| Flight Procedure Tracking Form | Action: FLIGHT CHECK | Task Type: STAR | Date Open: 04/10/2012 | Task #: 2012041021334201001 | Request #: 20120410213342 |
|---|---|---|---|---|---|
| **Procedure:** STAR NESTO FOUR PITTSBURGH PA KPIT | | **Airport ID:** KPIT | **Airport:** PITTSBURGH INTL | | **Reimbursable #:** |
| **City:** PITTSBURGH | **ST:** PA | **GPS #:** | | **Estimated Chart Date:** 01/10/2013 | **FICO #:** |
| **Fac ID:** | **Fac. Type:** Proc T | **Specialist:** SEAN BARBEE | | | |

## Procedure Review

P3

| | Rec'd | Rel'd | Full Name | Comments |
|---|---|---|---|---|
| **Lead:** | 06/19/2012 | 09/24/2012 | MARLON ROBINSON | |
| **QA:** | 09/24/2012 | 10/02/2012 | STEVEN SZUKALA | |
| **Liaison:** | 10/02/2012 | | Spurlin | |

**Procedure Comments:** ENROUTE **Remark Type:** INFORMATION

pkg 1 of 1

PITTSBURGH, PA PITTSBURGH INTL (KPIT) NESTO FOUR (STAR) ENROUTE-YES FC: 11.13.12 PUB: 1.10.13

ATTACHED FORMS: ESV REPORTS; 7100-4; 7100-3; 8260-2(S): BELLAIRE (AIR) VDME, REV 19; BENJE (BHU) NDB, REV 5; EJOCY-INT, REV 2; HRMAN-INT, REV 2; JOHNSTOWN (JST) VTAC, REV 14; PLEEZ-INT, REV 6; SAMEE-INT, REV 2; VINSE-INT, REV 3; (INFO ONLY) ALLEGHENY (AGC) VDME, REV 18; COYLE (CYN) VTAC, REV 16; INDIAN HEAD (IHD) VTAC, REV 10; MORGANTOWN (MGW) VTAC, REV 10; NESTO-INT, REV 9; WHEELING (HLG) VDME, REV 17.

CONTACT: DON SMITH/MARLON ROBINSON-AJV-352 LEADS, 405.954.1036 / 405.954.3636.

# NESTO FOUR ARRIVAL

ARRIVAL DESCRIPTION

INDIAN HEAD TRANSITION (IHD.NESTO3): From over IHD VORTAC via IHD R-315 to NESTO INT. Thence....

VINSE TRANSITION (VINSE.NESTO3): From over VINSE via AIR R-097 and IHD R-315 to NESTO INT. Thence....

....PIT: From over NESTO INT direct MMJ VORTAC. Expect radar vectors after NESTO INT.

....AGC WEST FLOW: From over NESTO INT direct AGC VOR/DME, then expect radar vectors.

....EAST FLOW: From over NESTO INT direct AGC VOR/DME, then expect radar vectors.

....HLG: From over NESTO INT direct HLG VOR/DME, then expect radar vectors.

....AFJ: From over NESTO INT via HLG R-102, then expect radar vectors.

LOST COMMUNICATIONS PROCEDURE:
Standard.

PROTOTYPE-NOT FOR NAVIGATION

## ESV Details

| Originating Office : | Airspace Docket Number : | Request Type : Establish | |
|---|---|---|---|
| **Facility Data** | | | |
| Chart Name : SAMEE DME FIX | City : BELLAIRE | Ident : AIR | State : OH |
| Type/Class : DME | Frequency : M1205 | Reference No.: 12086341 | |

**Expanded Service Volume Data: (Requesting Officer)**

| ESV ID | Radial 1 | Radial 2 | Distance | Minimum Altitude | Maximum Altitude |
|---|---|---|---|---|---|
| FAA 691517-015 | 97 | 0 | 78 | 140 | 159 |

| Requirement: SAMEE DME FIX FOR NESTO ARRIVAL | | |
|---|---|---|
| Signature: Barbee Sean | Routing Symbol: AJV-352 | Date: 08/21/2012 |

**Expanded Service Volume Data: (FMO)**

| ESV ID | Radial 1 | Radial 2 | Distance | Minimum Altitude | Maximum Altitude | Action Type |
|---|---|---|---|---|---|---|
| FAA 691517-015 | 97 | 0 | 78 | 140 | 159 | APPROVE |

| Requirement/Remarks: SAMEE DME FIX FOR NESTO ARRIVALAPPROVED. PEND. FLIGHT CHK/INSPECT @ THE REQ. DIST. AND MIN ALT. | | |
|---|---|---|
| Signature: NASSR NASHAAT | Routing Symbol: | Date: 08/28/2012 |

**Expanded Service Volume Data: (Super FMO)**

| ESV ID | Radial 1 | Radial 2 | Distance | Minimum Altitude | Maximum Altitude | Action Type |
|---|---|---|---|---|---|---|
| FAA 691517-015 | 97 | 0 | 78 | 140 | 159 | APPROVE |

| Requirement/Remarks: SAMEE DME FIX FOR NESTO ARRIVALAPPROVED. PEND. FLIGHT CHK/INSPECT @ THE REQ. DIST. AND MIN ALT. | | |
|---|---|---|
| Signature: Hughes Dennis | Routing Symbol: | Date: 08/30/2012 |

**Expanded Service Volume Data: (FIFO)**

| ESV ID | Radial 1 | Radial 2 | Distance | Minimum Altitude | Maximum Altitude | Action Type |
|---|---|---|---|---|---|---|
| FAA 691517-015 | 97 | 0 | | | | |

| Requirement/Remarks: | | |
|---|---|---|
| Signature: | Routing Symbol: | Date: |

## ESV Details

| Originating Office : | Airspace Docket Number : | Request Type : Establish | |
|---|---|---|---|
| **Facility Data** | | | |
| Chart Name : NESTO | City : JOHNSTOWN | Ident : JST | State : PA |
| Type/Class : TACR | Frequency : M1164 | Reference No.: 12097962 | |

**Expanded Service Volume Data: (Requesting Officer)**

| ESV ID | Radial 1 | Radial 2 | Distance | Minimum Altitude | Maximum Altitude |
|---|---|---|---|---|---|
| FAA 704125-020 | 266 | 0 | 42 | 40 | 230 |

| Requirement: GRANDFATHERED: NESTO INT FOR NESTO ARRIVAL. | | |
|---|---|---|
| Signature: Barbee Sean | Routing Symbol: AJV-352 | Date: 09/24/2012 |

**Expanded Service Volume Data: (FMO)**

| ESV ID | Radial 1 | Radial 2 | Distance | Minimum Altitude | Maximum Altitude | Action Type |
|---|---|---|---|---|---|---|
| FAA 704125-020 | 266 | 0 | 42 | 40 | 230 | APPROVE |

| Requirement/Remarks: GRANDFATHERED: NESTO INT FOR NESTO ARRIVAL.APPROVED. PEND. FLIGHT CHK/INSPECT @ THE REQ. DIST. AND MIN ALT. | | |
|---|---|---|
| Signature: Cassella Charles | Routing Symbol: | Date: 09/24/2012 |

**Expanded Service Volume Data: (Super FMO)**

| ESV ID | Radial 1 | Radial 2 | Distance | Minimum Altitude | Maximum Altitude | Action Type |
|---|---|---|---|---|---|---|
| FAA 704125-020 | 266 | 0 | 42 | 40 | 230 | APPROVE |

| Requirement/Remarks: GRANDFATHERED: NESTO INT FOR NESTO ARRIVAL.APPROVED. PEND. FLIGHT CHK/INSPECT @ THE REQ. DIST. AND MIN ALT. | | |
|---|---|---|
| Signature: Hughes Dennis | Routing Symbol: | Date: 09/24/2012 |

**Expanded Service Volume Data: (FIFO)**

| ESV ID | Radial 1 | Radial 2 | Distance | Minimum Altitude | Maximum Altitude | Action Type |
|---|---|---|---|---|---|---|
| FAA 704125-020 | 266 | 0 | | | | |

| Requirement/Remarks: | | |
|---|---|---|
| Signature: | Routing Symbol: | Date: |

## ESV Details

| Originating Office : | Airspace Docket Number : | Request Type : Establish | |
|---|---|---|---|
| **Facility Data** | | | |
| Chart Name : HRMAN DME FIX | City : BELLAIRE | Ident : AIR | State : OH |
| Type/Class : DME | Frequency : M1205 | Reference No.: 12086340 | |

**Expanded Service Volume Data: (Requesting Officer)**

| ESV ID | Radial 1 | Radial 2 | Distance | Minimum Altitude | Maximum Altitude |
|---|---|---|---|---|---|
| FAA 691517-014 | 97 | 0 | 90 | 140 | 159 |

| Requirement: HRMAN DME FIX FOR NESTO ARRIVAL | | |
|---|---|---|
| Signature: Barbee Sean | Routing Symbol: AJV-352 | Date: 08/21/2012 |

**Expanded Service Volume Data: (FMO)**

| ESV ID | Radial 1 | Radial 2 | Distance | Minimum Altitude | Maximum Altitude | Action Type |
|---|---|---|---|---|---|---|
| FAA 691517-014 | 97 | 0 | 90 | 140 | 159 | APPROVE |

| Requirement/Remarks: HRMAN DME FIX FOR NESTO ARRIVALAPPROVED. PEND. FLIGHT CHK/INSPECT @ THE REQ. DIST. AND MIN ALT. | | |
|---|---|---|
| Signature: NASSR NASHAAT | Routing Symbol: | Date: 08/28/2012 |

**Expanded Service Volume Data: (Super FMO)**

| ESV ID | Radial 1 | Radial 2 | Distance | Minimum Altitude | Maximum Altitude | Action Type |
|---|---|---|---|---|---|---|
| FAA 691517-014 | 97 | 0 | 90 | 140 | 159 | APPROVE |

| Requirement/Remarks: HRMAN DME FIX FOR NESTO ARRIVALAPPROVED. PEND. FLIGHT CHK/INSPECT @ THE REQ. DIST. AND MIN ALT. | | |
|---|---|---|
| Signature: Hughes Dennis | Routing Symbol: | Date: 08/30/2012 |

**Expanded Service Volume Data: (FIFO)**

| ESV ID | Radial 1 | Radial 2 | Distance | Minimum Altitude | Maximum Altitude | Action Type |
|---|---|---|---|---|---|---|
| FAA 691517-014 | 97 | 0 | | | | |

| Requirement/Remarks: | | |
|---|---|---|
| Signature: | Routing Symbol: | Date: |

## ESV Details

| Originating Office : | Airspace Docket Number : | Request Type : Establish | |
|---|---|---|---|
| **Facility Data** | | | |
| Chart Name : EJOCY | City : BELLAIRE | Ident : AIR | State : OH |
| Type/Class : H-VOR | Frequency : M117.1 | Reference No.: 12086560 | |

**Expanded Service Volume Data: (Requesting Officer)**

| ESV ID | Radial 1 | Radial 2 | Distance | Minimum Altitude | Maximum Altitude |
|---|---|---|---|---|---|
| FAA 691516-019 | 97 | 0 | 66 | 50 | 159 |

| Requirement: EJOCY DME FIX FOR NESTO ARRIVAL (KPIT) | | |
|---|---|---|
| Signature: Barbee Sean | Routing Symbol: AJV-352 | Date: 08/28/2012 |

**Expanded Service Volume Data: (FMO)**

| ESV ID | Radial 1 | Radial 2 | Distance | Minimum Altitude | Maximum Altitude | Action Type |
|---|---|---|---|---|---|---|
| FAA 691516-019 | 97 | 0 | 66 | 50 | 159 | APPROVE |

| Requirement/Remarks: EJOCY DME FIX FOR NESTO ARRIVAL (KPIT)APPROVED. PEND. FLIGHT CHK/INSPECT @ THE REQ. DIST. AND MIN ALT. | | |
|---|---|---|
| Signature: NASSR NASHAAT | Routing Symbol: | Date: 08/28/2012 |

**Expanded Service Volume Data: (Super FMO)**

| ESV ID | Radial 1 | Radial 2 | Distance | Minimum Altitude | Maximum Altitude | Action Type |
|---|---|---|---|---|---|---|
| FAA 691516-019 | 97 | 0 | 66 | 50 | 159 | APPROVE |

| Requirement/Remarks: EJOCY DME FIX FOR NESTO ARRIVAL (KPIT)APPROVED. PEND. FLIGHT CHK/INSPECT @ THE REQ. DIST. AND MIN ALT. | | |
|---|---|---|
| Signature: Hughes Dennis | Routing Symbol: | Date: 08/29/2012 |

**Expanded Service Volume Data: (FIFO)**

| ESV ID | Radial 1 | Radial 2 | Distance | Minimum Altitude | Maximum Altitude | Action Type |
|---|---|---|---|---|---|---|
| FAA 691516-019 | 97 | 0 | | | | |

| Requirement/Remarks: | | |
|---|---|---|
| Signature: | Routing Symbol: | Date: |

## ESV Details

| Originating Office : | Airspace Docket Number : | Request Type : Establish | |
|---|---|---|---|
| **Facility Data** | | | |
| Chart Name : EJOCY | City : BELLAIRE | Ident : AIR | State : OH |
| Type/Class : DME | Frequency : M1205 | Reference No.: 12086561 | |

**Expanded Service Volume Data: (Requesting Officer)**

| ESV ID | Radial 1 | Radial 2 | Distance | Minimum Altitude | Maximum Altitude |
|---|---|---|---|---|---|
| FAA 691517-016 | 97 | 0 | 66 | 50 | 159 |

| Requirement: EJOCY DME FIX FOR NESTO ARRIVAL (KPIT) | | |
|---|---|---|
| Signature: Barbee Sean | Routing Symbol: AJV-352 | Date: 08/28/2012 |

**Expanded Service Volume Data: (FMO)**

| ESV ID | Radial 1 | Radial 2 | Distance | Minimum Altitude | Maximum Altitude | Action Type |
|---|---|---|---|---|---|---|
| FAA 691517-016 | 97 | 0 | 66 | 50 | 159 | APPROVE |

| Requirement/Remarks: EJOCY DME FIX FOR NESTO ARRIVAL (KPIT)APPROVED. PEND. FLIGHT CHK/INSPECT @ THE REQ. DIST. AND MIN ALT. | | |
|---|---|---|
| Signature: NASSR NASHAAT | Routing Symbol: | Date: 08/28/2012 |

**Expanded Service Volume Data: (Super FMO)**

| ESV ID | Radial 1 | Radial 2 | Distance | Minimum Altitude | Maximum Altitude | Action Type |
|---|---|---|---|---|---|---|
| FAA 691517-016 | 97 | 0 | 66 | 50 | 159 | APPROVE |

| Requirement/Remarks: EJOCY DME FIX FOR NESTO ARRIVAL (KPIT)APPROVED. PEND. FLIGHT CHK/INSPECT @ THE REQ. DIST. AND MIN ALT. | | |
|---|---|---|
| Signature: Hughes Dennis | Routing Symbol: | Date: 08/30/2012 |

**Expanded Service Volume Data: (FIFO)**

| ESV ID | Radial 1 | Radial 2 | Distance | Minimum Altitude | Maximum Altitude | Action Type |
|---|---|---|---|---|---|---|
| FAA 691517-016 | 97 | 0 | | | | |

| Requirement/Remarks: | | |
|---|---|---|
| Signature: | Routing Symbol: | Date: |

# Approved ESVs Report

## Region - GL

**Ident - AIR** **City - BELLAIRE, OH** **Frequency - 117.1-MHz** **Facility - H-VOR**

| ESV ID | Radial 1 | Radial 2 | Distance | Alt Min | Alt Max | Fight Check Date |
|---|---|---|---|---|---|---|
| FAA 691516-001 | 111 | 0 | 57 | 30 | 175 | |
| **Requirement :** 900101E 900101A 900101A | | | | | | |
| FAA 691516-002 | 111 | 0 | 85 | 63 | 175 | |
| **Requirement :** 900101E 900101A 900101A | | | | | | |
| FAA 691516-003 | 126 | 0 | 52 | 40 | 175 | |
| **Requirement :** 900101E 900101A 900101A | | | | | | |
| FAA 691516-006 | 97 | 0 | 132 | 200 | 450 | |
| **Requirement :** 950526EBTL FIFO J80/J110/J230 NESTO STAR 950625RMODIFIED FROM 172 MILES BY BTL FIFO 951019ABTL FIFO | | | | | | |
| FAA 691516-007 | 97 | 0 | 90 | 120 | 240 | |
| **Requirement :** 950526EBTL FIFO NESTO STAR.HRMAN INT 950625AAGL-483 951019ABTL FIFO | | | | | | |
| FAA 691516-008 | 97 | 0 | 78 | 100 | 240 | |
| **Requirement :** 950526EBTL FIFO NESTO STAT.SAMEE INT 950625RAGL-483.MODIFIED ALT FROM FL055 TO FL100 951019ABTL FIFO | | | | | | |
| FAA 691516-011 | 263 | 0 | 76 | 60 | 158 | |
| **Requirement :** 090413R BREMN STAR,ADJUSTED MAX ALT TO SSV,FC 3/1/07,METZLAFF 090413 BREMN STAR 090414 AJW-326 ,APPROVED | | | | | | |
| FAA 691516-012 | 263 | 0 | 81 | 90 | 175 | |
| **Requirement :** Support BREHM Int | | | | | | |
| FAA 691516-013 | 247 | 0 | 48 | 30 | 175 | |
| **Requirement :** Support RAVES Int | | | | | | |
| FAA 691516-014 | 263 | 0 | 64 | 90 | 158 | |
| **Requirement :** 070531E GRANDFATHERED: FRICC INT, (BREMN STAR) 070531 Grandfather Rule/Policy. VOR Signal Strength(dBW) = 090413 AJW-326 ,APPROVED | | | | | | |
| FAA 691516-015 | 157 | 0 | 145 | 240 | 410 | |
| **Requirement :** Off airway route to J24 | | | | | | |
| FAA 691516-016 | 209 | 0 | 43 | 30 | 175 | 03/19/2010 |
| **Requirement :** | | | | | | |
| FAA 691516-018 | 158 | 0 | 53 | 34 | 145 | 11/24/2009 |
| **Requirement :** 091030E V103 TO CKB V/DME DUE TO CKB R-335 UNUSABLE BELOW 9000091102 Approved. Pend. Flight Chk/Inspect @ the req. dist. and MIN ALT. | | | | | | |

**Ident - AIR** **City - BELLAIRE, OH** **Frequency - 1205-MHz** **Facility - DME**

| ESV ID | Radial 1 | Radial 2 | Distance | Alt Min | Alt Max | Fight Check Date |
|---|---|---|---|---|---|---|
| FAA 691517-003 | 263 | 0 | 76 | 60 | 158 | |
| **Requirement :** 090413R BREMN STAR,ADJUSTED MAX ALT TO SSV,FC 3/1/07,METZLAFF 090413 Approved. Pend. Flight Chk/Inspect @ the req. dist. and MIN ALT. 090414 AJW-326 ,APPROVED | | | | | | |
| FAA 691517-004 | 263 | 0 | 81 | 90 | 175 | |
| **Requirement :** Support BREHM Int | | | | | | |
| FAA 691517-005 | 247 | 0 | 48 | 30 | 175 | |
| **Requirement :** Support RAVES Int | | | | | | |
| FAA 691517-006 | 263 | 0 | 64 | 90 | 158 | |
| **Requirement :** 070531E GRANDFATHERED: FRICC INT, (BREMN STAR) 070531 Grandfather Rule/Policy. TACR Signal Strength(dBW) = 090413 07056165 ,APPROVED | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| FAA 691517-007 | 157 | 0 | 145 | 240 | 410 | |

**Requirement :** Off airway route to J24

| | | | | | | |
|---|---|---|---|---|---|---|
| FAA 691517-008 | 217 | 232 | 100 | 100 | 170 | 10/17/2009 |

**Requirement :** 090402E FEWGA RNAV STAR. ESV FOR PIT ARRIVALS ON FEWGA STAR. N090402 Approved. Pend. Flight Chk/Inspect @ the req. dist. and MIN ALT.

| | | | | | | |
|---|---|---|---|---|---|---|
| FAA 691517-009 | 209 | 0 | 43 | 30 | 175 | 03/19/2010 |

**Requirement :** 090623E USED TO ESTABLISH SACKY INTERSECTION 090629 Approved. Pend. Flight Chk/Inspect @ the req. dist. and MIN ALT. 100323 USED ESV SHEET TO COCUMENT THE VOR PROTION OF THE AIR USED ESV SHEET TO COCUMENT THE VOR PROTION OF THE AIR VDME 209R. IT WAS

| | | | | | | |
|---|---|---|---|---|---|---|
| FAA 691517-012 | 158 | 0 | 53 | 34 | 145 | 11/24/2009 |

**Requirement :** 091030E V103 TO CKB V/DME DUE TO CKB R-335 UNUSABLE BELOW 9000091102 Approved. Pend. Flight Chk/Inspect @ the req. dist. and MIN ALT.

| | | | | | | |
|---|---|---|---|---|---|---|
| FAA 691517-013 | 217 | 232 | 100 | 100 | 170 | 09/13/2011 |

**Requirement :** 110428E MITIGATE FAILURE AND CRITICAL DME ON FEWGA STAR CAUSED110429 Approved. Pend. Flight Chk/Inspect @ the req. dist. and MIN ALT.

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# Approved ESVs Report

## Region - EA

**Ident - JST** **City - JOHNSTOWN, PA** **Frequency - 1164-MHz** **Facility - TACR**

| ESV ID | Radial 1 | Radial 2 | Distance | Alt Min | Alt Max | Fight Check Date |
|---|---|---|---|---|---|---|
| FAA 704125-001 | 74 | 0 | 59 | 70 | 175 | |

**Requirement :** 060515E RASHE FIX/V106 GNSS AIRWAY (PA) 060818 070420 AVN - 150 ORIG ESV REQUEST FOR JST X 6000 FT UNSAT. BUMP ALT TO

| | | | | | | |
|---|---|---|---|---|---|---|
| FAA 704125-003 | 326 | 0 | 43 | 42 | 175 | |

**Requirement :** 070331E GRANDFATHERED: TALLS INT, FEEDER FIX FOR KDUJ RNAV (GP070411 Approved. Pend. Flight Chk/Inspect @ the req. dist. and MIN ALT. 080828 AVN-150 FC SAT 9/5/07, N70, MARINO

| | | | | | | |
|---|---|---|---|---|---|---|
| FAA 704125-004 | 313 | 0 | 90 | 180 | 450 | |

**Requirement :** 070712E LLEEO STAR HAGUD 070724 Approved. Pend. Flight Chk/Inspect @ the req. dist. and MIN ALT. 071031 AVN-150 PREVIOUS FC SAT 313/104/180 TO 450

| | | | | | | |
|---|---|---|---|---|---|---|
| FAA 704125-005 | 96 | 0 | 62 | 60 | 400 | |

**Requirement :** Sub route for J152 and V12 to HAR Vortac

| | | | | | | |
|---|---|---|---|---|---|---|
| FAA 704125-006 | 96 | 0 | 81 | 130 | 400 | |

**Requirement :** Sub route for J152 and V12 to HAR Vortac

| | | | | | | |
|---|---|---|---|---|---|---|
| FAA 704125-007 | 99 | 0 | 83 | 180 | 450 | |

**Requirement :** Sub route for NY Center

| | | | | | | |
|---|---|---|---|---|---|---|
| FAA 704125-009 | 17 | 0 | 104 | 110 | 220 | |

**Requirement :** EST DUKE MOA

| | | | | | | |
|---|---|---|---|---|---|---|
| FAA 704125-010 | 42 | 0 | 104 | 110 | 220 | |

**Requirement :** EST DUKE MOA

| | | | | | | |
|---|---|---|---|---|---|---|
| FAA 704125-011 | 17 | 0 | 71 | 110 | 220 | |

**Requirement :** EST DUKE MOA

| | | | | | | |
|---|---|---|---|---|---|---|
| FAA 704125-012 | 274 | 0 | 55 | 50 | 175 | |

**Requirement :** Sub route to AGC

| | | | | | | |
|---|---|---|---|---|---|---|
| FAA 704125-015 | 136 | 0 | 45 | 180 | 450 | 09/25/1986 |

**Requirement :** 100818E GRANDFATHERED: BUSTR FIX 100823 Approved. Pend. Flight Chk/Inspect @ the req. dist. and MIN ALT.

| | | | | | | |
|---|---|---|---|---|---|---|
| FAA 704125-016 | 48 | 80 | 62 | 100 | 130 | 10/24/2011 |

**Requirement :** 110428E REQUEST ESV TO MITIGATE CRITICALS ON THE (DCA) SKILS1 110502 Approved. Pend. Flight Chk/Inspect @ the req. dist. and MIN ALT. RECORDED ON PREVIOUS RNAV PRO FLT CHECK. PER DAVID COOK

| | | | | | | |
|---|---|---|---|---|---|---|
| FAA 704125-018 | 96 | 0 | 62 | 50 | 175 | 11/02/1990 |

**Requirement :** 120606E GRANDFATHERED: V12 DEFINED COP 120606 APPROVED. PEND. FLIGHT CHK/INSPECT @ THE REQ. DIST. AND MIN ALT.

| | | | | | | |
|---|---|---|---|---|---|---|
| FAA 704125-019 | 96 | 0 | 49 | 50 | 175 | 03/08/1991 |

**Requirement :** 120821E GRANDFATHERED: JUNEY INT,V12,V10,FC 3/08/91,KOSCHEKA 120821 APPROVED. PEND. FLIGHT CHK/INSPECT @ THE REQ. DIST. AND MIN ALT.

**Ident - JST** **City - JOHNSTOWN, PA** **Frequency - 113-MHz** **Facility - L-VOR**

| ESV ID | Radial 1 | Radial 2 | Distance | Alt Min | Alt Max | Fight Check Date |
|---|---|---|---|---|---|---|
| FAA 711482-001 | 266 | 0 | 42 | 40 | 230 | |

**Requirement :** 050525E RADIAL FOR NESTO INT 050627 ESV APPROVED 080904 AVN-150

# Approved ESVs Report

## Region - EA

**Ident - IHD** **City - INDIAN HEAD, PA** **Frequency - 108.2-MHz** **Facility - L-VOR**

| ESV ID | Radial 1 | Radial 2 | Distance | Alt Min | Alt Max | Fight Check Date |
|---|---|---|---|---|---|---|
| FAA 697681-002 | 122 | 0 | 42 | 180 | 240 | |
| **Requirement :** 900101E DEP RTEDING PIT 900101A 900101A | | | | | | |
| FAA 697681-003 | 260 | 0 | 59 | 50 | 175 | |
| **Requirement :** 900101E V119 900101A 900101A | | | | | | |
| FAA 697681-004 | 315 | 0 | 21 | 50 | 230 | |
| **Requirement :** 900101E ARR TRSN 900101A 900101A | | | | | | |
| FAA 697681-006 | 116 | 0 | 20 | 180 | 350 | |
| **Requirement :** 900101E J518 900101A 900101A | | | | | | |
| FAA 697681-007 | 310 | 0 | 15 | 180 | 390 | |
| **Requirement :** 900101E J518 900101A 900101A | | | | | | |
| FAA 697681-008 | 185 | 0 | 28 | 50 | 370 | |
| **Requirement :** 900101E HOLDING V144/J162 900101A 900101A | | | | | | |
| FAA 697681-009 | 310 | 0 | 39 | 180 | 450 | |
| **Requirement :** 930504E 930202A 930408A | | | | | | |
| FAA 697681-010 | 116 | 0 | 15 | 180 | 390 | |
| **Requirement :** J518 usage | | | | | | |
| FAA 697681-011 | 315 | 0 | 15 | 180 | 230 | 01/25/1977 |
| **Requirement :** 090727E GRANDFATHERED: PLEEZ INT/DME/WP EXISTING ESV R-315@21 090804 Approved. Pend. Flight Chk/Inspect @ the req. dist. and MIN ALT. | | | | | | |
| FAA 697681-012 | 109 | 0 | 50 | 120 | 175 | 03/18/2010 |
| **Requirement :** | | | | | | |

**Ident - IHD** **City - INDIAN HEAD, PA** **Frequency - 980-MHz** **Facility - TACR**

| ESV ID | Radial 1 | Radial 2 | Distance | Alt Min | Alt Max | Fight Check Date |
|---|---|---|---|---|---|---|
| FAA 697682-001 | 116 | 0 | 15 | 180 | 390 | |
| **Requirement :** J518 usage | | | | | | |
| FAA 697682-002 | 315 | 0 | 15 | 180 | 230 | 01/25/1977 |
| **Requirement :** 090727E GRANDFATHERED: PLEEZ INT/DME/WP EXISTING ESV R-315@21 090804 Approved. Pend. Flight Chk/Inspect @ the req. dist. and MIN ALT. | | | | | | |
| FAA 697682-003 | 109 | 0 | 50 | 120 | 175 | 03/18/2010 |
| **Requirement :** | | | | | | |

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# Approved ESVs Report

## Region - GL

**Ident - AIR** **City - BELLAIRE, OH** **Frequency - 117.1-MHz** **Facility - H-VOR**

| ESV ID | Radial 1 | Radial 2 | Distance | Alt Min | Alt Max | Fight Check Date |
|---|---|---|---|---|---|---|
| FAA 691516-001 | 111 | 0 | 57 | 30 | 175 | |
| **Requirement :** 900101E 900101A 900101A | | | | | | |
| FAA 691516-002 | 111 | 0 | 85 | 63 | 175 | |
| **Requirement :** 900101E 900101A 900101A | | | | | | |
| FAA 691516-003 | 126 | 0 | 52 | 40 | 175 | |
| **Requirement :** 900101E 900101A 900101A | | | | | | |
| FAA 691516-006 | 97 | 0 | 132 | 200 | 450 | |
| **Requirement :** 950526EBTL FIFO J80/J110/J230 NESTO STAR 950625RMODIFIED FROM 172 MILES BY BTL FIFO 951019ABTL FIFO | | | | | | |
| FAA 691516-007 | 97 | 0 | 90 | 120 | 240 | |
| **Requirement :** 950526EBTL FIFO NESTO STAR.HRMAN INT 950625AAGL-483 951019ABTL FIFO | | | | | | |
| FAA 691516-008 | 97 | 0 | 78 | 100 | 240 | |
| **Requirement :** 950526EBTL FIFO NESTO STAT.SAMEE INT 950625RAGL-483.MODIFIED ALT FROM FL055 TO FL100 951019ABTL FIFO | | | | | | |
| FAA 691516-011 | 263 | 0 | 76 | 60 | 158 | |
| **Requirement :** 090413R BREMN STAR,ADJUSTED MAX ALT TO SSV,FC 3/1/07,METZLAFF 090413 BREMN STAR 090414 AJW-326 ,APPROVED | | | | | | |
| FAA 691516-012 | 263 | 0 | 81 | 90 | 175 | |
| **Requirement :** Support BREHM Int | | | | | | |
| FAA 691516-013 | 247 | 0 | 48 | 30 | 175 | |
| **Requirement :** Support RAVES Int | | | | | | |
| FAA 691516-014 | 263 | 0 | 64 | 90 | 158 | |
| **Requirement :** 070531E GRANDFATHERED: FRICC INT, (BREMN STAR) 070531 Grandfather Rule/Policy. VOR Signal Strength(dBW) = 090413 AJW-326 ,APPROVED | | | | | | |
| FAA 691516-015 | 157 | 0 | 145 | 240 | 410 | |
| **Requirement :** Off airway route to J24 | | | | | | |
| FAA 691516-016 | 209 | 0 | 43 | 30 | 175 | 03/19/2010 |
| **Requirement :** | | | | | | |
| FAA 691516-018 | 158 | 0 | 53 | 34 | 145 | 11/24/2009 |
| **Requirement :** 091030E V103 TO CKB V/DME DUE TO CKB R-335 UNUSABLE BELOW 9000091102 Approved. Pend. Flight Chk/Inspect @ the req. dist. and MIN ALT. | | | | | | |

**Ident - AIR** **City - BELLAIRE, OH** **Frequency - 1205-MHz** **Facility - DME**

| ESV ID | Radial 1 | Radial 2 | Distance | Alt Min | Alt Max | Fight Check Date |
|---|---|---|---|---|---|---|
| FAA 691517-003 | 263 | 0 | 76 | 60 | 158 | |
| **Requirement :** 090413R BREMN STAR,ADJUSTED MAX ALT TO SSV,FC 3/1/07,METZLAFF 090413 Approved. Pend. Flight Chk/Inspect @ the req. dist. and MIN ALT. 090414 AJW-326 ,APPROVED | | | | | | |
| FAA 691517-004 | 263 | 0 | 81 | 90 | 175 | |
| **Requirement :** Support BREHM Int | | | | | | |
| FAA 691517-005 | 247 | 0 | 48 | 30 | 175 | |
| **Requirement :** Support RAVES Int | | | | | | |
| FAA 691517-006 | 263 | 0 | 64 | 90 | 158 | |
| **Requirement :** 070531E GRANDFATHERED: FRICC INT, (BREMN STAR) 070531 Grandfather Rule/Policy. TACR Signal Strength(dBW) = 090413 07056165 ,APPROVED | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| FAA 691517-007 | 157 | 0 | 145 | 240 | 410 | |

**Requirement :** Off airway route to J24

| | | | | | | |
|---|---|---|---|---|---|---|
| FAA 691517-008 | 217 | 232 | 100 | 100 | 170 | 10/17/2009 |

**Requirement :** 090402E FEWGA RNAV STAR. ESV FOR PIT ARRIVALS ON FEWGA STAR. N090402 Approved. Pend. Flight Chk/Inspect @ the req. dist. and MIN ALT.

| | | | | | | |
|---|---|---|---|---|---|---|
| FAA 691517-009 | 209 | 0 | 43 | 30 | 175 | 03/19/2010 |

**Requirement :** 090623E USED TO ESTABLISH SACKY INTERSECTION 090629 Approved. Pend. Flight Chk/Inspect @ the req. dist. and MIN ALT. 100323 USED ESV SHEET TO COCUMENT THE VOR PROTION OF THE AIR USED ESV SHEET TO COCUMENT THE VOR PROTION OF THE AIR VDME 209R. IT WAS

| | | | | | | |
|---|---|---|---|---|---|---|
| FAA 691517-012 | 158 | 0 | 53 | 34 | 145 | 11/24/2009 |

**Requirement :** 091030E V103 TO CKB V/DME DUE TO CKB R-335 UNUSABLE BELOW 9000091102 Approved. Pend. Flight Chk/Inspect @ the req. dist. and MIN ALT.

| | | | | | | |
|---|---|---|---|---|---|---|
| FAA 691517-013 | 217 | 232 | 100 | 100 | 170 | 09/13/2011 |

**Requirement :** 110428E MITIGATE FAILURE AND CRITICAL DME ON FEWGA STAR CAUSED110429 Approved. Pend. Flight Chk/Inspect @ the req. dist. and MIN ALT.

Get (100 Records) **Next >>**

# Approved ESVs Report

## Region - EA

**Ident - CYN** **City - COYLE, NJ** **Frequency - 1168-MHz** **Facility - TACR**

| ESV ID | Radial 1 | Radial 2 | Distance | Alt Min | Alt Max | Fight Check Date |
|---|---|---|---|---|---|---|
| FAA 704137-001 | 284 | 0 | 133 | 220 | 450 | |
| **Requirement :** J80-110-230 LARRI Flt Chk Values/MIN ALT | | | | | | |
| FAA 704137-002 | 100 | 0 | 55 | 48 | 450 | 07/09/2009 |
| **Requirement :** | | | | | | |
| FAA 704137-005 | 100 | 0 | 55 | 48 | 450 | |
| **Requirement :** 080522E GRANDFATHERED: PREPI INTXN, EXISTING ON V312, CURRENT 080529 Approved. Pend. Flight Chk/Inspect @ the req. dist. and MIN ALT. 090714 AVN - 150 FACILITY DOES NOT SUPPORT BELOW 4800 | | | | | | |
| FAA 704137-006 | 226 | 0 | 42 | 18 | 148 | |
| **Requirement :** 081230E GRANDFATHERED: LEEAH INT, V-1 081230 Approved. Pend. Flight Chk/Inspect @ the req. dist. and MIN ALT. 081231 AJW-326 FC SAT MARINO, N56, 3/28/06 | | | | | | |
| FAA 704137-009 | 284 | 0 | 163 | 260 | 450 | |
| **Requirement :** 090807E GRANDFATHERED: COP J80-110-230,FC SAT 6/1/1989, CRUSE.090810 Approved. Pend. Flight Chk/Inspect @ the req. dist. and MIN ALT. 090812 AJW-326 ,APPROVED | | | | | | |

**Ident - CYN** **City - COYLE, NJ** **Frequency - 113.4-MHz** **Facility - H-VOR**

| ESV ID | Radial 1 | Radial 2 | Distance | Alt Min | Alt Max | Fight Check Date |
|---|---|---|---|---|---|---|
| FAA 711493-001 | 80 | 0 | 50 | 40 | 100 | |
| **Requirement :** 900101E TOWER ENRT ISP AREA TO WRI AREA 900101A 900101A | | | | | | |
| FAA 711493-002 | 20 | 0 | 45 | 30 | 175 | |
| **Requirement :** 900101E TRSN RTE EWR ARR VIA CYN 900101A 900101A | | | | | | |
| FAA 711493-003 | 100 | 0 | 52 | 20 | 175 | |
| **Requirement :** 900101E V312 900101A 900101A | | | | | | |
| FAA 711493-008 | 284 | 0 | 163 | 260 | 450 | |
| **Requirement :** 911125E 890603R 890601R 920618A | | | | | | |
| FAA 711493-009 | 284 | 0 | 133 | 220 | 450 | |
| **Requirement :** J80-110-230 LARRI Flt Chk Values/MIN ALT | | | | | | |
| FAA 711493-010 | 100 | 0 | 55 | 48 | 450 | 07/09/2009 |
| **Requirement :** | | | | | | |
| FAA 711493-016 | 226 | 0 | 42 | 18 | 148 | |
| **Requirement :** 081230E GRANDFATHERED: LEEAH INT, V-1 081230 Approved. Pend. Flight Chk/Inspect @ the req. dist. and MIN ALT. 081231 AJW-326 FC SAT MARINO, N56, 3/28/06 | | | | | | |

Get (100 Records) **Next >>**

# Approved ESVs Report

## Region - GL

**Ident - AIR** **City - BELLAIRE, OH** **Frequency - 117.1-MHz** **Facility - H-VOR**

| ESV ID | Radial 1 | Radial 2 | Distance | Alt Min | Alt Max | Fight Check Date |
|---|---|---|---|---|---|---|
| FAA 691516-001 | 111 | 0 | 57 | 30 | 175 | |
| **Requirement :** 900101E 900101A 900101A | | | | | | |
| FAA 691516-002 | 111 | 0 | 85 | 63 | 175 | |
| **Requirement :** 900101E 900101A 900101A | | | | | | |
| FAA 691516-003 | 126 | 0 | 52 | 40 | 175 | |
| **Requirement :** 900101E 900101A 900101A | | | | | | |
| FAA 691516-006 | 97 | 0 | 132 | 200 | 450 | |
| **Requirement :** 950526EBTL FIFO J80/J110/J230 NESTO STAR 950625RMODIFIED FROM 172 MILES BY BTL FIFO 951019ABTL FIFO | | | | | | |
| FAA 691516-007 | 97 | 0 | 90 | 120 | 240 | |
| **Requirement :** 950526EBTL FIFO NESTO STAR.HRMAN INT 950625AAGL-483 951019ABTL FIFO | | | | | | |
| FAA 691516-008 | 97 | 0 | 78 | 100 | 240 | |
| **Requirement :** 950526EBTL FIFO NESTO STAT.SAMEE INT 950625RAGL-483.MODIFIED ALT FROM FL055 TO FL100 951019ABTL FIFO | | | | | | |
| FAA 691516-011 | 263 | 0 | 76 | 60 | 158 | |
| **Requirement :** 090413R BREMN STAR,ADJUSTED MAX ALT TO SSV,FC 3/1/07,METZLAFF 090413 BREMN STAR 090414 AJW-326 ,APPROVED | | | | | | |
| FAA 691516-012 | 263 | 0 | 81 | 90 | 175 | |
| **Requirement :** Support BREHM Int | | | | | | |
| FAA 691516-013 | 247 | 0 | 48 | 30 | 175 | |
| **Requirement :** Support RAVES Int | | | | | | |
| FAA 691516-014 | 263 | 0 | 64 | 90 | 158 | |
| **Requirement :** 070531E GRANDFATHERED: FRICC INT, (BREMN STAR) 070531 Grandfather Rule/Policy. VOR Signal Strength(dBW) = 090413 AJW-326 ,APPROVED | | | | | | |
| FAA 691516-015 | 157 | 0 | 145 | 240 | 410 | |
| **Requirement :** Off airway route to J24 | | | | | | |
| FAA 691516-016 | 209 | 0 | 43 | 30 | 175 | 03/19/2010 |
| **Requirement :** | | | | | | |
| FAA 691516-018 | 158 | 0 | 53 | 34 | 145 | 11/24/2009 |
| **Requirement :** 091030E V103 TO CKB V/DME DUE TO CKB R-335 UNUSABLE BELOW 9000091102 Approved. Pend. Flight Chk/Inspect @ the req. dist. and MIN ALT. | | | | | | |

**Ident - AIR** **City - BELLAIRE, OH** **Frequency - 1205-MHz** **Facility - DME**

| ESV ID | Radial 1 | Radial 2 | Distance | Alt Min | Alt Max | Fight Check Date |
|---|---|---|---|---|---|---|
| FAA 691517-003 | 263 | 0 | 76 | 60 | 158 | |
| **Requirement :** 090413R BREMN STAR,ADJUSTED MAX ALT TO SSV,FC 3/1/07,METZLAFF 090413 Approved. Pend. Flight Chk/Inspect @ the req. dist. and MIN ALT. 090414 AJW-326 ,APPROVED | | | | | | |
| FAA 691517-004 | 263 | 0 | 81 | 90 | 175 | |
| **Requirement :** Support BREHM Int | | | | | | |
| FAA 691517-005 | 247 | 0 | 48 | 30 | 175 | |
| **Requirement :** Support RAVES Int | | | | | | |
| FAA 691517-006 | 263 | 0 | 64 | 90 | 158 | |
| **Requirement :** 070531E GRANDFATHERED: FRICC INT, (BREMN STAR) 070531 Grandfather Rule/Policy. TACR Signal Strength(dBW) = 090413 07056165 ,APPROVED | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| FAA 691517-007 | 157 | 0 | 145 | 240 | 410 | |

**Requirement :** Off airway route to J24

| | | | | | | |
|---|---|---|---|---|---|---|
| FAA 691517-008 | 217 | 232 | 100 | 100 | 170 | 10/17/2009 |

**Requirement :** 090402E FEWGA RNAV STAR. ESV FOR PIT ARRIVALS ON FEWGA STAR. N090402 Approved. Pend. Flight Chk/Inspect @ the req. dist. and MIN ALT.

| | | | | | | |
|---|---|---|---|---|---|---|
| FAA 691517-009 | 209 | 0 | 43 | 30 | 175 | 03/19/2010 |

**Requirement :** 090623E USED TO ESTABLISH SACKY INTERSECTION 090629 Approved. Pend. Flight Chk/Inspect @ the req. dist. and MIN ALT. 100323 USED ESV SHEET TO COCUMENT THE VOR PROTION OF THE AIR USED ESV SHEET TO COCUMENT THE VOR PROTION OF THE AIR VDME 209R. IT WAS

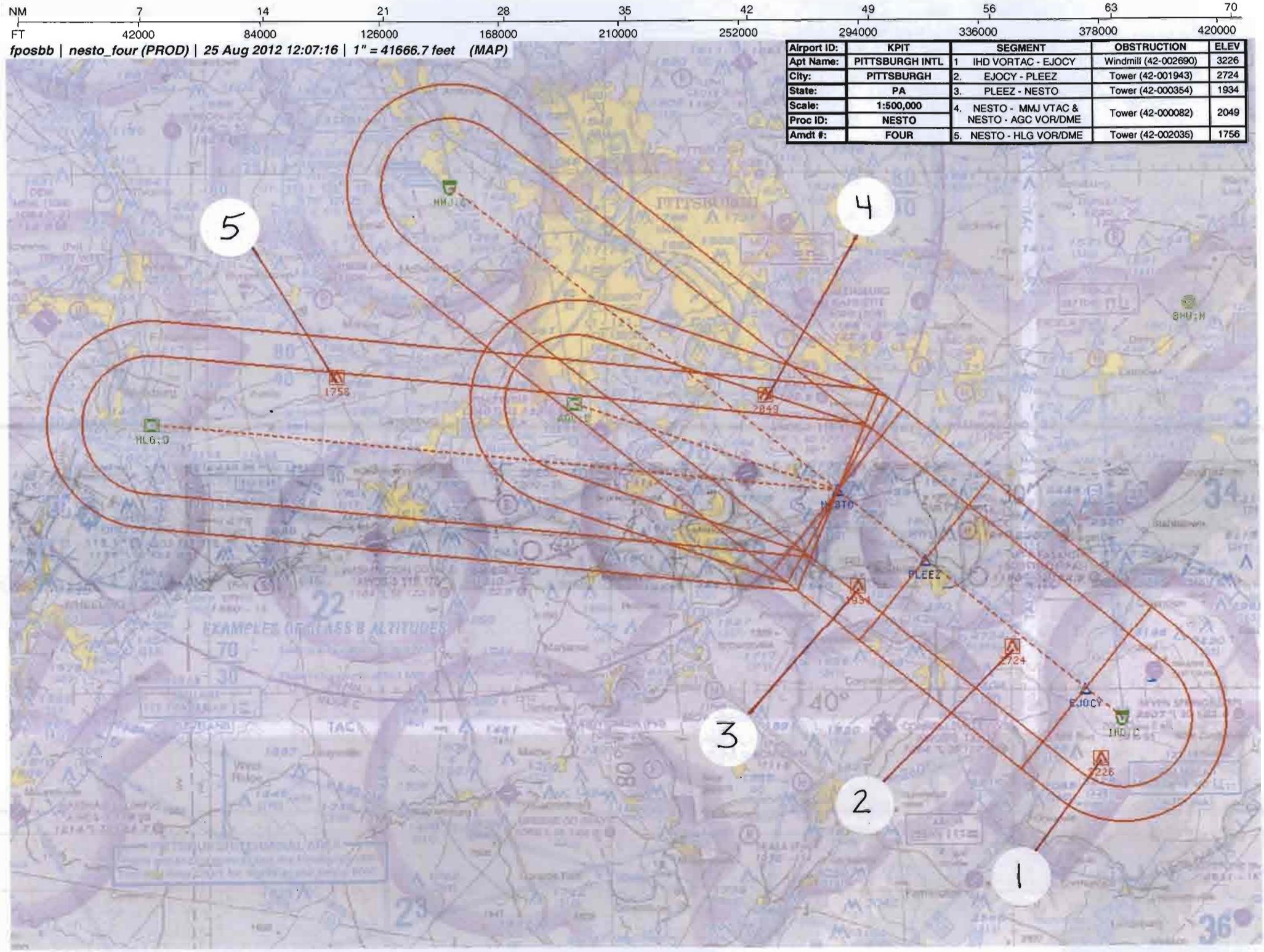
| | | | | | | |
|---|---|---|---|---|---|---|
| FAA 691517-012 | 158 | 0 | 53 | 34 | 145 | 11/24/2009 |

**Requirement :** 091030E V103 TO CKB V/DME DUE TO CKB R-335 UNUSABLE BELOW 9000091102 Approved. Pend. Flight Chk/Inspect @ the req. dist. and MIN ALT.

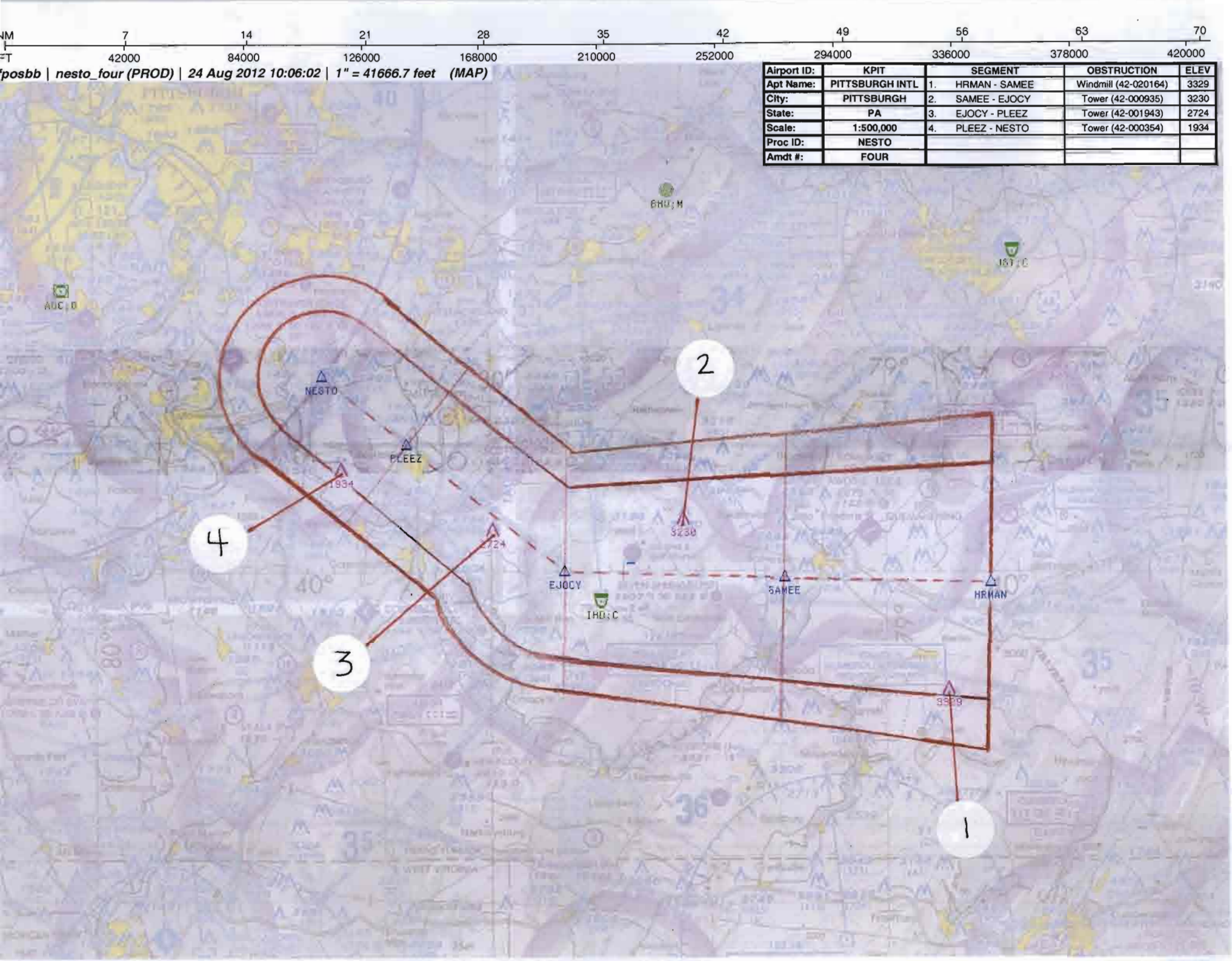
| | | | | | | |
|---|---|---|---|---|---|---|
| FAA 691517-013 | 217 | 232 | 100 | 100 | 170 | 09/13/2011 |

**Requirement :** 110428E MITIGATE FAILURE AND CRITICAL DME ON FEWGA STAR CAUSED110429 Approved. Pend. Flight Chk/Inspect @ the req. dist. and MIN ALT.

Get (100 Records) **Next >>**




| Airport ID: | KPIT | SEGMENT | OBSTRUCTION | ELEV |
|---|---|---|---|---|
| Apt Name: | PITTSBURGH INTL | 1 IHD VORTAC - EJOCY | Windmill (42-002690) | 3226 |
| City: | PITTSBURGH | 2. EJOCY - PLEEZ | Tower (42-001943) | 2724 |
| State: | PA | 3. PLEEZ - NESTO | Tower (42-000354) | 1934 |
| Scale: | 1:500,000 | 4. NESTO - MMJ VTAC & NESTO - AGC VOR/DME | Tower (42-000082) | 2049 |
| Proc ID: | NESTO | | | |
| Amdt #: | FOUR | 5. NESTO - HLG VOR/DME | Tower (42-002035) | 1756 |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FT 42000 84000 126000 168000 210000 252000 294000 336000 378000 420000
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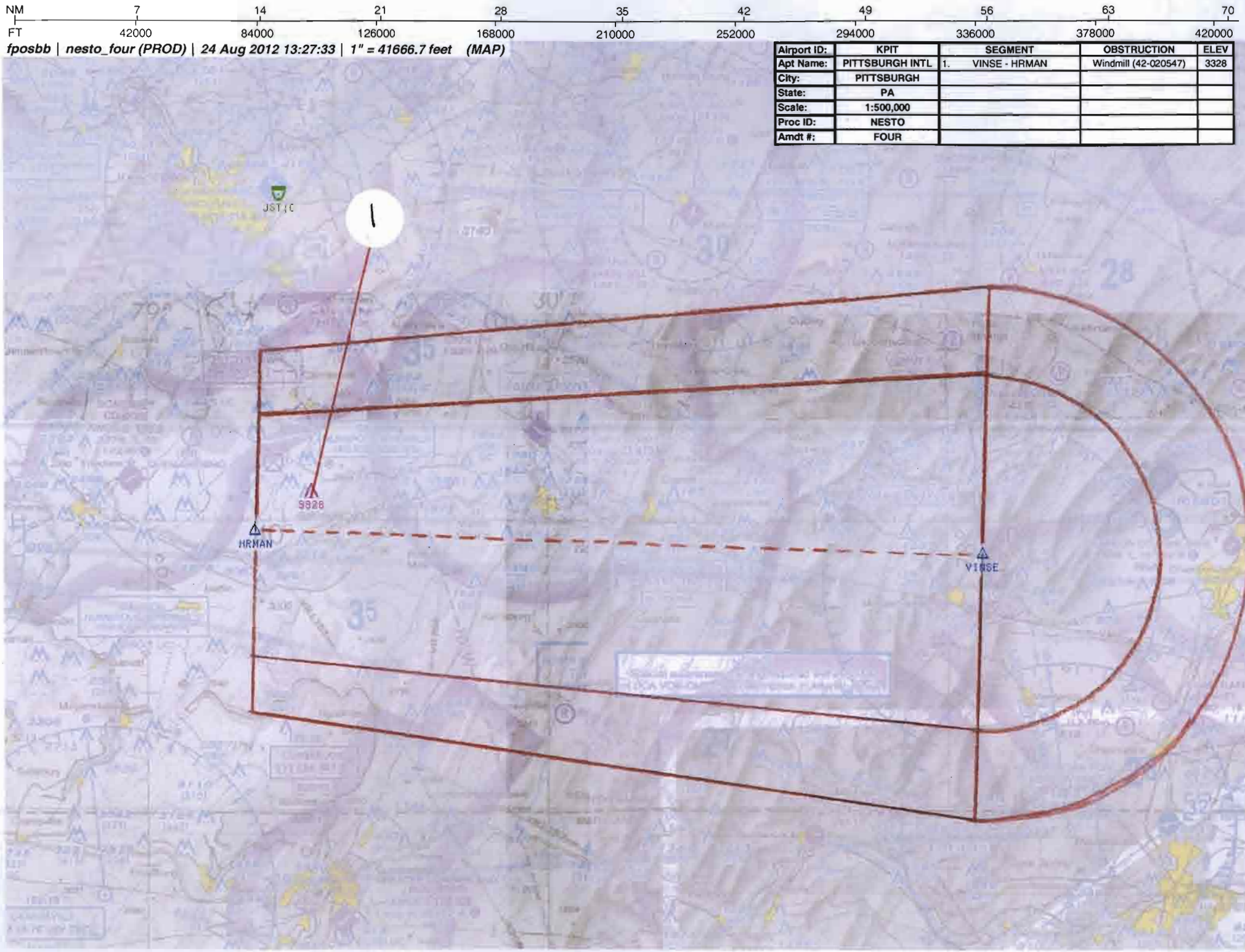
Airport ID: KPIT
Apt Name: PITTSBURGH INTL
City: PITTSBURGH
State: PA
Scale: 1:500,000
Proc ID: NESTO
Amdt #: FOUR
SEGMENT
1. HRMAN - SAMEE
2. SAMEE - EJOCY
3. EJOCY - PLEEZ
4. PLEEZ - NESTO
OBSTRUCTION
Windmill (42-020164)
Tower (42-000935)
Tower (42-001943)
Tower (42-000354)
ELEV
3329
3230
2724
1934
6HU;M
JST;C
AUC;D
IHD;C
NESTO
PLEEZ
EJOCY
SAMEE
HRMAN
1934
2724
3230
3329
1
2
3
4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FT 42000 84000 126000 168000 210000 252000 294000 336000 378000 420000
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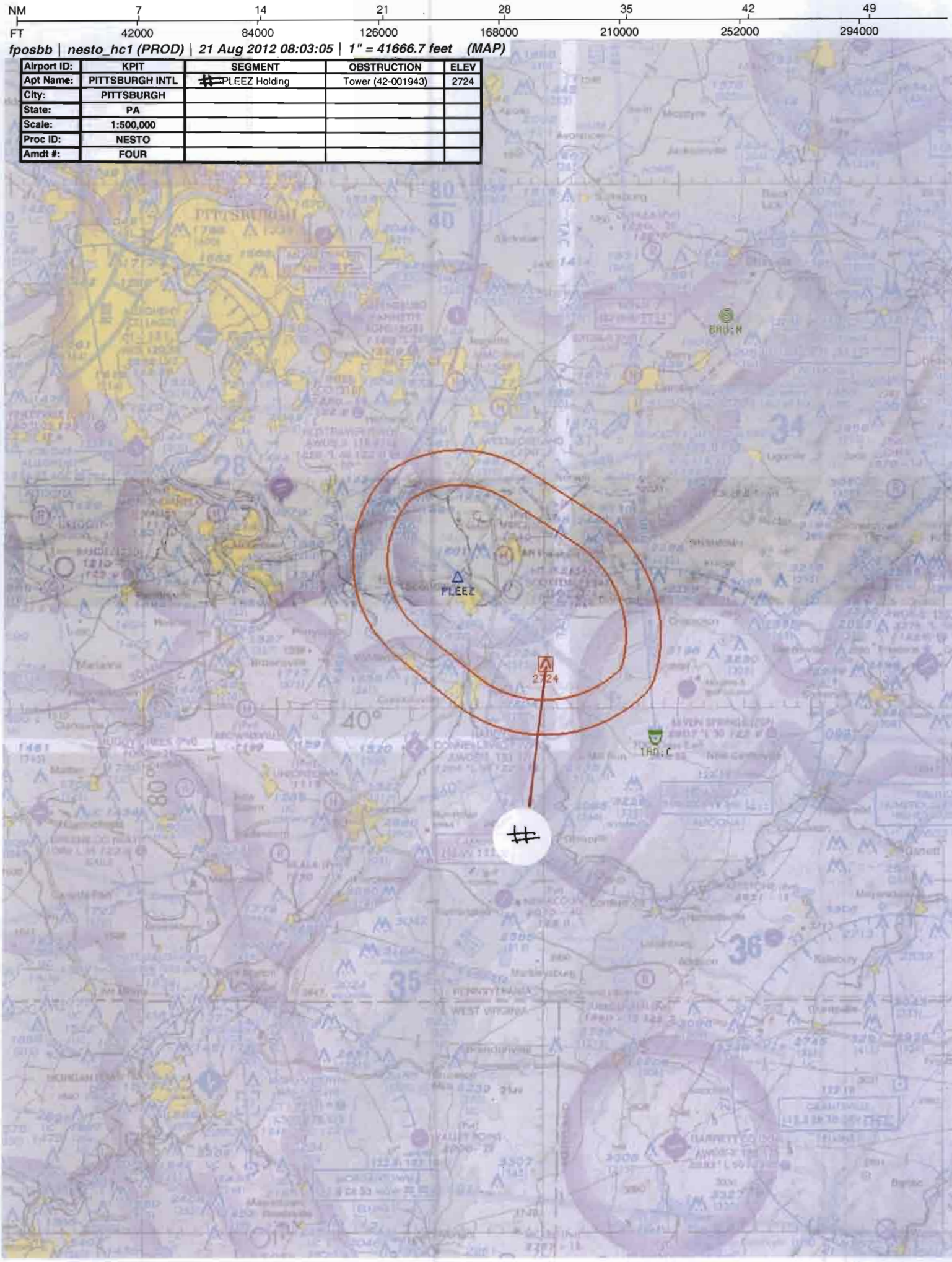
Airport ID: KPIT
Apt Name: PITTSBURGH INTL
City: PITTSBURGH
State: PA
Scale: 1:500,000
Proc ID: NESTO
Amdt #: FOUR
SEGMENT
1. VINSE - HRMAN
OBSTRUCTION
Windmill (42-020547)
ELEV
3328
JST (C
9928
HRMAN
VINSE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FT 42000 84000 126000 168000 210000 252000 294000
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Airport ID: KPIT
Apt Name: PITTSBURGH INTL
City: PITTSBURGH
State: PA
Scale: 1:500,000
Proc ID: NESTO
Amdt #: FOUR
SEGMENT
PLEEZ Holding
OBSTRUCTION
Tower (42-001943)
ELEV
2724
PLEEZ
2724
BRO:H
THO:C

US Department of Transportation
**Federal Aviation Administration**

# STAR - Standard Terminal Arrival

1. Bearings, headings, courses and radials are listed to the nearest hundredth (e.g. 360.00)
2. Distances are in nautical miles to nearest hundredth (e.g. 00.00)
3. Altitudes are minimum altitudes unless otherwise indicated

**(1) Transition Routes**

| (a) Transition Name | (b) Transition Computer Codes | (c) From RNAV WP/ FIX/NAVAID | (d) To RNAV WP/ FIX/NAVAID | (e) Mag Course/ Distance | (f) MEA | (g) MOCA | (h) MAA | (i) Crossing Altitudes / Fixes |
|---|---|---|---|---|---|---|---|---|
| VINSE | VINSE.NESTO4 | VINSE | HRMAN INT | 277.27/41.97 (AIR R-097) | FL200 | | | |
| | | HRMAN INT | SAMEE INT | 277.27/12.00 (AIR R-097) | 14000 | | | |
| | | SAMEE INT | EJOCY | 277.27/12.89 (AIR R-097) | 8000 | | | |
| | | EJOCY | PLEEZ INT | 315.02/11.87 (IHD R-315) | 5000 | | | |
| | | PLEEZ INT | NESTO INT | 315.02/6.39 (IHD R-315) | 5000 | | | |
| INDIAN HEAD | IHD.NESTO4 | IHD VORTAC | EJOCY | 315.02/2.76 (IHD R-315) | 5000 | | | |
| | | EJOCY | PLEEZ INT | 315.02/11.87 (IHD R-315) | 5000 | | | |
| | | PLEEZ INT | NESTO INT | 315.02/6.39 (IHD R-315) | 5000 | | | |

**(2) Arrival Route Description:**

KPIT: FROM OVER NESTO INT DIRECT MMJ VORTAC. EXPECT RADAR VECTORS AFTER NESTO INT. KAGC WEST FLOW: FROM OVER NESTO INT DIRECT AGC VOR/DME, THEN EXPECT RADAR VECTORS. KAGC EAST FLOW: FROM OVER NESTO INT DIRECT AGC VOR/DME, THEN EXPECT RADAR VECTORS. KHLG: FROM OVER NESTO INT DIRECT HLG VOR/DME, THEN EXPECT RADAR VECTORS. KAFJ: FROM OVER NESTO INT ON HLG R-102, THEN EXPECT RADAR VECTORS.

**(3) Procedural Data Notes:**

**CHART NOTE:** RADAR REQUIRED; **CHART NOTE:** DME REQUIRED.

**VERTICAL NAVIGATION PLANNING INFORMATION:** PITTSBURGH TURBOJETS WEST FLOW: EXPECT CLEARANCE TO CROSS NESTO AT 10,000 AND 250K. WHEN RWY 28 SIMULTANEOUS APPROACH IS IN USE, EXPECT CLEARANCE TO CROSS NESTO AT 9,000. PITTSBURGH TURBOJETS EAST FLOW: EXPECT CLEARANCE TO CROSS NESTO AT 10,000. PITTSBURGH PROPELLER AIRCRAFT: FILED AT 210K OR GREATER, EXPECT TO CROSS NESTO AT 7,000. FILED LESS THAN 210K, EXPECT TO CROSS NESTO AT 6,000. SATELLITE ARRIVALS: EXPECT TO CROSS NESTO AT 5,000.

**(4) Fixes and/or Holding Patterns:**

**CHART HOLDING PATTERN:** PLEEZ (HOLD SE, RT, 315.02 INBOUND).

**(5) Communications:** PITTSBURGH APP CON; PITTSBURGH INTL ATIS; ALLEGHENY COUNTY ATIS.

| (6) Arrival Name | (7) Number | (8) STAR Computer Code | (9) Superseded Nr. | (10) Dated | (11) Effective Date |
|---|---|---|---|---|---|
| NESTO | FOUR | NESTO.NESTO4 | THREE | 10 MAR 2011 | |

QUALITY 3 CHECKED

| (12) Airports Served | | | |
|---|---|---|---|
| **Airport Name** | PITTSBURGH INTL | **City/State** | PITTSBURGH, PA |
| **Airport Name** | PITTSBURGH/ALLEGHENY COUNTY | **City/State** | PITTSBURGH, PA |
| **Airport Name** | WHEELING OHIO COUNTY | **City/State** | WHEELING, WV |
| **Airport Name** | WASHINGTON COUNTY | **City/State** | WASHINGTON, PA |
| **Airport Name** | MONONGAHELA/ROSTRAVER | **City/State** | MONONGAHELA, PA |
| **Airport Name** | | **City/State** | |

**(13) Lost Communications Procedure:**

**(14) Remarks:**

**(15) Additional Flight Data:**

**MAGVAR:** AGC VOR/DME (9W); AIR VOR/DME (7W); BHU NDB (7W); CYN VORTAC (10W); HLG VOR/DME (7W); IHD VORTAC (6W); JST VORTAC (6W); MGW VORTAC (5W); MMJ VORTAC (8W).

**CHART:** MGW R-015 AT NESTO; **CHART:** JST R-266 AT NESTO; **CHART:** BHU 053 BEARING FROM PLEEZ; **CHART:** JST R-221 AT SAMEE; **CHART:** JST R-190 AT HRMAN; **CHART:** CYN R-284 AT VINSE; **CHART:** AIR R-097 AT EJOCY; **CHART:** 316 HDG FROM NESTO TO MMJ (28 NM); **CHART:** 297 HDG FROM NESTO TO AGC (16 NM); **CHART:** 282 HDG FROM NESTO TO HLG (39 NM); **CHART:** MMJ R-136 TO NESTO; **CHART:** AGC R-117 TO NESTO; **CHART:** HLG R-102 TO NESTO.

| (6) Arrival Name | (7) Number | (8) STAR Computer Code | (9) Superseded Nr. | (10) Dated | (11) Effective Date |
|---|---|---|---|---|---|
| NESTO | FOUR | NESTO.NESTO4 | THREE | 10 MAR 2011 | |

QUALITY 3 CHECKED

**(16) Continuation:**

**(17) Changes:**

1. DELETED MCKEESPORT (MKP) NDB FROM ADDITIONAL FLIGHT DATA (BLOCK 15)..
2. CHANGED ARRIVAL ROUTE DESCRIPTION (BLOCK 2) FROM: KAGC WEST FLOW: FROM OVER NESTO INT DIRECT MKP NDB, THEN EXPECT RADAR VECTORS.
3. ADDED NOTE: DME REQUIRED.

**(18) Reasons for Changes:**

1, 2. MCKEESPORT (MKP) NDB DECOMMISIONED.
3. DME IS REQUIRED TO USE PROCEDURE.

| | Name *(Typed and Signed)*, Title and Organization | | DATE |
|---|---|---|---|
| **Developed By** | MARK AGOSTINELLI, AIRSPACE AND PROCEDURES SPECIALIST, ZOB-530.1 | | 10/14/2005 |
| **Approved** | **NFPO** | DARRYEL ADAMS, MANAGER, AJV-352 | |
| | **Reg. ATD** | | |

QUALITY CHECKED

| (6) Arrival Name | (7) Number | (8) STAR Computer Code | (9) Superseded Nr. | (10) Dated | (11) Effective Date |
|---|---|---|---|---|---|
| NESTO | FOUR | NESTO.NESTO4 | THREE | 10 MAR 2011 | |

**(19) Graphic Depiction:**

QUALITY CHECKED

| (6) Arrival Name | (7) Number | (8) STAR Computer Code | (9) Superseded Nr. | (10) Dated | (11) Effective Date |
|---|---|---|---|---|---|
| NESTO | FOUR | NESTO.NESTO4 | THREE | 10 MAR 2011 | |

**US Department of Transportation**
**Federal Aviation Administration**

**STAR (Data Record)**

ARINC PACKET - 424-18 - STAR

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NAVAID  12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
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        SUSAD        MMJ   K6011200VTL  N40291735W080113794    N40291735W080113794W0080012001     NARMONTOUR

                 1         2         3         4         5         6         7         8         9         0         1         2         3
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        ------------------------------------------------------------------------------------------------------------------------------
        SUSAEAENRT   EJOCY K60    C     N40001140W079241800                    W0095     NAR           EJOCY
        SUSAEAENRT   HRMAN K60    R     N39593628W078515548                    W0099     NAR           HRMAN
        SUSAEAENRT   NESTO K60    C   L N40114005W079424949                    W0094     NAR           NESTO
        SUSAEAENRT   PLEEZ K60    C   L N40073951W079361940                    W0094     NAR           PLEEZ
        SUSAEAENRT   SAMEE K60    R     N39595445W079073195                    W0097     NAR           SAMEE
        SUSAEAENRT   VINSE K60    C   H N39581621W077572120                    W0105     NAR           VINSE

                 1         2         3         4         5         6         7         8         9         0         1         2         3
AIRPORT 12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAP KPITK6APIT     0     115YHN40292930W080135830W008001203         1800018000C    MNAR    PITTSBURGH INTL

                 1         2         3         4         5         6         7         8         9         0         1         2         3
SEGMENT 12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAP KPITK6ENESTO41IHD   010IHD  K6D 0V       IF                                          18000
        SUSAP KPITK6ENESTO41IHD   020EJOCYK6EA0EE      TF                    31500028
        SUSAP KPITK6ENESTO41VINSE 010VINSEK6EA0E       IF                                          18000
        SUSAP KPITK6ENESTO41VINSE 020HRMANK6EA0E       TF                    27730420
        SUSAP KPITK6ENESTO41VINSE 030SAMEEK6EA0E       TF                    27730120
        SUSAP KPITK6ENESTO41VINSE 040EJOCYK6EA0EE      TF                    27730129
        SUSAP KPITK6ENESTO42ALL   010EJOCYK6EA0E        IF                                          18000
        SUSAP KPITK6ENESTO42ALL   020PLEEZK6EA0E  H    TF                    31500119
        SUSAP KPITK6ENESTO42ALL   030NESTOK6EA0EY      TF                    31500064
        SUSAP KPITK6ENESTO42ALL   040MMJ  K6D 0VE      DF

                 1         2         3         4         5         6         7         8         9         0         1         2         3
RUNWAY  12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAP KPITK6GRW10C   0097081000 N40292354W080144654-0100    +0313701141000051150R
        SUSAP KPITK6GRW10L   0105020999 N40300840W080161626-0300    +0332601203000059150IILXB3
```

QUALITY CHECK

| (11) Arrival Name | (12) Number | (13) STAR Computer Code | (14) Superseded Nr. | (15) Dated | (16) Effective Date |
|---|---|---|---|---|---|
| NESTO | FOUR | NESTO.NESTO4 | THREE | 10 MAR 2011 | |

**FAA Form 7100-3 (9/02)**

```
SUSAP KPITK6GRW10R   0115001000 N40291222W080150686-0100    +0311801135000052200IIGUT3
SUSAP KPITK6GRW14    0081011444 N40294565W080132952-0400    +0315901148000060150R
SUSAP KPITK6GRW28C   0097082800 N40292025W080124096+0100    +0311501134000050150R
SUSAP KPITK6GRW28L   0115002800 N40290832W080123813+0100    +0307901122000059200IIPFS1
SUSAP KPITK6GRW28R   0105022800 N40300487W080140040+0300    +0323901174000057150IIHFE1
SUSAP KPITK6GRW32    0081013244 N40285009W080122021+0400    +0305701115033537150IITQW1
```

QUALITY 1 CHECKED

| (11) Arrival Name | (12) Number | (13) STAR Computer Code | (14) Superseded Nr. | (15) Dated | (16) Effective Date |
|---|---|---|---|---|---|
| NESTO | FOUR | NESTO.NESTO4 | THREE | 10 MAR 2011 | |

**US Department of Transportation**
**Federal Aviation Administration**

## STAR (Data Record)

ARINC SUMMARY - 424-18 - STAR

| ROUTES | TRANSITION | FIX | SEQ | USE | PATH | TURN | FO/FB | RNP | MAG(TRUE) | DISTANCE | ALTITUDE | SPEED |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | IHD | IHD | 010 | | IF | | FB | | | | | |
| | IHD | EJOCY | 020 | | TF | | FB | | 315.0() | 002.8 | | |
| | VINSE | VINSE | 010 | | IF | | FB | | | | | |
| | VINSE | HRMAN | 020 | | TF | | FB | | 277.3() | 042.0 | | |
| | VINSE | SAMEE | 030 | | TF | | FB | | 277.3() | 012.0 | | |
| | VINSE | EJOCY | 040 | | TF | | FB | | 277.3() | 012.9 | | |
| | ALL | EJOCY | 010 | | IF | | FB | | | | | |
| | ALL | PLEEZ | 020 | | TF | | FB | | 315.0() | 011.9 | | |
| | ALL | NESTO | 030 | | TF | | FO | | 315.0() | 006.4 | | |
| | ALL | MMJ | 040 | | DF | | FB | | | | | |

| POINT DATA | WAYPOINT | LAT IN SECS | LONG IN SECS | LAT IN MINS | LONG IN MINS |
|---|---|---|---|---|---|
| | IHD | N395827.27 | W0792130.12 | N3958.455 | W07921.502 |
| | MMJ | N402917.35 | W0801137.94 | N4029.289 | W08011.632 |
| | EJOCY | N400011.40 | W0792418.00 | N4000.190 | W07924.300 |
| | HRMAN | N395936.28 | W0785155.48 | N3959.605 | W07851.925 |
| | NESTO | N401140.05 | W0794249.49 | N4011.668 | W07942.825 |
| | PLEEZ | N400739.51 | W0793619.40 | N4007.659 | W07936.323 |
| | SAMEE | N395954.45 | W0790731.95 | N3959.908 | W07907.533 |
| | VINSE | N395816.21 | W0775721.20 | N3958.270 | W07757.353 |
| | RW10C | N402923.54 | W0801446.54 | N4029.392 | W08014.776 |
| | RW10L | N403008.40 | W0801616.26 | N4030.140 | W08016.271 |
| | RW10R | N402912.22 | W0801506.86 | N4029.204 | W08015.114 |
| | RW14 | N402945.65 | W0801329.52 | N4029.761 | W08013.492 |
| | RW28C | N402920.25 | W0801240.96 | N4029.338 | W08012.683 |
| | RW28L | N402908.32 | W0801238.13 | N4029.139 | W08012.636 |
| | RW28R | N403004.87 | W0801400.40 | N4030.081 | W08014.007 |
| | RW32 | N402850.09 | W0801220.21 | N4028.835 | W08012.337 |

| RUNWAY DATA | RWY | THRESHOLD ELEVATION | TCH |
|---|---|---|---|
| | RW10C | 01141 | 51 |
| | RW10L | 01203 | 59 |
| | RW10R | 01135 | 52 |
| | RW14 | 01148 | 60 |
| | RW28C | 01134 | 50 |

| (11) Arrival Name | (12) Number | (13) STAR Computer Code | (14) Superseded Nr. | (15) Dated | (16) Effective Date |
|---|---|---|---|---|---|
| NESTO | FOUR | NESTO.NESTO4 | THREE | 10 MAR 2011 | |

**FAA Form 7100-3 (9/02)**

| | | |
|---|---|---|
| RW28L | 01122 | 59 |
| RW28R | 01174 | 57 |
| RW32 | 01115 | 37 |

| (11) Arrival Name | (12) Number | (13) STAR Computer Code | (14) Superseded Nr. | (15) Dated | (16) Effective Date |
|---|---|---|---|---|---|
| NESTO | FOUR | NESTO.NESTO4 | THREE | 10 MAR 2011 | |

**US Department of Transportation**
**Federal Aviation Administration**

**STAR (Data Record)**

ARINC PACKET - 424-18 - STAR

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NAVAID  12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
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        SUSAD        AGC   K6011000VDLA N40164315W080022709    N40164315W080022709W0090012891     NARALLEGHENY
        SUSAD        IHD   K6010820VTL  N39582727W079213012    N39582727W079213012W0060028201     NARINDIAN HEAD

                 1         2         3         4         5         6         7         8         9         0         1         2         3
WP      12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAEAENRT   EJOCY K60    C     N40001140W079241800                    W0095     NAR          EJOCY
        SUSAEAENRT   HRMAN K60    R     N39593628W078515548                    W0099     NAR          HRMAN
        SUSAEAENRT   NESTO K60    C   L N40114005W079424949                    W0094     NAR          NESTO
        SUSAEAENRT   PLEEZ K60    C   L N40073951W079361940                    W0094     NAR          PLEEZ
        SUSAEAENRT   SAMEE K60    R     N39595445W079073195                    W0097     NAR          SAMEE
        SUSAEAENRT   VINSE K60    C   H N39581621W077572120                    W0105     NAR          VINSE

                 1         2         3         4         5         6         7         8         9         0         1         2         3
AIRPORT 12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAP KAGCK6AAGC     0     065YHN40211585W079554861W009001252         1800018000C    MNAR    ALLEGHENY COUNTY

                 1         2         3         4         5         6         7         8         9         0         1         2         3
SEGMENT 12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAP KAGCK6ENESTO41IHD   010IHD  K6D 0V      IF                                          18000
        SUSAP KAGCK6ENESTO41IHD   020EJOCYK6EA0EE     TF                    31500028
        SUSAP KAGCK6ENESTO41VINSE 010VINSEK6EA0E      IF                                          18000
        SUSAP KAGCK6ENESTO41VINSE 020HRMANK6EA0E      TF                    27730420
        SUSAP KAGCK6ENESTO41VINSE 030SAMEEK6EA0E      TF                    27730120
        SUSAP KAGCK6ENESTO41VINSE 040EJOCYK6EA0EE     TF                    27730129
        SUSAP KAGCK6ENESTO42ALL   010EJOCYK6EA0E       IF                                          18000
        SUSAP KAGCK6ENESTO42ALL   020PLEEZK6EA0E   H   TF                    31500119
        SUSAP KAGCK6ENESTO42ALL   030NESTOK6EA0EY      TF                    31500064
        SUSAP KAGCK6ENESTO42ALL   040AGC  K6D 0VE     DF

                 1         2         3         4         5         6         7         8         9         0         1         2         3
RUNWAY  12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAP KAGCK6GRW10    0065010989 N40211542W079562796+0000    +034730125000004715OIISAQ1
        SUSAP KAGCK6GRW13    0038251289 N40212626W079560359+0100    +034600124500005010OD
```

| (11) Arrival Name | (12) Number | (13) STAR Computer Code | (14) Superseded Nr. | (15) Dated | (16) Effective Date |
|---|---|---|---|---|---|
| NESTO | FOUR | NESTO.NESTO4 | THREE | 10 MAR 2011 | |

**FAA Form 7100-3 (9/02)**

```
SUSAP KAGCK6GRW28    0065012789 N40211552W079550400+0000    +034740125000005115OIIAGC1
SUSAP KAGCK6GRW31    0038253089 N40210741W079552076-0100    +03470012490000501000
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| (11) Arrival Name | (12) Number | (13) STAR Computer Code | (14) Superseded Nr. | (15) Dated | (16) Effective Date |
|---|---|---|---|---|---|
| NESTO | FOUR | NESTO.NESTO4 | THREE | 10 MAR 2011 | |

ARINC SUMMARY - 424-18 - STAR

| ROUTES | TRANSITION | FIX | SEQ | USE | PATH | TURN | FO/FB | RNP | MAG(TRUE) | DISTANCE | ALTITUDE | SPEED |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | IHD | IHD | 010 | | IF | | FB | | | | | |
| | IHD | EJOCY | 020 | | TF | | FB | | 315.0() | 002.8 | | |
| | VINSE | VINSE | 010 | | IF | | FB | | | | | |
| | VINSE | HRMAN | 020 | | TF | | FB | | 277.3() | 042.0 | | |
| | VINSE | SAMEE | 030 | | TF | | FB | | 277.3() | 012.0 | | |
| | VINSE | EJOCY | 040 | | TF | | FB | | 277.3() | 012.9 | | |
| | ALL | EJOCY | 010 | | IF | | FB | | | | | |
| | ALL | PLEEZ | 020 | | TF | | FB | | 315.0() | 011.9 | | |
| | ALL | NESTO | 030 | | TF | | FO | | 315.0() | 006.4 | | |
| | ALL | AGC | 040 | | DF | | FB | | | | | |

| POINT DATA | WAYPOINT | LAT IN SECS | LONG IN SECS | LAT IN MINS | LONG IN MINS |
|---|---|---|---|---|---|
| | AGC | N401643.15 | W0800227.09 | N4016.719 | W08002.452 |
| | IHD | N395827.27 | W0792130.12 | N3958.455 | W07921.502 |
| | EJOCY | N400011.40 | W0792418.00 | N4000.190 | W07924.300 |
| | HRMAN | N395936.28 | W0785155.48 | N3959.605 | W07851.925 |
| | NESTO | N401140.05 | W0794249.49 | N4011.668 | W07942.825 |
| | PLEEZ | N400739.51 | W0793619.40 | N4007.659 | W07936.323 |
| | SAMEE | N395954.45 | W0790731.95 | N3959.908 | W07907.533 |
| | VINSE | N395816.21 | W0775721.20 | N3958.270 | W07757.353 |
| | RW10 | N402115.42 | W0795627.96 | N4021.257 | W07956.466 |
| | RW13 | N402126.26 | W0795603.59 | N4021.438 | W07956.060 |
| | RW28 | N402115.52 | W0795504.00 | N4021.259 | W07955.067 |
| | RW31 | N402107.41 | W0795520.76 | N4021.124 | W07955.346 |

| RUNWAY DATA | RWY | THRESHOLD ELEVATION | TCH |
|---|---|---|---|
| | RW10 | 01250 | 47 |
| | RW13 | 01245 | 50 |
| | RW28 | 01250 | 51 |
| | RW31 | 01249 | 50 |

| (11) Arrival Name | (12) Number | (13) STAR Computer Code | (14) Superseded Nr. | (15) Dated | (16) Effective Date |
|---|---|---|---|---|---|
| NESTO | FOUR | NESTO.NESTO4 | THREE | 10 MAR 2011 | |

**US Department of Transportation**
**Federal Aviation Administration**

**STAR (Data Record)**

ARINC PACKET - 424-18 - STAR

```
                1         2         3         4         5         6         7         8         9         0         1         2         3
NAVAID  12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAD        HLG   K6011220VDL  N40153565W080340705    N40153565W080340705W0070012691     NARWHEELING
        SUSAD        IHD   K6010820VTL  N39582727W079213012    N39582727W079213012W0060028201     NARINDIAN HEAD

                1         2         3         4         5         6         7         8         9         0         1         2         3
WP      12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAEAENRT   EJOCY K60    C     N40001140W079241800                    W0095     NAR          EJOCY
        SUSAEAENRT   HRMAN K60    R     N39593628W078515548                    W0099     NAR          HRMAN
        SUSAEAENRT   NESTO K60    C   L N40114005W079424949                    W0094     NAR          NESTO
        SUSAEAENRT   PLEEZ K60    C   L N40073951W079361940                    W0094     NAR          PLEEZ
        SUSAEAENRT   SAMEE K60    R     N39595445W079073195                    W0097     NAR          SAMEE
        SUSAEAENRT   VINSE K60    C   H N39581621W077572120                    W0105     NAR          VINSE

                1         2         3         4         5         6         7         8         9         0         1         2         3
AIRPORT 12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAP KHLGK6AHLG     0     050YHN40103000W080384660W007001195        1800018000C    MNAR    WHEELING OHIO CO

                1         2         3         4         5         6         7         8         9         0         1         2         3
SEGMENT 12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAP KHLGK6ENESTO41IHD   010IHD  K6D 0V      IF                                  18000
        SUSAP KHLGK6ENESTO41IHD   020EJOCYK6EA0EE      TF                  31500028
        SUSAP KHLGK6ENESTO41VINSE 010VINSEK6EA0E       IF                                  18000
        SUSAP KHLGK6ENESTO41VINSE 020HRMANK6EA0E       TF                  27730420
        SUSAP KHLGK6ENESTO41VINSE 030SAMEEK6EA0E       TF                  27730120
        SUSAP KHLGK6ENESTO41VINSE 040EJOCYK6EA0EE      TF                  27730129
        SUSAP KHLGK6ENESTO42ALL   010EJOCYK6EA0E       IF                                  18000
        SUSAP KHLGK6ENESTO42ALL   020PLEEZK6EA0E  H    TF                  31500119
        SUSAP KHLGK6ENESTO42ALL   030NESTOK6EA0EY      TF                  31500064
        SUSAP KHLGK6ENESTO42ALL   040HLG  K6D 0VE      DF

                1         2         3         4         5         6         7         8         9         0         1         2         3
RUNWAY  12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAP KHLGK6GRW03    0050010330 N40100684W080390472+0500    +032280117100005915OIIHLG1
        SUSAP KHLGK6GRW16    0044971580 N40105060W080385613+0400    +03233011720000401 50R
```

| (11) Arrival Name | (12) Number | (13) STAR Computer Code | (14) Superseded Nr. | (15) Dated | (16) Effective Date |
|---|---|---|---|---|---|
| NESTO | FOUR | NESTO.NESTO4 | THREE | 10 MAR 2011 | |

**FAA Form 7100-3 (9/02)**

```
SUSAP KHLGK6GRW21    0050012130 N40105126W080383646-0500    +0330201195000052150R
SUSAP KHLGK6GRW34    0044973380 N40101170W080382806-0400    +0329301191000042150R
```

QUALITY CHECKED

| (11) Arrival Name | (12) Number | (13) STAR Computer Code | (14) Superseded Nr. | (15) Dated | (16) Effective Date |
|---|---|---|---|---|---|
| NESTO | FOUR | NESTO.NESTO4 | THREE | 10 MAR 2011 | |

**US Department of Transportation**
**Federal Aviation Administration**

**STAR (Data Record)**

ARINC SUMMARY - 424-18 - STAR

| ROUTES | TRANSITION | FIX | SEQ | USE | PATH | TURN | FO/FB | RNP | MAG(TRUE) | DISTANCE | ALTITUDE | SPEED |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | IHD | IHD | 010 | | IF | | FB | | | | | |
| | IHD | EJOCY | 020 | | TF | | FB | | 315.0() | 002.8 | | |
| | VINSE | VINSE | 010 | | IF | | FB | | | | | |
| | VINSE | HRMAN | 020 | | TF | | FB | | 277.3() | 042.0 | | |
| | VINSE | SAMEE | 030 | | TF | | FB | | 277.3() | 012.0 | | |
| | VINSE | EJOCY | 040 | | TF | | FB | | 277.3() | 012.9 | | |
| | ALL | EJOCY | 010 | | IF | | FB | | | | | |
| | ALL | PLEEZ | 020 | | TF | | FB | | 315.0() | 011.9 | | |
| | ALL | NESTO | 030 | | TF | | FO | | 315.0() | 006.4 | | |
| | ALL | HLG | 040 | | DF | | FB | | | | | |

| POINT DATA | WAYPOINT | LAT IN SECS | LONG IN SECS | LAT IN MINS | LONG IN MINS |
|---|---|---|---|---|---|
| | HLG | N401535.65 | W0803407.05 | N4015.594 | W08034.118 |
| | IHD | N395827.27 | W0792130.12 | N3958.455 | W07921.502 |
| | EJOCY | N400011.40 | W0792418.00 | N4000.190 | W07924.300 |
| | HRMAN | N395936.28 | W0785155.48 | N3959.605 | W07851.925 |
| | NESTO | N401140.05 | W0794249.49 | N4011.668 | W07942.825 |
| | PLEEZ | N400739.51 | W0793619.40 | N4007.659 | W07936.323 |
| | SAMEE | N395954.45 | W0790731.95 | N3959.908 | W07907.533 |
| | VINSE | N395816.21 | W0775721.20 | N3958.270 | W07757.353 |
| | RW03 | N401006.84 | W0803904.72 | N4010.114 | W08039.079 |
| | RW16 | N401050.60 | W0803856.13 | N4010.843 | W08038.936 |
| | RW21 | N401051.26 | W0803836.46 | N4010.854 | W08038.608 |
| | RW34 | N401011.70 | W0803828.06 | N4010.195 | W08038.468 |

| RUNWAY DATA | RWY | THRESHOLD ELEVATION | TCH |
|---|---|---|---|
| | RW03 | 01171 | 59 |
| | RW16 | 01172 | 40 |
| | RW21 | 01195 | 52 |
| | RW34 | 01191 | 42 |

| (11) Arrival Name | (12) Number | (13) STAR Computer Code | (14) Superseded Nr. | (15) Dated | (16) Effective Date |
|---|---|---|---|---|---|
| NESTO | FOUR | NESTO.NESTO4 | THREE | 10 MAR 2011 | |

**FAA Form 7100-3 (9/02)**

**US Department of Transportation**
**Federal Aviation Administration**

**STAR (Data Record)**

ARINC PACKET - 424-18 - STAR

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                 1         2         3         4         5         6         7         8         9         0         1         2         3
NAVAID  12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAD        HLG   K6011220VDL  N40153565W080340705    N40153565W080340705W0070012691     NARWHEELING
        SUSAD        IHD   K6010820VTL  N39582727W079213012    N39582727W079213012W0060028201     NARINDIAN HEAD

                 1         2         3         4         5         6         7         8         9         0         1         2         3
WP      12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAEAENRT   EJOCY K60    C     N40001140W079241800                    W0095     NAR           EJOCY
        SUSAEAENRT   HRMAN K60    R     N39593628W078515548                    W0099     NAR           HRMAN
        SUSAEAENRT   NESTO K60    C   L N40114005W079424949                    W0094     NAR           NESTO
        SUSAEAENRT   PLEEZ K60    C   L N40073951W079361940                    W0094     NAR           PLEEZ
        SUSAEAENRT   SAMEE K60    R     N39595445W079073195                    W0097     NAR           SAMEE
        SUSAEAENRT   VINSE K60    C   H N39581621W077572120                    W0105     NAR           VINSE

                 1         2         3         4         5         6         7         8         9         0         1         2         3
AIRPORT 12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAP KAFJK6AAFJ     0     050YHN40081130W080172470W008001184         1800018000C    MNAR    WASHINGTON COUNTY

                 1         2         3         4         5         6         7         8         9         0         1         2         3
SEGMENT 12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAP KAFJK6ENESTO41IHD   010IHD  K6D 0V       IF                                          18000
        SUSAP KAFJK6ENESTO41IHD   020EJOCYK6EA0EE      TF                    31500028
        SUSAP KAFJK6ENESTO41VINSE 010VINSEK6EA0E       IF                                          18000
        SUSAP KAFJK6ENESTO41VINSE 020HRMANK6EA0E       TF                    27730420
        SUSAP KAFJK6ENESTO41VINSE 030SAMEEK6EA0E       TF                    27730120
        SUSAP KAFJK6ENESTO41VINSE 040EJOCYK6EA0EE      TF                    27730129
        SUSAP KAFJK6ENESTO42ALL   010EJOCYK6EA0E       IF                                          18000
        SUSAP KAFJK6ENESTO42ALL   020PLEEZK6EA0E  H    TF                    31500119
        SUSAP KAFJK6ENESTO42ALL   030NESTOK6EA0EY      TF                    31500064
        SUSAP KAFJK6ENESTO42ALL   040NESTOK6EA0EE      FM HLG K6      102403952820    D

                 1         2         3         4         5         6         7         8         9         0         1         2         3
RUNWAY  12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAP KAFJK6GRW09    0050040930 N40080919W080175678-0200    +03253011780000501O0R
        SUSAP KAFJK6GRW27    0050042730 N40081347W080165260+0200    +03220011670000571O0IIAFJ1
```

| (11) Arrival Name | (12) Number | (13) STAR Computer Code | (14) Superseded Nr. | (15) Dated | (16) Effective Date |
|---|---|---|---|---|---|
| NESTO | FOUR | NESTO.NESTO4 | THREE | 10 MAR 2011 | |

**FAA Form 7100-3 (9/02)**

**US Department of Transportation**
**Federal Aviation Administration**

**STAR (Data Record)**

ARINC SUMMARY - 424-18 - STAR

| ROUTES | TRANSITION | FIX | SEQ | USE | PATH | TURN | FO/FB | RNP | MAG(TRUE) | DISTANCE | ALTITUDE | SPEED |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | IHD | IHD | 010 | | IF | | FB | | | | | |
| | IHD | EJOCY | 020 | | TF | | FB | | 315.0() | 002.8 | | |
| | VINSE | VINSE | 010 | | IF | | FB | | | | | |
| | VINSE | HRMAN | 020 | | TF | | FB | | 277.3() | 042.0 | | |
| | VINSE | SAMEE | 030 | | TF | | FB | | 277.3() | 012.0 | | |
| | VINSE | EJOCY | 040 | | TF | | FB | | 277.3() | 012.9 | | |
| | ALL | EJOCY | 010 | | IF | | FB | | | | | |
| | ALL | PLEEZ | 020 | | TF | | FB | | 315.0() | 011.9 | | |
| | ALL | NESTO | 030 | | TF | | FO | | 315.0() | 006.4 | | |
| | ALL | NESTO | 040 | | FM | | FB | | 282.0() | | | |

| POINT DATA | WAYPOINT | LAT IN SECS | LONG IN SECS | LAT IN MINS | LONG IN MINS |
|---|---|---|---|---|---|
| | HLG | N401535.65 | W0803407.05 | N4015.594 | W08034.118 |
| | IHD | N395827.27 | W0792130.12 | N3958.455 | W07921.502 |
| | EJOCY | N400011.40 | W0792418.00 | N4000.190 | W07924.300 |
| | HRMAN | N395936.28 | W0785155.48 | N3959.605 | W07851.925 |
| | NESTO | N401140.05 | W0794249.49 | N4011.668 | W07942.825 |
| | PLEEZ | N400739.51 | W0793619.40 | N4007.659 | W07936.323 |
| | SAMEE | N395954.45 | W0790731.95 | N3959.908 | W07907.533 |
| | VINSE | N395816.21 | W0775721.20 | N3958.270 | W07757.353 |
| | RW09 | N400809.19 | W0801756.78 | N4008.153 | W08017.946 |
| | RW27 | N400813.47 | W0801652.60 | N4008.225 | W08016.877 |

| RUNWAY DATA | RWY | THRESHOLD ELEVATION | TCH |
|---|---|---|---|
| | RW09 | 01178 | 50 |
| | RW27 | 01167 | 57 |

| (11) Arrival Name | (12) Number | (13) STAR Computer Code | (14) Superseded Nr. | (15) Dated | (16) Effective Date |
|---|---|---|---|---|---|
| NESTO | FOUR | NESTO.NESTO4 | THREE | 10 MAR 2011 | |

**US Department of Transportation**
**Federal Aviation Administration**

**STAR (Data Record)**

ARINC PACKET - 424-18 - STAR

```
                 1         2         3         4         5         6         7         8         9         0         1         2         3
NAVAID  12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAD        IHD   K6010820VTL  N39582727W079213012    N39582727W079213012W0060028201     NARINDIAN HEAD

                 1         2         3         4         5         6         7         8         9         0         1         2         3
WP      12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAEAENRT   EJOCY K60    C     N40001140W079241800                    W0095     NAR           EJOCY
        SUSAEAENRT   HRMAN K60    R     N39593628W078515548                    W0099     NAR           HRMAN
        SUSAEAENRT   NESTO K60    C   L N40114005W079424949                    W0094     NAR           NESTO
        SUSAEAENRT   PLEEZ K60    C   L N40073951W079361940                    W0094     NAR           PLEEZ
        SUSAEAENRT   SAMEE K60    R     N39595445W079073195                    W0097     NAR           SAMEE
        SUSAEAENRT   VINSE K60    C   H N39581621W077572120                    W0105     NAR           VINSE

                 1         2         3         4         5         6         7         8         9         0         1         2         3
AIRPORT 12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAP KFWQK6AFWQ     0     040YHN40123500W079495320W009001228         1800018000C    MNAR    ROSTRAVER

                 1         2         3         4         5         6         7         8         9         0         1         2         3
SEGMENT 12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAP KFWQK6ENESTO41IHD   010IHD  K6D 0V       IF                                          18000
        SUSAP KFWQK6ENESTO41IHD   020EJOCYK6EA0EE      TF                    31500028
        SUSAP KFWQK6ENESTO41VINSE 010VINSEK6EA0E       IF                                          18000
        SUSAP KFWQK6ENESTO41VINSE 020HRMANK6EA0E       TF                    27730420
        SUSAP KFWQK6ENESTO41VINSE 030SAMEEK6EA0E       TF                    27730120
        SUSAP KFWQK6ENESTO41VINSE 040EJOCYK6EA0EE      TF                    27730129
        SUSAP KFWQK6ENESTO42ALL   010EJOCYK6EA0E       IF                                          18000
        SUSAP KFWQK6ENESTO42ALL   020PLEEZK6EA0E   H   TF                    31500119
        SUSAP KFWQK6ENESTO42ALL   030NESTOK6EA0EE      TF                    31500064

                 1         2         3         4         5         6         7         8         9         0         1         2         3
RUNWAY  12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAP KFWQK6GRW08     0040020765 N40122744W079501706-0100     +0341101228000051075R
        SUSAP KFWQK6GRW26     0040022565 N40124260W079492942+0100     +0339501223000050075R
```

| (11) Arrival Name | (12) Number | (13) STAR Computer Code | (14) Superseded Nr. | (15) Dated | (16) Effective Date |
|---|---|---|---|---|---|
| NESTO | FOUR | NESTO.NESTO4 | THREE | 10 MAR 2011 | |

**FAA Form 7100-3 (9/02)**

ARINC SUMMARY - 424-18 - STAR

| ROUTES | TRANSITION | FIX | SEQ | USE | PATH | TURN | FO/FB | RNP | MAG(TRUE) | DISTANCE | ALTITUDE | SPEED |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | IHD | IHD | 010 | | IF | | FB | | | | | |
| | IHD | EJOCY | 020 | | TF | | FB | | 315.0() | 002.8 | | |
| | VINSE | VINSE | 010 | | IF | | FB | | | | | |
| | VINSE | HRMAN | 020 | | TF | | FB | | 277.3() | 042.0 | | |
| | VINSE | SAMEE | 030 | | TF | | FB | | 277.3() | 012.0 | | |
| | VINSE | EJOCY | 040 | | TF | | FB | | 277.3() | 012.9 | | |
| | ALL | EJOCY | 010 | | IF | | FB | | | | | |
| | ALL | PLEEZ | 020 | | TF | | FB | | 315.0() | 011.9 | | |
| | ALL | NESTO | 030 | | TF | | FB | | 315.0() | 006.4 | | |

| POINT DATA | WAYPOINT | LAT IN SECS | LONG IN SECS | LAT IN MINS | LONG IN MINS |
|---|---|---|---|---|---|
| | IHD | N395827.27 | W0792130.12 | N3958.455 | W07921.502 |
| | EJOCY | N400011.40 | W0792418.00 | N4000.190 | W07924.300 |
| | HRMAN | N395936.28 | W0785155.48 | N3959.605 | W07851.925 |
| | NESTO | N401140.05 | W0794249.49 | N4011.668 | W07942.825 |
| | PLEEZ | N400739.51 | W0793619.40 | N4007.659 | W07936.323 |
| | SAMEE | N395954.45 | W0790731.95 | N3959.908 | W07907.533 |
| | VINSE | N395816.21 | W0775721.20 | N3958.270 | W07757.353 |
| | RW08 | N401227.44 | W0795017.06 | N4012.457 | W07950.284 |
| | RW26 | N401242.60 | W0794929.42 | N4012.710 | W07949.490 |

| RUNWAY DATA | RWY | THRESHOLD ELEVATION | TCH |
|---|---|---|---|
| | RW08 | 01228 | 51 |
| | RW26 | 01223 | 50 |

| (11) Arrival Name | (12) Number | (13) STAR Computer Code | (14) Superseded Nr. | (15) Dated | (16) Effective Date |
|---|---|---|---|---|---|
| NESTO | FOUR | NESTO.NESTO4 | THREE | 10 MAR 2011 | |

# RADIO FIX AND HOLDING DATA RECORD

**NAME:** BELLAIRE VOR/DME **STATE:** OH **COUNTRY:** US

**LATITUDE/LONGITUDE:** 400101.29N/0804902.02W **TYPE:**

**AIRSPACE DOCKET:** **FIX TYPE OF ACTION:** NO CHANGE

**FIX MAKE-UP FACILITIES:**

| FAC | NAME | IDENT | TYPE | CLASS | MAG BRG | TRUE BRG | DME | DIST FROM FAC NM | DIST FROM FAC FEET | MRA | MAA |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | BELLAIRE | AIR | VOR/DME | H | | | | | | | 45000 |

**HOLDING:** **HOLDING TYPE OF ACTION:** MODIFY

**PATTERNS:**

| PAT | DIR | IDENT | TYPE | RAD/CRS/BRG | CRS INBOUND | TURN (L OR R) | LEG LENGTH TIME | LEG LENGTH DME | HOLDING ALTITUDES MIN | HOLDING ALTITUDES MAX | TEMPLATES MIN | TEMPLATES MAX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | SW | AIR | VOR/DME | 224.00 | 044.00 | L | 1-1 1/2 | | 3100 | 23000 | 4 | 19 |
| 2 | SE | AIR | VOR/DME | 117.00 | 297.00 | L | 1 | | 3000 | 8000 | 4 | 8 |
| 3 | NW | AIR | VOR/DME | 300.00 | 120.00 | R | 1 | | 3000 | 14000 | 4 | 10 |
| 4 | SW | | WP | 224.00 | 044.00 | L | | 4 | 3100 | 6000 | 5 | 6 |
| 5 | SW | | WP | 232.00 | 052.00 | L | | 10 | 3100 | 31000 | 6 | 25 |

**CONTROLLING OBSTRUCTIONS:**

| PAT | AIRSPEED | OBSTRUCTION | COORDINATES | ELEVATION | ACCURACY CODE |
|---|---|---|---|---|---|
| UPN | 230 | TOWER (39-000899) | 400340.00N/0804508.00W | 2025 | 1D |
| 1 | 200 | TOWER (39-000899) | 400340.00N/0804508.00W | 2025 | 1D |
| 2 | 200 | TOWER (39-000899) | 400340.00N/0804508.00W | 2025 | 1D |
| 3 | 200 | TOWER (39-000521) | 400435.00N/0805512.00W | 1655 | 5E |
| 4 | 200 | TOWER (39-000899) | 400340.00N/0804508.00W | 2025 | 1D |
| 5 | 200 | TOWER (39-000899) | 400340.00N/0804508.00W | 2025 | 2C |

**REASON FOR NONSTANDARD HOLDING:**
PAT 1 ATC REQUEST
PAT 2 ATC REQUEST.
PAT 4 ATC REQUEST
PAT 5 ATC REQUEST.

**HOLDING RESTRICTIONS:**
UNPLANNED HOLDING AUTHORIZED AT OR ABOVE 3100.

**REMARKS:**
PRECIPITOUS TERRAIN EVALUATION COMPLETED.

**FIX USE:**

| USE TYPE | USE TITLE | FAC | PAT | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|---|---|
| DP | LOCKBOURNE | | | KLCK | COLUMBUS | OH (US) |
| DP | ALLEGHENY | | | KAGC | PITTSBURGH | PA (US) |
| DP | PITTSBURGH | | | KPIT | PITTSBURGH | PA (US) |
| EN ROUTE | J110 | | | | | (US) |
| EN ROUTE | J162 | | | | | (US) |
| EN ROUTE | J230 | | | | | (US) |
| EN ROUTE | J34 | | | | | (US) |
| EN ROUTE | J80 | | | | | (US) |
| EN ROUTE | J91 | | | | | (US) |
| EN ROUTE | Q480 | | | | | (US) |
| EN ROUTE | V103 | | | | | (US) |
| EN ROUTE | V117 | | 1 | | | (US) |
| EN ROUTE | V214 | | | | | (US) |
| EN ROUTE | V309 | | | | | (US) |
| EN ROUTE | V75 | | | | | (US) |
| EN ROUTE | V8 | | | | | (US) |
| EN ROUTE | V92 | | | | | (US) |
| IAP | VOR/DME RWY 27 | | | K6G5 | BARNESVILLE | OH (US) |
| IAP | VOR-A | | | K8G6 | CADIZ | OH (US) |
| IAP | VOR-A | | 2 | K2P7 | ST CLAIRSVILLE | OH (US) |
| IAP | VOR/DME OR GPS RWY 25 | | | K4G5 | WOODSFIELD | OH (US) |
| IAP | VOR/DME-A | | 3 | KMPG | MOUNDSVILLE | WV (US) |
| IAP | ILS OR LOC RWY 3 | | 1 | KHLG | WHEELING | WV (US) |
| IAP | RNAV (GPS) RWY 16 | | 4 | KHLG | WHEELING | WV (US) |
| IAP | RNAV (GPS) RWY 21 | | 4 | KHLG | WHEELING | WV (US) |
| IAP | RNAV (GPS) RWY 34 | | | KHLG | WHEELING | WV (US) |
| IAP | VOR RWY 21 | | 1 | KHLG | WHEELING | WV (US) |
| STAR | LLEEO | | | CYQG | ONTARIO, CANADA | (CA) |
| STAR | CLANG | | | KIND | INDIANAPOLIS | IN (US) |
| STAR | WESTMINSTER | | | KBWI | BALTIMORE | MD (US) |
| STAR | LLEEO | | | KARB | ANN ARBOR | MI (US) |
| STAR | LLEEO | | | KDET | DETROIT | MI (US) |
| STAR | GEMNI | | | KDTW | DETROIT | MI (US) |
| STAR | WEEDA | | | KDTW | DETROIT | MI (US) |
| STAR | LLEEO | | | KYIP | DETROIT | MI (US) |
| STAR | LLEEO | | | KOZW | HOWELL | MI (US) |

QUALITY 3 CHECKED

| | | | | | |
|---|---|---|---|---|---|
| STAR | LLEEO | | KMTC | MOUNT CLEMENS | MI (US) |
| STAR | LLEEO | | KY47 | NEW HUDSON | MI (US) |
| STAR | LLEEO | | K1D2 | PLYMOUTH | MI (US) |
| STAR | LLEEO | | KPTK | PONTIAC | MI (US) |
| STAR | LLEEO | | KVLL | TROY | MI (US) |
| STAR | BREMN | | KCMH | COLUMBUS | OH (US) |
| STAR | BREMN | | KLCK | COLUMBUS | OH (US) |
| STAR | BREMN | | KOSU | COLUMBUS | OH (US) |
| STAR | BREMN | | KTZR | COLUMBUS | OH (US) |
| STAR | NESTO | | KFWQ | MONONGAHELA | PA (US) |
| STAR | NESTO | | KAGC | PITTSBURGH | PA (US) |
| STAR | FEWGA (RNAV) | 5 | KPIT | PITTSBURGH | PA (US) |
| STAR | NESTO | | KPIT | PITTSBURGH | PA (US) |
| STAR | WISKE | 1 | KPIT | PITTSBURGH | PA (US) |
| STAR | FEWGA (RNAV) | 5 | KAFJ | WASHINGTON | PA (US) |
| STAR | NESTO | | KAFJ | WASHINGTON | PA (US) |
| STAR | WISKE | 1 | KAFJ | WASHINGTON | PA (US) |
| STAR | NESTO | | KHLG | WHEELING | WV (US) |

**REQUIRED CHARTING:** DP, STAR, IAP, CONTROLLER, EN ROUTE LOW, EN ROUTE HIGH

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 19 **DATE OF REVISION:** 01/10/2013

**REASON FOR REVISION:**
CHANGED PAT 2 CONTROLLING OBSTACLE FROM 1678 MSL TWR (54-000122) TO 2025 MSL TWR (39-000899).
UPDATED FIX USE.

**DEVELOPED BY:** **DATE:** 08/20/2012 **OFFICE:** AJV-352 **NAME:** SEAN BARBEE

**APPROVED BY:** **DATE:** **OFFICE:** AJV-352 **NAME:** DARRYEL ADAMS

**SIGNATURE:**

**DISTRIBUTION:**
**NFDC**
**FPO:** CEN
**ARTCC:** ZOB
**ATC FACILITY:** PIT APP CON
**OTHER:**

# RADIO FIX AND HOLDING DATA RECORD

**NAME:** BENJE NDB **STATE:** PA **COUNTRY:** US

**LATITUDE/LONGITUDE:** 402231.63N/0791618.16W **TYPE:**

**AIRSPACE DOCKET:** **FIX TYPE OF ACTION:** MODIFY

**FIX MAKE-UP FACILITIES:**

| FAC | NAME | IDENT | TYPE | CLASS | MAG BRG | TRUE BRG | DME | DIST FROM FAC NM | DIST FROM FAC FEET | MRA | MAA |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | BENJE | BHU | NDB | MH | | | | | | | 10000 |

**HOLDING:** **HOLDING TYPE OF ACTION:** CANCEL

**FIX USE:**

| USE TYPE | USE TITLE | FAC | PAT | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|---|---|
| DP | PLEEZ | | | KLBE | LATROBE | PA (US) |
| IAP | NDB RWY 23 | | | KLBE | LATROBE | PA (US) |
| STAR | NESTO | | | KFWQ | MONONGAHELA | PA (US) |
| STAR | NESTO | | | KAGC | PITTSBURGH | PA (US) |
| STAR | NESTO | | | KPIT | PITTSBURGH | PA (US) |
| STAR | NESTO | | | KAFJ | WASHINGTON | PA (US) |
| STAR | NESTO | | | KHLG | WHEELING | WV (US) |

**REQUIRED CHARTING:** DP, STAR, IAP, CONTROLLER, EN ROUTE LOW

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 5 **DATE OF REVISION:** 01/10/2013

**REASON FOR REVISION:**
DELETED JOHNSTOWN (JST) VORTAC AND LATROBE (I-LBE)LOCALIZER FROM FIX MAKE-UP FACILITIES.
DELETED HOLDING PATTERNS AND RELATED DATA.
CHANGED COORDINATES TO MATCH ACTUAL FACILITY LOCATION; DELETED REMARK: BHU NDB MOVED ONTO EXTENDED RWY CENTERLINE; FACILITY NO LONGER USED FOR KLBE ILS RWY 23.
ADDED STAR AND DP TO REQUIRED CHARTING.
CHANGED DISTRIBUTION FPO FROM NYC TO EST.
UPDATED FIX USE.

**DEVELOPED BY:** **DATE:** 08/18/2012 **OFFICE:** AJV-352 **NAME:** SEAN BARBEE

**APPROVED BY:** **DATE:** **OFFICE:** AJV-352 **NAME:** DARRYEL ADAMS

**SIGNATURE:**

**DISTRIBUTION:**
**NFDC**
**FPO:** EST
**ARTCC:** ZOB
**ATC FACILITY:** LBE ATCT
**OTHER:**

# RADIO FIX AND HOLDING DATA RECORD

**NAME:** EJOCY **STATE:** PA **COUNTRY:** US

**LATITUDE/LONGITUDE:** 400011.40N/0792418.00W **TYPE:** WP, INT, DME

**AIRSPACE DOCKET:** **FIX TYPE OF ACTION:** MODIFY

**FIX MAKE-UP FACILITIES:**

| FAC | NAME | IDENT | TYPE | CLASS | MAG BRG | TRUE BRG | DME | DIST FROM FAC NM | DIST FROM FAC FEET | MRA | MAA |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | BELLAIRE | AIR | VOR/DME | H | 097.28 | 090.28 | 65.11 | 65.11 | | 5000 | 31000 |
| 2 | INDIAN HEAD | IHD | VORTAC | L | 314.90 | 308.90 | 2.76 | 2.76 | | 5000 | 17500 |

**EXPANDED SERVICE VOLUME (ESV):**

| FAC IDENT | FAC TYPE | RADIAL/BEARING | DISTANCE | MIN ALTITUDE | MAX ALTITUDE |
|---|---|---|---|---|---|
| AIR | VOR/DME | R-097 | 66 | 5000 | 15900 |

**HOLDING:** **HOLDING TYPE OF ACTION:** NO CHANGE

**REMARKS:**
INDIAN HEAD (FAC 2) AND BELLAIRE (FAC 1) USED TO ESTABLISH FIX COORDINATES

**FIX USE:**

| USE TYPE | USE TITLE | FAC | PAT | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|---|---|
| STAR | NESTO | 1, 2 | | KFWQ | MONONGAHELA | PA (US) |
| STAR | NESTO | 1, 2 | | KAGC | PITTSBURGH | PA (US) |
| STAR | DEMME (RNAV) | | | KPIT | PITTSBURGH | PA (US) |
| STAR | NESTO | 1, 2 | | KPIT | PITTSBURGH | PA (US) |
| STAR | DEMME (RNAV) | | | KAFJ | WASHINGTON | PA (US) |
| STAR | NESTO | 1, 2 | | KAFJ | WASHINGTON | PA (US) |
| STAR | NESTO | 1, 2 | | KHLG | WHEELING | WV (US) |

**REQUIRED CHARTING:** STAR

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 2 **DATE OF REVISION:** 01/10/2013

**REASON FOR REVISION:**
CHANGED BELLAIRE (AIR) VOR/DME ESV MIN/MAX ALTITUDES FROM 5000/14500 TO 5000/15900.
ADDED INDIAN HEAD (IHD) VORTAC AS FAC 2; ADDED REMARK: INDIAN HEAD (FAC 2) AND BELLAIRE (FAC 1) USED TO ESTABLISH FIX COORDINATES.

**DEVELOPED BY:** **DATE:** 08/28/2012 **OFFICE:** AJV-352 **NAME:** SEAN BARBEE

**APPROVED BY:** **DATE:** **OFFICE:** AJV-352 **NAME:** DARRYEL ADAMS

**SIGNATURE:**

**DISTRIBUTION:**
**NFDC**
**FPO:** EST
**ARTCC:** ZOB
**ATC FACILITY:** PIT APP CON/ATCT
**OTHER:**

QUALITY CHECKED

# RADIO FIX AND HOLDING DATA RECORD

**NAME:** HRMAN **STATE:** PA **COUNTRY:** US

**LATITUDE/LONGITUDE:** 395936.28N/0785155.48W **TYPE:** INT, DME

**AIRSPACE DOCKET:** **FIX TYPE OF ACTION:** MODIFY

**FIX MAKE-UP FACILITIES:**

| FAC | NAME | IDENT | TYPE | CLASS | MAG BRG | TRUE BRG | DME | DIST FROM FAC NM | DIST FROM FAC FEET | MRA | MAA |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | BELLAIRE | AIR | VOR/DME | H | 097.27 | 090.27 | 90.00 | 90.00 | | 14000 | 45000 |
| 2 | JOHNSTOWN | JST | VORTAC | L | 190.25 | 184.25 | | 19.44 | | 14000 | 17500 |

**EXPANDED SERVICE VOLUME (ESV):**

| FAC IDENT | FAC TYPE | RADIAL/BEARING | DISTANCE | MIN ALTITUDE | MAX ALTITUDE |
|---|---|---|---|---|---|
| AIR | VOR/DME | R-097 | 90 | 14000 | 15900 |

**HOLDING:** **HOLDING TYPE OF ACTION:** NO CHANGE

**REMARKS:**
JOHNSTOWN (FAC 2) AND BELLAIRE (FAC 1) USED TO ESTABLISH FIX COORDINATES

**FIX USE:**

| USE TYPE | USE TITLE | FAC | PAT | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|---|---|
| STAR | NESTO | 1, 2 | | KFWQ | MONONGAHELA | PA (US) |
| STAR | NESTO | 1, 2 | | KAGC | PITTSBURGH | PA (US) |
| STAR | NESTO | 1, 2 | | KPIT | PITTSBURGH | PA (US) |
| STAR | NESTO | 1, 2 | | KAFJ | WASHINGTON | PA (US) |
| STAR | NESTO | 1, 2 | | KHLG | WHEELING | WV (US) |

**REQUIRED CHARTING:** STAR

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 2 **DATE OF REVISION:** 01/10/2013

**REASON FOR REVISION:**
ADDED BELLAIRE (AIR) VOR/DME ESV DATA.
ADDED TO REMARKS: JOHNSTOWN (FAC 2) AND BELLAIRE (FAC 1) USED TO ESTABLISH FIX COORDINATES
FIX

**DEVELOPED BY:** **DATE:** 08/21/2012 **OFFICE:** AJV-352 **NAME:** SEAN BARBEE

**APPROVED BY:** **DATE:** **OFFICE:** AJV-352 **NAME:** DARRYEL ADAMS

**SIGNATURE:**

**DISTRIBUTION:**
**NFDC**
**FPO:** EST
**ARTCC:** ZOB
**ATC FACILITY:** PIT APP CON
**OTHER:**

# RADIO FIX AND HOLDING DATA RECORD

**NAME:** JOHNSTOWN VORTAC **STATE:** PA **COUNTRY:** US

**LATITUDE/LONGITUDE:** 401900.22N/0785003.00W **TYPE:**

**AIRSPACE DOCKET:** **FIX TYPE OF ACTION:** NO CHANGE

**FIX MAKE-UP FACILITIES:**

| FAC | NAME | IDENT | TYPE | CLASS | MAG BRG | TRUE BRG | DME | DIST FROM FAC NM | DIST FROM FAC FEET | MRA | MAA |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | JOHNSTOWN | JST | VORTAC | L | | | | | | | 17500 |

**HOLDING:** **HOLDING TYPE OF ACTION:** MODIFY

**PATTERNS:**

| PAT | DIR | IDENT | TYPE | RAD/CRS/BRG | CRS INBOUND | TURN (L OR R) | LEG LENGTH TIME | LEG LENGTH DME | HOLDING ALTITUDES MIN | HOLDING ALTITUDES MAX | TEMPLATES MIN | TEMPLATES MAX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | NE | JST | VORTAC | 050.00 | 230.00 | R | 1 | | 4200 | 14000 | 7 | 10 |
| 2 | SW | JST | VORTAC | 221.88 | 041.88 | R | 1 | | 4200 | 14000 | 7 | 10 |
| 3 | NE | JST | VORTAC | 050.00 | 230.00 | R | 1 | | 4300 | 14000 | 13 | 18 |

**CONTROLLING OBSTRUCTIONS:**

| PAT | AIRSPEED | OBSTRUCTION | COORDINATES | ELEVATION | ACCURACY CODE |
|---|---|---|---|---|---|
| 1 | 230 | WINDMILL (42-020840) | 402007.07N/0784018.14W | 2839 | 5E |
| 2 | 230 | WINDMILL (42-020076) | 400646.12N/0785114.44W | 3073 | 5E |
| 3 | 310 | WINDMILL (42-003511) | 402230.90N/0783415.16W | 3216 | 5E |

**HOLDING RESTRICTIONS:**
HOLDING LIMITED TO ESTABLISHED PATTERNS.

**PROCEDURES REQUIRING CLIMB-IN-HOLD:**

| PAT | PROCEDURE TITLE | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|
| 3 | ILS OR LOC/DME RWY 33 | KJST | JOHNSTOWN | PA (US) |

**REMARKS:**
PRECIPITOUS TERRAIN EVALUATION COMPLETE.
ESV ON FILE.

**FIX USE:**

| USE TYPE | USE TITLE | FAC | PAT | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|---|---|
| DP | WILTT | | | KAOO | ALTOONA | PA (US) |
| DP | JENER | | | KJST | JOHNSTOWN | PA (US) |
| DP | LILLI | | | KJST | JOHNSTOWN | PA (US) |
| DP | HOMEE | | | KLBE | LATROBE | PA (US) |
| DP | ALLEGHENY | | | KAGC | PITTSBURGH | PA (US) |
| DP | PITTSBURGH | | | KPIT | PITTSBURGH | PA (US) |
| EN ROUTE | J152 | | | | | (US) |
| EN ROUTE | J211 | | | | | (US) |
| EN ROUTE | V106 | | | | | (US) |
| EN ROUTE | V12 | | | | | (US) |
| EN ROUTE | V297 | | | | | (US) |
| EN ROUTE | V35 | | | | | (US) |
| EN ROUTE | V469 | | | | | (US) |
| IAP | ILS OR LOC RWY 21 | | | KAOO | ALTOONA | PA (US) |
| IAP | RNAV (GPS) RWY 14 | | | KHMZ | BEDFORD | PA (US) |
| IAP | ILS OR LOC RWY 08 | | | KBTP | BUTLER | PA (US) |
| IAP | RNAV (GPS) RWY 07 | | | K9G8 | EBENSBURG | PA (US) |
| IAP | RNAV (GPS) RWY 25 | | | K9G8 | EBENSBURG | PA (US) |
| IAP | VOR-A | | | K9G8 | EBENSBURG | PA (US) |
| IAP | LOC RWY 28 | | | KIDI | INDIANA | PA (US) |
| IAP | ILS OR LOC/DME RWY 33 | | 3 | KJST | JOHNSTOWN | PA (US) |
| IAP | VOR RWY 05 | | 2 | KJST | JOHNSTOWN | PA (US) |
| IAP | VOR RWY 15 | | 1 | KJST | JOHNSTOWN | PA (US) |
| IAP | VOR RWY 23 | | 1 | KJST | JOHNSTOWN | PA (US) |
| IAP | VOR/DME OR TACAN RWY 15 | | | KJST | JOHNSTOWN | PA (US) |
| IAP | VOR/DME OR TACAN RWY 23 | | | KJST | JOHNSTOWN | PA (US) |
| IAP | ILS OR LOC RWY 23 | | | KLBE | LATROBE | PA (US) |
| IAP | NDB RWY 23 | | | KLBE | LATROBE | PA (US) |
| IAP | RNAV (GPS) RWY 23 | | | KLBE | LATROBE | PA (US) |
| IAP | LOC/NDB RWY 25 | | | K2G9 | SOMERSET | PA (US) |
| IAP | NDB RWY 25 | | | K2G9 | SOMERSET | PA (US) |
| IAP | RNAV (GPS) RWY 25 | | | K2G9 | SOMERSET | PA (US) |
| STAR | LLEEO | | | CYQG | ONTARIO, CANADA | (CA) |
| STAR | LLEEO | | | KARB | ANN ARBOR | MI (US) |
| STAR | LLEEO | | | KDET | DETROIT | MI (US) |
| STAR | LLEEO | | | KYIP | DETROIT | MI (US) |
| STAR | LLEEO | | | KOZW | HOWELL | MI (US) |
| STAR | LLEEO | | | KMTC | MOUNT CLEMENS | MI (US) |
| STAR | LLEEO | | | KY47 | NEW HUDSON | MI (US) |
| STAR | LLEEO | | | K1D2 | PLYMOUTH | MI (US) |
| STAR | LLEEO | | | KPTK | PONTIAC | MI (US) |
| STAR | LLEEO | | | KVLL | TROY | MI (US) |

QUALITY 3 CHECKED

| | | | | |
|---|---|---|---|---|
| STAR | NESTO | KFWQ | MONONGAHELA | PA (US) |
| STAR | BOJID | KPHL | PHILADELPHIA | PA (US) |
| STAR | BUNTS | KPHL | PHILADELPHIA | PA (US) |
| STAR | NESTO | KAGC | PITTSBURGH | PA (US) |
| STAR | NESTO | KPIT | PITTSBURGH | PA (US) |
| STAR | NESTO | KAFJ | WASHINGTON | PA (US) |
| STAR | NESTO | KHLG | WHEELING | WV (US) |

**REQUIRED CHARTING:** DP, STAR, MILITARY IAP, IAP, CONTROLLER, EN ROUTE LOW, EN ROUTE HIGH

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 14 **DATE OF REVISION:** 01/10/2013

**REASON FOR REVISION:**
CHANGED PATS 1 AND 2 MIN/MAX HOLDING TEMPLATES FROM 5/11 TO 7/10.
CHANGED PAT 1 CONTROLLING OBSTACLE FROM 2739 MSL AAO 401612.00N/0784515.00W.
UPDATED FIX USE.

**DEVELOPED BY:** **DATE:** 09/24/2012 **OFFICE:** AJV-352 **NAME:** SEAN BARBEE

**APPROVED BY:** **DATE:** **OFFICE:** AJV-352 **NAME:** DARRYEL ADAMS

**SIGNATURE:**

**DISTRIBUTION:**
**NFDC**
**FPO:** EST
**ARTCC:** ZOB
**ATC FACILITY:** JST ATCT
**OTHER:**

QUALITY 3 CHECKED

# RADIO FIX AND HOLDING DATA RECORD

**NAME:** PLEEZ **STATE:** PA **COUNTRY:** US

**LATITUDE/LONGITUDE:** 400739.51N/0793619.40W **TYPE:** WP, INT, DME

**AIRSPACE DOCKET:** **FIX TYPE OF ACTION:** MODIFY

**FIX MAKE-UP FACILITIES:**

| FAC | NAME | IDENT | TYPE | CLASS | MAG BRG | TRUE BRG | DME | DIST FROM FAC NM | DIST FROM FAC FEET | MRA | MAA |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | INDIAN HEAD | IHD | VORTAC | L | 315.02 | 309.02 | 14.63 | 14.63 | | 5000 | 23000 |
| 2 | BENJE | BHU | NDB | MH | 233.00 | 226.00 | | 21.35 | | 4000 | 17500 |

**EXPANDED SERVICE VOLUME (ESV):**

| FAC IDENT | FAC TYPE | RADIAL/BEARING | DISTANCE | MIN ALTITUDE | MAX ALTITUDE |
|---|---|---|---|---|---|
| IHD | VORTAC | R-315 | 15 | 18000 | 23000 |

**HOLDING:** **HOLDING TYPE OF ACTION:** MODIFY

**PATTERNS:**

| PAT | DIR | IDENT | TYPE | RAD/CRS/BRG | CRS INBOUND | TURN (L OR R) | LEG LENGTH TIME | LEG LENGTH DME | HOLDING ALTITUDES MIN | HOLDING ALTITUDES MAX | TEMPLATES MIN | TEMPLATES MAX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | SE | IHD | VORTAC | 315.02 | 315.02 | R | 1-1 1/2 | | 5000 | 23000 | 5 | 20 |
| 2 | SW | | WP | 232.80 | 052.80 | R | | 5 | 4000 | 6000 | 5 | 6 |
| 3 | SE | | WP | 136.82 | 316.82 | R | | 10 | 5000 | 17500 | 7 | 17 |

**CONTROLLING OBSTRUCTIONS:**

| PAT | AIRSPEED | OBSTRUCTION | COORDINATES | ELEVATION | ACCURACY CODE |
|---|---|---|---|---|---|
| 1 | 200 | TOWER (42-001943) | 400211.81N/0792943.34W | 2724 | 1A |
| 2 | 200 | TOWER (42-000354) | 400543.08N/0794123.30W | 1934 | 1A |
| 3 | 200 | TOWER (42-001943) | 400211.81N/0792943.34W | 2724 | 1A |

**HOLDING RESTRICTIONS:**
PAT 3 CHART 210K ICON
HOLDING LIMITED TO ESTABLISHED PATTERNS.

**REMARKS:**
PRECIPITOUS TERRAIN EVALUATION COMPLETED.

**FIX USE:**

| USE TYPE | USE TITLE | FAC | PAT | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|---|---|
| DP | PLEEZ | | | KLBE | LATROBE | PA (US) |
| EN ROUTE | V268-474 | 1, 2 | | | | (US) |
| IAP | RNAV (GPS) RWY 5 | | 2 | KLBE | LATROBE | PA (US) |
| STAR | NESTO | 1, 2 | 1 | KFWQ | MONONGAHELA | PA (US) |
| STAR | NESTO | 1, 2 | 1 | KAGC | PITTSBURGH | PA (US) |
| STAR | DEMME (RNAV) | | 3 | KPIT | PITTSBURGH | PA (US) |
| STAR | NESTO | 1, 2 | 1 | KPIT | PITTSBURGH | PA (US) |
| STAR | DEMME (RNAV) | | 3 | KAFJ | WASHINGTON | PA (US) |
| STAR | NESTO | 1, 2 | 1 | KAFJ | WASHINGTON | PA (US) |
| STAR | NESTO | 1, 2 | 1 | KHLG | WHEELING | WV (US) |

**REQUIRED CHARTING:** DP, STAR, IAP, CONTROLLER, EN ROUTE LOW

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 6 **DATE OF REVISION:** 01/10/2013

**REASON FOR REVISION:**
CHANGED PAT 1 CONTROLLING OBSTACLE FROM 3226 MSL WINDMILL (42-002691).
CHANGED FAC 1 MRA FROM 4000; CHANGED FAC 2 MAA FROM 10000.
UPDATED FIX USE.

**DEVELOPED BY:** **DATE:** 08/21/2012 **OFFICE:** AJV-352 **NAME:** SEAN BARBEE

**APPROVED BY:** **DATE:** **OFFICE:** AJV-352 **NAME:** DARRYEL ADAMS

**SIGNATURE:**

**DISTRIBUTION:**
**NFDC**
**FPO:** EST
**ARTCC:** ZOB
**ATC FACILITY:** PIT APP CON/ATCT
**OTHER:** LBE ATCT

# RADIO FIX AND HOLDING DATA RECORD

**NAME:** SAMEE **STATE:** PA **COUNTRY:** US

**LATITUDE/LONGITUDE:** 395954.45N/0790731.95W **TYPE:** INT, DME

**AIRSPACE DOCKET:** **FIX TYPE OF ACTION:** MODIFY

**FIX MAKE-UP FACILITIES:**

| FAC | NAME | IDENT | TYPE | CLASS | MAG BRG | TRUE BRG | DME | DIST FROM FAC NM | DIST FROM FAC FEET | MRA | MAA |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | BELLAIRE | AIR | VOR/DME | H | 097.27 | 090.27 | 78.00 | 78.00 | | 14000 | 45000 |
| 2 | JOHNSTOWN | JST | VORTAC | L | 221.18 | 215.18 | | 23.32 | | 14000 | 17500 |

**EXPANDED SERVICE VOLUME (ESV):**

| FAC IDENT | FAC TYPE | RADIAL/BEARING | DISTANCE | MIN ALTITUDE | MAX ALTITUDE |
|---|---|---|---|---|---|
| AIR | VOR/DME | R-097 | 78 | 14000 | 15900 |

**HOLDING:** **HOLDING TYPE OF ACTION:** NO CHANGE

**REMARKS:**
JOHNSTOWN (FAC 2) AND BELLAIRE (FAC 1) USED TO ESTABLISH FIX COORDINATES

**FIX USE:**

| USE TYPE | USE TITLE | FAC | PAT | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|---|---|
| STAR | NESTO | 1, 2 | | KFWQ | MONONGAHELA | PA (US) |
| STAR | NESTO | 1, 2 | | KAGC | PITTSBURGH | PA (US) |
| STAR | NESTO | 1, 2 | | KPIT | PITTSBURGH | PA (US) |
| STAR | NESTO | 1, 2 | | KAFJ | WASHINGTON | PA (US) |
| STAR | NESTO | 1, 2 | | KHLG | WHEELING | WV (US) |

**REQUIRED CHARTING:** STAR

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 2 **DATE OF REVISION:** 01/10/2013

**REASON FOR REVISION:**
ADDED BELLAIRE (AIR) VOR/DME ESV DATA.
ADDED REMARK: JOHNSTOWN (FAC 2) AND BELLAIRE (FAC 1) USED TO ESTABLISH FIX COORDINATES.

**DEVELOPED BY:** **DATE:** 08/21/2012 **OFFICE:** AJV-352 **NAME:** SEAN BARBEE

**APPROVED BY:** **DATE:** **OFFICE:** AJV-352 **NAME:** DARRYEL ADAMS

**SIGNATURE:**

**DISTRIBUTION:**
**NFDC**
**FPO:** EST
**ARTCC:** ZOB
**ATC FACILITY:** PIT APP CON
**OTHER:**

# RADIO FIX AND HOLDING DATA RECORD

**NAME:** VINSE **STATE:** PA **COUNTRY:** US

**LATITUDE/LONGITUDE:** 395816.21N/0775721.20W **TYPE:** WP, DME

**AIRSPACE DOCKET:** 10-AEA-11 **FIX TYPE OF ACTION:** MODIFY

**FIX MAKE-UP FACILITIES:**

| FAC | NAME | IDENT | TYPE | CLASS | MAG BRG | TRUE BRG | DME | DIST FROM FAC NM | DIST FROM FAC FEET | MRA | MAA |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | COYLE | CYN | VORTAC | H | 284.37 | 274.37 | 163.00 | 163.00 | | 26000 | 45000 |
| 2 | BELLAIRE | AIR | VOR/DME | H | 097.27 | 090.27 | | 131.97 | | 26000 | 45000 |

**EXPANDED SERVICE VOLUME (ESV):**

| FAC IDENT | FAC TYPE | RADIAL/BEARING | DISTANCE | MIN ALTITUDE | MAX ALTITUDE |
|---|---|---|---|---|---|
| CYN | VORTAC | R-284 | 163 | 26000 | 45000 |
| AIR | VOR/DME | R-097 | 132 | 26000 | 45000 |

**HOLDING:** **HOLDING TYPE OF ACTION:** NO CHANGE

**FIX USE:**

| USE TYPE | USE TITLE | FAC | PAT | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|---|---|
| EN ROUTE | J110 | 1 | | | | (US) |
| EN ROUTE | J230 | 1 | | | | (US) |
| EN ROUTE | J80 | 1 | | | | (US) |
| EN ROUTE | Q480 | | | | | (US) |
| STAR | NESTO | 1, 2 | | KFWQ | MONONGAHELA | PA (US) |
| STAR | NESTO | 1, 2 | | KAGC | PITTSBURGH | PA (US) |
| STAR | DEMME (RNAV) | | | KPIT | PITTSBURGH | PA (US) |
| STAR | NESTO | 1, 2 | | KPIT | PITTSBURGH | PA (US) |
| STAR | DEMME (RNAV) | | | KAFJ | WASHINGTON | PA (US) |
| STAR | NESTO | 1, 2 | | KAFJ | WASHINGTON | PA (US) |
| STAR | NESTO | 1, 2 | | KHLG | WHEELING | WV (US) |

**REQUIRED CHARTING:** STAR, CONTROLLER, EN ROUTE HIGH

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 3 **DATE OF REVISION:** 01/10/2013

**REASON FOR REVISION:**
ADDED BELLAIRE (AIR) VORTAC AS FAC 2; ADDED AIR ESV DATA.
UPDATED FIX USE.

**DEVELOPED BY:** **DATE:** 09/24/2012 **OFFICE:** AJV-352 **NAME:** SEAN BARBEE

**APPROVED BY:** **DATE:** **OFFICE:** AJV-352 **NAME:** DARRYEL ADAMS

**SIGNATURE:**

**DISTRIBUTION:**
**NFDC**
**FPO:** EST
**ARTCC:** ZNY, ZOB
**ATC FACILITY:** PIT APP CON/ATCT
**OTHER:**

QUALITY 3 CHECKED

INFO ONLY

# RADIO FIX AND HOLDING DATA RECORD

**NAME:** ALLEGHENY VOR/DME **STATE:** PA **COUNTRY:** US

**LATITUDE/LONGITUDE:** 401643.15N/0800227.09W **TYPE:**

**AIRSPACE DOCKET:** **FIX TYPE OF ACTION:** NO CHANGE

**FIX MAKE-UP FACILITIES:**

| FAC | NAME | IDENT | TYPE | CLASS | MAG BRG | TRUE BRG | DME | DIST FROM FAC NM | DIST FROM FAC FEET | MRA | MAA |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | ALLEGHENY | AGC | VOR/DME | L | | | | | | | 17500 |

**HOLDING:** **HOLDING TYPE OF ACTION:** NO CHANGE

**PATTERNS:**

| PAT | DIR | IDENT | TYPE | RAD/CRS/BRG | CRS INBOUND | TURN (L OR R) | LEG LENGTH TIME | LEG LENGTH DME | HOLDING ALTITUDES MIN | HOLDING ALTITUDES MAX | TEMPLATES MIN | TEMPLATES MAX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | SW | AGC | VOR/DME | 237.17 | 057.17 | R | 1 | | 3000 | 14000 | 4 | 10 |
| 2 | SW | AGC | VOR/DME | 236.00 | 056.00 | R | 1 | | 3000 | 6000 | 4 | 5 |
| 3 | SE | | WP | 147.16 | 327.16 | R | | 5 | 3000 | 6000 | 5 | 6 |
| 4 | SE | | WP | 147.16 | 327.16 | R | | 4 | 3000 | 6000 | 5 | 6 |
| 5 | S | AGC | VOR/DME | 174.00 | 354.00 | R | 1 | | 3000 | 6000 | 4 | 5 |
| 6 | NW | AGC | VOR/DME | 310.00 | 130.00 | R | 1 | | 4000 | 6000 | 4 | 9 |

**CONTROLLING OBSTRUCTIONS:**

| PAT | AIRSPEED | OBSTRUCTION | COORDINATES | ELEVATION | ACCURACY CODE |
|---|---|---|---|---|---|
| UPN | 200 | TOWER (42-001020) | 402455.07N/0800217.74W | 1717 | 1A |
| 1 | 200 | TOWER (42-001967) | 401017.00N/0800617.00W | 1628 | 5E |
| 2 | 200 | TOWER (42-001967) | 401017.00N/0800617.00W | 1628 | 5E |
| 3 | 200 | TOWER (42-001656) | 401706.10N/0800216.10W | 1619 | 2C |
| 4 | 200 | TOWER (42-001656) | 401706.10N/0800216.10W | 1619 | 2C |
| 5 | 200 | TOWER (42-000770) | 400816.00N/0795729.00W | 1690 | 5E |
| 6 | 200 | TOWER (42-001656) | 401706.10N/0800216.10W | 1619 | 2C |
| 6 | 265 | TOWER (42-002035) | 401752.50N/0802020.48W | 1756 | 2A |

**HOLDING RESTRICTIONS:**
UNPLANNED HOLDING AUTHORIZED BETWEEN 3000 AND 14000 ONLY.

**REMARKS:**
PRECIPITOUS TERRAIN EVALUATION COMPLETE.

**FIX USE:**

| USE TYPE | USE TITLE | FAC | PAT | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|---|---|
| DP | HOMEE | | | KLBE | LATROBE | PA (US) |
| DP | ALLEGHENY | | | KAGC | PITTSBURGH | PA (US) |
| DP | PITTSBURGH | | | KPIT | PITTSBURGH | PA (US) |
| EN ROUTE | V12 | | | | | (US) |
| IAP | ILS OR LOC RWY 23 | | | KLBE | LATROBE | PA (US) |
| IAP | NDB RWY 23 | | | KLBE | LATROBE | PA (US) |
| IAP | RNAV (GPS) RWY 23 | | | KLBE | LATROBE | PA (US) |
| IAP | RNAV (GPS) RWY 26 | | 4 | KFWQ | MONONGAHELA | PA (US) |
| IAP | ILS OR LOC RWY 10 | | 1 | KAGC | PITTSBURGH | PA (US) |
| IAP | ILS OR LOC RWY 28 | | 2 | KAGC | PITTSBURGH | PA (US) |
| IAP | RNAV (GPS) RWY 28 | | 3 | KAGC | PITTSBURGH | PA (US) |
| IAP | VOR-A | | 2 | KAGC | PITTSBURGH | PA (US) |
| IAP | ILS OR LOC RWY 10L | | | KPIT | PITTSBURGH | PA (US) |
| IAP | ILS OR LOC RWY 10R | | 5 | KPIT | PITTSBURGH | PA (US) |
| IAP | ILS OR LOC RWY 28L | | 6 | KPIT | PITTSBURGH | PA (US) |
| IAP | ILS OR LOC RWY 28R | | | KPIT | PITTSBURGH | PA (US) |
| IAP | ILS OR LOC RWY 32 | | | KPIT | PITTSBURGH | PA (US) |
| IAP | ILS RWY 10L (CAT II) | | | KPIT | PITTSBURGH | PA (US) |
| IAP | ILS RWY 10L (CAT III) | | | KPIT | PITTSBURGH | PA (US) |
| IAP | ILS RWY 10R (CAT II) | | 5 | KPIT | PITTSBURGH | PA (US) |
| IAP | ILS RWY 10R (CAT III) | | 5 | KPIT | PITTSBURGH | PA (US) |
| IAP | ILS RWY 28L (CAT II) | | 6 | KPIT | PITTSBURGH | PA (US) |
| IAP | ILS RWY 28R (CAT II) | | | KPIT | PITTSBURGH | PA (US) |
| IAP | RNAV (GPS) RWY 10L | | | KPIT | PITTSBURGH | PA (US) |
| IAP | RNAV (GPS) RWY 14 | | 3 | KPIT | PITTSBURGH | PA (US) |
| IAP | RNAV (GPS) Y RWY 10C | | 3 | KPIT | PITTSBURGH | PA (US) |
| IAP | RNAV (GPS) Y RWY 10R | | 3 | KPIT | PITTSBURGH | PA (US) |
| IAP | RNAV (RNP) Z RWY 10C | | 3 | KPIT | PITTSBURGH | PA (US) |
| IAP | RNAV (RNP) Z RWY 10R | | 3 | KPIT | PITTSBURGH | PA (US) |
| IAP | ILS OR LOC RWY 27 (ALT MISS) | | 1 | KAFJ | WASHINGTON | PA (US) |
| STAR | NESTO | | | KFWQ | MONONGAHELA | PA (US) |
| STAR | NESTO | | | KAGC | PITTSBURGH | PA (US) |
| STAR | NESTO | | | KPIT | PITTSBURGH | PA (US) |
| STAR | WISKE | | | KPIT | PITTSBURGH | PA (US) |
| STAR | NESTO | | | KAFJ | WASHINGTON | PA (US) |
| STAR | NESTO | | | KHLG | WHEELING | WV (US) |

QUALITY 3 CHECKED

**REQUIRED CHARTING:** DP, STAR, IAP, AREA, CONTROLLER, EN ROUTE LOW

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 18 **DATE OF REVISION:** 11/15/2012

**REASON FOR REVISION:**
1. UPDATED FORM DUE TO SPELLING ERROR ON PREVIOUS FORM.

| | | | |
|---|---|---|---|
| **DEVELOPED BY:** | **DATE:** 07/16/2012 | **OFFICE:** AJV-352 | **NAME:** RONALD SALPINO |
| **APPROVED BY:** | **DATE:** | **OFFICE:** AJV-352 | **NAME:** DARRYEL ADAMS |
| | **SIGNATURE:** | | |

**DISTRIBUTION:**
**NFDC**
**FPO:** EST
**ARTCC:** ZOB
**ATC FACILITY:** PIT APP CON
**OTHER:**

QUALITY 3 CHECKED

# INFO ONLY

# RADIO FIX AND HOLDING DATA RECORD

**NAME:** COYLE VORTAC **STATE:** NJ **COUNTRY:** US

**LATITUDE/LONGITUDE:** 394902.42N/0742553.85W **TYPE:**

**AIRSPACE DOCKET:** **FIX TYPE OF ACTION:** NO CHANGE

**FIX MAKE-UP FACILITIES:**

| FAC | NAME | IDENT | TYPE | CLASS | MAG BRG | TRUE BRG | DME | DIST FROM FAC NM | DIST FROM FAC FEET | MRA | MAA |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | COYLE | CYN | VORTAC | H | | | | | | | 45000 |

**HOLDING:** **HOLDING TYPE OF ACTION:** MODIFY

**PATTERNS:**

| PAT | DIR | IDENT | TYPE | RAD/CRS/BRG | CRS INBOUND | TURN (L OR R) | LEG LENGTH TIME | LEG LENGTH DME | HOLDING ALTITUDES MIN | HOLDING ALTITUDES MAX | TEMPLATES MIN | TEMPLATES MAX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | NE | CYN | VORTAC | 067.00 | 247.00 | R | 1 | | 2000 | 8000 | 4 | 8 |
| 2 | W | CYN | VORTAC | 260.00 | 080.00 | L | 1 | | 2000 | 8000 | 4 | 8 |
| 3 | NE | | WP | 067.00 | 247.00 | R | | 4 | 2000 | 6000 | 5 | 6 |

**CONTROLLING OBSTRUCTIONS:**

| PAT | AIRSPEED | OBSTRUCTION | COORDINATES | ELEVATION | ACCURACY CODE |
|---|---|---|---|---|---|
| 1 | 200 | AAO | 395122.20N/0742406.20W | 418 | 2A |
| 2 | 200 | TOWER (34-000091) | 395152.00N/0743240.00W | 500 | 5D |
| 3 | 200 | AAO | 395122.20N/0742406.20W | 418 | 2A |

**REASON FOR NONSTANDARD HOLDING:**
PAT 2 T0 PROVIDE SEPARATION FROM R-5002

**HOLDING RESTRICTIONS:**
HOLDING LIMITED TO ESTABLISHED PATTERNS.
PAT 1: PRIOR COORDINATION REQUIRED WITH CONTROLLING AGENCY FOR HOLDING OVER R-5001A/B; R-5002A ABOVE 6000.
PAT 2: PRIOR COORDINATION REQUIRED WITH CONTROLLING AGENCY FOR HOLDING OVER R-5002A ABOVE 6000.
CHART HOLDING PAT 1 ON ENROUTE LOW

**REMARKS:**
PRECIPITOUS TERRAIN EVALUATION COMPLETE.

**FIX USE:**

| USE TYPE | USE TITLE | FAC | PAT | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|---|---|
| DP | ATLANTIC CITY | | | KACY | ATLANTIC CITY | NJ (US) |
| DP | LEEAH | | | KMIV | MILLVILLE | NJ (US) |
| DP | MODENA | | | KWRI | WRIGHTSTOWN | NJ (US) |
| DP | POINT PLEASANT | | | KWRI | WRIGHTSTOWN | NJ (US) |
| DP | POTTSTOWN | | | KWRI | WRIGHTSTOWN | NJ (US) |
| DP | LA GUARDIA | | | KLGA | NEW YORK | NY (US) |
| DP | PHILADELPHIA | | | KPHL | PHILADELPHIA | PA (US) |
| EN ROUTE | J110 | | | | | (US) |
| EN ROUTE | J150 | | | | | (US) |
| EN ROUTE | J209 | | | | | (US) |
| EN ROUTE | J37 | | | | | (US) |
| EN ROUTE | V1 | | | | | (US) |
| EN ROUTE | V16 | | | | | (US) |
| EN ROUTE | V312 | | | | | (US) |
| IAP | COPTER ILS OR LOC/DME RWY 13 | | | KACY | ATLANTIC CITY | NJ (US) |
| IAP | ILS OR LOC RWY 13 | | | KACY | ATLANTIC CITY | NJ (US) |
| IAP | ILS OR LOC/DME RWY 31 | | | KACY | ATLANTIC CITY | NJ (US) |
| IAP | VOR RWY 13 | | | KACY | ATLANTIC CITY | NJ (US) |
| IAP | VOR RWY 31 | | | KACY | ATLANTIC CITY | NJ (US) |
| IAP | VOR RWY 4 | | | KACY | ATLANTIC CITY | NJ (US) |
| IAP | VOR-B | | | KN81 | HAMMONTON | NJ (US) |
| IAP | NDB RWY 24 | | | KNEL | LAKEHURST | NJ (US) |
| IAP | TACAN RWY 24 | | | KNEL | LAKEHURST | NJ (US) |
| IAP | TACAN Z RWY 33 | | | KNEL | LAKEHURST | NJ (US) |
| IAP | VOR OR VOR/DME OR TACAN Y RWY 33 | | | KNEL | LAKEHURST | NJ (US) |
| IAP | VOR RWY 24 | | | KNEL | LAKEHURST | NJ (US) |
| IAP | RNAV (GPS) RWY 6 | | | KN12 | LAKEWOOD | NJ (US) |
| IAP | VOR RWY 6 | | | KN12 | LAKEWOOD | NJ (US) |
| IAP | RNAV (GPS) RWY 19 | | | KN14 | LUMBERTON | NJ (US) |
| IAP | VOR-A | | 1 | KN14 | LUMBERTON | NJ (US) |
| IAP | VOR RWY 26 | | 1 | KVAY | MOUNT HOLLY | NJ (US) |
| IAP | ILS RWY 6 | | | KMJX | TOMS RIVER | NJ (US) |
| IAP | VOR OR GPS RWY 24 | | | KMJX | TOMS RIVER | NJ (US) |
| IAP | VOR OR GPS RWY 6 | | 2 | KMJX | TOMS RIVER | NJ (US) |
| IAP | RNAV (GPS) RWY 5 | | 3 | KN73 | VINCENTOWN | NJ (US) |
| IAP | VOR-A | | 1 | KN73 | VINCENTOWN | NJ (US) |
| IAP | ILS OR LOC/DME RWY 24 | | 1 | KWRI | WRIGHTSTOWN | NJ (US) |
| IAP | VOR/DME OR TACAN RWY 18 | | | KWRI | WRIGHTSTOWN | NJ (US) |
| IAP | VOR/DME OR TACAN RWY 24 | | 1 | KWRI | WRIGHTSTOWN | NJ (US) |

QUALITY 3 CHECKED

| | | | | |
|---|---|---|---|---|
| IAP | ILS OR LOC RWY 27L | KPHL | PHILADELPHIA | PA (US) |
| IAP | RNAV (GPS) RWY 27L | KPHL | PHILADELPHIA | PA (US) |
| IAP | RNAV (GPS) RWY 33 | KPNE | PHILADELPHIA | PA (US) |
| STAR | RUUTH | KEWR | NEWARK | NJ (US) |
| STAR | SEA ISLE | KMJX | TOMS RIVER | NJ (US) |
| STAR | HARRISBURG | KWRI | WRIGHTSTOWN | NJ (US) |
| STAR | CAMRN | KJFK | NEW YORK | NY (US) |
| STAR | GATBY | KLGA | NEW YORK | NY (US) |
| STAR | KORRY | KLGA | NEW YORK | NY (US) |
| STAR | BOUNO | KHPN | WHITE PLAINS | NY (US) |
| STAR | NESTO | KFWQ | MONONGAHELA | PA (US) |
| STAR | NESTO | KAGC | PITTSBURGH | PA (US) |
| STAR | NESTO | KPIT | PITTSBURGH | PA (US) |
| STAR | NESTO | KAFJ | WASHINGTON | PA (US) |
| STAR | NESTO | KHLG | WHEELING | WV (US) |

**REQUIRED CHARTING:** DP, STAR, MILITARY IAP, IAP, CONTROLLER, EN ROUTE LOW, EN ROUTE HIGH

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 16 **DATE OF REVISION:** 04/05/2012

**REASON FOR REVISION:**
UPDATED COORDINATES PER AVNIS DATA
UPDATED PATTERN 2 OBST ID FROM 31-0091
UPDATED FIX USE

**DEVELOPED BY:** **DATE:** 08/18/2011 **OFFICE:** AJV-352 **NAME:** JILL OLSON (BRIAN BERUBEE)

**APPROVED BY:** **DATE:** 02/06/2012 **OFFICE:** AJV-352 **NAME:** DARRYEL ADAMS

**SIGNATURE:**

**DISTRIBUTION:** **NFDC**
**FPO:** EST
**ARTCC:** ZNY
**ATC FACILITY:** WRI, ACY APP CON
**OTHER:**

QUALITY CHECKED

INFO ONLY

# RADIO FIX AND HOLDING DATA RECORD

**NAME:** INDIAN HEAD VORTAC **STATE:** PA **COUNTRY:** US

**LATITUDE/LONGITUDE:** 395827.27N/0792130.12W **TYPE:**

**AIRSPACE DOCKET:** **FIX TYPE OF ACTION:** NO CHANGE

**FIX MAKE-UP FACILITIES:**

| FAC | NAME | IDENT | TYPE | CLASS | MAG BRG | TRUE BRG | DME | DIST FROM FAC NM | DIST FROM FAC FEET | MRA | MAA |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | INDIAN HEAD | IHD | VORTAC | L | | | | | | | 17500 |

**HOLDING:** **HOLDING TYPE OF ACTION:** MODIFY

**PATTERNS:**

| PAT | DIR | IDENT | TYPE | RAD/CRS/BRG | CRS INBOUND | TURN (L OR R) | LEG LENGTH TIME | LEG LENGTH DME | HOLDING ALTITUDES MIN | HOLDING ALTITUDES MAX | TEMPLATES MIN | TEMPLATES MAX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | SW | IHD | VORTAC | 224.09 | 044.09 | R | 1 | | 4500 | 14000 | 5 | 10 |
| 2 | E | IHD | VORTAC | 098.00 | 278.00 | R | 1 | | 5000 | 14000 | 5 | 10 |
| 3 | E | | WP | 101.00 | 281.00 | R | | 5 | 5000 | 14000 | 6 | 11 |

**CONTROLLING OBSTRUCTIONS:**

| PAT | AIRSPEED | OBSTRUCTION | COORDINATES | ELEVATION | ACCURACY CODE |
|---|---|---|---|---|---|
| UPN | 200 | TOWER (42-000935) | 400250.00N/0791515.00W | 3230 | 5E |
| 1 | 200 | WINDMILL (42-002690) | 395542.27N/0792310.12W | 3226 | 5E |
| 2 | 200 | TOWER (42-000935) | 400250.00N/0791515.00W | 3230 | 5E |
| 3 | 200 | TOWER (42-000935) | 400250.00N/0791515.00W | 3230 | 5E |

**HOLDING RESTRICTIONS:**
UNPLANNED HOLDING AUTHORIZED AT OR ABOVE 5000.

**REMARKS:**
PRECIPITOUS TERRAIN EVALUATION COMPLETED.
ESV ON FILE.

**FIX USE:**

| USE TYPE | USE TITLE | FAC | PAT | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|---|---|
| DP | TAKE-OFF MINIMUMS | | | KVVS | CONNELLSVILLE | PA (US) |
| DP | HOMEE | | | KLBE | LATROBE | PA (US) |
| DP | PLEEZ | | | KLBE | LATROBE | PA (US) |
| DP | TAKE-OFF MINIMUMS | | | KLBE | LATROBE | PA (US) |
| EN ROUTE | J518 | | | | | (US) |
| EN ROUTE | V119 | | | | | (US) |
| EN ROUTE | V268 | | | | | (US) |
| EN ROUTE | V268-474 | | | | | (US) |
| EN ROUTE | V35 | | | | | (US) |
| EN ROUTE | V474 | | | | | (US) |
| IAP | RNAV (GPS) RWY 27 | | | K2G4 | OAKLAND | MD (US) |
| IAP | VOR RWY 27 | | | K2G4 | OAKLAND | MD (US) |
| IAP | LOC RWY 5 | | | KVVS | CONNELLSVILLE | PA (US) |
| IAP | RNAV (GPS) RWY 14 | | | KVVS | CONNELLSVILLE | PA (US) |
| IAP | RNAV (GPS) RWY 5 | | | KVVS | CONNELLSVILLE | PA (US) |
| IAP | ILS OR LOC RWY 23 | | 2 | KLBE | LATROBE | PA (US) |
| IAP | NDB RWY 23 | | 2 | KLBE | LATROBE | PA (US) |
| IAP | RNAV (GPS) RWY 23 | | 3 | KLBE | LATROBE | PA (US) |
| IAP | LOC/NDB RWY 25 | | | K2G9 | SOMERSET | PA (US) |
| IAP | NDB RWY 25 | | | K2G9 | SOMERSET | PA (US) |
| IAP | RNAV (GPS) RWY 7 | | | K2G9 | SOMERSET | PA (US) |
| IAP | ILS OR LOC RWY 18 | | | KMGW | MORGANTOWN | WV (US) |
| STAR | NESTO | | | KFWQ | MONONGAHELA | PA (US) |
| STAR | NESTO | | | KAGC | PITTSBURGH | PA (US) |
| STAR | DEMME RNAV | | | KPIT | PITTSBURGH | PA (US) |
| STAR | NESTO | | | KPIT | PITTSBURGH | PA (US) |
| STAR | DEMME RNAV | | | KAFJ | WASHINGTON | PA (US) |
| STAR | NESTO | | | KAFJ | WASHINGTON | PA (US) |
| STAR | NESTO | | | KHLG | WHEELING | WV (US) |

**REQUIRED CHARTING:** DP, STAR, IAP, CONTROLLER, EN ROUTE LOW, EN ROUTE HIGH

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 10 **DATE OF REVISION:** 01/13/2011

**REASON FOR REVISION:**
NEW CONTROLLING OBSTRUCTION FOR HOLDING PATTERN 1.

QUALITY 3 CHECKED

**DEVELOPED BY:** **DATE:** 06/15/2010 **OFFICE:** AVN-110 **NAME:** JIM EMORY (SAMER MASSARUEH)

**APPROVED BY:** **DATE:** 11/16/2010 **OFFICE:** AVN-110 **NAME:** GEORGE DAVIS

**SIGNATURE:**

**DISTRIBUTION:** **NFDC**
**FPO:** EST
**ARTCC:** ZOB
**ATC FACILITY:** PIT APP CON/ATCT
**OTHER:**

# INFO ONLY

## RADIO FIX AND HOLDING DATA RECORD

**NAME:** MORGANTOWN VORTAC **STATE:** WV **COUNTRY:** US

**LATITUDE/LONGITUDE:** 393324.10N/0795137.42W **TYPE:**

**AIRSPACE DOCKET:** **FIX TYPE OF ACTION:** MODIFY

**FIX MAKE-UP FACILITIES:**

| FAC | NAME | IDENT | TYPE | CLASS | MAG BRG | TRUE BRG | DME | DIST FROM FAC NM | DIST FROM FAC FEET | MRA | MAA |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | MORGANTOWN | MGW | VORTAC | L | | | | | | | 45000 |

**HOLDING:** **HOLDING TYPE OF ACTION:** NO CHANGE

**PATTERNS:**

| PAT | DIR | IDENT | TYPE | RAD/CRS/BRG | CRS INBOUND | TURN (L OR R) | LEG LENGTH TIME | LEG LENGTH DME | HOLDING ALTITUDES MIN | HOLDING ALTITUDES MAX | TEMPLATES MIN | TEMPLATES MAX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | NW | MGW | VORTAC | 307.25 | 127.25 | L | 1 1/2 | | 18000 | 45000 | 16 | 29 |

**CONTROLLING OBSTRUCTIONS:**

| PAT | AIRSPEED | OBSTRUCTION | COORDINATES | ELEVATION | ACCURACY CODE |
|---|---|---|---|---|---|
| UPN | 265 | AAO | 393008.50N/0793151.30W | 3349 | 4E |

**REASON FOR NONSTANDARD HOLDING:**
PAT 1 AIR TRAFFIC REQUEST.

**HOLDING RESTRICTIONS:**
UNPLANNED HOLDING AUTHORIZED AT OR ABOVE 4600.

**REMARKS:**
CHART PAT #1 ON ENROUTE HIGH AND CONTROLLER CHARTS.
PRECIPITOUS TERRAIN EVALUATION COMPLETED.

**FIX USE:**

| USE TYPE | USE TITLE | FAC | PAT | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|---|---|
| DP | ALLEGHENY | | | KAGC | PITTSBURGH | PA (US) |
| DP | PITTSBURG | | | KPIT | PITTSBURGH | PA (US) |
| DP | TAKEOFF MINIMUMS | | | KMGW | MORGANTOWN | WV (US) |
| EN ROUTE | J162 | | 1 | | | (US) |
| EN ROUTE | V144 | | | | | (US) |
| EN ROUTE | V35 | | | | | (US) |
| EN ROUTE | V44 | | | | | (US) |
| EN ROUTE | V469 | | | | | (US) |
| EN ROUTE | V75 | | | | | (US) |
| IAP | LOC RWY 5 | | | KVVS | CONNELLSVILLE | PA (US) |
| IAP | RNAV (GPS) RWY 14 | | | KVVS | CONNELLSVILLE | PA (US) |
| IAP | RNAV (GPS) RWY 5 | | | KVVS | CONNELLSVILLE | PA (US) |
| IAP | ILS OR LOC RWY 21 | | | KCKB | CLARKSBURG | WV (US) |
| IAP | RNAV (GPS) RWY 21 | | | KCKB | CLARKSBURG | WV (US) |
| IAP | RNAV (GPS) RWY 3 | | | KCKB | CLARKSBURG | WV (US) |
| IAP | RNAV (GPS) RWY 23 | | | K4G7 | FAIRMONT | WV (US) |
| IAP | VOR/DME-A | | | K4G7 | FAIRMONT | WV (US) |
| IAP | ILS OR LOC RWY 18 | | | KMGW | MORGANTOWN | WV (US) |
| IAP | RNAV (GPS) Y RWY 18 | | | KMGW | MORGANTOWN | WV (US) |
| IAP | RNAV (GPS) Z RWY 18 | | | KMGW | MORGANTOWN | WV (US) |
| IAP | VOR-A | | | KMGW | MORGANTOWN | WV (US) |
| STAR | FRDMM (RNAV) | | 1 | KDCA | WASHINGTON | DC (US) |
| STAR | NUMMY | | 1 | KDCA | WASHINGTON | DC (US) |
| STAR | GIBBZ (RNAV) | | | KIAD | WASHINGTON | DC (US) |
| STAR | ROYIL | | | KIAD | WASHINGTON | DC (US) |
| STAR | SHNON | | | KIAD | WASHINGTON | DC (US) |
| STAR | WESTMINSTER | | | KBWI | BALTIMORE | MD (US) |
| STAR | FRDMM (RNAV) | | 1 | KADW | CAMP SPRINGS | MD (US) |
| STAR | NUMMY | | 1 | KADW | CAMP SPRINGS | MD (US) |
| STAR | BREMN | | | KCMH | COLUMBUS | OH (US) |
| STAR | BREMN | | | KLCK | COLUMBUS | OH (US) |
| STAR | BREMN | | | KOSU | COLUMBUS | OH (US) |
| STAR | BREMN | | | KTZR | COLUMBUS | OH (US) |
| STAR | NESTO | | | KFWQ | MONONGAHELA | PA (US) |
| STAR | NESTO | | | KAGC | PITTSBURGH | PA (US) |
| STAR | DEMME (RNAV) | | | KPIT | PITTSBURGH | PA (US) |
| STAR | NESTO | | | KPIT | PITTSBURGH | PA (US) |
| STAR | DEMME (RNAV) | | | KAFJ | WASHINGTON | PA (US) |
| STAR | NESTO | | | KAFJ | WASHINGTON | PA (US) |
| STAR | FRDMM (RNAV) | | 1 | KDAA | FORT BELVOIR | VA (US) |
| STAR | NUMMY | | 1 | KDAA | FORT BELVOIR | VA (US) |
| STAR | GIBBZ (RNAV) | | 1 | KJYO | LEESBURG | VA (US) |
| STAR | GIBBZ (RNAV) | | 1 | KHEF | MANASSAS | VA (US) |
| STAR | NESTO | | | KHLG | WHEELING | WV (US) |

QUALITY 3

**REQUIRED CHARTING:** DP, STAR, IAP, CONTROLLER, EN ROUTE LOW, EN ROUTE HIGH

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 10 **DATE OF REVISION:** 10/22/2009

**REASON FOR REVISION:**
UPDATED FIX USE.
PRECIPITOUS TERRAIN EVAL COMPLETED AND ANNOTATED IN REMARKS.
ADDED PAT 1 HOLDING MINIMUM TEMPLATE SIZE.

| | | | |
|---|---|---|---|
| **DEVELOPED BY:** | **DATE:** 05/26/2009 | **OFFICE:** AVN-101 | **NAME:** EUGENE NEWTON (DAVID JENNER) |
| **APPROVED BY:** | **DATE:** 10/22/2009 | **OFFICE:** AVN-110 | **NAME:** GLENN WEEKS |
| | **SIGNATURE:** | | |

**DISTRIBUTION:**
**NFDC**
**FPO:** EST
**ARTCC:** ZOB
**ATC FACILITY:** CKB
**OTHER:**

QUALITY 3 CHECKED

# INFO ONLY

## RADIO FIX AND HOLDING DATA RECORD

**NAME:** NESTO **STATE:** PA **COUNTRY:** US

**LATITUDE/LONGITUDE:** 401140.05N/0794249.49W **TYPE:** WP, INT, DME

**AIRSPACE DOCKET:** **FIX TYPE OF ACTION:** NO CHANGE

**FIX MAKE-UP FACILITIES:**

| FAC | NAME | IDENT | TYPE | CLASS | MAG BRG | TRUE BRG | DME | DIST FROM FAC NM | DIST FROM FAC FEET | MRA | MAA |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | MORGANTOWN | MGW | VORTAC | L | 015.00 | 010.00 | | 38.83 | | 4000 | 17500 |
| 2 | JOHNSTOWN | JST | VORTAC | L | 266.00 | 260.00 | | 41.06 | | 4000 | 17500 |
| 3 | INDIAN HEAD | IHD | VORTAC | L | 315.01 | 309.01 | 21.03 | 21.03 | | 4000 | 17500 |

**EXPANDED SERVICE VOLUME (ESV):**

| FAC IDENT | FAC TYPE | RADIAL/BEARING | DISTANCE | MIN ALTITUDE | MAX ALTITUDE |
|---|---|---|---|---|---|
| JST | VORTAC | R-266 | 42 | 4000 | 23000 |

**HOLDING:** **HOLDING TYPE OF ACTION:** NO CHANGE

**PATTERNS:**

| PAT | DIR | IDENT | TYPE | RAD/CRS/BRG | CRS INBOUND | TURN (L OR R) | LEG LENGTH TIME | LEG LENGTH DME | HOLDING ALTITUDES MIN | HOLDING ALTITUDES MAX | TEMPLATES MIN | TEMPLATES MAX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | SE | IHD | VORTAC | 315.01 | 315.01 | R | 1-1 1/2 | | 4000 | 17500 | 6 | 18 |
| 2 | SE | | WP | 138.01 | 318.01 | R | | 4 | 3100 | 6000 | 5 | 6 |

**CONTROLLING OBSTRUCTIONS:**

| PAT | AIRSPEED | OBSTRUCTION | COORDINATES | ELEVATION | ACCURACY CODE |
|---|---|---|---|---|---|
| 1 | 200 | TOWER (42-000354) | 400543.08N/0794123.30W | 1934 | 1A |
| 2 | 200 | AAO | 400706.30N/0794040.00W | 1723 | 6A |

**HOLDING RESTRICTIONS:**
HOLDING LIMITED TO ESTABLISHED PATTERNS.

**REMARKS:**
PRECIPITOUS TERRAIN EVALUATION COMPLETED.

**FIX USE:**

| USE TYPE | USE TITLE | FAC | PAT | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|---|---|
| EN ROUTE | V-469 | 1, 2, 3 | | | | (US) |
| EN ROUTE | V268-474 | 1, 2, 3 | 1 | | | (US) |
| IAP | RNAV (GPS) RWY 5 | | | KLBE | LATROBE | PA (US) |
| IAP | RNAV (GPS) RWY 10 | | 2 | KAGC | PITTSBURGH | PA (US) |
| IAP | VOR-A | 1, 2, 3 | | KAGC | PITTSBURGH | PA (US) |
| IAP | ILS OR LOC RWY 10L | 1, 2, 3 | | KPIT | PITTSBURGH | PA (US) |
| IAP | ILS RWY 10L (CAT II) | 1, 2, 3 | | KPIT | PITTSBURGH | PA (US) |
| IAP | ILS RWY 10L (CAT III) | 1, 2, 3 | | KPIT | PITTSBURGH | PA (US) |
| IAP | RNAV (GPS) Y RWY 28C | | | KPIT | PITTSBURGH | PA (US) |
| IAP | RNAV (GPS) Y RWY 28L | | | KPIT | PITTSBURGH | PA (US) |
| IAP | RNAV (GPS) Y RWY 28R | | | KPIT | PITTSBURGH | PA (US) |
| IAP | RNAV (GPS) Y RWY 32 | | | KPIT | PITTSBURGH | PA (US) |
| IAP | RNAV (RNP) Z RWY 28C | | | KPIT | PITTSBURGH | PA (US) |
| IAP | RNAV (RNP) Z RWY 28L | | | KPIT | PITTSBURGH | PA (US) |
| IAP | RNAV (RNP) Z RWY 28R | | | KPIT | PITTSBURGH | PA (US) |
| IAP | RNAV (RNP) Z RWY 32 | | | KPIT | PITTSBURGH | PA (US) |
| IAP | RNAV (GPS) RWY 27 | | | KAFJ | WASHINGTON | PA (US) |
| STAR | NESTO | 1, 2, 3 | | KFWQ | MONONGAHELA | PA (US) |
| STAR | NESTO | 1, 2, 3 | | KAGC | PITTSBURGH | PA (US) |
| STAR | DEMME (RNAV) | | | KPIT | PITTSBURGH | PA (US) |
| STAR | NESTO | 1, 2, 3 | | KPIT | PITTSBURGH | PA (US) |
| STAR | DEMME (RNAV) | | | KAFJ | WASHINGTON | PA (US) |
| STAR | NESTO | 1, 2, 3 | | KAFJ | WASHINGTON | PA (US) |
| STAR | NESTO | 1, 2, 3 | | KHLG | WHEELING | WV (US) |

**REQUIRED CHARTING:** STAR, IAP, CONTROLLER, EN ROUTE LOW

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 9 **DATE OF REVISION:** 09/20/2012

**REASON FOR REVISION:**
UPDATED HOLDING PATTERN 2 OBSTACLE; MSL CHANGED FROM 1934 TO 1723.

**DEVELOPED BY:** **DATE:** 05/04/2012 **OFFICE:** AJV-352 **NAME:** KELLY DEAN

**APPROVED BY:** **DATE:** 07/19/2012 **OFFICE:** AJV-352 **NAME:** DARRYEL ADAMS

QUALITY 3 CHECKED

**SIGNATURE:**

**DISTRIBUTION:** **NFDC**
**FPO:** EST
**ARTCC:** ZOB
**ATC FACILITY:** PIT APP CON; LBE
**OTHER:**

QUALITY 3 CHECKED

INFO ONLY

# RADIO FIX AND HOLDING DATA RECORD

**NAME:** WHEELING VOR/DME **STATE:** WV **COUNTRY:** US

**LATITUDE/LONGITUDE:** 401535.65N/0803407.05W **TYPE:**

**AIRSPACE DOCKET:** **FIX TYPE OF ACTION:** NO CHANGE

**FIX MAKE-UP FACILITIES:**

| FAC | NAME | IDENT | TYPE | CLASS | MAG BRG | TRUE BRG | DME | DIST FROM FAC NM | DIST FROM FAC FEET | MRA | MAA |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | WHEELING | HLG | VOR/DME | L | | | | | | | 17500 |

**HOLDING:** **HOLDING TYPE OF ACTION:** MODIFY

**PATTERNS:**

| PAT | DIR | IDENT | TYPE | RAD/CRS/BRG | CRS INBOUND | TURN (L OR R) | LEG LENGTH TIME | LEG LENGTH DME | HOLDING ALTITUDES MIN | HOLDING ALTITUDES MAX | TEMPLATES MIN | TEMPLATES MAX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | NE | HLG | VOR/DME | 043.00 | 223.00 | L | 1 | | 3000 | 8000 | 4 | 10 |
| 2 | NE | | WP | 042.00 | 222.00 | L | | 5 | 3000 | 6000 | 5 | 6 |
| 3 | NE | | WP | 043.00 | 223.00 | L | | 4 | 3100 | 6000 | 5 | 6 |

**CONTROLLING OBSTRUCTIONS:**

| PAT | AIRSPEED | OBSTRUCTION | COORDINATES | ELEVATION | ACCURACY CODE |
|---|---|---|---|---|---|
| 1 | 200 | STACK (39-004385) | 401511.02N/0803848.40W | 1672 | 4D |
| 1 | 265 | TOWER (39-000086) | 402033.00N/0803713.00W | 2002 | 2C |
| 2 | 200 | STACK (42-000032) | 402147.00N/0802405.00W | 1700 | 5E |
| 3 | 200 | STACK (42-000032) | 402147.00N/0802405.00W | 1700 | 5E |

**REASON FOR NONSTANDARD HOLDING:**
PAT 1 ATC REQUEST
PAT 2 ATC REQUEST
PAT 3 ATC REQUEST

**HOLDING RESTRICTIONS:**
HOLDING LIMITED TO ESTABLISHED PATTERNS.

**REMARKS:**
PRECIPITOUS TERRAIN EVALUATION COMPLETED.
PAT 1 200 KIAS CONTROLLING OBSTACLE ASSIGNED 4D AC PER 2005-AGL-2231-OE.
PAT 1 EVALUATED AT 265 KIAS FOR MILITARY USE.

**FIX USE:**

| USE TYPE | USE TITLE | FAC | PAT | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|---|---|
| DP | LOCKBOURNE | | | KLCK | COLUMBUS | OH (US) |
| DP | ALLEGHENY | | | KAGC | PITTSBURGH | PA (US) |
| DP | PITTSBURGH | | | KPIT | PITTSBURGH | PA (US) |
| IAP | VOR RWY 25 | | | K02G | EAST LIVERPOOL | OH (US) |
| IAP | ILS OR LOC RWY 10L | | | KPIT | PITTSBURGH | PA (US) |
| IAP | ILS OR LOC RWY 10R | | | KPIT | PITTSBURGH | PA (US) |
| IAP | ILS OR LOC RWY 28L | | 1 | KPIT | PITTSBURGH | PA (US) |
| IAP | ILS OR LOC RWY 32 | | | KPIT | PITTSBURGH | PA (US) |
| IAP | ILS RWY 10L (CAT II) | | | KPIT | PITTSBURGH | PA (US) |
| IAP | ILS RWY 10L (CAT III) | | | KPIT | PITTSBURGH | PA (US) |
| IAP | ILS RWY 10R (CAT II) | | | KPIT | PITTSBURGH | PA (US) |
| IAP | ILS RWY 10R (CAT III) | | | KPIT | PITTSBURGH | PA (US) |
| IAP | RNAV (GPS) Y RWY 28C | | 2 | KPIT | PITTSBURGH | PA (US) |
| IAP | RNAV (GPS) Y RWY 28L | | 2 | KPIT | PITTSBURGH | PA (US) |
| IAP | RNAV (RNP) Z RWY 28C | | 2 | KPIT | PITTSBURGH | PA (US) |
| IAP | RNAV (RNP) Z RWY 28L | | 2 | KPIT | PITTSBURGH | PA (US) |
| IAP | ILS OR LOC RWY 27 | | 1 | KAFJ | WASHINGTON | PA (US) |
| IAP | RNAV (GPS) RWY 27 | | 3 | KAFJ | WASHINGTON | PA (US) |
| IAP | ILS OR LOC RWY 3 | | 1 | KHLG | WHEELING | WV (US) |
| IAP | RNAV (GPS) RWY 3 | | 3 | KHLG | WHEELING | WV (US) |
| IAP | VOR RWY 21 | | 1 | KHLG | WHEELING | WV (US) |
| STAR | NESTO | | | KFWQ | MONONGAHELA | PA (US) |
| STAR | NESTO | | | KAGC | PITTSBURGH | PA (US) |
| STAR | NESTO | | | KPIT | PITTSBURGH | PA (US) |
| STAR | WISKE | | | KPIT | PITTSBURGH | PA (US) |
| STAR | NESTO | | | KAFJ | WASHINGTON | PA (US) |
| STAR | NESTO | | | KHLG | WHEELING | WV (US) |

**REQUIRED CHARTING:** DP, STAR, IAP, CONTROLLER, EN ROUTE LOW

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 17 **DATE OF REVISION:** 06/03/2010

**REASON FOR REVISION:**

PAT 2 MIN HOLDING ALTITUDE AMENDED FROM 4000 TO 3000 TO SUPPORT RNAV (GPS) RWY 27 MISSED APPROACH AT WASHINGTON, PA (AFJ).

NOTE FROM REV 16: PAT 3 WAS ESTABLISHED TO PROVIDE 4 NM HOLDING LEGS IAW DOCUMENTATION OF LEG LENGTH CRITERIA/POLICY. PROCEDURES THAT CURRENTLY USE PATTERN 2 WILL USE PATTERN 3 WHEN AMENDED.

**DEVELOPED BY:** **DATE:** 03/26/2010 **OFFICE:** AVN-110 **NAME:** PETER GUIMOND

**APPROVED BY:** **DATE:** 04/06/2010 **OFFICE:** AVN-110 **NAME:** GEORGE DAVIS

**SIGNATURE:**

**DISTRIBUTION:**
**NFDC**
**FPO:** EST
**ARTCC:** ZOB
**ATC FACILITY:** PIT APP CON
**OTHER:**

QUALITY 3 CHECKED