

| | | | | | |
|---|------------------------------|---|-------------------------------------|---|--|
| Flight Procedures Cover Page | Task Action: FLIGHT CHECK | Task Type: SID | Estimated Chart Date: 04/22/2021 | APWS Task ID: 3218538210444A54827DFD76806CF154 | APWS Project ID: 428664E1518E4550B11889D27D5FB815 |
| Procedure: KMCO FSHUN ONE RNAV DP | | Enroute: YES | Specialist: Harris, Michael | | Agreement Number: |
| Airport ID: KMCO | | | Airport City: ORLANDO | | State: FL |
| Facility ID: | Facility Type: | Flight Inspection Remark Type: New FC Slot | | | |
| <p>Procedure Comments: KMCO ACTIVE DATA USED.</p> <p>KMCO MAGVAR W06/2015.</p> <p>WAIVER LETTER REQUIRED TO NOT CHART MCA AT THE IF FOR RADAR VECTORS (RV) FOR ALL APPLICABLE RUNWAYS AT KMCO.</p> <p>CONTACT ALLAN WILL 405.954.6103</p> | | | | | |



FIPC DME/DME FORM

| | | | | | |
|---|---|--------------------------------------|---------------------------------|----------------------------|--|
| PROCEDURE: KMCO FSHUN ONE RNAV DP | | AIRPORT NAME: ORLANDO INTL | | AIRPORT ID: KMCO | SPECIAL CONTROL NO: AG-01-046-21 |
| FAC ID: FSHUN1 | | CITY: ORLANDO | | ST: FL | ORIG CHART DATE: 04/22/2021 |
| DFL TYPE: PROC/D | THIRD PARTY: <input type="checkbox"/> YES | EST. TIME ON SITE: 1.0 | REIMB. NUMBER: AC0683 | PTS TASK ID: | |

PREFLIGHT NOTES

| | | |
|------------------|--|----------------------|
| REVIEWER: | DATE: | |
| COMMENTS: | CHECK ONE: <input type="checkbox"/> FLT CK REQ <input type="checkbox"/> NFCR <input type="checkbox"/> REJECT | |
| | | YES NO |
| | CPV COMPLETE? | X |

PROCEDURE RESULTS

| | | | | |
|---|-------------------------|---|--|--|
| INSPECTION DATE: 02/23/2021 | CREW #: VN258 | N #: N85 | INSTRUMENT PROCEDURE STATUS: <input checked="" type="checkbox"/> SAT <input type="checkbox"/> SAT W/CHANGES <input type="checkbox"/> UNSAT | ARINC CODING: <input type="checkbox"/> SAT <input checked="" type="checkbox"/> SAT/GOLD <input type="checkbox"/> UNSAT |
| FLIGHT INSPECTOR SIGNATURE: james hawley @ 02/23/2021 17:32 | | PRINTED NAME: HAWLEY, JAMES MICHAEL | | NOTAM INITIATED? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO |

| | | |
|----------------------------------|--|--|
| FLIGHT INSPECTOR REMARKS: | | |
|----------------------------------|--|--|

| | | |
|---|------------------------------|----------------------|
| DME/DME STATUS: <input type="checkbox"/> SAT <input type="checkbox"/> UNSAT | SPECIALIST SIGNATURE: | PRINTED NAME: |
|---|------------------------------|----------------------|

| |
|----------------------------|
| SPECIALIST REMARKS: |
|----------------------------|

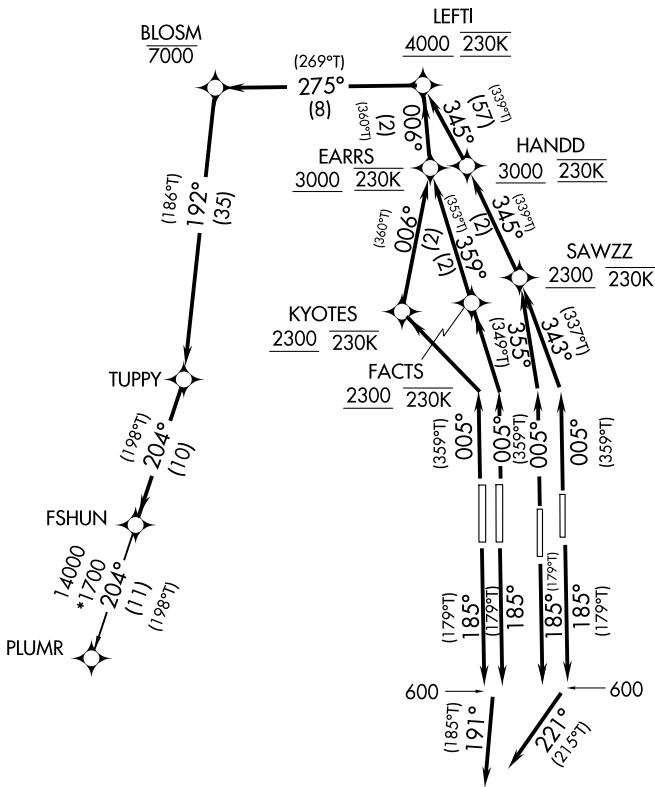
IN-FLIGHT OBSTACLE REPORT

| | | | | |
|--------------------------|---------------------------------|-----------------------------|-----------------------------------|-----------------------------------|
| OBSTRUCTION ID #: | COORDINATES OR LOCATION: | GNSS ALTITUDE (MSL): | BAROMETRIC ALTITUDE (MSL): | HEIGHT ABOVE GROUND LEVEL: |
|--------------------------|---------------------------------|-----------------------------|-----------------------------------|-----------------------------------|

| FIPC DME/DME FORM | | | | | | | |
|---|---|--|--|-----------------------------------|--|--|--|
| PROCEDURE: KMCO FSHUN ONE RNAV DP | | | AIRPORT NAME: ORLANDO INTL | | AIRPORT ID: KMCO | SPECIAL CONTROL NO: AG-01-046-21 | |
| FAC ID: FSHUN1 | | CITY: ORLANDO | | | ST: FL | ORIG CHART DATE: 04/22/2021 | |
| DFL TYPE: PROC/D | THIRD PARTY: <input type="checkbox"/> YES | EST. TIME ON SITE: 1.0 | REIMB. NUMBER: AC0683 | | PTS TASK ID: | | |
| PREFLIGHT NOTES | | | | | | | |
| REVIEWER: | | | | | DATE: | | |
| COMMENTS: | | | | | CHECK ONE: <input type="checkbox"/> FLT CK REQ <input type="checkbox"/> NFCR <input type="checkbox"/> REJECT <div style="display: flex; justify-content: flex-end; align-items: center; margin-top: 5px;"> <div style="border: 1px solid black; width: 100px; height: 20px; margin-right: 5px;"></div> <div style="text-align: center; font-size: 0.8em; margin-right: 5px;">YES</div> <div style="border: 1px solid black; width: 100px; height: 20px; margin-right: 5px;"></div> <div style="text-align: center; font-size: 0.8em;">NO</div> </div> <div style="display: flex; justify-content: flex-end; align-items: center; margin-top: 5px;"> <div style="border: 1px solid black; width: 100px; height: 20px; margin-right: 5px;"></div> <div style="text-align: center; font-size: 0.8em;">CPV COMPLETE?</div> <div style="border: 1px solid black; width: 100px; height: 20px; margin-right: 5px;"></div> <div style="text-align: center; font-size: 0.8em;">X</div> <div style="border: 1px solid black; width: 100px; height: 20px;"></div> </div> | | |
| PROCEDURE RESULTS | | | | | | | |
| INSPECTION DATE: 02/23/2021 | CREW #: VN258 | N #: N85 | INSTRUMENT PROCEDURE STATUS: <input checked="" type="checkbox"/> SAT <input type="checkbox"/> SAT W/CHANGES <input type="checkbox"/> UNSAT | | ARINC CODING: <input type="checkbox"/> SAT <input checked="" type="checkbox"/> SAT/GOLD <input type="checkbox"/> UNSAT | | |
| FLIGHT INSPECTOR SIGNATURE: james hawley @ 02/23/2021 17:32 | | | PRINTED NAME: HAWLEY, JAMES MICHAEL | | | NOTAM INITIATED? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO | |
| FLIGHT INSPECTOR REMARKS: | | | | | | | |
| | | | | | | | |
| DME/DME STATUS: <input checked="" type="checkbox"/> SAT <input type="checkbox"/> UNSAT | | SPECIALIST SIGNATURE: miles ctr carpenter @ 03/03/2021 07:50 | | | PRINTED NAME: Miles Carpenter | | |
| SPECIALIST REMARKS: Segments recorded by Flight Inspection or verified by TARGETS DME prediction-modeling tool under the KMCO FSHUN1 SID received ESV's and DME's as modeled and are suitable for navigation using DME/DME/IRU. Segment(s) flown were: BLOSM - PLUMR. | | | | | | | |
| IN-FLIGHT OBSTACLE REPORT | | | | | | | |
| OBSTRUCTION ID #: | COORDINATES OR LOCATION: | GNSS ALTITUDE (MSL): | BAROMETRIC ALTITUDE (MSL): | HEIGHT ABOVE GROUND LEVEL: | | | |
| | | | | | | | |

TOP ALTITUDE:
ASSIGNED BY ATC

PROTOTYPE-NOT FOR NAVIGATION



- NOTE: DME/DME/IRU or GPS required
- NOTE: RADAR required
- NOTE: RNAV 1
- NOTE: Jet and turboprop aircraft
- NOTE: If unable to accept climb rate, advise Clearance Delivery/ATC on initial contact.

(NARRATIVE ON FOLLOWING PAGE)
(NOTES CONTINUED ON FOLLOWING PAGE)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 17L: Climb on heading 185° to 600, then on heading 221° or as assigned by ATC, for vectors to TUPPY, thence...

TAKEOFF RWY 17R: Climb on heading 185° to 600, then on heading 221° or as assigned by ATC, for vectors to TUPPY, thence...

TAKEOFF RWY 18L: Climb on heading 185° to 600, then on heading 191° or as assigned by ATC, for vectors to TUPPY, thence...

TAKEOFF RWY 18R: Climb on heading 185° to 600, then on heading 191° or as assigned by ATC, for vectors to TUPPY, thence...

TAKEOFF RWY 35L: Climb on heading 005° to intercept course 355° to cross SAWZZ at or above 2300 and at or below 230K, then on track 345° to cross HANDD at or above 3000 and at 230K, then on track 338° to cross LEFTI at or above 4000 and at 230K, then on track 275° to cross BLOSM at or below 7000, then on track 192° to TUPPY, thence...

TAKEOFF RWY 35R: Climb on heading 005° to intercept course 343° to cross SAWZZ at or above 2300 and at or below 230K, then on track 345° to cross HANDD at or above 3000 and at 230K, then on track 338° to cross LEFTI at or above 4000 and at 230K, then on track 275° to cross BLOSM at or below 7000, then on track 192° to TUPPY, thence...

TAKEOFF RWY 36L: Climb on heading 005° to 600, then direct to cross KYOTE at or above 2300 and at or below 230K, then on track 006° to cross EARRS at or above 3000 and at 230K, then on track 342° to cross LEFTI at or above 4000 and at 230K, then on track 275° to cross BLOSM at or below 7000, then on track 192° to TUPPY, thence...

TAKEOFF RWY 36R: Climb on heading 005° to 600, then direct to cross FACTS at or above 2300 and at or below 230K, then on track 359° to cross EARRS at or above 3000 and at 230K, then on track 342° to cross LEFTI at or above 4000 and at 230K, then on track 275° to cross BLOSM at or below 7000, then on track 192° to TUPPY, thence...

... on track 204° to FSHUN. Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

TAKEOFF MINIMUMS

RWY 17L/R, 18L/R, 35 L/R, 36L/R: Standard with minimum climb of 500' per NM to 600.

DME/DME/IRU or GPS required

NOTE: RADAR required

NOTE: RNAV 1

NOTE: Jet and turboprop aircraft

NOTE: If unable to accept climb rate, advise Clearance Delivery/ATC on initial contact.

PROTOTYPE-NOT FOR NAVIGATION

PROCEDURE REVIEW BOARD (PRB) Results

March 11, 2021

PRB recommendations do not constitute approval

1. Waiver: ORLANDO INTL, ORLANDO, FLORIDA (MCO) - FSHUN ONE (RNAV) DEPARTURE,
<https://swims.faa.gov/Procedure/Edit/6726>

Requested By: AJV-A

PRB Results: Return for Rework

- (1) FAA Order 8260.3, para 13-1-3: Evaluate the 40:1 departure OCS originating at the departure end of runway (DER) at DER elevation. Departure operations are unrestricted if the OCS is clear.
 - (a) 40:1 ASC: add attached (DivDep_KMCO_RW17L, DivDep_KMCO_RW17R, DivDep_KMCO_RW18L, DivDep_KMCO_RW18R) diverse assessment to package.
- (2) MCO North Only: 8260.3, Section 13-6, evaluations. Temporarily Waived until December 2, 2021.
 - (a) Provide completed Hold down altitude evaluations for December 2, 2021 post-implementation as agreed. Temporary Waiver to criteria is only valid until December 2, 2021.
- (3) MCO North Only: 8260.46, Para 2-1-1 e (2)(c): Manual ATC crossing altitude evaluations for climb gradients. Approval is required for climb gradients over 500ft/NM and Waiver is required to publish ATC climb gradient.
 - (a) Complete attached (W_A_FL_FLORIIDA_FSHUN_ONE_RNAV_DEPARTURE_CG_APPROVAL) approval and resubmit package. Add attached (CG KMCO Calc, KMCO CG) assessment to package, both pdf calculations and xls.
 - (b) Complete attached (FSHUN ATC CG Waiver) waiver and resubmit package.
 - (c) NOTAM Required: "NOTE: ATC CLIMB GRADIENT: RWY 35R: 566 FT/NM to 2300, 36L: 637 FT/NM to 2300, 36R: 621 FT/NM to 2300, IF UNABLE TO ACCEPT CLIMB RATE ADVISE ATC PRIOR TO TAXI" This temporary NOTAM allows sufficient time to amend the procedure. As agreed with the Metroplex Team, all post-implementation amendments shall be completed by December 2, 2021.
- (4) PBN/Equipment Box Notes. Correct for December 2, 2021 post-implementation to match upcoming 8260.46H. Move RNAV 1, DME/DME/IRU or GPS to PBN box and remove "required" so it reads "RNAV 1 – DME/DME/IRU OR GPS". Move "RADAR REQUIRED" to the Equipment Box.
- (5) Waiver Required to FAA Order 8260.46G, Appendix E, Section 1, paragraph 10c, specifically, the requirement to document the minimum crossing altitude at the IF on RNAV Radar departure procedures. Temporarily Waived until December 2, 2021.
 - (a) Temporary waiver allows sufficient time to amend the procedure waiver as needed for no altitude at the IDF. As agreed with the Metroplex Team, all post-implementation amendments shall be completed by December 2, 2021.

Required NOTAM:

FUSHN ONE DEPARTURE (RNAV)

CHART NOTE: ATC CLIMB GRADIENT: RWY 35R: 566 FT/NM to 2300, 36L: 637 FT/NM to 2300, 36R: 621 FT/NM to 2300, IF UNABLE TO ACCEPT CLIMB RATE ADVISE ATC PRIOR TO TAXI



Federal Aviation Administration

Memorandum

Date:

To: Gary Powell, Director, Aeronautical Information Services

From: *For* Wade E.K. Terrell, Acting Manager, Flight Technologies and
Procedures Division

Subject: Waiver to FAA Order 8260.3 Obstacle Clearance Requirements for
SID Containing ATC Altitude Restrictions and 8260.46,
Documentation of Minimum Crossing Altitude at the Initial Fix (IF)

This memorandum authorizes temporary waivers to FAA Order 8260.3E, United States Standard for Terminal Instrument Procedures (TERPS), Chapter 13, Section 13-6, requirements to complete a level surface evaluation for charted maximum, mandatory or block altitude restrictions and FAA Order 8260.46G, Departure Procedure (DP) Program, Appendix E, Section 1, paragraph 10c requirement to document and chart the minimum crossing altitude at the Initial Fix (IF) on Area Navigation (RNAV) Radar departure procedures for the following:

Orlando Intl (KMCO), Orlando, FL

DDANY ONE DEPARTURE (RNAV)
EPCOT ONE DEPARTURE (RNAV)
FSHUN ONE DEPARTURE (RNAV)
MZULO ONE DEPARTURE (RNAV)
LEWRD ONE DEPARTURE (RNAV)
JEEYMY ONE DEPARTURE (RNAV)

Tampa Intl (KTPA), Tampa, FL

ENED NINE DEPARTURE (RNAV)
BAYPO NINE DEPARTURE (RNAV)

St Pete-Clearwater Intl (KPIE), St Petersburg-Clearwater, FL

ENED NINE DEPARTURE (RNAV)
BAYPO NINE DEPARTURE (RNAV)

This waiver remains in effect until December 2, 2021. No additional waiver request action is required. Please direct all inquiries to Thomas J. Nichols, Standards Section Manager, Flight Procedures and Airspace Group at 405-954-1171 or thomas.j.nichols@faa.gov.

1. FLIGHT PROCEDURE IDENTIFICATION:

Orlando, FL
Orlando INTL (KMCO)
FSHUN DEPARTURE (RNAV)

2. WAIVER REQUIRED AND APPLICABLE STANDARD:

Publish ATC Climb Gradients (CG). FAA Order 8260.46 Para 2-1-1 e (2) (a) Establish a single CG exceeding 200 ft/NM whenever required for obstruction clearance and include the altitude to which the gradient is required in the takeoff minimums note. FAA Order 8260.46 Para 2-1-1 e (2)(c) Do not chart CG's that may be needed to support airspace, Navigation solution, environmental, or ATC operations limitations.

3. REASON FOR WAIVER (JUSTIFICATION FOR NONSTANDARD TREATMENT):

The ATC CG's of RWY 35R: 566 FT/NM, 36L: 637 FT/NM, 36R: 621 FT/NM allow for the departures to be clear of arriving traffic to Executive Airport (KORL) RWY 25 ILS final approach. This ensures traffic flow for both airports and if the aircraft cannot accept the climb gradient ATC can provide an alternate option. Historically all aircraft have been able to make the crossing altitudes.

4. EQUIVALENT LEVEL OF SAFETY PROVIDED:

The procedure will have a Chart Note added stating: "NOTE: ATC CLIMB GRADIENT: RWY 35R: 566 FT/NM to 2300, 36L: 637 FT/NM to 2300, 36R: 621 FT/NM to 2300, IF UNABLE TO ACCEPT CLIMB RATE ADVISE ATC PRIOR TO TAXI". This allows controllers time to coordinate with the controller in the adjacent airspace or assign a different departure.

5. ALTERNATIVE ACTIONS DEEMED NOT FEASIBLE:

Discarding the crossing altitude in favor of a standard climb was considered, but due to the high density air traffic in the FL MCO airspace, the risk of essential controller transmissions and the loss of traffic flow was regarded as being too great and a safety issue.

6. COORDINATION WITH USER ORGANIZATIONS (SPECIFY):

Eastern Service Area PBN FAA and NATCA leads.
FL TRACON (F11)
ZMA/ZJX ARTCC
Orlando Tower
American and Southwest Airlines

7. SUBMITTED BY:

| DATE | OFFICE IDENTIFICATION | TITLE |
|----------|-----------------------|---------|
| 03/11/21 | AJV-A423 | Manager |

SIGNATURE
Digitally signed by
ALLAN WILL
Mar 29, 2021

8. AFS ACTIONS:

☐ APPROVED ☐ DISAPPROVED ☐ NOT REQUIRED

COMMENTS:

| DATE | ROUTING SYMBOL | SIGNATURE |
|------|----------------|-----------|
|------|----------------|-----------|



Federal Aviation Administration

Memorandum

To: Wade Terrell, Manager, Flight Technologies and Procedures Division
THRU: Wayne Radicke, Manager, Flight Procedures and Airspace Group

From: Julie Morgan, Manager, Instrument Flight Procedures (IFP) Coordination
Team, AJV-A410

Subject: Approval Request: Orlando INTL, Orlando, FL (KMCO)

The purpose of this memo is to request Flight Standards approval to publish the Orlando FSHUN ONE Departure (RNAV) with a climb gradient higher than 500 ft/NM as stated in Order 8260.46G Paragraph 2-1-1.d.(2): "The Flight Procedures and Airspace Group (or appropriate military authority) must approve DPs and DVAs requiring a CG in excess of 500 ft/NM (600 ft/NM for helicopters)..." and Paragraph 2-1-1.d.(2)(a) "Requests for approval of CGs in excess of 500 ft/NM (600 ft/NM for helicopters) must include documentation showing the calculations used to derive the climb gradient values."

The KMCO FSHUN ONE Departure was intended to overlay the initial climb of the Conventional SIDs to protect the arriving aircraft into Executive Airport (KORL) on the ILS RWY 25 IAP. This crossing restriction is needed to ensure separation and optimal traffic flow for a very congested airspace. The crossing restrictions result in ATC climb gradients of: RWY 35R: 566 FT/NM to 2300, 36L: 637 FT/NM to 2300, 36R: 621 FT/NM to 2300. This ensures traffic flow for both airports and if the aircraft cannot accept the climb gradient ATC can coordinate for traffic into KORL RWY 25 to stop until the departure is airborne and past the final approach. Historically all aircraft have been able to make the crossing altitudes.

| | DAM | +2600 | -5000 | +7000 |
|--------|--------------------|--------------------|----------------------|-------------------------------|
| | 35L - GOTHOM | 380.12/NM | 35 GOTHOM | MIEGS 476.19 M-LAPOU -476.19 |
| | 35R - | 442.92 | 385.95' | " " |
| | 36L | 361.11 | @ 3914.28 | " " |
| | 36R | 369.84 | " | " |
| | MZULD-35L - GOTHOM | 380.12 | 455.96 | 455.96 |
| | 35R - GOTHOM | 442.92 | GOTHOM MIEGS | " MIEGS-ASKUE - |
| | 36L - | 361.11 442.92 | @ 3558.15 | " " |
| | 36R - | 369.84 | " | " |
| | FATHE 35L - JWELE | 485.98/NM | 3000 JIRAN 191.38/NM | I-BIGSE 11000 B-BUFFI -455.58 |
| 565.22 | 35R - KASE | 565.22 | 191.38 | 3933.94' |
| 623.31 | 36L - KYOTE | 623.34 | 3000 EARS 319.63 | 11000 BUFFI 451.47/ |
| 613.33 | 36R - FACTS | 613.33 | 3000 HAND 312.5 | 11000 BUFFI 435.06/NM |
| | JEEMY 35L - | " | " | +11600 MDUSA 372.39' |
| ME | 35R - | " | " | MDUSA 339.32/NM |
| | 36L - | " | " | MDUSA 372.39 |
| | 36R - | " | " | MDUSA 388.52 |
| | | | | MDUSA 389.22 |
| ME NO | EPOT 35L - | +2300 SOW22 466.53 | +3000 HAND 344.83 | +4000 LEFT 299.40 |
| TR | 35R - | 493.56 | 344.83 | 299.40 |
| | 36L - | 2300 KYOTE 623.31 | +3000 EARS 319.63 | 4000 LEFT 300.30 |
| | 36R - | 2300 FACTS 613.33 | +3000 EARS 327.10 | 4000 LEFT 300.30 |
| | LEWRI 35L - | " | " | +14000 SARRIL 328.3 |
| | 35R - | " | " | " |
| | 36L - | " | " | " |
| | 36R - | " | " | " |
| | FSHUN 35L - | " | " | +12000 TVP/4 -200 |
| | 35R - | " | " | " |
| | 36L - | " | " | " |
| | 36R - | " | " | " |

| AIRPORT | PROCEDURE | RWY | WAYPOINT | RESTRICTION | ATC CG |
|---------|-----------|-----|----------|-------------|-----------|
| KMCO | FATHE | 35R | JWOLF | ↑2600 | 565.22'NM |
| | | 36L | KYOTE | ↑2300 | 636.70'NM |
| | | 36R | FACTS | ↑2300 | 620.48'NM |
| KMCO | JEEMY | 35R | JWOLF | ↑2600 | 565.22'NM |
| | | 36L | KYOTE | ↑2300 | 636.70'NM |
| | | 36R | FACTS | ↑2300 | 620.48'NM |
| KMCO | EPCOT | 35R | SAWZZ | ↑2300 | 565.22'NM |
| | | 36L | KYOTE | ↑2300 | 636.70'NM |
| | | 36R | FACTS | ↑2300 | 620.48'NM |
| KMCO | LEWRD | 35R | SAWZZ | ↑2300 | 565.22'NM |
| | | 36L | KYOTE | ↑2300 | 636.70'NM |
| | | 36R | FACTS | ↑2300 | 620.48'NM |
| KMCO | FSHUN | 35R | SAWZZ | ↑2300 | 565.22'NM |
| | | 36L | KYOTE | ↑2300 | 636.70'NM |
| | | 36R | FACTS | ↑2300 | 620.48'NM |

DivDep - KMCO RW17L

Project: KMCO LEWRD 20201026
Last Evaluation: 09-Mar-2021 15:15:24
Reference Software Version: 2.8.0
Project Chart Date: 04/22/2021

Evaluation Settings

| | |
|---|---------------------|
| Evaluated obstacles?: | true |
| Obstacle Database: | IFPA (50.0nm query) |
| Evaluated terrain?: | true |
| Terrain point result limit: | 50 |
| Worst Case Vegetation Height (ft) AGL: | 100 |
| ICA Turn Altitude (ft): | 489.70 |
| Input Climb Gradient (ft/NM): | 500.00 |
| Input CG Termination Altitude (ft): | 600.00 |
| Counter-clockwise Limiting Magnetic Heading (deg): | - |
| Clockwise Limiting Magnetic Heading (deg): | - |
| Speed Restriction (kts): | - |
| Inhibit controlling obstacles within ICA Extended 3SM Area: | false |

Airport

| | |
|----------------------------|----------------------------------|
| Name: | ORLANDO INTL |
| Location: | N28° 25' 45.80",W081° 18' 32.40" |
| Elevation (ft): | 96.40 |
| Magnetic Variation (degs): | -6.00 () |

Approach End of Runway

| | |
|--------------------------|---------------------------------------|
| Name: | KMCO:RW17L [IFPA r12 08-22-13 TO UNK] |
| Landing Threshold Point: | N28° 26' 37.31",W081° 16' 57.29" |
| Elevation (ft): | 89.70 |
| DER Location: | N28° 25' 08.20",W081° 16' 56.38" |
| DER Elevation (ft): | 89.70 |
| True Course (degs): | 179.48 |
| Width (ft): | 150 |

Departure End of Runway

| | |
|---------------------------------|---------------------------------------|
| Name: | KMCO:RW35R [IFPA r12 08-22-13 TO UNK] |
| Landing Threshold Point: | N28° 25' 08.20",W081° 16' 56.38" |
| Elevation (ft): | 89.70 |
| DER Location: | N28° 26' 37.31",W081° 16' 57.29" |
| DER Elevation (ft): | 89.70 |
| True Course (degs): | 359.48 |
| Width (ft): | 150 |

Runways with Vertically Guided Survey

KMCO: RW18R: VGAS, KMCO: RW17L: VGAS, KMCO: RW17R: VGAS, KMCO: RW35L: VGAS, KMCO: RW36R: VGAS, KMCO: RW18L: VGAS, KMCO: RW35R: VGAS, KMCO: RW36L: VGAS

Terrain Information

| Terrain Extractor Name | Extractor Location | Extractor Type | Resolution |
|------------------------|--|--------------------------------------|------------|
| AJV A DTED | C:\Program Files (x86)\TARGETS\data\DTED-3Sec-2019\DTED-AJVA | org.mitre.caasd.terrain.DTEExtractor | 3.0 |

Database Effective Dates

| Database | Date |
|---------------|------------|
| UddfObstacle | 07/13/2017 |
| Tiled IFPA | N/A |
| OEAAA | N/A |
| DOF | 02/25/2021 |
| NFDC | 02/25/2021 |
| IFP_OFFLINE | N/A |
| AVNII_OFFLINE | N/A |
| IFPA | 03/09/2021 |
| CIFP | 02/25/2021 |

Procedure Results

| | |
|---------------------------------------|---|
| ICA Start Point: | N28° 25' 08.20",W081° 16' 56.38" |
| ICA Start Height (ft): | 89.70 |
| ICA Length (NM): | 0.80 |
| ICA Length (ft): | 4860.89 |
| Area Radius (NM): | 25.00 |
| ICAE OCS Height (ft) AMSL: | 393.51 |
| Diverse B OCS Start Height (ft) AMSL: | 496.40 |
| DRP: | N28° 26' 17.51",W081° 16' 57.09" |
| ICA Corner Points: | N28° 25' 08.24",W081° 16' 50.78" to N28° 25' 08.15",W081° 17' 01.98", N28° 24' 19.91",W081° 17' 16.07" to N28° 24' 20.23",W081° 16' 35.70" |

Criteria Failures and Warnings

No failures.

Software Evaluation Failures, Warnings, and Notes

No failures.

Failure/Warning Justifications

None.

Obstacles Requiring Accuracy Code Verification

[12-000471 [IFPA r2], 12-000862 [IFPA r2], 12-001416 [IFPA r1], 12-001543 [IFPA r1], 12-003598 [IFPA r1], 12-006164 [IFPA r1], 12-006168 [IFPA r1], 12-006170 [IFPA r1], 12-006171 [IFPA r1], 12-006173 [IFPA r1], 12-006181 [IFPA r1], 12-006182 [IFPA r1], 12-006184 [IFPA r1], 12-006185 [IFPA r1], 12-006188 [IFPA r1], 12-006266 [IFPA r1], 12-006267 [IFPA r1], 12-006268 [IFPA r1], 12-006367 [IFPA r2], 12-026945 [IFPA r1], 12-027131 [IFPA r1], 12-027341 [IFPA r1]]

Ignored Obstacles

None.

Procedure Notes

None.

No CG obstacles for area ICA

No CGTA obstacles for area ICA

LOW CLOSE IN Obstacle Evaluation

| Obstacle | Source | Type | Lat | Lon | Height (ft) | Ht (ft) AMSL | Ht (ft) AGL | AC (H/V (ft)) | Eff Ht (ft) AMSL | Ctrln Msmt Dist (ft) | Surf Ht (ft) AMSL | Amt of Pen (ft) | Req CG (ft/NM) | Req CGTA (ft) | CGTA For Input CG (ft) | Side Ctrln | Dist to Ctrln (ft) |
|-----------|--------|--------|-----------------|------------------|-------------|--------------|-------------|---------------|------------------|----------------------|-------------------|-----------------|----------------|---------------|------------------------|------------|--------------------|
| 12-055394 | IFPA | POLE | N28° 25' 08.11" | W081° 16' 55.03" | 91.0 | 91.0 | 3.0 | 1A (+20/+3) | 91.0 | 9.92 | 89.95 | 1.05 | 1048.27 | 91.41 | | LEFT | 120.48 |
| 12-079592 | IFPA | TREE | N28° 24' 53.09" | W081° 16' 46.12" | 152.0 | 152.0 | 74.0 | 1A (+20/+3) | 152.0 | 1534.1 | 128.05 | 23.95 | 324.88 | 171.73 | 142.25 | LEFT | 902.31 |
| 12-079622 | IFPA | NAVAID | N28° 25' 08.10" | W081° 16' 56.38" | 90.0 | 90.0 | 1.0 | 1A (+20/+3) | 90.0 | 9.84 | 89.95 | 0.05 | 243.97 | 90.09 | 89.82 | ON | 0.07 |

No CG obstacles for area DIV A

No CGTA obstacles for area DIV A

No CG obstacles for area DIV B

No CGTA obstacles for area DIV B

No obstacles for area SEE AND AVOID

DivDep - KMCO RW17R

Project: KMCO LEWRD 20201026
Last Evaluation: 09-Mar-2021 15:19:30
Reference Software Version: 2.8.0
Project Chart Date: 04/22/2021

Evaluation Settings

| | |
|---|---------------------|
| Evaluated obstacles?: | true |
| Obstacle Database: | IFPA (50.0nm query) |
| Evaluated terrain?: | true |
| Terrain point result limit: | 50 |
| Worst Case Vegetation Height (ft) AGL: | 100 |
| ICA Turn Altitude (ft): | 486.70 |
| Input Climb Gradient (ft/NM): | 500.00 |
| Input CG Termination Altitude (ft): | 600.00 |
| Counter-clockwise Limiting Magnetic Heading (deg): | - |
| Clockwise Limiting Magnetic Heading (deg): | - |
| Speed Restriction (kts): | - |
| Inhibit controlling obstacles within ICA Extended 3SM Area: | false |

Airport

| | |
|----------------------------|----------------------------------|
| Name: | ORLANDO INTL |
| Location: | N28° 25' 45.80",W081° 18' 32.40" |
| Elevation (ft): | 96.40 |
| Magnetic Variation (degs): | -6.00 () |

Approach End of Runway

| | |
|--------------------------|---------------------------------------|
| Name: | KMCO:RW17R [IFPA r16 03-29-18 TO UNK] |
| Landing Threshold Point: | N28° 26' 08.20",W081° 17' 45.17" |
| Elevation (ft): | 90.10 |
| DER Location: | N28° 24' 29.20",W081° 17' 44.13" |
| DER Elevation (ft): | 86.70 |
| True Course (degs): | 179.47 |
| Width (ft): | 150 |

Departure End of Runway

| | |
|---------------------------------|---------------------------------------|
| Name: | KMCO:RW35L [IFPA r16 03-29-18 TO UNK] |
| Landing Threshold Point: | N28° 24' 29.20",W081° 17' 44.13" |
| Elevation (ft): | 86.70 |
| DER Location: | N28° 26' 08.20",W081° 17' 45.17" |
| DER Elevation (ft): | 90.10 |
| True Course (degs): | 359.47 |
| Width (ft): | 150 |

Runways with Vertically Guided Survey

KMCO: RW17L: VGAS, KMCO: RW35L: VGAS, KMCO: RW18R: VGAS, KMCO: RW36R: VGAS, KMCO: RW35R: VGAS, KMCO: RW36L: VGAS, KMCO: RW18L: VGAS, KMCO: RW17R: VGAS

Terrain Information

| Terrain Extractor Name | Extractor Location | Extractor Type | Resolution |
|------------------------|--|--------------------------------------|------------|
| AJV A DTED | C:\Program Files (x86)\TARGETS\data\DTED-3Sec-2019\DTED-AJVA | org.mitre.caasd.terrain.DTEExtractor | 3.0 |

Database Effective Dates

| Database | Date |
|---------------|------------|
| UddfObstacle | 07/13/2017 |
| Tiled IFPA | N/A |
| OEAAA | N/A |
| DOF | 02/25/2021 |
| NFDC | 02/25/2021 |
| IFP_OFFLINE | N/A |
| AVNII_OFFLINE | N/A |
| IFPA | 03/09/2021 |
| CIFP | 02/25/2021 |

Procedure Results

| | |
|---------------------------------------|---|
| ICA Start Point: | N28° 24' 29.20",W081° 17' 44.13" |
| ICA Start Height (ft): | 86.70 |
| ICA Length (NM): | 0.80 |
| ICA Length (ft): | 4860.89 |
| Area Radius (NM): | 25.00 |
| ICAE OCS Height (ft) AMSL: | 390.51 |
| Diverse B OCS Start Height (ft) AMSL: | 496.40 |
| DRP: | N28° 25' 48.40",W081° 17' 44.96" |
| ICA Corner Points: | N28° 24' 29.24",W081° 17' 38.53" to N28° 24' 29.15",W081° 17' 49.73", N28° 23' 40.90",W081° 18' 03.81" to N28° 23' 41.23",W081° 17' 23.45" |

Criteria Failures and Warnings

No failures.

Software Evaluation Failures, Warnings, and Notes

No failures.

Failure/Warning Justifications

None.

Obstacles Requiring Accuracy Code Verification

[12-000471 [IFPA r2], 12-000862 [IFPA r2], 12-001416 [IFPA r1], 12-001543 [IFPA r1], 12-003598 [IFPA r1], 12-006164 [IFPA r1], 12-006167 [IFPA r1], 12-006168 [IFPA r1], 12-006170 [IFPA r1], 12-006171 [IFPA r1], 12-006173 [IFPA r1], 12-006181 [IFPA r1], 12-006184 [IFPA r1], 12-006185 [IFPA r1], 12-006188 [IFPA r1], 12-006266 [IFPA r1], 12-006267 [IFPA r1], 12-006268 [IFPA r1], 12-006367 [IFPA r2], 12-026945 [IFPA r1], 12-027131 [IFPA r1], 12-027341 [IFPA r1]]

Ignored Obstacles

None.

Procedure Notes

None.

No CG obstacles for area ICA

No CGTA obstacles for area ICA

LOW CLOSE IN Obstacle Evaluation

| Obstacle | Source | Type | Lat | Lon | Height (ft) | Ht (ft) AMSL | Ht (ft) AGL | AC (H/V (ft)) | Eff Ht (ft) AMSL | Ctrln Msrmt Dist (ft) | Surf Ht (ft) AMSL | Amt of Pen (ft) | Req CG (ft/NM) | Req CGTA (ft) | CGTA For Input CG (ft) | Side Ctrln | Dist to Ctrln (ft) |
|-----------|--------|------|-----------------|------------------|-------------|--------------|-------------|---------------|------------------|-----------------------|-------------------|-----------------|----------------|---------------|------------------------|------------|--------------------|
| 12-079106 | IFPA | TREE | N28° 24' 15.52" | W081° 17' 53.57" | 133.0 | 133.0 | 58.0 | 1A (+20/+3) | 133.0 | 1373.34 | 121.03 | 11.97 | 269.71 | 147.66 | 112.96 | RIGHT | 855.46 |
| 12-074916 | IFPA | TREE | N28° 24' 14.53" | W081° 17' 53.76" | 136.0 | 136.0 | 60.0 | 1A (+20/+3) | 136.0 | 1473.17 | 123.53 | 12.47 | 267.72 | 151.61 | 114.07 | RIGHT | 873.36 |
| 12-055922 | IFPA | TREE | N28° 24' 13.13" | W081° 17' 54.40" | 136.0 | 136.0 | 60.0 | 1A (+20/+3) | 136.0 | 1614.03 | 127.05 | 8.95 | 244.36 | 151.61 | 106.34 | RIGHT | 931.82 |
| 12-079623 | IFPA | TREE | N28° 24' 12.14" | W081° 17' 54.24" | 135.0 | 135.0 | 59.0 | 1A (+20/+3) | 135.0 | 1714.15 | 129.55 | 5.45 | 225.42 | 150.29 | 98.65 | RIGHT | 918.46 |

No CG obstacles for area DIV A

No CGTA obstacles for area DIV A

No CG obstacles for area DIV B

No CGTA obstacles for area DIV B

No obstacles for area SEE AND AVOID

DivDep - KMCO RW18L

Project: KMCO LEWRD 20201026
Last Evaluation: 09-Mar-2021 15:22:26
Reference Software Version: 2.8.0
Project Chart Date: 04/22/2021

Evaluation Settings

| | |
|---|---------------------|
| Evaluated obstacles?: | true |
| Obstacle Database: | IFPA (50.0nm query) |
| Evaluated terrain?: | true |
| Terrain point result limit: | 50 |
| Worst Case Vegetation Height (ft) AGL: | 100 |
| ICA Turn Altitude (ft): | 491.00 |
| Input Climb Gradient (ft/NM): | 500.00 |
| Input CG Termination Altitude (ft): | 600.00 |
| Counter-clockwise Limiting Magnetic Heading (deg): | - |
| Clockwise Limiting Magnetic Heading (deg): | - |
| Speed Restriction (kts): | - |
| Inhibit controlling obstacles within ICA Extended 3SM Area: | false |

Airport

| | |
|----------------------------|----------------------------------|
| Name: | ORLANDO INTL |
| Location: | N28° 25' 45.80",W081° 18' 32.40" |
| Elevation (ft): | 96.40 |
| Magnetic Variation (degs): | -6.00 () |

Approach End of Runway

| | |
|--------------------------|---------------------------------------|
| Name: | KMCO:RW18L [IFPA r15 04-27-17 TO UNK] |
| Landing Threshold Point: | N28° 26' 54.00",W081° 19' 20.30" |
| Elevation (ft): | 92.40 |
| DER Location: | N28° 24' 55.15",W081° 19' 19.04" |
| DER Elevation (ft): | 91.00 |
| True Course (degs): | 179.46 |
| Width (ft): | 200 |

Departure End of Runway

| | |
|---------------------------------|---------------------------------------|
| Name: | KMCO:RW36R [IFPA r15 04-27-17 TO UNK] |
| Landing Threshold Point: | N28° 24' 55.15",W081° 19' 19.04" |
| Elevation (ft): | 91.00 |
| DER Location: | N28° 26' 54.00",W081° 19' 20.30" |
| DER Elevation (ft): | 92.40 |
| True Course (degs): | 359.46 |
| Width (ft): | 200 |

Runways with Vertically Guided Survey

KMCO: RW36R: VGAS, KMCO: RW17R: VGAS, KMCO: RW18L: VGAS, KMCO: RW17L: VGAS, KMCO: RW35L: VGAS, KMCO: RW35R: VGAS, KMCO: RW18R: VGAS, KMCO: RW36L: VGAS

Terrain Information

| Terrain Extractor Name | Extractor Location | Extractor Type | Resolution |
|------------------------|--|--------------------------------------|------------|
| AJV A DTED | C:\Program Files (x86)\TARGETS\data\DTED-3Sec-2019\DTED-AJVA | org.mitre.caasd.terrain.DTEExtractor | 3.0 |

Database Effective Dates

| Database | Date |
|---------------|------------|
| UddfObstacle | 07/13/2017 |
| Tiled IFPA | N/A |
| OEAAA | N/A |
| DOF | 02/25/2021 |
| NFDC | 02/25/2021 |
| IFP_OFFLINE | N/A |
| AVNII_OFFLINE | N/A |
| IFPA | 03/09/2021 |
| CIFP | 02/25/2021 |

Procedure Results

| | |
|---------------------------------------|---|
| ICA Start Point: | N28° 24' 55.15",W081° 19' 19.04" |
| ICA Start Height (ft): | 91.00 |
| ICA Length (NM): | 0.80 |
| ICA Length (ft): | 4860.89 |
| Area Radius (NM): | 25.00 |
| ICAE OCS Height (ft) AMSL: | 394.81 |
| Diverse B OCS Start Height (ft) AMSL: | 496.40 |
| DRP: | N28° 26' 34.20",W081° 19' 20.09" |
| ICA Corner Points: | N28° 24' 55.19",W081° 19' 13.44" to N28° 24' 55.10",W081° 19' 24.63", N28° 24' 06.85",W081° 19' 38.70" to N28° 24' 07.19",W081° 18' 58.34" |

Criteria Failures and Warnings

No failures.

Software Evaluation Failures, Warnings, and Notes

No failures.

Failure/Warning Justifications

None.

Obstacles Requiring Accuracy Code Verification

[12-000471 [IFPA r2], 12-000862 [IFPA r2], 12-001416 [IFPA r1], 12-001543 [IFPA r1], 12-003598 [IFPA r1], 12-006164 [IFPA r1], 12-006167 [IFPA r1], 12-006168 [IFPA r1], 12-006170 [IFPA r1], 12-006171 [IFPA r1], 12-006173 [IFPA r1], 12-006175 [IFPA r1], 12-006181 [IFPA r1], 12-006184 [IFPA r1], 12-006185 [IFPA r1], 12-006188 [IFPA r1], 12-006266 [IFPA r1], 12-006267 [IFPA r1], 12-006268 [IFPA r1], 12-006367 [IFPA r2], 12-027131 [IFPA r1], 12-027341 [IFPA r1]]

Ignored Obstacles

None.

Procedure Notes

None.

No CG obstacles for area ICA

No CGTA obstacles for area ICA

LOW CLOSE IN Obstacle Evaluation

| Obstacle | Source | Type | Lat | Lon | Height (ft) | Ht (ft) AMSL | Ht (ft) AGL | AC (H/V (ft)) | Eff Ht (ft) AMSL | Ctrln Msrmt Dist (ft) | Surf Ht (ft) AMSL | Amt of Pen (ft) | Req CG (ft/NM) | Req CGTA (ft) | CGTA For Input CG (ft) | Side Ctrln | Dist to Ctrln (ft) |
|-----------|--------|------|-----------------|------------------|-------------|--------------|-------------|---------------|------------------|-----------------------|-------------------|-----------------|----------------|---------------|------------------------|------------|--------------------|
| 12-055965 | IFPA | POLE | N28° 24' 54.99" | W081° 19' 22.21" | 94.0 | 94.0 | 3.0 | 1A (+20/+3) | 94.0 | 13.17 | 91.33 | 2.67 | 1821.78 | 94.95 | | RIGHT | 283.58 |
| 12-055944 | IFPA | TREE | N28° 24' 26.24" | W081° 19' 05.67" | 171.0 | 171.0 | 95.0 | 1A (+20/+3) | 171.0 | 2930.72 | 164.27 | 6.73 | 218.38 | 196.33 | 105.77 | LEFT | 1166.03 |
| 12-078751 | IFPA | TREE | N28° 24' 26.90" | W081° 19' 06.65" | 169.0 | 169.0 | 89.0 | 1A (+20/+3) | 169.0 | 2863.24 | 162.58 | 6.42 | 217.93 | 193.7 | 105.09 | LEFT | 1079.14 |
| 12-079560 | IFPA | TREE | N28° 24' 25.43" | W081° 19' 04.62" | 170.0 | 170.0 | 94.0 | 1A (+20/+3) | 170.0 | 3013.41 | 166.34 | 3.66 | 209.73 | 195.01 | 99.04 | LEFT | 1259.02 |

No CG obstacles for area DIV A

No CGTA obstacles for area DIV A

No CG obstacles for area DIV B

No CGTA obstacles for area DIV B

No obstacles for area SEE AND AVOID

DivDep - KMCO RW18R

Project: KMCO LEWRD 20201026
Last Evaluation: 09-Mar-2021 15:26:23
Reference Software Version: 2.8.0
Project Chart Date: 04/22/2021

Evaluation Settings

| | |
|---|---------------------|
| Evaluated obstacles?: | true |
| Obstacle Database: | IFPA (50.0nm query) |
| Evaluated terrain?: | true |
| Terrain point result limit: | 50 |
| Worst Case Vegetation Height (ft) AGL: | 100 |
| ICA Turn Altitude (ft): | 491.10 |
| Input Climb Gradient (ft/NM): | 500.00 |
| Input CG Termination Altitude (ft): | 600.00 |
| Counter-clockwise Limiting Magnetic Heading (deg): | - |
| Clockwise Limiting Magnetic Heading (deg): | - |
| Speed Restriction (kts): | - |
| Inhibit controlling obstacles within ICA Extended 3SM Area: | false |

Airport

| | |
|----------------------------|----------------------------------|
| Name: | ORLANDO INTL |
| Location: | N28° 25' 45.80",W081° 18' 32.40" |
| Elevation (ft): | 96.40 |
| Magnetic Variation (degs): | -6.00 () |

Approach End of Runway

| | |
|--------------------------|---------------------------------------|
| Name: | KMCO:RW18R [IFPA r20 03-29-18 TO UNK] |
| Landing Threshold Point: | N28° 26' 53.86",W081° 19' 37.11" |
| Elevation (ft): | 92.50 |
| DER Location: | N28° 24' 55.01",W081° 19' 35.83" |
| DER Elevation (ft): | 91.10 |
| True Course (degs): | 179.46 |
| Width (ft): | 200 |

Departure End of Runway

| | |
|---------------------------------|---------------------------------------|
| Name: | KMCO:RW36L [IFPA r22 03-29-18 TO UNK] |
| Landing Threshold Point: | N28° 24' 55.01",W081° 19' 35.83" |
| Elevation (ft): | 91.10 |
| DER Location: | N28° 26' 53.86",W081° 19' 37.11" |
| DER Elevation (ft): | 92.50 |
| True Course (degs): | 359.45 |
| Width (ft): | 200 |

Runways with Vertically Guided Survey

KMCO: RW36L: VGAS, KMCO: RW18R: VGAS, KMCO: RW35R: VGAS, KMCO: RW36R: VGAS, KMCO: RW18L: VGAS, KMCO: RW17L: VGAS, KMCO: RW35L: VGAS, KMCO: RW17R: VGAS

Terrain Information

| Terrain Extractor Name | Extractor Location | Extractor Type | Resolution |
|------------------------|--|--------------------------------------|------------|
| AJV A DTED | C:\Program Files (x86)\TARGETS\data\DTED-3Sec-2019\DTED-AJVA | org.mitre.caasd.terrain.DTEExtractor | 3.0 |

Database Effective Dates

| Database | Date |
|---------------|------------|
| UddfObstacle | 07/13/2017 |
| Tiled IFPA | N/A |
| OEAAA | N/A |
| DOF | 02/25/2021 |
| NFDC | 02/25/2021 |
| IFP_OFFLINE | N/A |
| AVNII_OFFLINE | N/A |
| IFPA | 03/09/2021 |
| CIFP | 02/25/2021 |

Procedure Results

| | |
|---------------------------------------|---|
| ICA Start Point: | N28° 24' 55.01",W081° 19' 35.83" |
| ICA Start Height (ft): | 91.10 |
| ICA Length (NM): | 0.80 |
| ICA Length (ft): | 4860.89 |
| Area Radius (NM): | 25.00 |
| ICAE OCS Height (ft) AMSL: | 394.91 |
| Diverse B OCS Start Height (ft) AMSL: | 496.40 |
| DRP: | N28° 26' 34.05",W081° 19' 36.90" |
| ICA Corner Points: | N28° 24' 55.05",W081° 19' 30.23" to N28° 24' 54.96",W081° 19' 41.43", N28° 24' 06.71",W081° 19' 55.49" to N28° 24' 07.05",W081° 19' 15.13" |

Criteria Failures and Warnings

No failures.

Software Evaluation Failures, Warnings, and Notes

No failures.

Failure/Warning Justifications

None.

Obstacles Requiring Accuracy Code Verification

[12-000471 [IFPA r2], 12-000862 [IFPA r2], 12-001416 [IFPA r1], 12-001543 [IFPA r1], 12-003598 [IFPA r1], 12-006164 [IFPA r1], 12-006167 [IFPA r1], 12-006168 [IFPA r1], 12-006170 [IFPA r1], 12-006171 [IFPA r1], 12-006173 [IFPA r1], 12-006175 [IFPA r1], 12-006181 [IFPA r1], 12-006184 [IFPA r1], 12-006185 [IFPA r1], 12-006188 [IFPA r1], 12-006266 [IFPA r1], 12-006267 [IFPA r1], 12-006268 [IFPA r1], 12-006367 [IFPA r2], 12-027131 [IFPA r1], 12-027341 [IFPA r1]]

Ignored Obstacles

None.

Procedure Notes

None.

No CG obstacles for area ICA

No CGTA obstacles for area ICA

LOW CLOSE IN Obstacle Evaluation

| Obstacle | Source | Type | Lat | Lon | Height (ft) | Ht (ft) AMSL | Ht (ft) AGL | AC (H/V (ft)) | Eff Ht (ft) AMSL | Ctrln Msrmt Dist (ft) | Surf Ht (ft) AMSL | Amt of Pen (ft) | Req CG (ft/NM) | Req CGTA (ft) | CGTA For Input CG (ft) | Side Ctrln | Dist to Ctrln (ft) |
|-----------|--------|------|-----------------|------------------|-------------|--------------|-------------|---------------|------------------|-----------------------|-------------------|-----------------|----------------|---------------|------------------------|------------|--------------------|
| 12-061647 | IFPA | POLE | N28° 24' 54.89" | W081° 19' 32.66" | 92.0 | 92.0 | 3.0 | 1A (+20/+3) | 92.0 | 14.51 | 91.46 | 0.54 | 496.29 | 92.28 | 92.28 | LEFT | 282.89 |

No CG obstacles for area DIV A

No CGTA obstacles for area DIV A

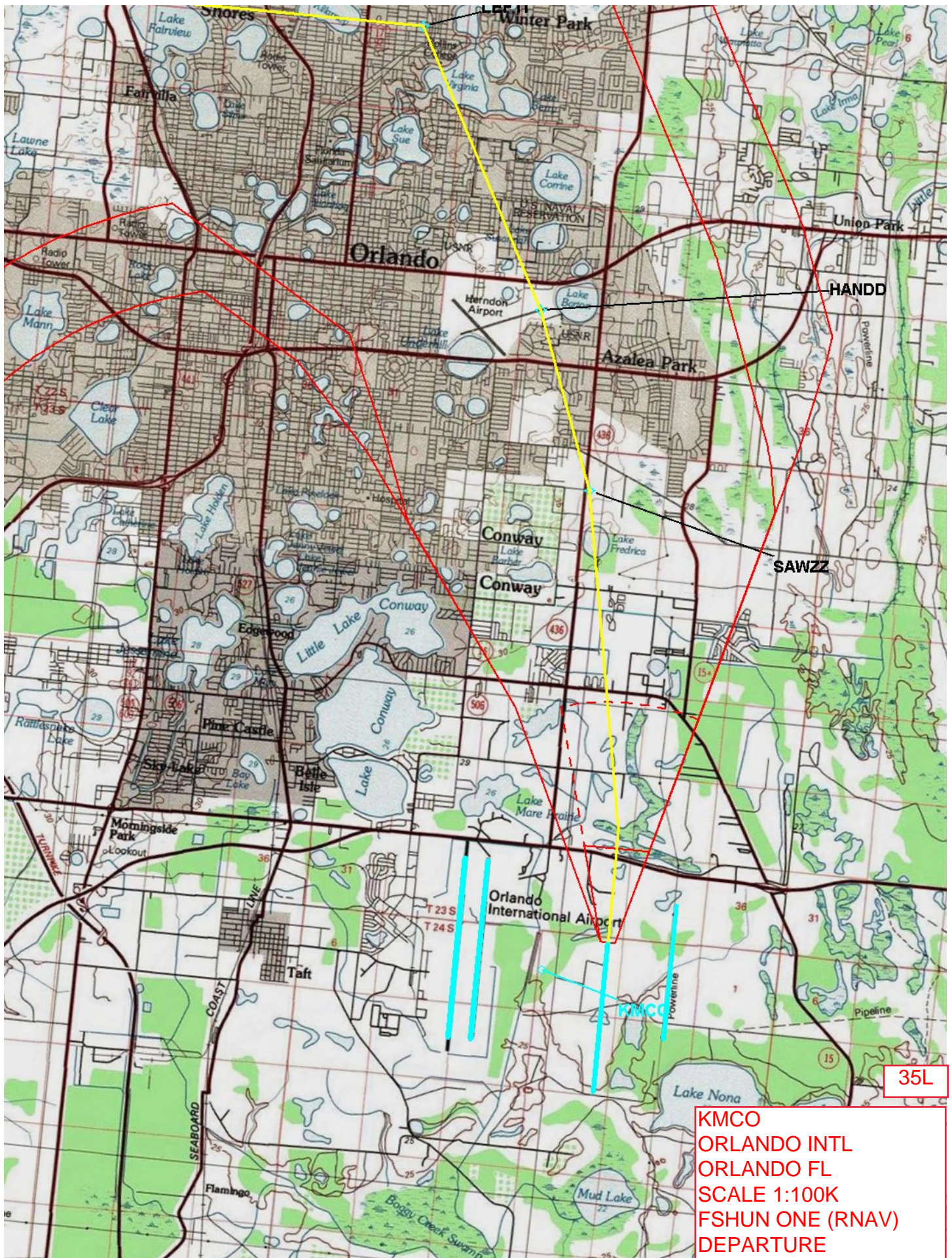
No CG obstacles for area DIV B

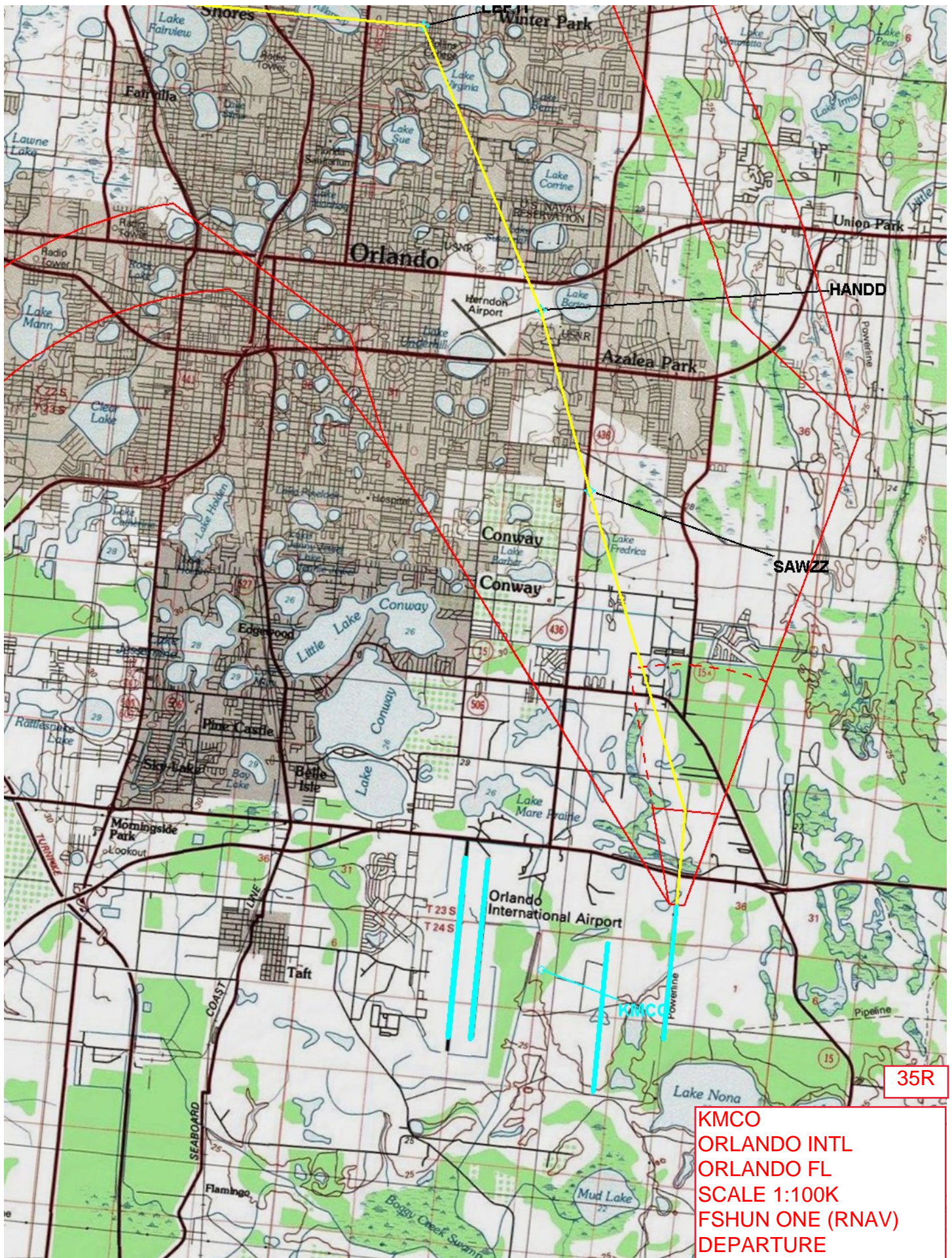
No CGTA obstacles for area DIV B

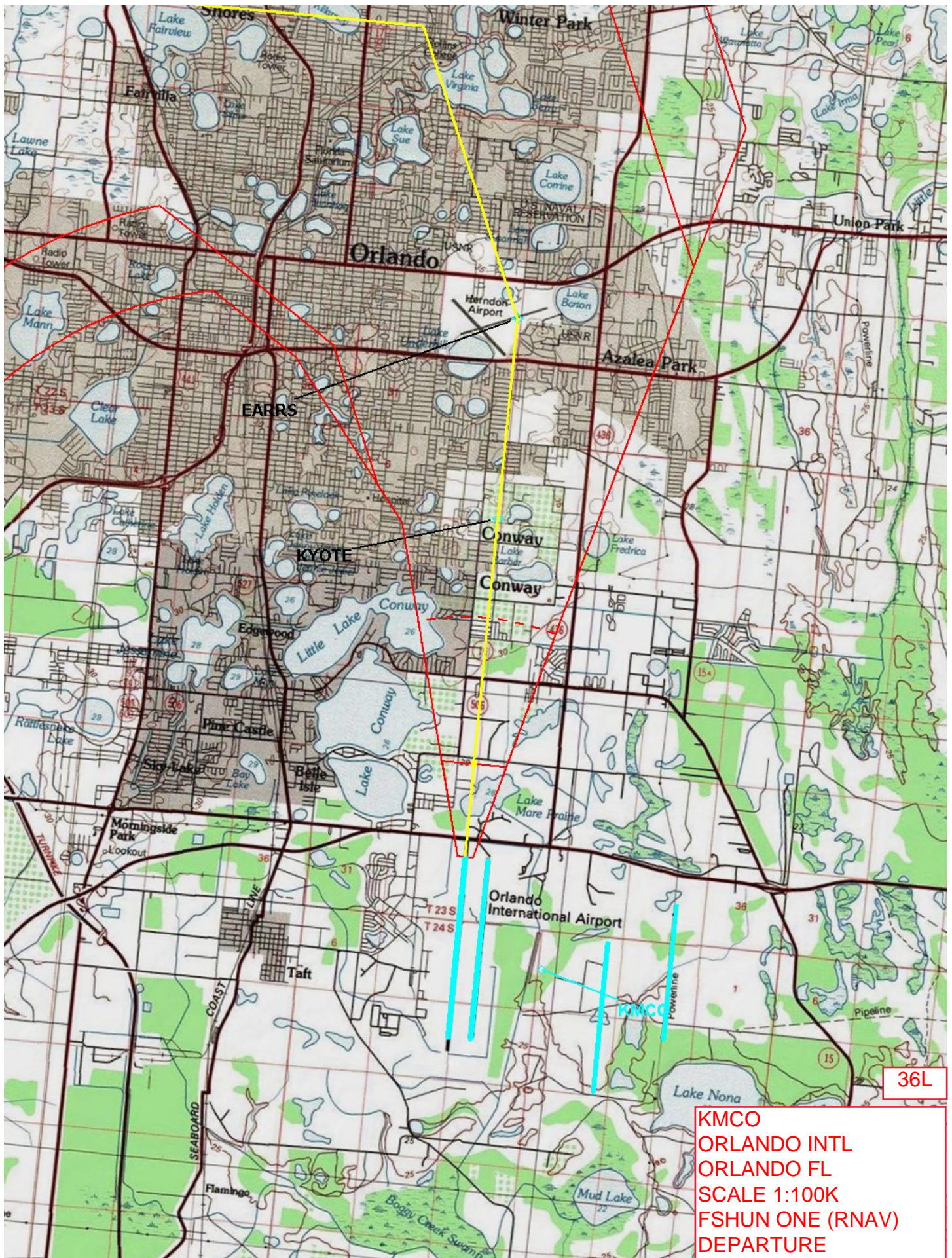
No obstacles for area SEE AND AVOID

KMCO
ORLANDO INTL
ORLANDO FL
SCALE 1:500K
FSHUN ONE (RNAV)
DEPARTURE









36L

KMCO
ORLANDO INTL
ORLANDO FL
SCALE 1:100K
FSHUN ONE (RNAV)
DEPARTURE

