

**IVAO XA AND IVAO SOD**

**LETTER OF AGREEMENT**

**EFFECTIVE: FEB 10, 2019**

**SUBJECT: SO Letter of Agreement (LOA) management of North America Region Division**

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**1. PURPOSE**

This Agreement establishes responsibilities and describes procedures for Special Operations between IVAO XA and IVAO SO Department.

**2. CANCELLATION**

Cancelled LOA from 24 October 2017

**3. SCOPE**

If you want to fly with a military aircraft and/or military flight plan within United States, Canadian or Bahamas airspace, please observe the following rules. These are rules that have been defined by the competent national authorities.

**4. TERMS**

**GAT**    **General Air Traffic**

**OAT**    **Operational Air Traffic**

**DOD**    **Department of Defense**

**SAR**    **Search and Rescue**

**RCAF**   **Royal Canadian Air Force**

**5. PROCEDURES**

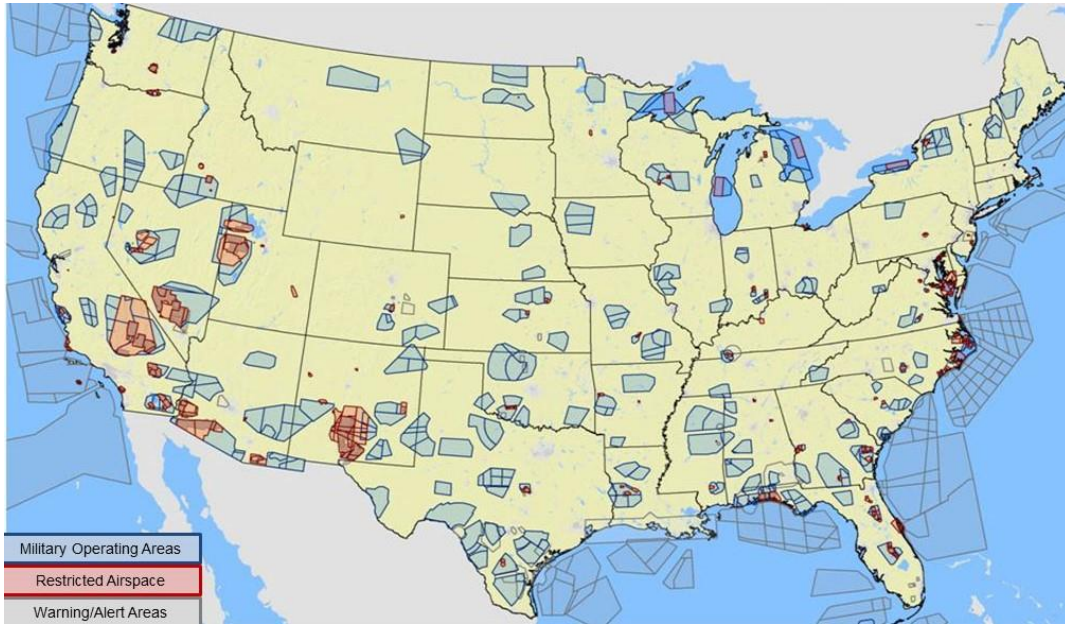
- a. **GAT Flights.** You may cross the US, Canada or Bahamas Airspace without prior permission. You may even land on a civil airport/airfield or military airbase. All under the premise that as GAT (unarmed and without dangerous goods) you comply with the civil procedures:
  - i. **US** [https://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&tpl=/ecfrbrowse/Title14/14tab\\_02.tpl](https://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&tpl=/ecfrbrowse/Title14/14tab_02.tpl)

- ii. **Canada** <http://www.navcanada.ca/EN/products-and-services/Pages/AIP.aspx>
    - iii. **Bahamas** [http://www.bcaa.gov.bs/public/downloads/CIVIL AVIATION GENERAL REGULATIONS.pdf](http://www.bcaa.gov.bs/public/downloads/CIVIL_AVIATION_GENERAL_REGULATIONS.pdf)
  - b. **OAT Flights.** Please contact xa-soc@ivao.aero at least 3 business days before your intended entry. If possible, a simple mail with relevant information according to Diplomatic Aircraft Clearance procedures:
    - i. **US/Bahamas** <https://www.state.gov/t/pm/iso/c56895.htm>
    - ii. **Canada** [https://www.international.gc.ca/protocol-protocole/policies-politiques/overflight\\_clearance-autorisation\\_survol.aspx?lang=eng](https://www.international.gc.ca/protocol-protocole/policies-politiques/overflight_clearance-autorisation_survol.aspx?lang=eng)
  - c. **Transponder Codes (US only)**
    - i. **DOD:** 5000-5057, 5063-5077, 5100-5300, 5400, 6100, 6400, 7501-7577
    - ii. **SAR:** 1277
    - iii. **SR-71, F-12, U-2, B-57, pressure suit flights and aircraft operations above FL 600:** 4000
    - iv. **Special Aircraft Operations:** 4401-4433, 4466-4477
    - v. **Air Force operations above FL600:** 4454-4465
    - vi. **DOD interceptor aircraft on active air defense missions and operating without ATC clearance:** 7777
  - d. **Low-level flights.** Only on IR/VR routes.
  - e. **Speed Restrictions.**
    - i. Within Active CTR: 250 IAS, on request max. 1.2 M
    - ii. Supersonic under IFR only over FL400
    - iii. Fighter Acft below FL100: <350 IAS
  - f. Other Mil-Acft below FL100: <250 IAS

**6. AIRSPACE**

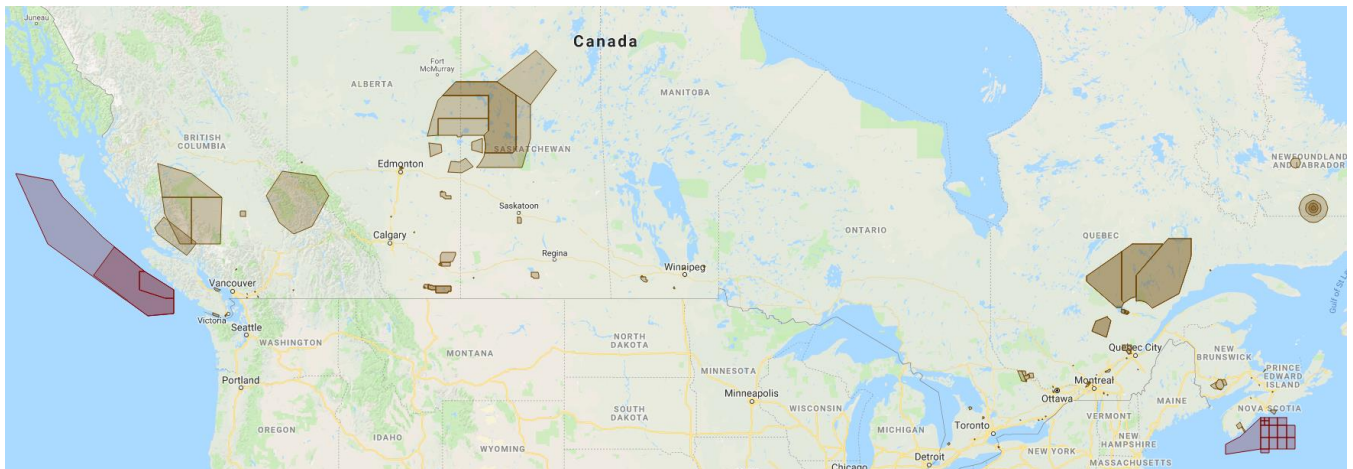
**a. United States Special Use Airspace [\[More Info\]](#)**

- i. Warning Areas
- ii. Military Operations Areas
- iii. Alert Areas
- iv. Controlled Firing Areas



**b. Canada Special Use airspace:**

- i. Restricted
- ii. Danger



**7. MILITARY AIRFIELDS**

- a. List and map of all US military bases can be found [here](#).
- b. List and map of all RCAF bases, including squadrons can be found [here](#).

**8. MILITARY CONTROL UNITS**

- a. United States DoD RAPCON facilities. (Figure 1 - Highlighted in purple)
- b. Listed positions below are used for standard daily operations. Changes might be done for individual events or special occasions. Details of operations can be found at <https://www.airnav.com/> via the airfield's website respectively.

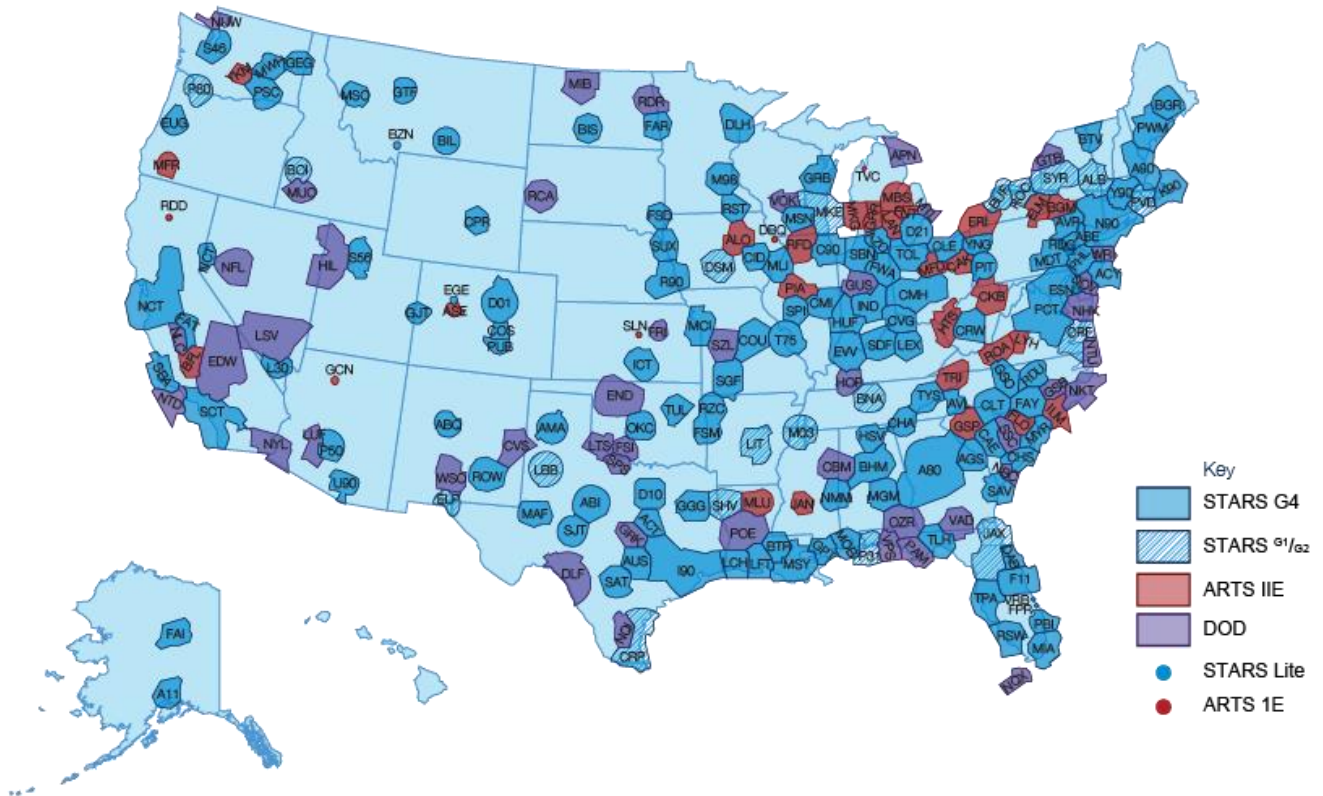


FIGURE 1 – DOD TRACON/RAPCON MAP

Login	Callsign	Frequency
APN_GND	<b>ALPENA GROUND</b>	<b>121.9</b>
APN_TWR	<b>ALPENA TOWER</b>	<b>121.35</b>
APN_APP	<b>ALPENA APPROACH</b>	<b>128.425</b>
CBM_GND	<b>COLUMBUS GROUND</b>	<b>121.9</b>
CBM_TWR	<b>COLUMBUS TOWER</b>	<b>126.65</b>
CBM_APP	<b>COLUMBUS APPROACH</b>	<b>126.075</b>

CVS_DEL	<b>CLRC DELIVY</b>	<b>120.2</b>
CVS_GND	<b>CANNON GROUND</b>	<b>121.9</b>
CVS_TWR	<b>CANNON TOWER</b>	<b>120.4</b>
CVS_APP	<b>CANNON APPROACH</b>	<b>118.425</b>
DLF_DEL	<b>CLRC DELIVERY</b>	<b>120.5</b>
DLF_GND	<b>LAUGHLIN GROUND</b>	<b>127.5 (275.8)</b>
DLF_TWR	<b>LAUGHLIN TOWER</b>	<b>125.2</b>
DOV_DEL	<b>CLRC DELIVERY</b>	<b>118.05</b>
DOV_GND	<b>DOVER GROUND</b>	<b>118.875</b>
DOV_TWR	<b>DOVER TOWER</b>	<b>126.35</b>
DOV_APP	<b>DOVER APPROACH</b>	<b>132.425</b>
EDW_GND	<b>EDWARDS GROUND</b>	<b>121.8</b>
EDW_TWR	<b>EDWARDS TOWER</b>	<b>120.7</b>
END_DEL	<b>CLRC DELIVERY</b>	<b>122.5 (225.4)</b>
END_GND	<b>VANCE GROUND</b>	<b>121.8</b>
END_TWR	<b>VANCE TOWER</b>	<b>124.05</b>
END_APP	<b>VANCE APPROACH</b>	<b>118.075</b>
FRI_DEL	<b>CLRC DELIVERY</b>	<b>119.65</b>
FRI_GND	<b>MARSHALL GROUND</b>	<b>122.9 (229.4)</b>
FRI_TWR	<b>MARSHALL TOWER</b>	<b>126.2</b>
FRI_APP	<b>MARSHALL APPROACH</b>	<b>121.25</b>
FSI_GND	<b>POST GROUND</b>	<b>121.7</b>
FSI_TWR	<b>POST TOWER</b>	<b>124.95</b>
GR_DEL	<b>CLRC DELIVERY</b>	<b>126.2</b>
GR_GND	<b>GRAY GROUND</b>	<b>121.8</b>
GR_TWR	<b>GRAY TOWER</b>	<b>120.75</b>
GTB_GND	<b>WHEELER-SACK GROUND</b>	<b>121.9</b>
GTB_TWR	<b>WHEELER-SACK TOWER</b>	<b>118.75</b>
GTB_APP	<b>WHEELER-SACK APPROACH</b>	<b>124.875</b>
GUS_DEL	<b>CLRC DELIVERY</b>	<b>123.7</b>
GUS_GND	<b>GRISSOM GROUND</b>	<b>128.425</b>
GUS_TWR	<b>GRISSOM TOWER</b>	<b>133.7</b>

GUS_APP	<b>GRISSOM APPROACH</b>	<b>121.05</b>
HMN_DEL	<b>CLRC DELIVERY</b>	<b>126.7</b>
HMN_DEL	<b>HOLLOMAN GROUND</b>	<b>127.05</b>
HMN_TWR	<b>HOLLOMAN TOWER</b>	<b>119.3</b>
HMN_APP	<b>HOLLOMAN APPROACH</b>	<b>120.6</b>
HOP_GND	<b>CAMPBELL GROUND</b>	<b>121.8</b>
HOP_TWR	<b>CAMPBELL TOWER</b>	<b>120.9</b>
HOP_APP	<b>CAMPBELL APPROACH</b>	<b>118.1</b>
LSV_DEL	<b>CLRC DELIVERY</b>	<b>120.9</b>
LSV_DEL	<b>NELLIS GROUND</b>	<b>121.8</b>
LSV_TWR	<b>NELLIS TOWER</b>	<b>132.55</b>
LSV_APP	<b>NELLIS APPROACH</b>	<b>118.125</b>
LTS_DEL	<b>CLRC DELIVERY</b>	<b>120.65</b>
LTS_GND	<b>ALTUS GROUND</b>	<b>121.85</b>
LTS_TWR	<b>ALTUS TOWER</b>	<b>119.65</b>
LTS_APP	<b>ALTUS APPROACH</b>	<b>125.1</b>
LUF_DEL	<b>CLRC DELIVERY</b>	<b>126.25</b>
LUF_GND	<b>LUKE GROUND</b>	<b>133.175</b>
LUF_TWR	<b>LUKE TOWER</b>	<b>119.1</b>
LUF_APP	<b>LUKE APPROACH</b>	<b>118.15</b>
MIB_GND	<b>MINOT GROUND</b>	<b>134.0</b>
MIB_TWR	<b>MINOT TOWER</b>	<b>120.65</b>
MIB_APP	<b>MINOT APPROACH</b>	<b>119.6</b>
MUO_DEL	<b>CLRC DELIVERY</b>	<b>127.1</b>
MUO_GND	<b>MOUNTAIN HOME GROUND</b>	<b>120.5</b>
MUO_TWR	<b>MOUNTAIN HOME TOWER</b>	<b>133.85</b>
MUO_APP	<b>MOUNTAIN HOME APPROACH</b>	<b>124.8</b>
NBC_GND	<b>BEAUFORT GROUND</b>	<b>128.15</b>
NBC_TWR	<b>BEAUFORT TOWER</b>	<b>119.05</b>
NBC_APP	<b>BEAUFORT APPROACH</b>	<b>123.7</b>
NFL_GND	<b>NAVY FALLON GROUND</b>	<b>125.1 (251.15)</b>
NFL_TWR	<b>NAVY FALLON TOWER</b>	<b>119.25</b>

NFL_APP	<b>NAVY FALLON APPROACH</b>	<b>120.85</b>
NHK_DEL	<b>CLRC DELIVERY</b>	<b>135.2</b>
NHK_GND	<b>PATUXENT GROUND</b>	<b>120.6</b>
NHK_TWR	<b>PATUXENT TOWER</b>	<b>123.7</b>
NHK_APP	<b>PATUXENT APPROACH</b>	<b>120.5</b>
NKT_DEL	<b>CLRC DELIVERY</b>	<b>125.95</b>
NKT_GND	<b>CHERRY POINT GROUND</b>	<b>128.625</b>
NKT_TWR	<b>CHERRY POINT TOWER</b>	<b>121.3</b>
NKT_APP	<b>CHERRY POINT APPROACH</b>	<b>119.35</b>
NLC_DEL	<b>CLRC DELIVERY</b>	<b>124.1</b>
NLC_GND	<b>LEMOORE GROUND</b>	<b>121.65</b>
NLC_TWR	<b>LEMOORE TOWER</b>	<b>128.3</b>
NLC_APP	<b>LEMOORE APPROACH</b>	<b>118.15</b>
NQX_DEL	<b>CLRC DELIVERY</b>	<b>121.2</b>
NQX_GND	<b>NAVY KEY WEST GROUND</b>	<b>121.7</b>
NQX_TWR	<b>NAVY KEY WEST TOWER</b>	<b>118.57</b>
NQX_APP	<b>NAVY KEY WEST APPROACH</b>	<b>124.8</b>
NTD_DEL	<b>CLRC DELIVERY</b>	<b>120.75</b>
NTD_GND	<b>POINT MUGU GROUND</b>	<b>121.6</b>
NTD_TWR	<b>POINT MUGU TOWER</b>	<b>124.85</b>
NTD_APP	<b>POINT MUGU APPROACH</b>	<b>128.65</b>
NTU_DEL	<b>CLRC DELIVERY</b>	<b>125.4 (254.4)</b>
NTU_GND	<b>OCEANA GROUND</b>	<b>133.6 (336.4)</b>
NTU_TWR	<b>OCEANA TOWER</b>	<b>127.075</b>
NTU_APP	<b>OCEANA APPROACH</b>	<b>123.9</b>
NUW_DEL	<b>CLRC DELIVERY</b>	<b>124.15</b>
NUW_GND	<b>WHIDBEY GROUND</b>	<b>121.75</b>
NUW_TWR	<b>WHIDBEY TOWER</b>	<b>127.9</b>
NUW_APP	<b>WHIDBEY APPROACH</b>	<b>118.2</b>
NYL_DEL	<b>CLRC DELIVERY</b>	<b>118.0</b>
NYL_GND	<b>YUMA GROUND</b>	<b>121.9</b>
NYL_TWR	<b>YUMA TOWER</b>	<b>119.3</b>

NYL_APP	<b>YUMA APPROACH</b>	<b>124.7</b>
OZR_DEL	<b>CLRC DELIVERY</b>	<b>118.075</b>
OZR_GND	<b>CAIRNS GROUND</b>	<b>121.9</b>
OZR_TWR	<b>CAIRNS TOWER</b>	<b>135.2</b>
OZR_APP	<b>CAIRNS APPROACH</b>	<b>121.1</b>
PAM_DEL	<b>CLRC DELIVERY</b>	<b>118.05</b>
PAM_GND	<b>TYNDALL GROUND</b>	<b>121.9</b>
PAM_TWR	<b>TYNDALL TOWER</b>	<b>133.95</b>
PAM_APP	<b>TYNDALL APPROACH</b>	<b>119.775</b>
POE_GND	<b>POLK GROUND</b>	<b>121.8</b>
POE_TWR	<b>POLK TOWER</b>	<b>119.0</b>
POE_APP	<b>POLK APPROACH</b>	<b>123.7</b>
RCA_GND	<b>ELLSWORTH GROUND</b>	<b>121.8</b>
RCA_TWR	<b>ELLSWORTH TOWER</b>	<b>126.05</b>
RCA_APP	<b>ELLSWORTH APPROACH</b>	<b>119.5</b>
RDR_GND	<b>RED RIVER GROUND</b>	<b>119.15</b>
RDR_TWR	<b>RED RIVER TOWER</b>	<b>124.9</b>
RDR_APP	<b>RED RIVER APPROACH</b>	<b>118.1</b>
SPS_DEL	<b>CLRC DELIVERY</b>	<b>121.2</b>
SPS_GND	<b>SHEPPARD GROUND</b>	<b>125.5</b>
SPS_TWR	<b>SHEPPARD TOWER</b>	<b>119.75</b>
SPS_APP	<b>SHEPPARD APPROACH</b>	<b>118.2</b>
SSC_GND	<b>SHAW GROUND</b>	<b>126.1</b>
SSC_TWR	<b>SHAW TOWER</b>	<b>126.65</b>
SSC_APP	<b>SHAW APPROACH</b>	<b>125.4</b>
SZL_DEL	<b>CLRC DELIVERY</b>	<b>121.75</b>
SZL_GND	<b>WHITEMAN GROUND</b>	<b>128.275</b>
SZL_TWR	<b>WHITEMAN TOWER</b>	<b>132.4</b>
SZL_APP	<b>WHITEMAN APPROACH</b>	<b>127.45</b>
VAD_DEL	<b>CLRC DELIVERY</b>	<b>120.625</b>
VAD_GND	<b>MOODY GROUND</b>	<b>138.95</b>
VAD_TWR	<b>MOODY TOWER</b>	<b>128.45</b>



VOK_GND	<b>VOLK GROUND</b>	<b>121.9</b>
VOK_TWR	<b>VOLK TOWER</b>	<b>127.5</b>
VOK_APP	<b>VOLK APPROACH</b>	<b>135.25</b>
VPS_DEL	<b>CLRC DELIVERY</b>	<b>127.7</b>
VPS_GND	<b>EGLIN GROUND</b>	<b>121.8</b>
VPS_TWR	<b>EGLIN TOWER</b>	<b>118.2</b>
VPS_APP	<b>EGLIN APPROACH</b>	<b>125.1</b>
WRI_DEL	<b>CLRC DELIVERY</b>	<b>135.2</b>
WRI_GND	<b>MC GUIRE GROUND</b>	<b>121.8</b>
WRI_TWR	<b>MC GUIRE TOWER</b>	<b>118.65</b>
WRI_APP	<b>MC GUIRE APPROACH</b>	<b>124.15</b>

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**Signed By**

Seth Leiser

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