BUF - BUFFALO, NY
IAG - NIAGARA FALLS, NY

STANDARD OPERATING PROCEDURES

Effective June 24 2010

Version 1.0

RECORD OF REVISIONS

REVISION	DATED
N/A	

Authorization through:

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Thomas King, ZOB Training Administrator

Not intended for use outside of VATSIM.

CHAPTER 1 - OVERVIEW

Section 1: General

1-1-1 PURPOSE. This order contains the Standard Operating Procedures for Buffalo (BUF) ATCT, Niagara Falls (IAG) ATCT, Buffalo TRACON and any satellite airport within. Please NOTE that this is a condensed supplement and any questions regarding information herein should be directed to the appropriate ZOB staff.

1-1-2 POF FILE. BUF and IAG facilities are *required* to use the BUF POF file.

Section 2: Buffalo TRACON facilities and frequencies.

1-2-1 BUFFALO (BUF) ATCT.

BUF_DEL
Frequency: 124.70
Vox Channel: buf_124.70
BUF_GND
Frequency: 133.20
Vox Channel: buf_133.20
BUF_TWR
Frequency: 120.50
Vox Channel: buf_120.50
KBUF ATIS
Frequency: 135.35

Radio name: "Buffalo"

1-2-2 BUFFALO (BUF) TRACON.

BUF_E_APP
(053-233 degrees)
Frequency: 126.15*
Vox Channel: buf_126.15
BUF_W_APP
(234-052 degrees)
Frequency: 126.50
Vox Channel: buf_126.50
BUF_F_APP
(Final approach radar)
Frequency: 123.80
Vox Channel: buf_123.80

Radio name: "Buffalo"

1-2-3 NIAGARA FALLS (IAG) ATCT.

IAG_DEL
Frequency: 119.25
Vox Channel: iag_119.25
IAG_GND
Frequency: 121.70
Vox Channel: iag_121.70
IAG_TWR
Frequency: 118.50
Vox Channel: iag_118.50
KIAG_ATIS
Frequency: 120.80

Radio name: "Niagara"

*** Denotes a primary combined facility frequency for BUF TRACON.**

Section 3: Beacon and Computer Assignments

1-3-1 BUFFALO CODE ALLOCATION BLOCKS. Code blocks are shared between KBUF and KIAG ATCT.

CODE BLOCK	USAGE
0140 - 0177	IFR Codes
0401 - 0414	VFR Departures
0415 - 0437	VFR Arrivals
0440 - 0462	VFR Over Flights

(1) The IFR code block distributed between BUF and IAG facilities are automatically assigned through the "assign squawk" function.
(2) All VFR beacon codes must be *manually* inserted by the controller into the "Squawk" column found on the radar client as a means to avoid the incorrect code block assigned by the computer.
(3) VFR Departure and Arrival code blocks will only be used for aircraft filed for BUF or IAG. Arriving or departing VFR aircraft from BUF TRACON satellite airports will be assigned a code within the 0440 – 0462 block.

Section 4: BUF TRACON Airports

1-4-1 CLASS GOLF AIRFIELDS.
K9G3 – Akron, NY (East Radar Sector, BUF R-060 9 DME)
KBQR – Lancaster, NY (East Radar Sector, BUF R-110 1.5 DME)
KDKK – Dunkirk, NY (West Radar Sector, BUF R-235 39 DME)

1-4-2 CLASS DELTA AIRFIELDS.
KIAG – Niagara Falls, NY (West Radar Sector, BUF R-315 17 DME)

1-4-3 CLASS CHARLIE AIRFIELDS.
KBUF – Buffalo, NY (Split Radar)

*Note that not all class Golf airfields may appear listed.

CHAPTER 2 – BUF ATCT

Section 1: Buffalo Departure Procedures

2-1-1 IFR DEPARTURE ROUTING. All NAVAIDs found in the Buffalo 3 departure are recommended. Additional routing through outside fixes not found on the Buffalo 3 departure plate are approved (i.e. HANKK, VAIRS, V36 etc…) at the BUF airport.

2-1-2 IFR DEPARTURES INITIAL CLIMB ASSIGMNENT. All IFR departures will be assigned an initial climb of 10,000 whereas higher may be expected in 10 minutes after departure. Departing aircraft filing less than 10,000 as a cruising altitude may expect an initial climb to their filed cruise altitude.

2-1-3 VFR DEPARTURES INITIAL CLIMB ASSIGNMENT.
(1) All VFR outbound aircraft are to be assigned a departure frequency based on direction of flight, beacon code, and may expect at or below 2,500, regardless of altitude filed, the aircraft may expect higher following handoff to the Buffalo TRACON.
(2) VFR aircraft requesting to remain in the pattern will be assigned a discreet squawk code; no altitude needs to be specified for this request.

2-1-4 PREFERRED RUNWAYS. Buffalo ATCT shall use Runway 23 or Runway 5 as the preferred primary runway.

Section 2: Buffalo Local Control

2-2-1 TAKEOFF CLEARANCE. All departing aircraft, IFR or VFR, are to maintain runway heading unless an assigned departure heading or direction has been coordinated with TRACON.

2-2-2 GO AROUNDS AND MISSED APPROACHES. Local control shall advise the radar sector which will provide radar service to the aircraft. Local control may climb the missed approach or go-around up to 2500 and turn 20 degrees left or right of the centerline, if required, for separation without coordination. The affected sector shall be advised prior to communication transfer.

2-2-3 SECONDARY RUNWAY RELEASE. Local control must obtain releases for all secondary runway departures. EXAMPLE: Runway 23 is the designated departure runway; Runway 32 is requested by the departing aircraft. Local control must therefore seek a release from TRACON.

CHAPTER 3 – IAG ATCT

Note: Class D Airfield

Section 1: Niagara Falls Departure Procedures

3-1-1 IFR DEPARTURES INITIAL CLIMB ASSIGMNENT.
(1) Aircraft with departure fix filed within U.S. airspace will be assigned an initial climb of 10,000 whereas higher may be expected in 10 minutes after departure. Departing aircraft filing less than 10,000 as a cruising altitude may expect an initial climb to their filed cruise altitude.
(2) Aircraft with departure fix filed within Canadian airspace will be assigned an initial climb of 6,000 whereas higher may be expected in 10 minutes after departure. Departing aircraft filing less than 6,000 as a cruising altitude may expect an initial climb to their filed cruise altitude.

3-1-2 VFR DEPARTURES.
(1) VFR aircraft departing IAG without flight following shall not be assigned a departure frequency nor beacon code, and use VFR code "1200" at all times. Common class D procedures apply.
(2) VFR aircraft requesting flight following shall be issued a departure frequency and beacon code.

Section 2: Niagara Local Control

3-2-1 TAKEOFF CLEARANCE.
(1) All VFR departures will be turned to their requested direction of flight prior to frequency change.
(2) IFR departures must have a release approval from TRACON prior to takeoff clearance. Departure headings for IFR aircraft will be issued through TRACON. It is the responsibility of IAG TWR to coordinate with TRACON prior to issuing a heading after departure to IFR aircraft.

CHAPTER 4 – BUF TRACON

Section 1: Radar Sectors

SEE APPENDIX (BELOW) FOR RADAR SECTOR DELEGATION.

4-1-1 FINAL RADAR OPERATIONS. When Final Radar (BUF_F_APP) is in operation, West and East radar shall, unless otherwise verbally coordinated, handoff arriving aircraft descending to or level at 5,000 feet. Assigned headings shall be written in the scratchpad prior to handoff to the Final Radar. Final may descend and turn arrival aircraft toward the localizer or to establish them on a downwind without coordination.

4-1-2 SEQUNCING AND COORDINATION BETWEEN WEST RADAR (WR) AND EAST RADAR (ER) SECTORS.
(1) **RWY 23 -** When the Final Radar is not in operation, WR must coordinate with ER for a sequence on all arrivals. Assignment of a sequence constitutes approval for WR to vector to the localizer Final Approach Course subject to the following: WR retains the responsibility for separation on spacing relative to ER traffic being followed.
(2) **RWY 5 -** When the Final Radar is not in operation, ER must coordinate with WR for a sequence on all arrivals. Assignment of a sequence constitutes approval for ER to vector to the localizer Final Approach Course subject to the following: ER retains the responsibility for separation on spacing relative to WR traffic being followed.
(3) **RWY 32 –** (No Final Radar authorized) WR must coordinate with ER for a sequence on all arrivals. WR to vector to the extended centerline subject to the following: WR retains the responsibility for separation on spacing relative to ER traffic being followed.
(4) **RWY 14 –** (No Final Radar authorized) ER must coordinate with WR for a sequence on all arrivals. Assignment of a sequence constitutes approval for ER to vector to the localizer Final Approach Course subject to the following: ER retains the responsibility for separation on spacing relative to WR traffic being followed.

4-1-3 NIAGARA FALLS (IAG) ARRIVAL SECTOR. When West Radar (WR) and East Radar (ER) and/or Final Radar (FR) is open, and Runway 05 or 23 is the primary runway in use, ER/FR shall handoff to WR. When Runway 14 or 32 is in use as the primary runway, unless otherwise coordinated, WR shall handoff to ER for aircraft landing IAG. **SEE APPENDIX (BELOW) FOR RADAR SECTOR DELEGATION.**

Section 2: Departures

4-2-1 NOISE ABATEMENT. The following informal noise abatement procedures apply to all turbojets and all aircraft weighing more than 12,500 pounds. Deviation from this procedure is approved where as to ensure separation and integrity of the operation.
(1) Radar controllers shall ensure that all traffic remains on runway heading until leaving 3,000 feet MSL before proceeding on course.

EXAMPLE: "Cactus 1740, Buffalo Departure, Radar Contact passing through 1,400. Upon leaving 3,000 feet turn left to join the Victor 33 airway on course…"

Section 3: Arrivals

4-3-1 DESCENT. Avoid assigning interim descents of less than 6,000 feet MSL for aircraft landing at BUF, when possible. Aircraft within a 22 nautical mile radius of the airport may be instructed to initiate a further descent below 6,000 feet MSL. Descent of the aircraft should commence no more than 40 miles nor less than 30 miles from the landing airport, when possible

Section 4: Radar Handoff Procedures

4-4-1 HANDOFFS. All handoffs to BUF_APP shall commence at or before the transfer-of-control (TCP) point. Deviations may include verbal and/or written coordination or letter of agreement.

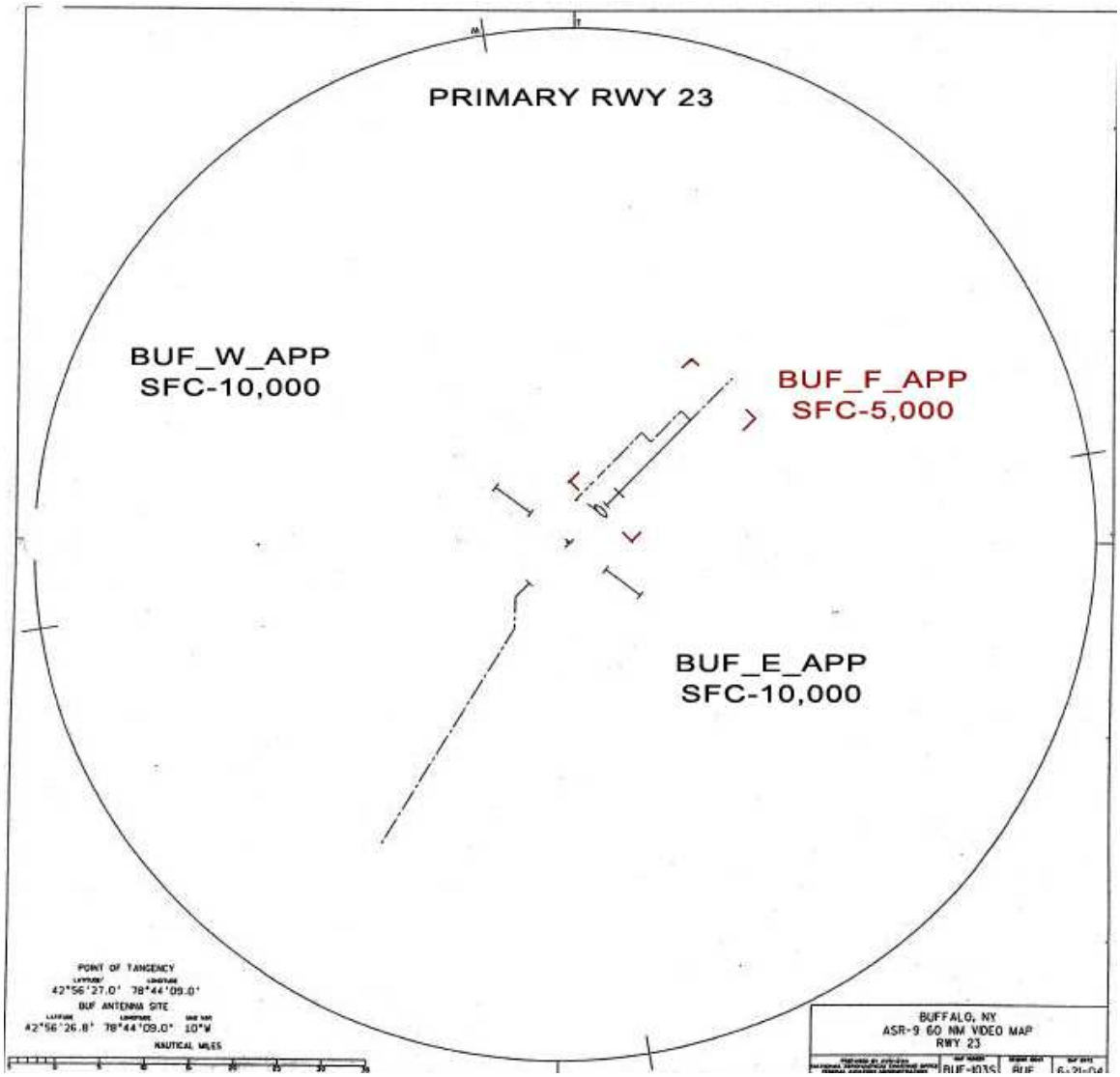
(1) BUF LOAs: **Toronto FIR** (See Letters of Agreement found on zobartcc.org)

(2) Descent requirements for Buffalo area (BUF/IAG):

(a) ZOB CENTER will handoff all arrivals at 11,000 with exception to aircraft that are filed for lower.

(b) ROC TRACON will handoff all arrivals at 6,000 with exception to aircraft that are filed for lower.

APPENDIX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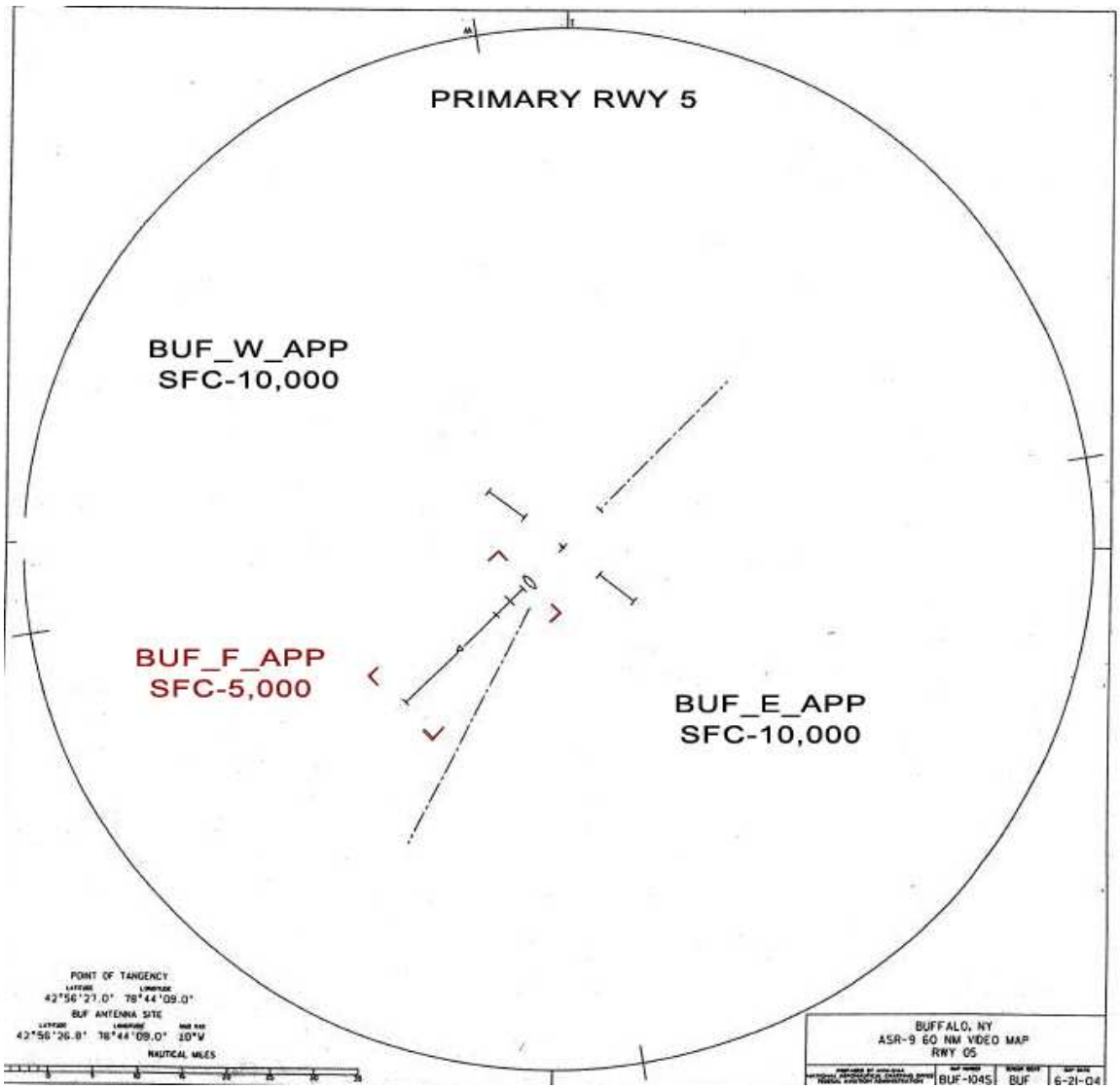
BUF_W_APP
SFC-10,000
BUF_F_APP
SFC-5,000
BUF_E_APP
SFC-10,000
POINT OF TANGENCY
42°56'27.0' 78°44'09.0'
BUF ANTENNA SITE
42°56'26.8' 78°44'09.0' 10°W
NAUTICAL MILES
BUFFALO, NY
ASR-9 60 NM VIDEO MAP
RWY 23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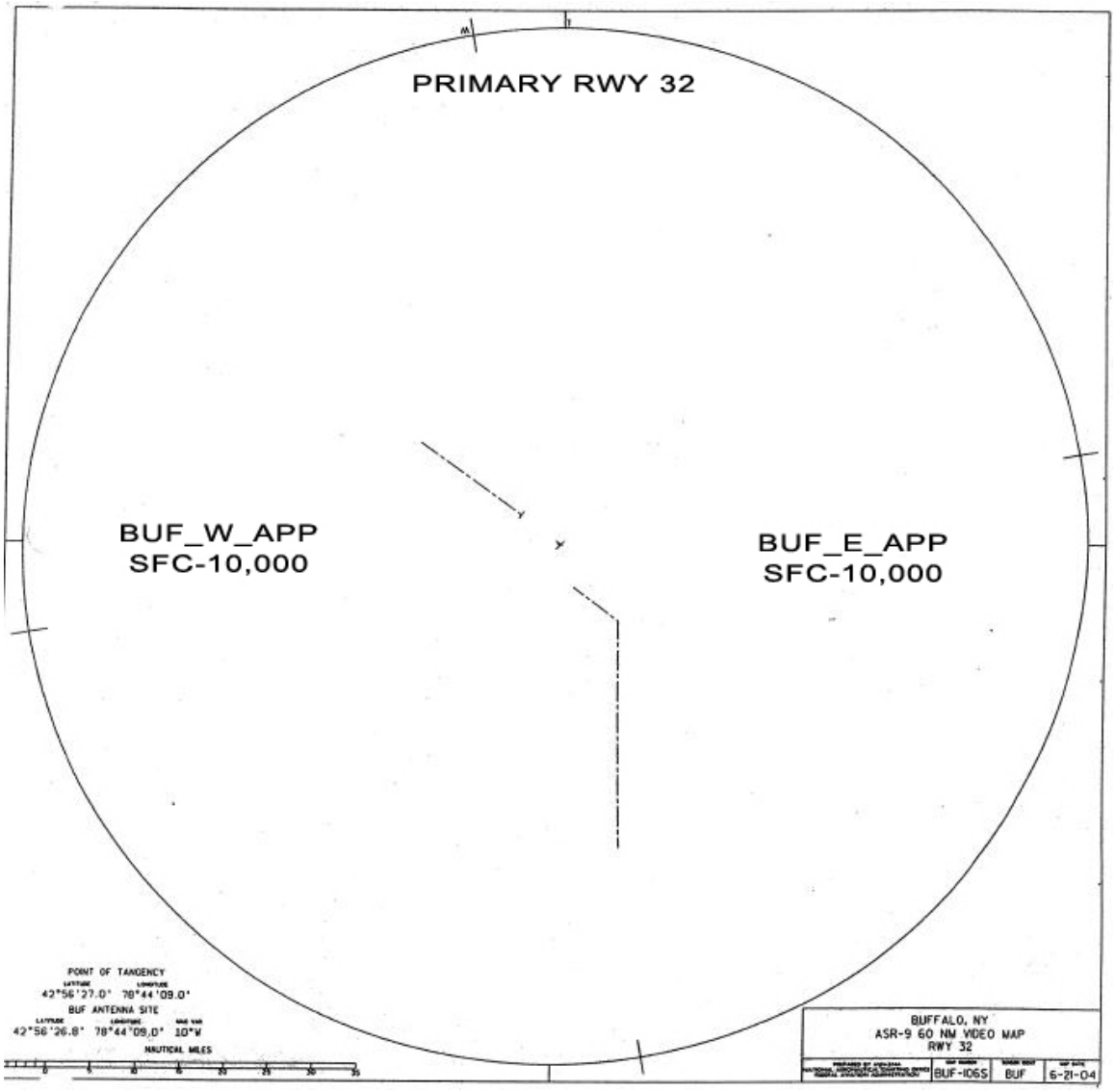
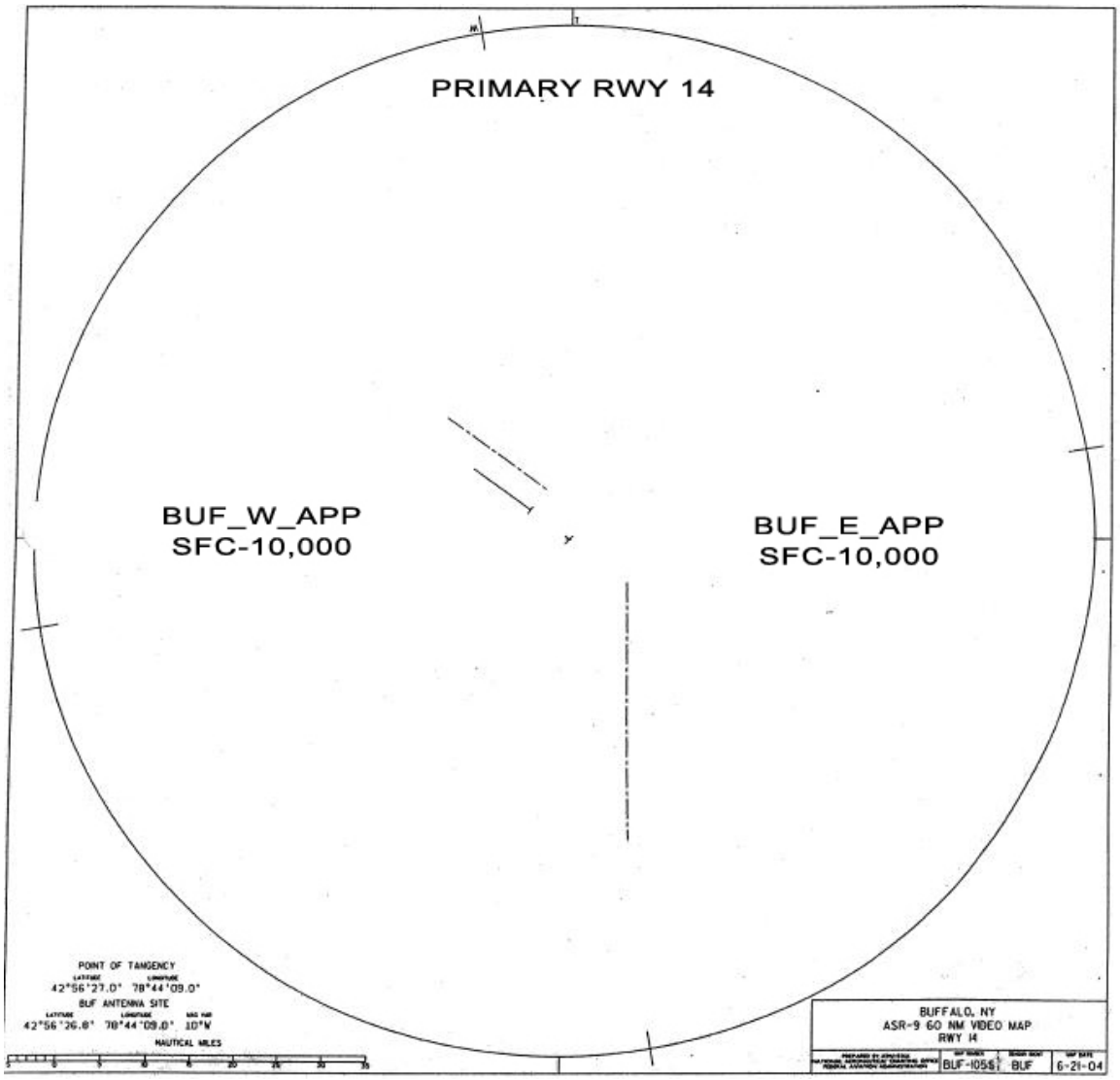
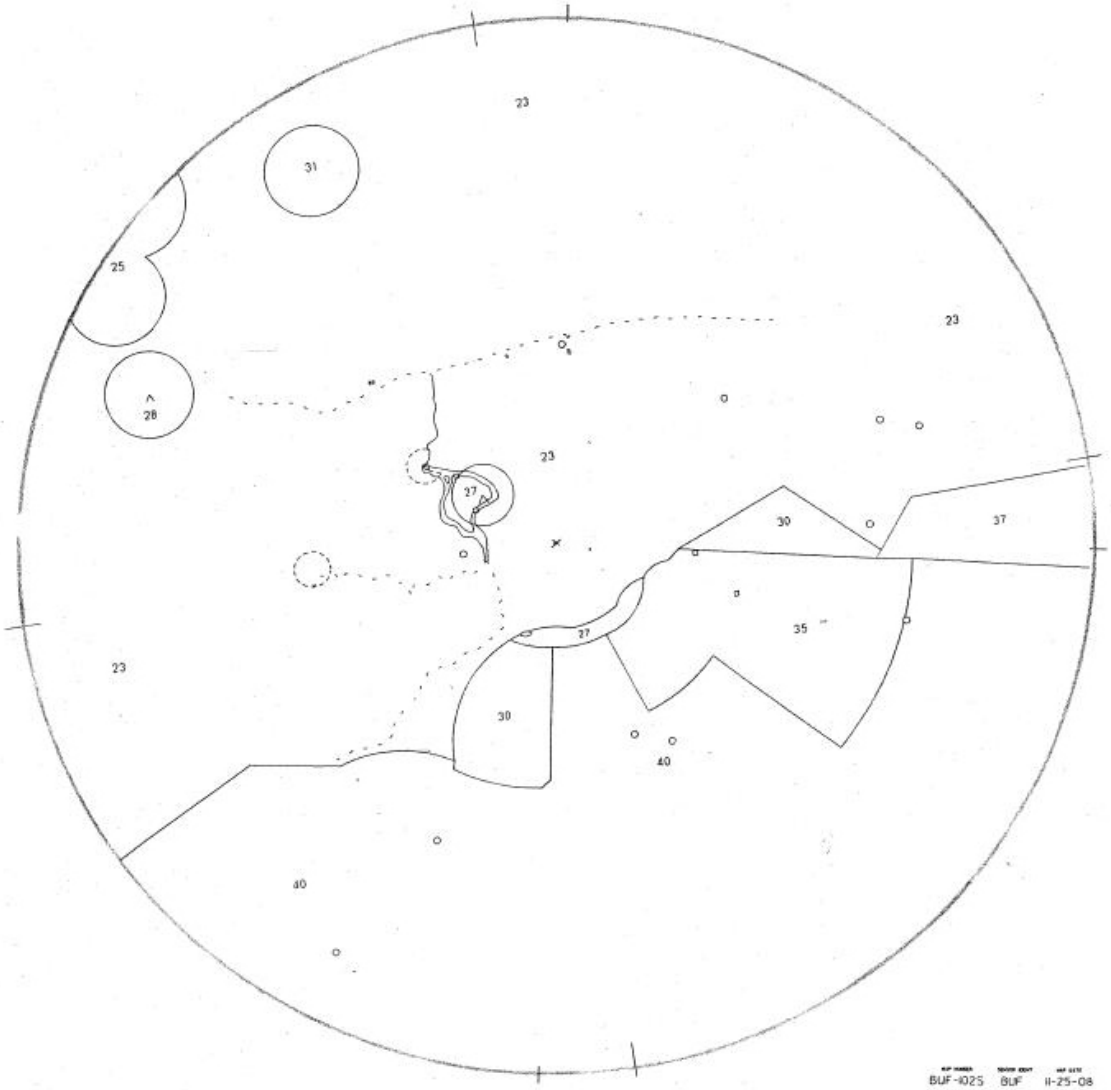
BUF_W_APP
SFC-10,000
BUF_F_APP
SFC-5,000
BUF_E_APP
SFC-10,000
POINT OF TANGENCY
42°56'27.0" 78°44'09.0"
BUF ANTENNA SITE
42°56'26.8" 78°44'09.0" 10°W
NAUTICAL MILES
BUFFALO, NY
ASR-9 60 NM VIDEO MAP
RWY 05
BUF-104S
BUF
6-21-04


PRIMARY RWY 32
BUF_W_APP
SFC-10,000
BUF_E_APP
SFC-10,000
POINT OF TANGENCY
LATITUDE LONGITUDE
42°56'27.0" 78°44'09.0"
BUF ANTENNA SITE
LATITUDE LONGITUDE MAG VAR
42°56'26.8" 78°44'09.0" 10°W
NAUTICAL MILES
0 5 10 15 20 25 30 35
BUFFALO, NY
ASR-9 60 NM VIDEO MAP
RWY 32
PREPARED BY AERONAUTICAL CENTER (AMC)
MAP NUMBER
BUF-106S
RADAR SITE
BUF
MAP DATE
6-21-04


PRIMARY RWY 14
BUF_W_APP
SFC-10,000
BUF_E_APP
SFC-10,000
POINT OF TANGENCY
LATITUDE LONGITUDE
42°56'27.0" 78°44'09.0"
BUF ANTENNA SITE
LATITUDE LONGITUDE MAG VAR
42°56'26.8" 78°44'09.0" 10°W
NAUTICAL MILES
BUFFALO, NY
ASR-9 60 NM VIDEO MAP
RWY 14
BUF-105S
BUF
6-21-04

MINIMUM VECTORING ALTITUDE MAP (MVA)



BUF-402S BUF 11-25-08