



**BOSTON ARTCC (vZBW)
STANDARD OPERATING PROCEDURE**

**NANTUCKET ATCT (KACK)
HYANNIS ATCT (KHYA)
MARTHAS VINEYARD ATCT (KMVY)
CAPE APPROACH (K90)**

<i>RELEASE RECORD</i>			
Version	Date	Author	Notes
1.0	24 April 2009		Initial Release
1.1	22 Jun 2014	KZ	Martha's Vineyard Radar added
1.2	05 Mar 2015	BN	Format to match vZBW SOPs, new ACK GND freq

CHAPTER 1. OVERVIEW

- a. This document outlines the air traffic control procedures and responsibilities for controllers working positions at the ACK ATCT and/or the K90 TRACON.

(1) Quick Reference Sheets		pp. 2-3
(2) Chapters 2-4	Tower Operating Procedures	pp. 4-8
(3) Chapter 5-6	Radar Operating Procedures	pp. 9-10
(4) Chapter 7	Interfacility Coordination	pp. 11-13
(5) Chapter 8	Appendices	pp. 14-18

b. Callsign Usage and Frequency Delegation:

- (1) The following callsigns and frequencies shall be used when working positions at ACK ATCT or K90 TRACON.

I. ACK_DEL	Clearance Delivery (CD)	119.37	(Chapter 2)
II. ACK_GND	Ground Control (GC)	132.50	(Chapter 3)
III. ACK_TWR	Local Control (LC)	118.30	(Chapter 4)
IV. CAPE_N_APP	Hyannis Radar (YA)	118.20	(Chapter 5)
V. CAPE_S_APP	Nantucket Radar (AA)	126.10	(Chapter 6)
VI. CAPE_V_APP	Martha's Vineyard Radar (VA)	133.75	

Quick Reference Sheets

ACK_DEL (119.37)

Initial Altitude IFR Aircraft: 2000 feet

Departure Procedures: STEWY (RNAV) DP or Radar vectors to [FIX]

Departures to BOS: FREDO.BOS or LFV(and if able, SCUPP) @ 4000, 6000, or 8000

Departures to K90 fields: Radar Vectors Direct @ 2000

ACK_GND (132.50)

Taxi Routes: Due to the simple taxiway system, there are no preferred taxi routes. Generally, Taxiway E should be used for outbounds, and Taxiway F should be used for inbounds.

Intersection Departures: Coordinate all intersection departures with Tower prior to transfer of communications

ACK_TWR (118.30)

Airspace: 4 NM from Nantucket Airport from surface to 2,500 feet.

Runways: Runway 6 or 24 shall be an active runway at all times.

Calm Wind: Runway 24 is the calm wind runway. Additional runways may be opened as needed.

	Departures:	Missed Approach	
RWY 6	010° - 080°	Runway Heading	1,500 feet
RWY 24	230° - 270°	Runway Heading	1,500 feet
RWY 15	150° - 190°	Runway Heading	1,500 feet
RWY 33	310° - 350°	Runway Heading	1,500 feet

CAPE_APP (118.20/126.10/133.75)

NEWBE STAR	DEEPO at 11,000	Expect handoff at NEWBE
DEEPO STAR [RNAV]	DEEPO at 11,000	Expect handoff at MINNK
DUNKK V141 GAILS	3,000/5,000	Expect handoff at DUNKK
LFV	3,000/5,000/7,000/9,000	Expect handoff at boundary
FREDO	3,000/5,000	Expect handoff at FREDO
MVY359/035	3,000/5,000/7,000/9,000	Expect handoff at boundary

Note: The peninsular region of the Cape is a Wildlife Reserve. Unless landing or departing a K90 field, **all traffic must remain at or above 2,000 feet at all times.**

HYA_GND (118.45)

Initial Altitude IFR Aircraft: 2000 feet
Departure Procedures: Radar vectors to [FIX]
Departures to BOS: FREDO.BOS or LFV(and, if able, SCUPP) @ 4000
Departures to K90 fields: Radar Vectors Direct @ 2000

Intersection Departures: Coordinate all intersection departures with Tower prior to transfer of communications

HYA_TWR (119.50)

Airspace: 4 NM from Hyannis Airport from surface to 2,600 feet.
Runways: Runway 6 or 24 shall be an active runway at all times. Coordinate with ACK_TWR to determine the flow in use.
Calm Wind: Runway 24 is the calm wind runway. Additional runways may be opened as needed.

	Departures:	Missed Approach	
RWY 6	020° - 130°	Runway Heading	2,000 feet
RWY 24	210° - 290°	Runway Heading	2,000 feet
RWY 15	130° - 170°	Runway Heading	2,000 feet
RWY 33	310° - 350°	Runway Heading	2,000 feet

MVY_GND (124.35)

Initial Altitude IFR Aircraft: 2000 feet
Departure Procedures: Radar vectors to [FIX]
Departures to BOS: FREDO.BOS or LFV(and, if able, SCUPP) @ 4000 or 6000
Departures to K90 fields: Radar Vectors Direct @ 2000

Intersection Departures: Coordinate all intersection departures with Tower prior to transfer of communications

MVY_TWR (121.40)

Airspace: 4 NM from Martha's Vineyard Airport from surface to 2,600 feet.
Runways: Runway 6 or 24 shall be an active runway at all times. Coordinate with ACK_TWR to determine the flow in use.
Calm Wind: Runway 24 is the calm wind runway. Additional runways may be opened as needed.

Releases: Verbal releases must be obtained from K90 for all IFR/SVFR departures. If no further instructions are received, the aircraft is assumed to be released on runway heading climbing to 2,000 feet.

CHAPTER 2. CLEARANCE DELIVERY

a. Altitude Assignments.

- (1) Assign all IFR departures 2,000 feet
- (2) Assign all VFR departures requesting radar services 2,500 feet, or lower requested altitude.
- (3) Aircraft shall expect requested altitude ten (10) minutes after departure.

b. VFR Aircraft.

- (1) VFR aircraft requesting radar services shall be assigned the appropriate altitude, departure frequency, and a discrete squawk code.

EXAMPLE: "Maintain VFR at or below 2,500 until advised. Departure frequency 126.10, squawk 5531."

- (2) If a VFR aircraft has specifically declined radar services, do not assign a discrete squawk code. However, still assign the appropriate initial altitude.

EXAMPLE: "Maintain VFR at or below 2,500 until advised."

(3) SVFR

- (a) All Special VFR (SVFR) departures shall be instructed to maintain SVFR at or below 1,500 feet.

c. IFR Aircraft.

- (1) Clear IFR aircraft via the appropriate preferred routing.

(a) If an aircraft is unable to accept a preferred route, coordinate with the appropriate ZBW controller(s) to determine an acceptable route.

- (2) The **STEWY DP (RNAV)** is the only Departure Procedure available. When departing Runway 6, properly equipped aircraft may fly this procedure. Clearance Delivery must insert this into the Flight Plan.

EXAMPLE: "Cleared to (destination) via the STEWY (#) RNAV Departure, MVY transition, as filed."

- (3) Aircraft NOT equipped to fly the STEWY DP shall be cleared via radar vectors to the first fix or navaid, then as filed (or as amended).

EXAMPLE: "Cleared to (destination) via radar vectors MVY, as filed"

- (4) Departures to KBOS (Boston Logan International)

(a) All aircraft shall be routed via FREDO.BOS or LFV(.SCUPP) at 4,000, 6,000 or 8,000. Assign aircraft of similar performance to the same altitude.

CHAPTER 3. GROUND CONTROL

- a. Ground Control is responsible for the movement of aircraft on all airport movement areas, excluding any active runway(s).

b. Non-Movement Areas.

- (1) The portion of Taxiway F between A and B is a non-movement area. Aircraft may taxi and push back in this area without a clearance from air traffic control.

c. Taxiway and Run-up Restrictions.

- (1) Except aircraft inbound to the ramp, do not permit any aircraft to use Taxiway F between A and B.
- (2) The centerline of Taxiway F is only 80 feet from the ramp. Use caution when taxiing large aircraft on Taxiway F when aircraft are parked at the GA ramp.
- (3) The centerlines of Taxiway F and Taxiway E are separated by only 125 feet. Use caution when large aircraft are operating in opposite directions on these taxiways.
- (4) Runway 12-30 may be used as a taxi route to Runway 33 when necessary to avoid excessive taxiing on Runway 15-33.

d. Intersection departures.

- (1) Coordinate all intersection departures with Local Control and provide aircraft departing from an intersection with the available takeoff distance from the assigned intersection.

CHAPTER 4. LOCAL CONTROL

- a. Local Control is authorized to provide services within the area extending radially outward 4 nautical miles (NM) from the Nantucket Airport, upwards from the surface to 2,500 feet, and on all active runways. These services include:
- (1) Separation between successive departures.
 - (2) Separation between successive arrivals.
 - (3) Separation between arrivals and departures.
 - (4) Separation between overflights and other aircraft.
 - (5) Utilization of visual separation as appropriate.
- b. **Runway selection.**
- (1) Runway 6 or Runway 24 shall be advertised as active at all times. Additional runways may be opened at the discretion of the Local Controller.
 - (2) Local Control must coordinate with the other Cape area towers (HYA and MVY) to determine the flow in use. All Cape airports must be on the same flow at all times. The ACK_TWR controller shall, after coordinating with the other Cape Towers, determine what flow will be used by all Cape Towers and pass this information to relevant Radar sectors.
 - (a) *Landing runway 6 is the Northeast flow; landing runway 24 is the Southwest flow.*
 - (3) Only the runway being advertised as active should be used unless:
 - (a) An aircraft expresses an operational necessity for an inactive runway.
 - (b) For departures, a release is obtained from Radar.
- c. **Runway Changes.**
- (1) ACK_TWR shall initiate all runway changes and coordinate with the other Cape Towers. Once a decision is reached, the relevant Radar sectors shall be informed as to when the new flow will come into effect.

(2) Local Control shall advise Radar of the last departure on the old configuration and the first departure on the new configuration. Radar shall advise LC of the last arrival on the old configuration and the first arrival on the new configuration. The first departure after a runway change requires a release from Radar.

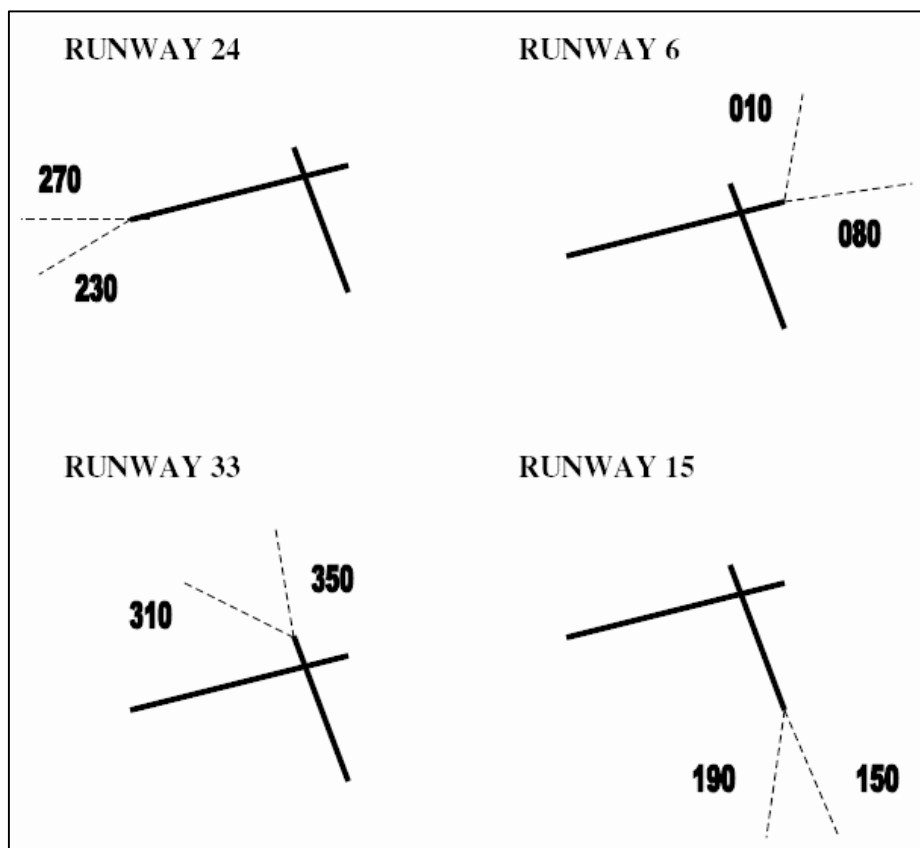
d. Departures.

(1) Releases

- (a) All aircraft departing the primary runway (Runway 6 or Runway 24 as appropriate) do not require a release from Radar.
- (b) Releases from all runways other than the primary runway must be manually coordinated with Radar.
- (c) Releases may be accomplished by verbal or textual coordination ("KAP368 runway 15. Released, RE. DM").
- (d) Releases are valid for a period of three (3) minutes.

(2) Departure Headings

- (a) LC shall assign all departures an initial heading within the Departure Corridor. The heading should turn the aircraft toward his flight planned route. Assigned headings need not be coordinated with Radar.



e. Arrival procedures.

(1) All aircraft executing an unintentional missed approach shall be assigned to fly the runway heading and to climb and maintain 1,500 feet.

(a) Coordinate with the appropriate Radar sector and hand off the aircraft as soon as possible.

(b) Automatic releases are cancelled until otherwise advised by the Radar controller.

(2) Practice Approaches

(a) Aircraft executing practice approaches shall be handed off to AR/DR no later than the missed approach point.

(b) Practice approach aircraft shall be issued a heading within the Departure Corridor and be cleared to 2,000 or as otherwise advised by Radar.

(c) Aircraft wishing to discontinue practice approaches at ACK shall be issued a heading within the Departure Corridor and manually coordinated with Radar.

f. Traffic patterns.

(1) Generally, aircraft remaining in the pattern should not be assigned a discrete squawk code. This prevents Radar from mistakenly tracking the target, and prevents Conflict Alerts from going off.

CHAPTER 5. RADAR SECTORS

HYANNIS RADAR (YA)

Primary: 118.200

a. Airspace.

(1) See Appendix 3.

b. Departures.

- (1) Hyannis Radar is responsible for departures from Hyannis (HYA). Hyannis will also be responsible for Martha's Vineyard (MVY) unless Martha's Vineyard Radar is staffed.
- (2) Departing aircraft shall be cleared on to their filed routing as soon as practicable.
- (3) When appropriate, climb departing aircraft to 10,000 feet or lower assigned altitude.
- (4) Initiate an automated handoff to the appropriate ZBW sector upon the departure being cleared on course and ensured free of traffic conflicts.
- (5) Issue transfer of radio communications to the appropriate ZBW sector upon passing 6,000-7,000 feet or within 10NM the APP/CTR boundary, as appropriate
- (6) Traffic permitting, the departure controller shall clear VFR aircraft to proceed on course and/or climb to their requested altitude
 - (a) *"Proceed on course, climb to requested VFR altitude"*

c. Arrivals.

- (1) Unless otherwise coordinated, clear HYA arrivals for the approach that is advertised on the ATIS.
- (2) Initiate communications transfer for arrivals no greater than 12 miles and no less than 7 miles from the airport.

d. Intrafacility Coordination.

- (1) The flows below are optional and may be changed with the agreement of both controllers.

- (2) If the Northeast flow is in use, transfer ACK arrivals from the north to Nantucket Radar at 3,000 on a vector through Area H (See Appendix 4).
- (3) If the Northeast flow is in use, transfer ACK arrivals from the west to Nantucket Radar at 4,000 on a vector through the ACK South Arrival Gate (See Appendix 4).
- (4) If the Northeast flow is in use, transfer ACK arrivals from the northeast to Nantucket Radar at 5,000 via direct ACK VOR through the ACK North Arrival Gate (See Appendix 4).
- (5) If the Southeast flow is in use, transfer ACK arrivals from the north to Nantucket Radar at 2,000 on a vector through the ACK North Arrival Gate (See Appendix 4).

NANTUCKET RADAR (AA)**118.150****a. Airspace.**

- (1) See Appendix 3.

b. Departures.

- (1) Nantucket Radar is responsible for departures from Nantucket (ACK).
- (2) Departing aircraft shall be cleared on to their filed routing as soon as practicable.
- (3) When appropriate, climb departing aircraft to 10,000 feet or lower assigned altitude.
- (4) Initiate an automated handoff to the appropriate ZBW sector upon the departure being cleared on course and ensured free of traffic conflicts.
- (5) Issue transfer of radio communications to the appropriate ZBW sector upon passing 6,000-7,000 feet or within 10NM the APP/CTR boundary, as appropriate
- (6) Traffic permitting, the departure controller shall clear VFR aircraft to proceed on course and/or climb to their requested altitude
 - (a) *“Proceed on course, climb to requested VFR altitude”*

c. Arrivals.

- (1) Unless otherwise coordinated, clear ACK arrivals for the approach that is advertised on the ATIS.
- (2) Initiate communications transfer for arrivals no greater than 12 miles and no less than 7 miles from the airport.

d. Intrafacility Coordination.

- (1) The flows below are optional and may be changed with the agreement of both controllers.
- (2) If the Northeast flow is in use, transfer MVY arrivals from the east to Martha's Vineyard/Hyannis Radar at 2,000 via direct MVY VOR.
- (3) If the Northeast flow is in use, transfer HYA arrivals from the south to Hyannis Radar at 2,000 on a vector towards PEAKE.
- (4) If the Southwest flow is in use, transfer MVY arrivals from the east to Martha's Vineyard/Hyannis Radar at 2,000 via direct MVY VOR.
- (5) If the Southwest flow is in use, transfer HYA arrivals from the south to Hyannis Radar at 3,000 on a vector heading 020.

CHAPTER 7. INTERFACILITY COORDINATION**A90 TRACON and K90 TRACON****a. K90 to A90.**

- (1) Traffic inbound BOS shall be routed via FREDO.BOS or LFV (and, if able, SCUPP) at 4,000, 6,000, or 8,000.
- (2) K90 shall route traffic inbound A90 satellite fields via FREDO DIRECT at 4,000.
- (3) K90 shall route overflights to A90 via FREDO.BOS at 6,000, 8,000 or 10,000.

b. A90 to K90.

- (1) Traffic inbound PVC shall be on radar vectors or direct at 1,000 or 3,000. K90 has control for turns and descent on contact.

(2) Traffic inbound HYA shall be routed DUNKK.V141.GAILS at odd altitudes.

(3) Traffic inbound ACK shall be routed via LFV at or above 5,000.

(4) Traffic inbound MVY shall be handed off at or below 7,000.

c. Control for Turns.

(1) Both A90 and K90 shall have control for 30 degree turns “on contact.”

PVD ATCT / G90 TRACON and K90 TRACON

a. K90 to PVD.

(1) Traffic inbound EWB shall be handed off at or below 3,000.

(2) Workload permitting, hand off EWB arrival traffic on a 10 mile base leg for the landing runway.

(3) Traffic overflying PVD ATCT airspace shall be at or above 6,000, excluding V374 traffic.

b. PVD to K90.

(1) Traffic inbound PVC shall be on radar vectors or direct at 3,000. K90 has control for turns and descent on contact.

(2) Traffic inbound HYA shall be routed V151.GAILS at odd thousand foot altitudes.

(3) Traffic inbound ACK shall be routed via PVD.PVD143.CLAMY at 3,000

(4) Traffic inbound MVY shall be handed off at or below 7,000.

c. PYM Arrival Procedures

(1) PVD ATCT has responsibility for all Instrument Approaches at Plymouth Airport.

(2) K90 may issue Visual Approaches to aircraft originating within K90 airspace provided the aircraft will remain clear of PVD airspace.

- (3) K90 shall hand off arrivals requesting an instrument approach to PVD via direct Plymouth NDB (FFF) at or below 3,000.
- (4) PVD shall verbally coordinate all PYM arrivals prior to issuing an approach clearance.
- (5) PVD shall issue 118.2 (or if, Martha's Vineyard Radar is staffed, 133.75) as a missed approach or IFR cancellation frequency.

d. Control for Turns.

- (1) Both PVD and K90 shall have control for 30 degree turns "on contact."

ZBW ARTCC and K90 TRACON

a. ZBW to K90.

- (1) Traffic inbound ACK shall be routed via:
 - (a) NEWBE STAR to cross DEEPO at 11,000.
 - (b) DEEPO STAR (RNAV) to cross DEEPO at 11,000.
- (2) Traffic landing at other K90 fields shall be routed through the Arrival Gate via radar vectors or own navigation descending to 11,000.
 - (a) The Arrival Gate overlies the K90 western airspace boundary from the ACK 265 radial clockwise to the ACK 295 radial.

b. K90 to ZBW.

- (1) K90 shall clear all departures on course and issue a climb to 10,000 before transferring communications to ZBW.
- (2) K90 shall ensure that aircraft on the same route are handed off to Center with no less than 10 NM "in-trail" spacing.
- (3) Clear all arrivals landing Kennedy Int'l (JFK) via:
 - ACK - V34 SEY V268 HTO V46 DPK at or below 10,000 or MVY SEY SEY276 PARCH PARCH1 for jets above 10,000.
 - MVY - MVY230 V34 SEY HTO V46 DPK at or below 10,000 or COSSY SEY PARCH PARCH1 for jets above 10,000.
 - HYA - MVY230 V34 SEY HTO V46 DPK at or below 10,000.

(4) Clear all arrivals landing Newark Int'l (EWR) via:

ACK - V146 PVD V167 HFD V3 CMK V623 SAX at or below 10,000.

MVY and HYA - PVD V167 HFD V3 CMK V623 SAX at or below 10,000.

(5) Clear all arrivals landing La Guardia (LGA) via:

ACK - V146 PVD V167 HFD V1 MAD V475 at or below 10,000 or V146 PUT NELIE VALRE V157 for jets above 10,000.

MVY - PVD V167 HFD V1 MAD V475 at or below 10,000 or V146 PUT NELIE VALRE V157 for jets above 10,000.

HYA - PVD V167 HFD V1 MAD V475 at or below 10,000.

(6) Clear all arrivals landing Islip (ISP) via:

ACK - V34 SEY V268 HTO V46 CCC at or below 10,000 or MVY SEY SEY235 ARCAV V46 HTO V46 CCC above 10,000.

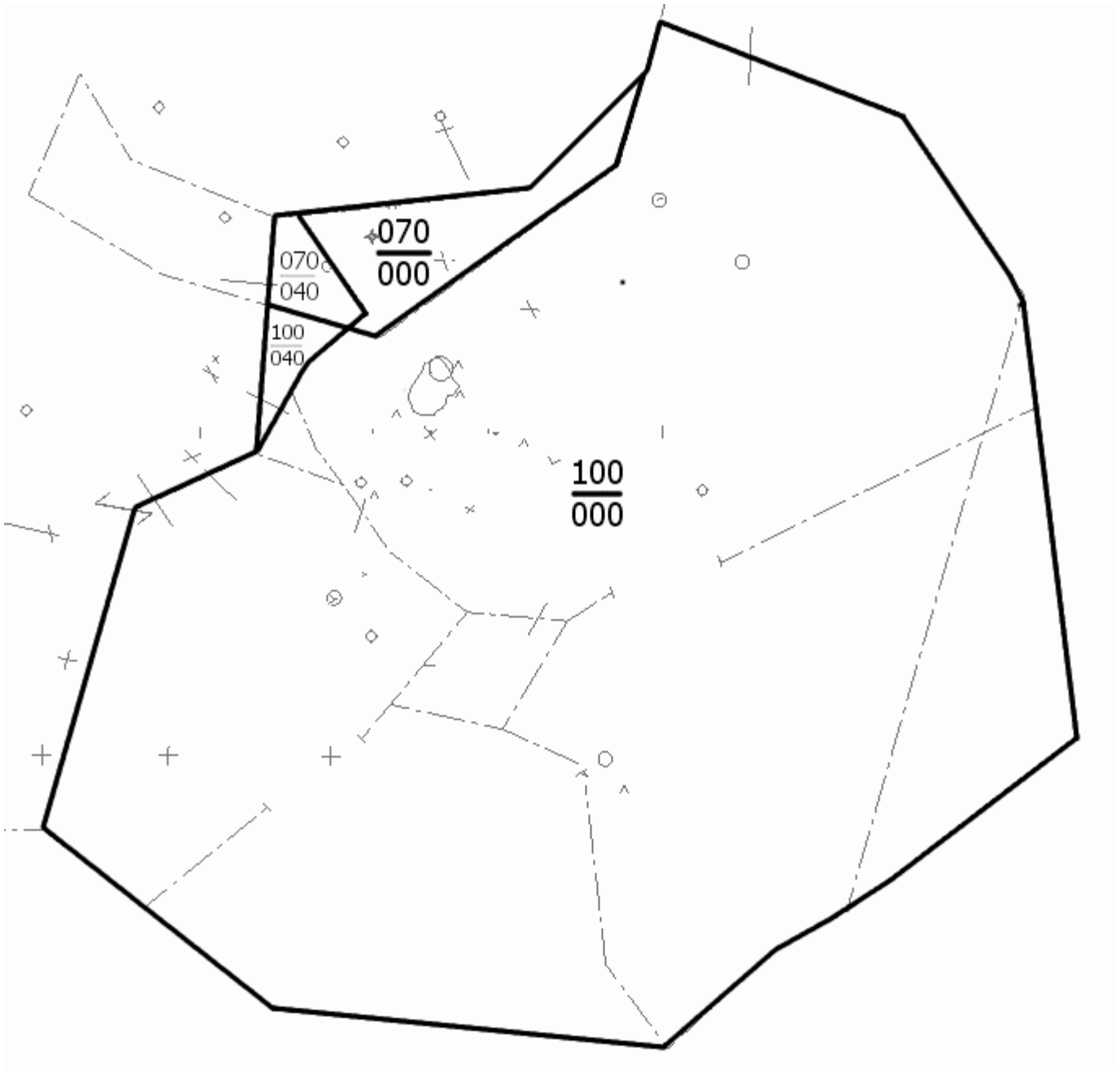
MVY - MVY MVY230 V34 SEY V268 HTO V46 CCC at or below 10,000 or COSSY SEY SEY235 V46 HTO V46 CCC above 10,000

HYA - MVY MVY230 V34 SEY V268 HTO V46 CCC at or below 10,000.

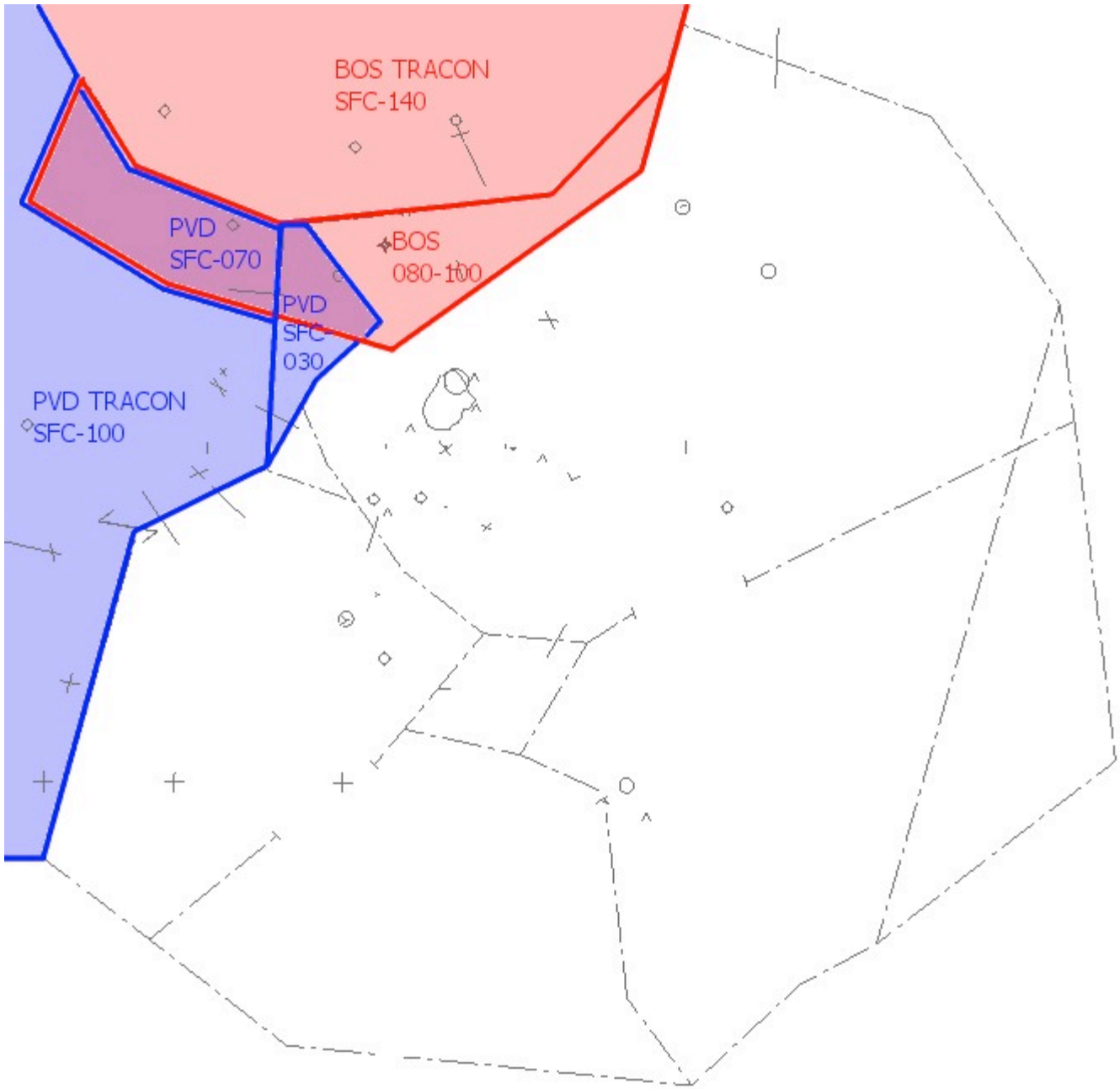
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CHAPTER 8. APPENDICIES

APPENDIX 1. TRACON AIRSPACE

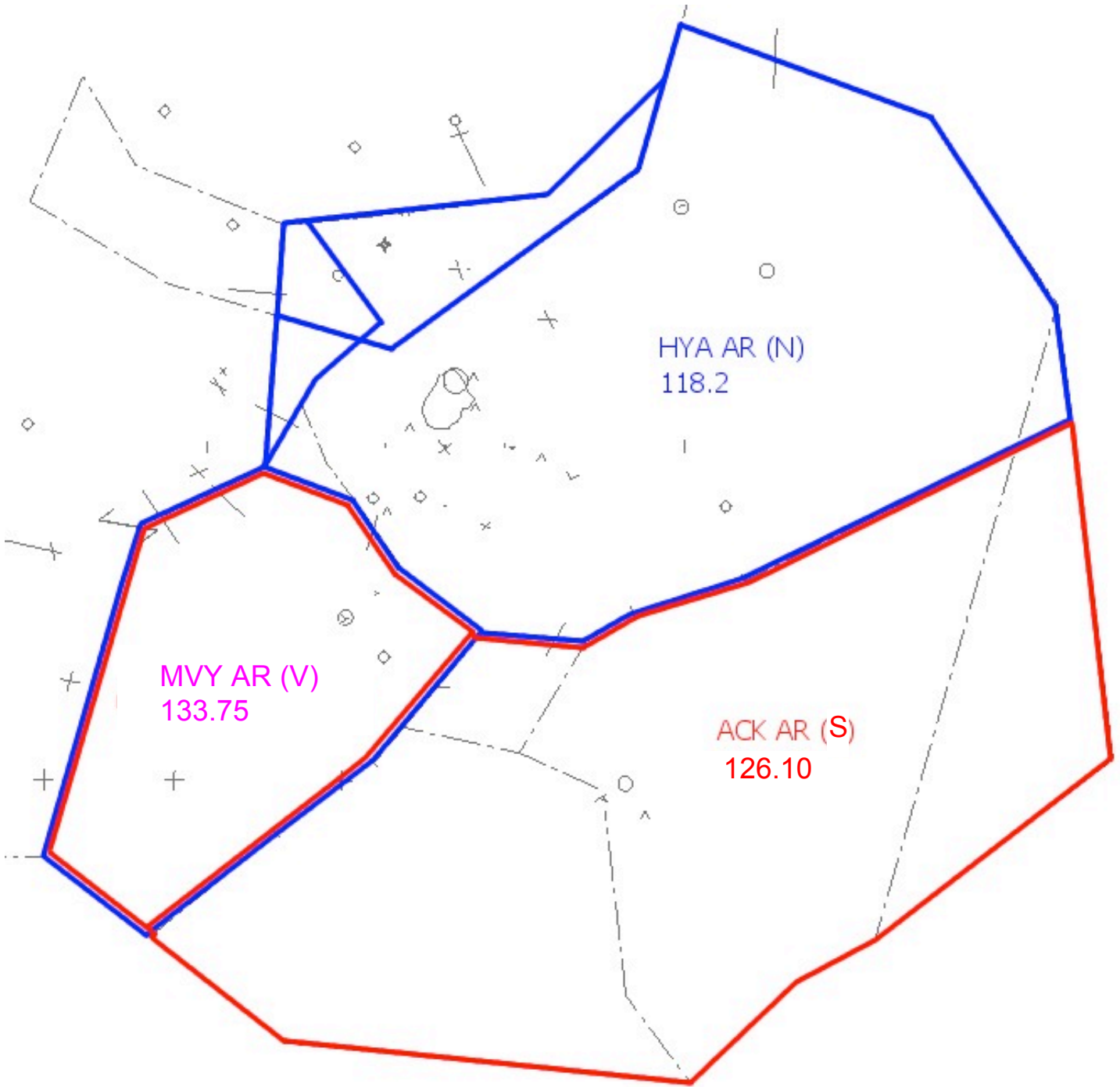


APPENDIX 2. ADJACENT FACILITIES



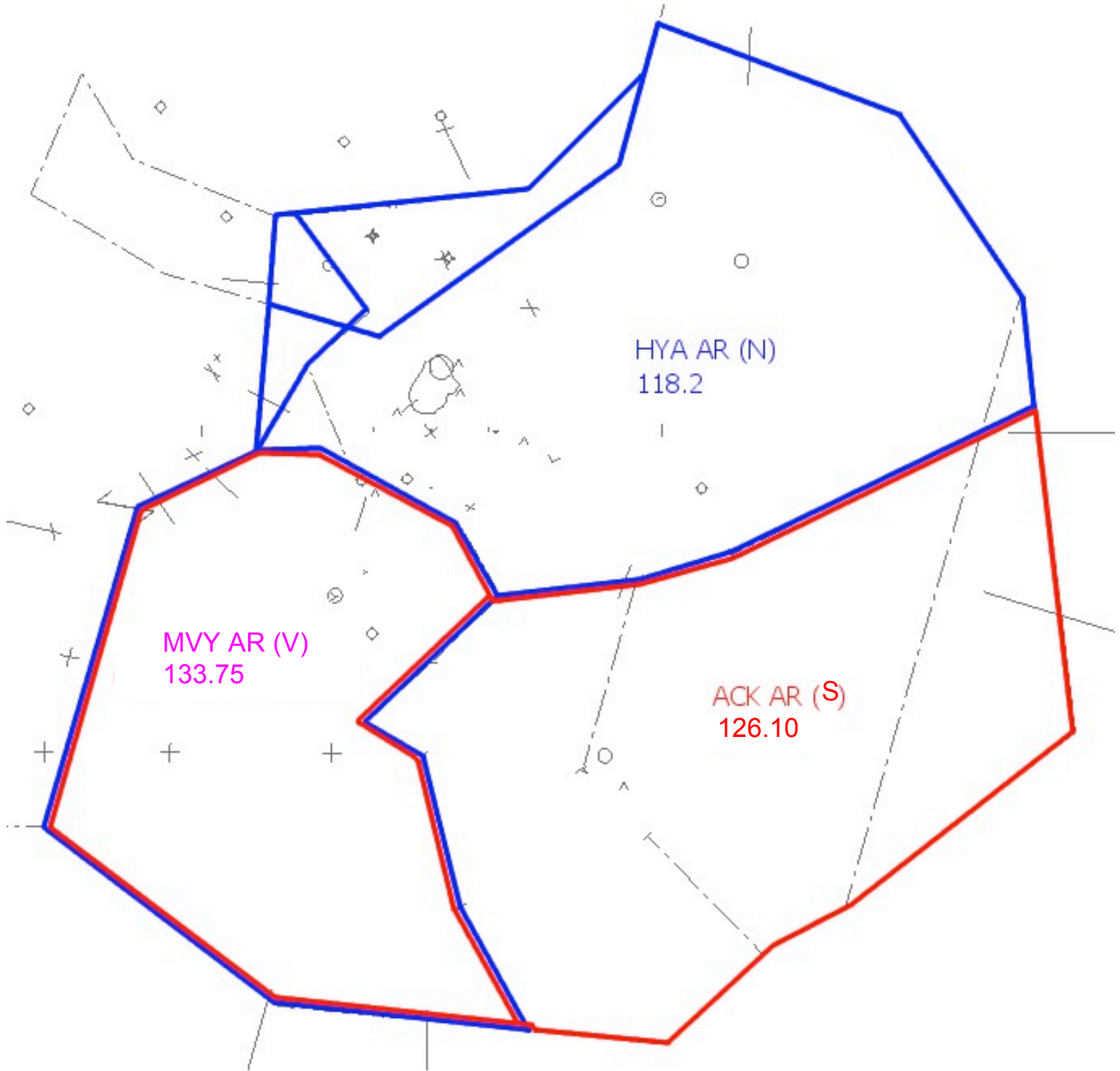
APPENDIX 3. INTRAFACILITY SECTORS

a. Northeast Flow



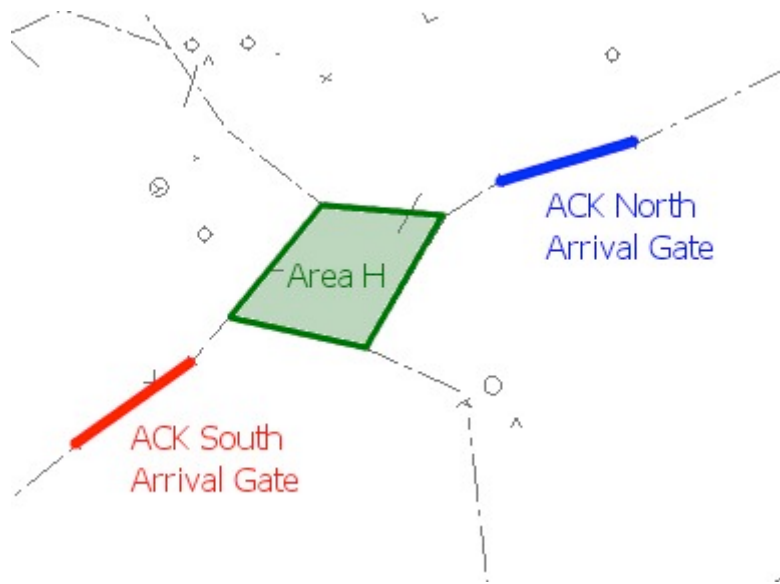
APPENDIX 3. INTRAFACILITY SECTORS (CONT.)

b. Southwest Flow



APPENDIX 4. VIDEO MAP

a. Northeast Flow



b. Southwest Flow

