CHAPTER 5. LOW ENROUTE STANDARD OPERATING PROCEDURES

SECTION 1. AREA 1 (LOW)

5-1-1. SECTOR SUMMARY

Area 1 (Low) is a low altitude area composed of sectors 10, 11, 12, 14, and 15. Area 1 Low is mainly responsible for Detroit arrivals approaching from the northwest and southwest and Detroit departures departing to the west and south.

5-1-2. SECTOR INFORMATION

1) Frequency – 126.75

2) VATSIM callsign – CLE_L1_CTR or CLE_12_CTR

3) Voice server/channel - rw.avsim.net/ZOB_126.75

4) ASRC Settings:

   a. Range - 200 NM
   b. Filter Settings – 000b300
   c. Altimeters – DTW MBS LAN TOL

5) Altitude limits - Surface to FL230 except underlying approach control airspace

6) Approach Controls:

   a. Flint Approach (SFC-100)
   b. Lansing Approach (SFC-100)
   c. Toledo Approach (SFC-100)

5-1-3. ARRIVAL PROCEDURES

1) **DTW** arrivals will enter sector 12 on the POLAR1 or sector 15 on the MIZAR3 arrivals at or below FL210. Jets must be sequenced at least 10 miles-in-trail and should cross POLAR or MIZAR at 12,000. Props must be sequenced at least 6 miles-in-trail and should cross POLAR or MIZAR at 11,000. All traffic should be handed off to sector 4S (D21 S).

2) **D21 Area** arrivals will enter sector 12 on the SPRTN3 or sector 15 on the CRUXX4 arrivals at or below FL210. All SPRTN arrivals must be sequenced at least 6 miles-in-trail and should cross SPRTN at 9,000. CRUXX jets must cross CRUXX at 10,000 and 250 knots. CRUXX props must cross CRUXX at or below 9,000. All traffic should be handed off to sector 4Y (D21 Y). Center must coordinate a point-out with TOL or LAN Approach sectors for each aircraft that will transition that sector.

3) **Other** arrivals inside and within 60 NM of Area 1 (Low) boundary (i.e. AZO, LAN, DAY, etc.) will enter the area through various routes and sectors. They must be sequenced at least 6 miles-in-trail, should be descended to 11,000 by 35 miles from the destination airport and handed off to the next appropriate sector.

5-1-4. DEPARTURE PROCEDURES

1) **DTW and DTW Area** departures will enter sectors 11and 14 climbing to 13,000 or lower. They should be climbed to FL230 or lower requested altitude and be handed off to the next appropriate sector.

2) **Other** departures will enter the area through various sectors climbing to 10,000 or lower. They should be climbed to FL230 or lower requested altitude and be handed off to the next appropriate sector.

SECTION 2. AREA 2 (LOW)

5-2-1. SECTOR SUMMARY

Area 2 (Low) is a low altitude area composed of sectors 20, 21, and 24. Area 2 Low is mainly responsible for Detroit arrivals approaching from the northeast, Detroit departures departing to the north and east, and Cleveland arrivals approaching from the north.

5-2-2. SECTOR INFORMATION

1) Frequency – 132.25

2) VATSIM callsign – CLE_L2_CTR or CLE_20_CTR

3) Voice server/channel - rw.avsim.net/ZOB_132.25

4) ASRC Settings:

   a. Range - 200 NM
   b. Filter Settings – 000b300
   c. Altimeters – DTW FNT MBS MTC CLE

5) Altitude limits - Surface to FL230 except underlying approach control airspace

6) Approach Controls:

   a. Flint Approach (SFC-100)
   b. Selfridge Approach (SFC-100) (Military RAPCON)
   c. Saginaw Approach (SFC-100)

5-2-3. ARRIVAL PROCEDURES

1) **DTW** arrivals will enter sector 20 on the SPICA2 arrival at or below FL240. Jets must be sequenced at least 10 miles-in-trail and should cross SPICA at 12,000. Props must be sequenced at least 6 miles-in-trail and should cross SPICA at 11,000. All traffic should be handed off to sector 4F (D21 F).

2) **D21 Area** arrivals will enter sector 20 on the PICES1 arrival at or below FL240. Arrivals must be sequenced at least 6 miles-in-trail. All aircraft arriving KPTK or KVLL shall cross SWANN at 6,000' and be handed off to sector 4P (D21 P). All aircraft arriving KOZW or Y49 shall cross SWANN at 9,000' and be handed off to sector 4P (D21 P). All aircraft arriving CYQG shall cross WINZZ at 6,000 and be handed off to sector 4D (D21 D). All aircraft arriving KARB or KYIP shall cross WINZZ at 9,000 and be handed off to sector 4D (D21 D).

3) **CLE** arrivals will enter sector 20 from the north and sector 21 from the west/northwest at or below FL240 on the HIMEZ1 arrival. Jets must be sequenced at least 10 miles-in-trail and should cross HIMEZ at 10,000 and 250 knots. Props must be sequenced at least 6 miles-in-trail and should cross HIMEZ at 9,000. All traffic should be handed off to sector 3W (CLE W).

4) **CLE Area** arrivals will enter sector 20 from the north and sector 21 from the west/northwest at or below FL240. Arrivals must be sequenced at least 6 miles-in-trail, must be routed via HIMEZ, jets should cross HIMEZ at 10,000 and 250 knots, props should cross HIMEX at 9,000 and should be handed off to sector 3D (CLE D).

5) **Other** arrivals inside and within 60 NM of Area 2 (Low) boundary (i.e. MBS, MTC, YXU, etc.) will enter the area through various routes and sectors. They must be sequenced 6 miles-in-trail, should be descended to 11,000 by 35 miles from the destination airport, and handed off to the next appropriate sector.

5-2-4. DEPARTURE PROCEDURES

1) **DTW and DTW Area** departures will enter sectors 20, 21, and 24 climbing to 13,000 or lower. They should be climbed to FL230 or lower requested altitude and be handed off to the next appropriate sector.

2) **Other** departures will enter the area through various sectors climbing to 10,000 or lower. They should be climbed to FL230 or lower requested altitude and be handed off to the next appropriate sector.

SECTION 3. AREA 3 (LOW)

5-3-1. SECTOR SUMMARY

Area 3 (Low) is a low altitude area composed of sectors 30, 32, 33, and 35. Area 3 Low is mainly responsible for Cleveland arrivals approaching from the east; Cleveland departures departing northeast and southeast; Pittsburgh arrivals approaching from the northwest; Toronto arrivals approaching from south.

5-3-2. SECTOR INFORMATION

1) Frequency – 120.77

2) VATSIM callsign – CLE_L3_CTR or CLE_30_CTR

3) Voice server/channel - rw.avsim.net/ZOB_120.77

4) ASRC Settings:

   a. Range - 200 NM
   b. Filter Settings – 000b300
   c. Altimeters – CLE PIT CAK ERI BUF YNG

5) Altitude limits - Surface to FL230 except underlying approach control airspace

6) Approach Controls:

   a. Cleveland Approach (SFC-120)
   b. Buffalo Approach (SFC-100)
   b. Youngstown Approach (SFC-080)
   c. Erie Approach (SFC-100)

5-3-3. ARRIVAL PROCEDURES

1) **CLE** arrivals will enter sector 30 from the northeast and southeast routed via CXR1 at or below FL240. Jets must be sequenced at least 10 miles-in-trail and should cross CXR at 10,000 and 250 knots. Props must be sequenced at least 6 miles-in-trail and should cross CXR at 9,000. All traffic should be handed off to sector 3E (CLE E).

2) **CLE Area** arrivals will enter sector 30 from the northeast and southeast routed via CXR at or below FL180. North satellite arrivals (i.e. BKL and CGF) must be sequenced at least 6 miles-in-trail, cross CXR at 6,000, and be handed off to sector 3F (CLE F). South satellite arrivals (i.e. LPR and SKY Area) must be sequenced at least 6 miles-in-trail, cross CXR at 11,000, and be handed off to sector 3R (CLE R). Center must coordinate a point-out with YNG Approach sector for each aircraft that will transition that sector.

3) **PIT** arrivals will enter sector 35 from the northwest on the CUTTA2 arrival at or below FL240. Jets must be sequenced at least 10 miles-in-trail and should cross CUTTA at 10,000 (and 250 knots when PIT is in an east flow). Props must be sequenced at least 6 miles-in-trail and should cross CUTTA at 9,000. All traffic should be handed off to 5F (PIT F).

4) **PIT Area** arrivals will enter sector 35 at or below 17,000. They must be routed via CUTTA, must be sequenced at least 6 miles-in-trail, and should cross CUTTA at 5,000. All traffic should be handed off to sector 5A (PIT A). Center must coordinate a point-out with CAK or YNG Approach sectors for each aircraft that will transition that sector.

5) **YYZ and YYZ Area** arrivals will enter sector 32 from the south/southwest and sector 33 from the east at or below FL240 and routed via DKK or BUF to join the YOUTH2 (or LINNG1 between 0030 and 0630 local) arrivals. DKK traffic must be sequenced at least 15 miles-in-trail and should cross MYPAL at 11,000. BUF traffic must be sequenced at least 15 miles-in-trail and should be descended to cross BUF at 11,000. All traffic must be handed off to sector 95 (ZYZ South/London). Center must coordinate a point-out with BUF approach for each aircraft that will transition that sector.

6) **CAK and CAK Area** arrivals will enter sector 35 from the northeast over YNG direct ACO along V72 at or below 16,000. They must be sequenced at least 6 miles-in-trail, should be descended to 9,000 or lower and handed off to sector 3Q (CAK Approach). Center must coordinate a point-out with YNG approach for each aircraft that will transition that sector.

7) **YNG and YNG Area** arrivals will enter sectors 30 and 35 on various routes direct YNG at or below 16,000. They must be sequenced at least 6 miles-in-trail, descended to 9,000 or lower and handed off to YNG approach sector. Center must coordinate a point-out with CLE, CAK or ERI approach for each aircraft that will transition that sector.

8) **Other** arrivals inside and within 60 NM of Area 3 (Low) boundary (i.e. ERI, BUF, ROC, etc.) must be sequenced 6 MIT, should cross 35 miles from the destination airport at 11,000, and be handed off to the next appropriate sector.

5-3-4. DEPARTURE PROCEDURES

1) **CLE and CLE Area** departures will enter sectors 30 and 35 climbing to 12,000 or lower. They should be climbed to FL230 or lower requested altitude and be handed off to the next appropriate sector.

2) **Other** departures will enter the area through various sectors climbing to 10,000 or lower. They should be climbed to FL230 or lower requested altitude and be handed off to the next appropriate sector.

SECTION 4. AREA 4 (LOW)

5-4-1. SECTOR SUMMARY

Area 4 (Low) is a low altitude area composed of sectors 40 and 41. Area 4 Low is mainly responsible for Detroit arrivals approaching from the southeast, Cleveland arrivals from the west and Cleveland departures to the west.

5-4-2. SECTOR INFORMATION

1) Frequency – 127.90

2) VATSIM callsign – CLE_L4_CTR or CLE_40_CTR

3) Voice server/channel - rw.avsim.net/ZOB_127.90

4) ASRC Settings:

   a. Range - 200 NM
   b. Filter Settings – 000b300
   c. Altimeters – DTW CLE MFD TOL

5) Altitude limits - Surface to FL230 except underlying approach control airspace

6) Approach Controls:

   a. Mansfield Approach (SFC-080)

5-4-3. ARRIVAL PROCEDURES

1) **DTW** arrivals will enter sector 40 and 41 on the WEEDA1 OR GEMNI1 arrival at or below FL240. Jets must be sequenced at least 10 miles-in-trail and should cross GEMNI at 12,000, or WEEDA at 12,000 when DTW is on South Flow, 11,000 when DTW is on North Flow. Props filed for 210 knots or greater must be sequenced at least 6 miles-in-trail and must cross GEMNI at 11,000. Props filed for less than 210 knots must be sequenced at least 6 miles-in-trail and must cross GEMNI at 6,000. All traffic should be handed off to sector 4F (D21 F).

2) **D21 Area** arrivals will enter sector 41 on the LLEEO1 arrival at or below FL180. Jets must be sequenced at least 6 miles-in-trail and should cross LLEEO at 10,000. Props must be sequenced at least 6 miles-in-trail and should cross LLEEO at 8,000. All traffic should be handed off to sector 4K (D21 K). Center must coordinate a point-out with CLE approach sectors for each aircraft that will transition that sector.

3) **CLE** arrivals will enter sector 41 on the ABERZ1 arrival at or below 17,000'. Jets must be sequenced at least 10 miles-in-trail and should cross ABERZ at 10,000 and 250 knots. Props must be sequenced at least 6 miles-in-trail and should cross ABERZ at 9,000. All traffic should be handed off to sector 3W (CLE W).

4) **CLE Area** arrivals will enter sector 41 at or below FL240. North satellite arrivals (i.e. BKL and CGF) must be sequenced at least 6 miles-in-trail, cross ABERZ at 10,000 or 9,000, and be handed off to sector 3D (CLE D). South satellite arrivals (i.e. LPR and SKY Area) must be sequenced at least 6 miles-in-trail, cross ABERZ at 6,000, and be handed off to sector 3D (CLE D). Center must coordinate a point-out with MFD Approach sector for each aircraft that will transition that sector.

5) **PIT Area** arrivals will enter sector 40 at or below FL240. They must be routed via DJB ACO CUTTA2, must be sequenced at least 10 miles-in-trail, should cross DJB at 17,000, and must be handed off to sector 30 (ZOB L3) .

6) **MFD Area** arrivals will enter sector 40 from the north at or below 16,000. They must be sequenced at least 6 miles-in-trail and should cross 30 DME north of MFD at 9,000. All traffic should be handed off to sector 2M (MFD approach). Center must coordinate a point-out with TOL or CLE Approach sectors for each aircraft that will transition that airspace.

7) **Other** arrivals inside and within 60 NM of Area 4 (Low) boundary (i.e. TOL, CMH, DAY, etc.) will enter the area through various routes and sectors. They must be sequenced at least 6 miles-in-trail, should cross 35 miles from the destination airport at 11,000, and should be handed off to the next appropriate sector.

5-4-4. DEPARTURE PROCEDURES

1) **CLE and CLE Area** departures will enter sector 40 climbing to 12,000 or lower. They should be climbed to FL230 or lower requested altitude and be handed off to the next appropriate sector.

2) **Other** departures will enter the area through various sectors climbing to 10,000 or lower. They should be climbed to FL230 and be handed off to the next appropriate sector.

SECTION 5. AREA 5 (LOW)

5-5-1. SECTOR SUMMARY

Area 5 (Low) is a low altitude sector composed of sectors 52, 53, and 55. Area 5 Low is mainly responsible for Pittsburgh arrivals approaching from the southeast and Pittsburgh departures departing south and east.

5-5-2. SECTOR INFORMATION

1) Frequency – 128.45

2) VATSIM callsign – CLE_L5_CTR or CLE_53_CTR

3) Voice server/channel - rw.avsim.net/ZOB_124.40

4) ASRC Settings:

a. Range - 200 NM
b. Filter Settings – 000b300
c. Altimeters – PIT CKB AOO

5) Altitude limits - Surface to FL230 except underlying approach control airspace

6) Approach Controls:

a. Clarksburg Approach (SFC-100)

5-5-3. ARRIVAL PROCEDURES

1) **PIT** arrivals will enter sector 54 from the southeast on the NESTO2 arrival at or below FL240 or from the south on the WISKE2 CKB transition
    a. **NESTO 2:** Jets must be sequenced at least 10 miles-in-trail by NESTO. When Pittsburgh is landing west, jets must cross NESTO at 10,000 and 250 knots EXCEPT IF Pittsburgh is utilizing simultaneous 28 approaches, then jets must cross NESTO at 9,000. When Pittsburgh is landing east, jets must cross NESTO at 10,000. During all operations, props filed for 210 knots or greater true airspeed must cross NESTO at 7,000. Props filed at less than 210 knots true airspeed must cross NESTO at 6,000. All PIT arrivals should be handed off to sector 5D (PIT D).
    b. **WISKE 2:** Jets must be sequenced 15 miles-in-trail and descended to 15,000 prior to the sector boundary. Props must be sequenced 15 miles in trail and descended to 12,000 prior to the sector boundary. All traffic should be handed off to sector 64 (ZOB L6).

2) **PIT Area** arrivals will enter sector 52 at or below FL240 on the NESTO2 or WISKE2 arrivals. NESTO arrivals should cross NESTO at 5,000 and be handed off to sector 5S. WISKE arrivals must be sequenced 15 miles in trail, descended to 8,000 and be handed off to sector 64 (ZOB L6).

3) **CMH** arrivals must be routed via MGW or AIR to join the BREMN2 arrival. Aircraft must be sequenced 10 miles-in-trail at each VOR. There are no altitude restrictions. All aircraft should be handed off to sector 64 (ZOB L6).

4) **CKB** arrivals from the northeast should be routed via MGW and should be descended to 6,000 prior to the sector boundary and be handed off to sector 1B (CKB approach).

5) **MGW** arrivals shall be routed via MGW. Arrivals on or north of the MGW 090 radial should be descended to 4,000. Arrivals south of the MGW 090 radial should be descended to 5,000. All arrivals should be handed off to sector 1B (CKB approach).

6) **BWI** arrivals must be on the EMI5 arrival and must cross LUNDY at FL250 or LIZIO at or below FL230, depending on transition. MGW transition aircraft will enter Area 5 (Low) departing PIT area and must be climbed to cross LIZIO at or below FL230. All traffic must be handed off to sector 83 (ZDC 15).

7) **IAD** arrivals must be on the CSN2 or the JASEN4 arrivals. All traffic must be handed off to sector 83 (ZDC 15).

8) **DCA** arrivals must be on the BUCKO6 arrival or routed via ESL to join the MANNE4 arrival. All traffic must be handed off to sector 83 (ZDC 15).

9) **MDT** arrivals shall be routed via the HAR VOR. Jets should be descended to 10,000 prior to the sector boundary. Props should be descended to 9,000 prior to the sector boundary. All arrivals should be handed off to sector KA or sector KC (Harrisburg approach).

10) **PSB Area** arrivals must be descended to cross 35 miles west of PSB at or below 8,000 and handed off to New York Center.

11) **Other** arrivals inside and within 60 NM of Area 5 (Low) boundary must be sequenced 6 miles-in-trail and cross 35 miles from the destination airport at 11,000 and be handed off to the next appropriate sector.

5-5-4. DEPARTURE PROCEDURES

1) **PIT and PIT Area** departures will be climbing to 14,000. They should be climbed to FL230 or lower requested altitude and be handed off to the next appropriate sector.

2) **JST** departures will be climbing to 10,000 or lower requested altitude, but not less than 5,000, on the JENER2 or LILLI2 departure. They should be climbed to FL230 or lower requested altitude and be handed off to the next appropriate sector.

3) **LBE** departures will be climbing to 10,000 or lower requested altitude, but not less than 5,000, on the HOMEE2 or PLEEZ2 departure. They must be climbed to FL230 or lower requested altitude and be handed off to the next appropriate sector.

4) **Other** departures will be climbing to 10,000 or lower. They must be climbed to FL230 or lower requested altitude and be handed off to the next appropriate sector.

SECTION 6. AREA 6 (LOW)

5-6-1. SECTOR SUMMARY

Area 6 (Low) is a low altitude sector composed of sectors 61, 62, and 64. Area 6 is responsible for arrival procedures to three major airports. Cleveland, Pittsburgh, and Columbus all rely on Area 6 to sequence their arrivals.

5-6-2. SECTOR INFORMATION

1) Frequency – 134.90

2) VATSIM callsign – CLE_L6_CTR or CLE_64_CTR

3) Voice server/channel - rw.avsim.net/ZOB_134.90

4) ASRC Settings:

   a. Range - 200 NM
   b. Filter Settings – 000b300
   c. Altimeters – CLE CMH PIT CAK

5) Altitude limits - Surface to FL230 except underlying approach control airspace

6) Approach Controls:

   a. Akron-Canton Approach (SFC-080)
   b. Pittsburgh Approach (SFC-140)

5-6-3. ARRIVAL PROCEDURES

1) **PIT** arrivals entering the southern half of the area will be on the WISKE2 arrival; arrivals entering in the northern half of the area will be on the CUTTA 2 arrival.
   a. **WISKE2:** CTW transition jets will enter the area from ZID at FL190. HNN jets will enter from the SW at FL210. CKB jets will enter at 15,000. All jets must cross WISKE at 10,000 and, if landing east, 250 knots. CTW and HNN props will enter the area at or below 15,000. CKB props will enter the area at or below 12,000. Props filed for 210 knots or greater should cross WISKE at 7000. Props filed for less than 210 knots should cross WISKE at 6000. All traffic should be handed off to sector 5W (PIT W).
   b. **CUTTA2:** CUTTA2 jets will be routed via the BSV VOR to join the arrival. Jets must be sequenced 15 miles in trail and descended to 14,000 prior to the sector boundary. Props must be descended to 12,000 prior to the sector boundary. All traffic should be handed off to sector 30 (ZOB L3).

2) **PIT Area** arrivals should be routed the same as PIT arrivals. BSV.CUTTA2 traffic should be descended to 10,000 prior to the sector boundary and handed off to Area 3. CTW and HNN WISKE2 traffic will arrive from ZID at or below 13,000. CKB traffic will enter at 8,000. All WISKE2 traffic should cross WISKE at 5,000 and be handed off to sector 5S (PIT S).

3) **CLE** arrivals must be routed via the KEATN3 arrival. TVT jets will arrive from ZID at or below 17,000. BSV jets will arrive from Area 5/6 (High) at FL240 50 miles S/SE of BSV. All jets must cross KEATN sequenced 10 miles in trail at 10,000 and be handed off to sector 3E (CLE E). TVT props will arrive from ZID at or below 17,000. BSV props will arrive from Area 5 (Low) at FL200 at the sector boundary. All props shall cross KEATN sequenced at least 10 miles in trail at 9,000 and be handed off to sector 3E (CLE E).

4) **CLE Area** arrivals are treated the same as CLE arrivals except all must cross KEATN sequenced at least 6 miles-in-trail at 11,000 and be handed off to sector 3R (CLE R).

5) **CMH** arrivals should be routed via the BREMN 2 arrival. Aircraft should cross HISOM at FL200 and be handed off to the appropriate ZID sector.

6) **CAK area** arrivals should be descended to 8,000 and be handed off to the appropriate CAK approach sector.

7) **MFD area** arrivals should be descended to 8,000 and handed off to sector 2M (MFD approach).

8) **Other** arrivals inside and within 60 NM of Area 5 (Low) boundary must be sequenced 6 miles-in-trail and cross 35 miles from the destination airport at 11,000 and handed off to the next appropriate sector.

5-6-4. DEPARTURE PROCEDURES

1) **PIT and PIT Area** departures will be climbing to 14,000. They should be climbed to FL230 or lower requested altitude and be handed off to the next appropriate sector.

2) **CLE and CLE Area** departures will be climbing to 12,000 or lower requested altitude and routed via MFD or APE. They should be climbed to FL230 or lower requested altitude and be handed off to the next appropriate sector.

3) **MFD** departures will be climbing to 8,000 or lower requested altitude. They should be climbed to FL230 or lower requested altitude and handed off to the next appropriate sector.

4) **CAK** departures will be climbing to 8,000 or lower requested altitude. They should be climbed to FL230 or lower requested altitude and handed off to the next appropriate sector.

5) **Other** departures will be climbing to 10,000 or lower requested altitude. They should be climbed to FL230 or lower requested altitude and handed off to the next sector.

SECTION 7. AREA 7 (LOW)

5-7-1. SECTOR SUMMARY

Area 7 (Low) is a low altitude sector composed of sectors 71, 73, and 74. Area 7 Low is mainly responsible for Pittsburgh arrivals approaching from the northeast and Pittsburgh departures departing north.

5-7-2. SECTOR INFORMATION

1) Frequency – 134.47

2) VATSIM callsign – CLE_L7_CTR or CLE_71_CTR

3) Voice server/channel - rw.avsim.net/ZOB_134.47

4) ASRC Settings:

   a. Range - 200 NM
   b. Filter Settings – 000b300
   c. Altimeters – PIT ROC BFD

5) Altitude limits - Surface to FL230 except underlying approach control airspace

6) Approach Controls:

   a. Rochester Approach (SFC-100)

5-7-3. ARRIVAL PROCEDURES

1) **PIT** arrivals will enter sector 71 from the northeast on the GRACE2 arrival route at or below FL240. Jets must be sequenced at least 10 miles-in-trail, cross GRACE at 10,000 and, if landing west, 250 knots. Props filed for 210 knots or greater must cross GRACE at 8,000. Props filed for less than 210 knots must cross WISKE at 6,000. All traffic should be handed off to sector 5B (PIT B).

2) **PIT Area** arrivals will enter sector 71 at or below FL180. They must be routed via GRACE, sequenced at least 6 miles-in-trail, cross GRACE at 5,000, and be handed of to sector 5A (PIT A).

3) **Other** arrivals inside and within 60 NM of Area 7 (Low) boundary (i.e. BUF, SYR, ELM, etc.) must be sequenced at least 6 miles-in-trail, cross 35 miles from the destination airport at 11,000, and be handed off to the next appropriate sector.

5-7-4. DEPARTURE PROCEDURES

1) **PIT and PIT Area** departures will be climbing to 14,000. They should be climbed to FL230 or lower requested altitude and be handed off to the next appropriate sector.

2) **Other** departures will be climbing to 10,000 or lower. They should be climbed to FL230 or lower requested altitude and be handed off to the next sector.