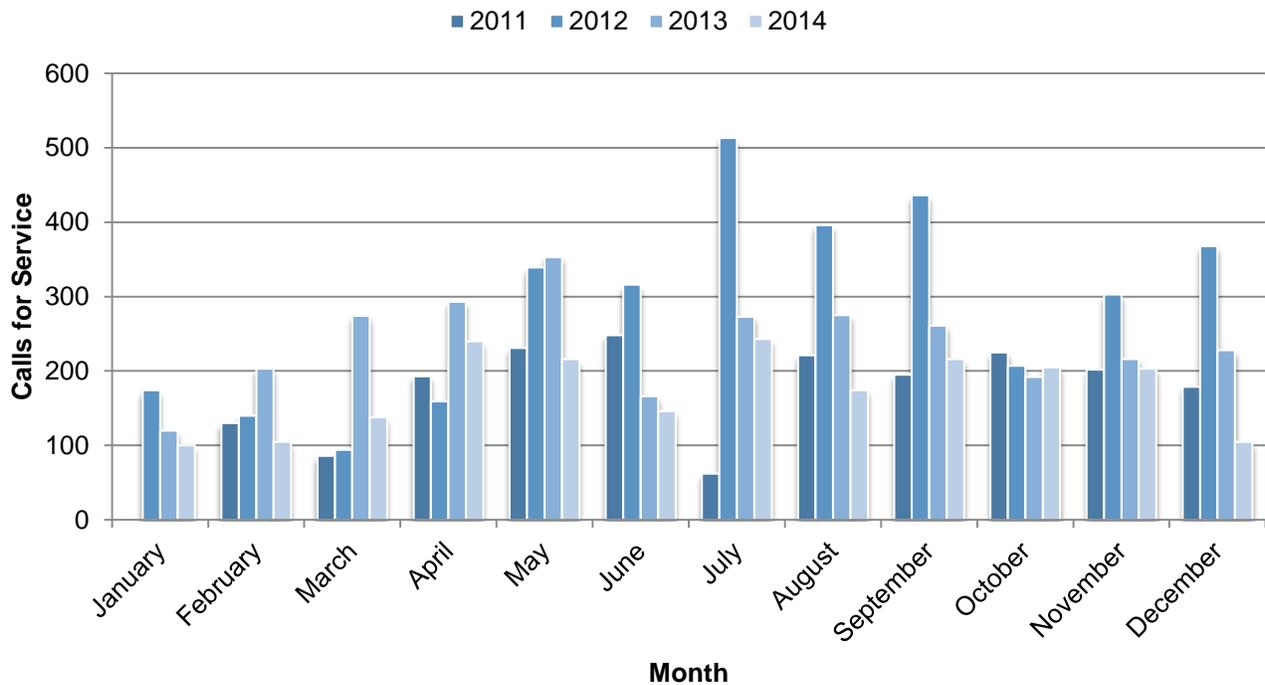
FLIGHT HOURS BY MONTH: 2011 – 2014



INCIDENTS ATTENDED QUARTERLY: 2011 – 2014

	Q1	Q2	Q3	Q4	Total
2011	202	597	444	537	1780
2012	288	651	1080	669	2688
2013	604	773	794	622	2793
2014	343	602	633	513	2091

TOTAL INCIDENT VOLUME BY MONTH: 2011 – 2014



DISPATCHED INCIDENTS QUARTERLY: 2011 – 2014

	Q1	Q2	Q3	Q4	Total
2011	216	672	478	606	1972
2012	408	814	1345	878	3445
2013	597	812	809	636	2854
2014	376	722	686	557	2341

YEAR TO YEAR DATA: 2011 – 2014

	2011	2012	2013	2014	2011 – 2012 % change	2012 – 2013 % change	2013 – 2014 % change
Dispatched Calls	1972	3445	2854	2341	75% increase	17% decrease	18% decrease
Arrived on Scene	1780	2688	2793	2091	51% increase	4% increase	25% decrease
Apprehensions ²	127	185	200	187	46% increase	8% increase	7% decrease
Prime Unit Calls ³	652	1987	1450	1096	205% increase	27% decrease	24% decrease
Noise Complaints	20	10	4	3	50% decrease	60% decrease	25% decrease

² Credited to reporting statistics are apprehensions and the location of involved parties on the ground that were made as a direct result of the presence and actions of AIR1. If it were not for AIR1, these apprehensions could not occur at the time resulting in further investigative resources on the ground to complete the calls for service. Of the 187 parties identified to ground resources, 105 parties were taken into custody for criminal offenses at the time due to the support of AIR1.

³ The Prime Unit Calls as it pertains to AIR1 is more accurately a measure of being the first police unit to arrive on scene for the assigned event.



PHOTO BY WING IMAGING SECTION OF 17 WING WINNIPEG

2014

Operation Report

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