LETTER OF AGREEMENT (LOA) BETWEEN WINNIPEG AREA CONTROL CENTRE (CZWG) AND **EDMONTON AREA CONTROL CENTRE (CZEG)**







LOA Between	Edmonton ACC (CZEG) Winnipeg ACC (CZWG)		
Effective Date	01 July, 2019, 00:01z		
Concerning	Joint and Independent Operational Air Traffic Control Procedures and Primary and Secondary Ownership of High and Low sectors		

<u>Cancels and or Supercedes - The Letter Of Agreement (LOA) between Edmonton Area Control Centre</u> (CZEG) and Winnipeg Area Control Centre (CZWG) dated May 26, 2016.

Revision Listing As Follows					
DATE	REVISION BY	VER	NOTES		
Dec 18, 2018	Owen Kane	1.0	Initial Document Creation		
July 1, 2019	Owen Kane	1.3	Update Winnipeg Frequencies and Callsigns Section 5.2		

SECTION 1 - PURPOSE

This Letter Of Agreement defines the ownership hierarchy for providing ATC services to the Bison, Thompson, Hudson, and Severn high-level sectors (FL290 and above).

By updating these ownerships, CZEG and CZWG are looking at increasing the presence of virtual air traffic controllers in the affected sectors with the intention of further expanding the service level, coverage and online presence in this portion of the Canadian airspace and VATCAN's jurisdiction within the VATSIM network.

SECTION 2 - DESCRIPTION OF THE AIRSPACE

The Edmonton and Winnipeg FIRs as described in the DAH (TP1820) and their respective CTAs as depicted on the HI aeronautical maps. The delegated airspace includes the uncontrolled airspace below the CTA. The airspace delegated to Winnipeg FIR by Edmonton FIR as illustrated in Appendix B.

Transferred Sectors or Airspace Defined By Bounding and Geographic Coordinates					
Airspace/Sector	Bounding In	Geographic Coordinates			
Thompson	Polygon Lines	N055.12.27.440 W107.39.26.010 N053.00.00.000 W102.00.00.000 N053.00.00.000 W102.00.00.000 N052.27.00.000 W101.00.00.000 N052.27.00.000 W101.00.00.000 N052.27.00.000 W101.00.000 N052.47.00.000 W099.07.00.000 N052.47.00.000 W099.07.00.000 N052.20.00.000 W095.00.00.000 N052.20.00.000 W095.00.00.000 N052.20.00.000 W095.00.00.000 N052.00.00.000 W093.00.00.000 N057.30.00.000 W099.45.00.000 N057.30.00.000 W099.45.00.000 N061.00.00.000 W098.00.00.000 N061.00.00.000 W098.00.00.000 N061.00.00.000 W098.00.00.000 N055.12.27.440 W107.39.26.010			
Severn	Polygon Lines	N052.00.15.912 W093.00.42.305 N057.30.21.339 W090.45.12.802 N057.30.21.339 W090.45.12.802 N058.30.12.997 W080.01.09.036 N058.30.12.997 W080.01.09.036 N053.29.12.090 W079.59.14.535 N053.29.12.090 W079.59.14.535 N050.08.31.484 W085.37.58.294 N050.08.31 W090.42.305 W090.42.200 W			
Hudson	Polygon Lines	N061.00.00.000 W098.00.00.000 N063.00.00.000 W091.00.00.000 N063.00.00.000 W091.00.00.000 N064.45.00.000 W080.00.000 N064.45.00.000 W080.00.000 N064.45.00.000 W080.00.000 N064.02.00.000 W074.00.00.000 N064.02.00.000 W074.00.00.000 N062.45.00.000 W080.00.000 N062.45.00.000 W080.00.000 N058.30.00.000 W080.00.000 N058.30.00.000 W080.00.000 N057.30.00.000 W090.45.00.000 N057.30.00.000 W090.45.00.000 N057.30.00.000 W098.00.00.000			

SECTION 3 - OWNERSHIP HIERARCHY

Edmonton (CZEG) and Winnipeg (CZWG) are responsible for providing air traffic control services (ATC) within their respective FIR or CTA in accordance with Nav Canada boundaries and VATSIM COC/COR, VATCAN Policies and local SOP's. The Primary and Secondary ownership of the sectors pertaining to this LOA is detailed in the table below.

Sector	Primary Owner	Secondary Owner
Thompson (FL290 and above)	CZWG	CZEG
Hudson (FL290 and above)	CZWG	CZEG
Severn (FL290 and above)	CZWG	CZEG
Bison (FL290 and above)	CZEG	N/A
La Ronge (Below FL290)	CZWG	N/A

CZEG and CZWG are each jointly responsible for providing air traffic services for the High-Level Sectors (FL290 And Above) of Thomson, Hudson and Severn given the following factors:

- At any given moment, when a certified controller (C1 or higher) of the Primary owner is online, that controller assumes control of the given airspace. In the absence of the Primary owner, when a certified controller (C1 or higher) of the Secondary owner is online, that controller assumes control of the given airspace.
- CZWG is exclusively responsible for providing air traffic services for the La Ronge Low-Level Sector (Below FL290).
- CZEG is exclusively responsible for providing air traffic services for the BISON High-Level Sector (FL290 and above).

SECTION 4 - JOINT AIRSPACE TRANSFER PROCEDURES

If a certified controller of the Secondary owner is or has been online without the presence of a Primary owner, and a Primary owner connects to the network:

- The Secondary owner must brief the Primary owner on the traffic situation in the airspace the Primary owner will assume.
- The Secondary owner must perform a proper handoff of all aircraft within the airspace the Primary owner will assume.

SECTION 5 - INTER FIR OPERATIONAL PROCEDURES (When Both FIR'S Operating)

Unless otherwise coordinated, Edmonton and Winnipeg ACCs are responsible for the relay of IFR, CVFR and FITN flight plan data to the adjacent ACC for all flights whose airspace to be protected will infringe the common control boundary.

For the purpose of this agreement are dictated per Euroscope established procedures for Transfer of Control (TOC) defined as handoffs, transfers or releases as defined by Euroscope and normal acceptance within VATCAN.

Section 5.1 - Edmonton Controller Frequencies

Winnipeg controllers should refer to the following table when initiating a TOC of an aircraft inbound to Calgary when an Edmonton Controller is online.

Edmonton Controllers To Transfer To When Aircraft Enters Edmonton Sectors					
Position	Callsign	Code	Freq	Altitude	Notes
CZEG_FSS	Edmonton CTR	ZFS	135.02	GND To FL600	No Other Position - Online
CZEG_CTR	Edmonton CTR	QC	135.75	GND To FL600	When "QH" & "QL" Off or "QH" Offline
CZEG_H_CTR	Edmonton CTR	QH	132.90	FL290 TO 600	Always For Designated FL
CZEG_L_CTR	Edmonton CTR	QL	132.85	GND To FL280	Always For Designated FL

Section 5.2 - Winnipeg Controller Frequencies

Edmonton controllers should refer to the following table when initiating a TOC of an aircraft inbound to Calgary when an Edmonton Controller is online.

Edmonton Controllers To Transfer To When Aircraft Enters Winnipeg Sectors					
Position	Callsign	Code	Freq	Altitude	Notes
CZWG_CTR	Winnipeg CTR	HD	124.00	GND To FL 600	Covering all ZWG airspace
CZWG_CTR	Winnipeg CTR	QV	124.30	GND To FL 600	Covering South-West ZWG
CZWG_CTR	Winnipeg CTR	PA	123.80	GND To FL 600	Covering North-West ZWG

SECTION 6 - SECTOR FILE CHANGES

Changes required to implement this Addendum will be performed on CZEG's Sector File only as follows

	HIGH-LEVEL SECTOR OVER THE WINNIPEG CENTRE FIR					
Descriptions	Thompson	Hudson	Severn			
Designations	CZEG_TH:28500:60000	CZEG_HU:28500:60000	CZEG_ER:28500:60000			
Ownership In Order Of Sector Priority Primary Is Listed First	WGHD:TH:DH:QH:QC:ZFS WGHD - Winnipeg Ctr TH - Thompson Ctr DH - Alberta High Ctr QH - Edmonton High Ctr QC - Edmonton Ctr FSS - Edmonton FSS Ctr	WGHD:HU:ZFS WGHD - Winnipeg Ctr HU - Thompson Ctr FSS - Edmonton FSS Ctr	WGHD:ER:DH:QH:QC:ZFS WGHD - Winnipeg Ctr TH - Thompson Ctr DH - Alberta High Ctr QH - Edmonton High Ctr QC - Edmonton Ctr FSS - Edmonton FSS Ctr			
Borders	WGTH	WGHU	WGER			

Within the CZEG Sector Files Winnipeg Centre is defined as WGHD operating on a frequency of 124.00. CZWG Centre callsigns to be included in the Primary owner list for the purposes of this LOA is CZWG_CTR. Winnipeg FIR will advise the Edmonton FIR if additional Ownership Hierarchy and Controller Positions are to be added.

No further sector files changes are required prior to the signing of this agreement. However, both FIR Chiefs will ask their respective Facility Engineers to discuss any Inter FIR COPIX changes and additions which could improve the workflow for this LOA.

SECTION 7 - RADARS AND SIMULATION MODE

NavCan Radars and ADS-B (Mode S) receivers located within the CZWG FIR will be included the CZEG FIRs' sector file. Integration with the Incoming NavCan Iridium Space Based Satellite System ADS-B may necessitate changes to both radars and Euroscope simulation mode settings. Both FIRs' agree to monitor changes in this area and to jointly facilitate changes as required. Controllers in both FIRs will as prudent with their SOP ensure that certified controllers within each FIR use the parameters and set values in the Euroscope General Settings to ensure consistency with the service provided by Primary and Secondary owners.

Radar and Simulation Mode - General Setting Table					
General Settings Parameter	Values or Checks Required				
Correlation mode	S-Mode				
S-mode transponders	IEFGRWQ				
Squawk Code For S-Mode Transponders	Blank				
Correlation distance	50 NM				
Do NOT auto-correlate the following squawks	1200, 2000, 2200, 7000, 7700				
Simulate radar coverage and outage	Checked				
Do NOT auto correlate duplicated	Checked				
Accept pilot squawk	Checked				
Show VFR Flight Plan Track	Unchecked				
Show IFR Flight Plan Track	Checked				
Auto start FP track	Checked				

SECTION 8 - DELEGATION OF SIGNING AUTHORITY

The signing authority to amend any portion of this LOA, including attachments, is delegated to the CZWG and CZEG FIR Chiefs or their designated representatives. All amendments must follow the proper review and validation process and must have received approval from both FIRs'.

SECTION 9 - ANNUAL REVIEWS AND INITIAL SIX MONTH EVALUATION

It is agreed that at six months from the initial effective date and on an annual basis from the effective date of February 1, 2019, an evaluation will be conducted for the purposes of assessing the outcome on the implementation of this LOA.

Data shall be recorded by each FIR to note any and all issues good and bad as it relates to the purpose of this LOA.

Annually or at the initial six month evaluation period CZWG and CZEG FIR Chiefs, or their assigned delegates, shall exchange all gathered information and together suggest areas improvement which further the purpose of the LOA.

FIRs' will then arrange and ensure all required collaboration sessions to evaluate all necessary modifications to this LOA to ensure its currency and guaranteeing it continues to accomplish the purpose as outlined in Section 1.

Upon both FIRs' reaching agreement on the required adjustments to this LOA, an addendum will be added, incorporating the adjustments accordingly, which will then form part of this LOA and be effective until termination of the LOA by both FIR Chiefs.

SECTION 10 - TERMINATION OF LETTER OF AGREEMENT

Notice of Intent to Terminate this LOA can be initiated at any time by either FIR Chief, or their delegates, with proper references as to the reasons for termination.

Notice of the intent to terminate this Amendment must be sent via email to the corresponding ACC Chief, with an email copy to VATCAN1.

Upon issuance of the notice of intent to terminate this Amendment, the ACC Chiefs, or their assigned delegates, will convene to review the reasons for termination. Every effort should be made by the leaders of both FIRs' and VATCAN to find a resolution to the cause or causes of concern, and seek a resolution that benefits both FIRs' and VATCAN in general.

If no consensus is reached, the airspaces addressed in this LOA will revert back to ownership as defined by NavCan publications. The FIR Chiefs will establish a Termination Date, which must be no less than 4 calendar weeks from the date that no consensus was reached.

SECTION 11 - COMMUNICATION

Communication of the implementation of this Letter Of Agreement (LOA), or Termination thereof must be sent by both FIR Chiefs, or their assigned delegates, to the respective certified Controllers and posted in the respective FIR websites and VATCAN forums. This will ensure the network users (Controllers and Pilots) are given enough time to prepare for the transition.

SECTION 12 - APPENDIX'S

Appendices from the original LOA between CZEG and CZWG from 26 May 2016 are relevant for the purposes of this Letter of Agreement (LOA) and are included as will form part of the LOA.

The following appendices are included on separate pages following;

APPENDIX "A" - Jointly Controlled Delegated Airspace - Airspace In Colour, Hudson, Severn, Thompson Delegated To Winnipeg ACC By Edmonton ACC FL290 And Abov<u>e.</u>

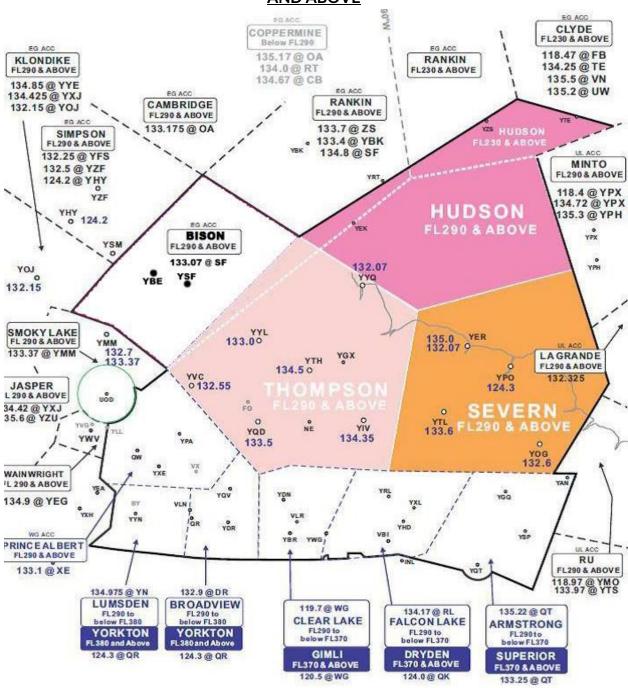
APPENDIX "B" - Edmonton Airspace With High And Low Sectors And Surrounding FIRs And ARTCCs

APPENDIX "C" - Winnipeg High Sectors FL290 And Above

APPENDIX "D" - Winnipeg Low Sectors FL290 And Above

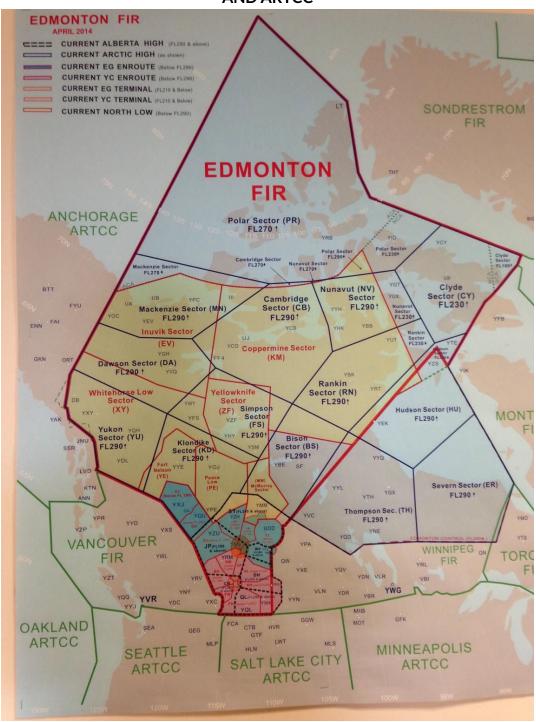
SECTION 12 - APPENDIX "A"

JOINTLY CONTROLLED DELEGATED AIRSPACE - AIRSPACE IN COLOUR, HUDSON, SEVERN, THOMPSON DELEGATED TO WINNIPEG ACC BY EDMONTON ACC FL290 AND ABOVE



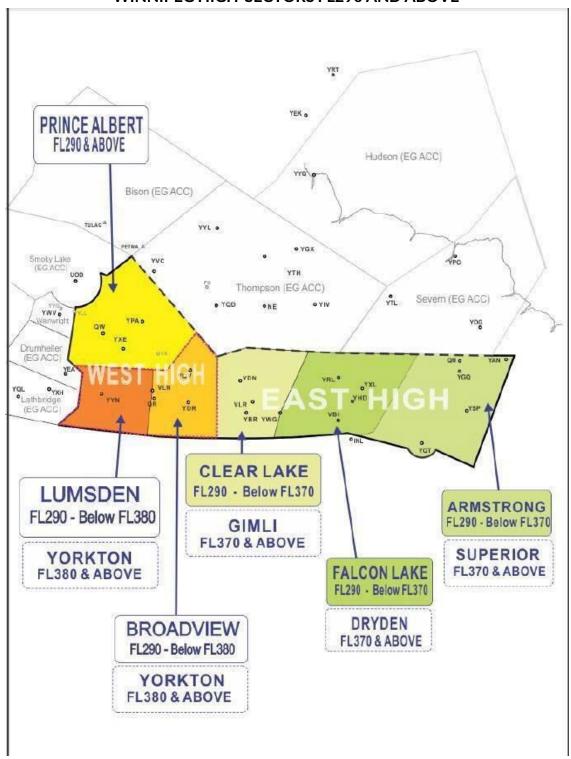
SECTION 12 - APPENDIX "B"

EDMONTON AIRSPACE WITH HIGH AND LOW SECTORS AND SURROUNDING FIRS AND ARTCC



SECTION 12 - APPENDIX "C"

WINNIPEG HIGH SECTORS FL290 AND ABOVE



SECTION 12 - APPENDIX "D"

WINNIPEG LOW SECTORS FL290 AND ABOVE WINNIPEG LOW SECTORIZATION Eff: 08 JAN 2015 NORTH LOW WASKESIU LA RONGE Below FL290 Below FL290 Below FL290 DIAL 793 134.32(XE) / 133.9(PA) DIAL 746 133.15(TH) / 132.82(IV) DIAL 747 135.62(QD) / 126.4(VC) 134.6 (YQ) / 135.1 (NE) 132.375 (LL) 135.05(YL) / 124.47(SF) Nunavut FL 230 & up (EG ACC) (EG ACC) Yellowknife YRT (EGACC) YSF ZWL ŶĸJ YYL YPO YTH YVC TROUT LAKE UOD Below FL290 DIAL 735 135.15(TL) / 135.475(OG) YOD YNE YWV 135.32(RL) / 133.95(PO) YPA QW YOG YQV LYD W VEST **YRL** YN YDR YSP YWG YBR · VBI YQT INL WG EAST SASKATOON REGINA WINNIPEG THUNDER BAY Below FL240 DIAL 766 119.9 Below FL240 DIAL 763 Bolow FL240 DIAL 775 Below FL240 DIAL 762 KENORA BELOW FL240 119.2 119.5 120.1 WG EAST Below FL290 KENORA Below FL290 DIAL 724 DIAL 736 118.0 132.2 **GREAT PLAINS** Below FL290 WG WEST MARATHON **DIAL 799** Below FL290 DIAL 721 Below FL290 DIAL 733 (QR) 123.8 (BR) 132.25 285.4 (YN) 132.8 132.12

134 4 349 6

(SP) 134 075

AUTHORIZING SIGNATURES

Owen Kane
FIR Chief
Edmonton FIR - ACC (CZEG)

Date: July 1, 2019

Nate Power
FIR Chief
Winnipeg FIR-ACC (CZWG)

Date: July 1 2019

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FIR Chief
Edmonton FIR - ACC (CZEG)

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