| Flight Procedures Cover Page | Task Action: FLIGHT CHECK | APWS Project ID: 3B9EF53F2C5245AE87CF6CE2D62BFE35 | | | |
|--|---|--|------------------------------------|--|--------------------------|
| Procedure: MCO JEEMY FOUR (RNAV) SID | • | Enroute: YES | Specialist : Bruno, John | | Agreement Number: |
| Airport ID: KMCO | | • | Airport City: ORLANDO | | State: FL |
| Facility ID: | Facility Type: | Flight Inspection Rema New FC Slot | rk Type: | | |
| Procedure Comments: Contact Rob Hamilton 405-954-4608 WAIVER ON FILE TO NOT CHART IF ALTI WAIVER ON FILE TO PUBLISH ATC CLIM WAIVER ON FILE TO UTILIZE DEPARTUR APPROVAL LETTER ON FILE FOR CLIMB 04/02/25: THIS IS A UPDATED COPY OF -EQUIPMENT REQUIREMENT NOTES - RI AIRCRAFT". | TUDE AT THE IF FOR RAI B GRADIENTS. C SECTOR CRITERIA TO GRADIENTS IN EXCESS THE FORM DEVELOPED EMOVED NOTE "RADAR R | DAR VECTORS (RV). EVALUATE RWY 35L FOR OF 500 FEET PER NM. ON ON 02/19/25 REQUIRED FOR NON-GPS | OBSTACLES. EQUIPPED | | OUALITY 26 OHECKER |
| | | | | | ALITY 41 CHECKE |

| | | | | FIPC I | DME/DM | E FORM | Л | | | | | | |
|---|--|---|--|--|--|--------------------------------|-----------------------|----------------------|--------------------------|------------------------|--------------------------------|---------------------|-----------|
| PROCEDURE: | | | | AIRPOR | Г NAME: | | | AIRPOF | RT ID: | SPECIAL | CONTROL N | I O: | |
| MCO JEEMY FOU | JR (RNAV) SI | D | | ORLAND | O INTL | | | KMCO | | AG-02-28 | 3-25 | | |
| FAC ID: JEEMY4 | | CITY | : ORLANDO | | | | | ST: FL | | ORIG CH | ART DATE: (| 06/12/202 | 25 |
| DFL TYPE: | THIRD PAR | TY: EST. | TIME ON SITE: | REIMB. NUN | /IBER: | PTS T | FASK I | (D : | | | | | |
| PROC/D | YE | S 1.0 | | | | 329B3 | 3BDD9 | 51E48E2 | 9F9D5452E | DA205B7F | | | |
| | | | | PREF | LIGHT | NOTES | | | | | | | |
| REVIEWER: ryar | n caramanica | | | | | | | | DATE: (| 03/15/2025 | | | |
| COMMENTS: | | | | | | | | | CHECK C | DNE: | | | |
| | | | | | | | | | 🗌 FLT (| CK REQ | X NFCR | 🗌 REJ | ECT |
| | | | | | | | | - | | | | YES | NO |
| | | | | | | | | | CPV COM | IPLETE? | | X | |
| | | | | PROCE | EDURE F | RESULT | S | | | | | | |
| INSPECTION DA | TE: C | CREW #: | N #: | INSTRUM | ENT PROCEI | URE STATU | US: | | ARINC | CODING | : | | |
| 03/15/2025 | | VN532 | | X SAT | SAT W | CHANGES | | UNSAT | X SAT | Г 🗌 S | AT/GOLD | 🗌 UN | NSAT |
| FLIGHT INSPEC | FOR SIGNAT | TURE: | | PRINTED | NAME: | | | | | | NOTAM | INITIAT | ED? |
| ryan caramanica @ | 03/15/2025 10 |):58 | | CARAMA | NICA, RYAN I | DANIEL | | | | | YES | XI | NO |
| FLIGHT INSPEC Ground evaluation Changes to climb g database. No chang | FOR REMAR of amended pr radient, and al- es require an a | RKS: ocedure, Spe titude restrict irborne evalu | ecial Number; AG-0 tions were ATC req uation. Procedure as | 2-283-25, ORL uested for airsp amended is Sa | ANDO INTL () ace and traffic f tisfactory. | MCO), Orland low, no obstac | lo, FL, . cle char | JEEMY F nges. Ver | OUR DEP ified adjuste | ATURE (RI ed RNAV p | NAV) SID, Amo oints in JMCO | dt 4, Sat. 2502C | |
| DME/DME STAT | US: S | SPECIALIS | T SIGNATURE: | | | | | PRINTE | D NAME: | | | | |
| X SAT | UNSAT | steven s-ctr r | ager @ 03/19/2025 | 11:06 | | | | Steven R | ager | | | | |
| SPECIALIST REN | ARKS: | | | | | | | | | | | | |
| No Post Flight DM | E-DME analys | is necessary. | . No change to proc | edure required a | airborne eval. | | | | | | | | |
| | | | IN- | FLIGHT | OBSTA | CLE RE | POF | RT | | | | | |
| OBSTRUCTION I | D #: COOR | DINATES | OR LOCATION: | GNSS ALTIT | TUDE (MSL): | BAROMET | FRIC A | LTITUD | E (MSL): | HEIGHT | ABOVE GRO | UND LE | EVEL: |

| | | | | | F | FIPC D | ME/DM | EF | ORM | | | | | | | |
|---|--|---|--|--|-----------------------------|---|--|--------------------|------------------------|-------------------|-------------------|-----------|---------------------|---------------------------------|---------------------|-----------|
| PROCEDURE: | | | | | I | AIRPORT | NAME: | | | A | IRPOF | RT ID: | SPECIA | L CONTROL I | NO: | |
| MCO JEEMY FOU | JR (RNAV) S | SID | | | | ORLAND | O INTL | | | K | KMCO | | AG-02-2 | 83-25 | | |
| FAC ID: JEEMY4 | | | CITY: OR | RLANDO | | | | | | ST | T: FL | | ORIG C | HART DATE: | 06/12/202 | 25 |
| DFL TYPE: | THIRD PA | RTY: | EST. TIM | E ON SITE: | REI | MB. NUM | IBER: | | PTS TA | SK ID: | : | | | | | |
| PROC/D | | ES | 1.0 | | | | | | 329B3B | DD951 | LE48E29 | 9F9D5452I | DA205B7F | - | | |
| | | | | | | PREF | LIGHT | NO | ΓES | | | | | | | |
| REVIEWER: ryan | n caramanica | | | | | | | | | | | DATE: | 03/15/202 | 5 | | |
| COMMENTS: | | | | | | | | | | | | CHECK (| DNE: | | | |
| | | | | | | | | | | | | 🗌 FLT (| CK REQ | X NFCR | 🗌 REJ | ECT |
| | | | | | | | | | | | | | | | YES | NO |
| | | | | | | | | | | | | CPV COM | 1PLETE? | | X | |
| | | | | | P | ROCE | DURE 1 | RES | ULTS | | | | | | | |
| INSPECTION DA | TE: | CREV | v #: | N #: | IN | NSTRUME | ENT PROCE | DURE | STATUS | : | | ARINC | | G: | | |
| 03/15/2025 | | VN53 | 32 | | | X SAT | SAT W | //CHAI | NGES | UN 🗌 | NSAT | X SA | г 🗌 | SAT/GOLD | | NSAT |
| FLIGHT INSPEC | FOR SIGNA | TURE | 2: | | P] | RINTED | NAME: | | | | | | | NOTAM | INITIAT | ED? |
| ryan caramanica @ | 03/15/2025 1 | 10:58 | | | C | CARAMAN | NICA, RYAN | DANIE | EL | | | | | | XI | NO |
| FLIGHT INSPEC Ground evaluation Changes to climb g database. No chang | FOR REMA of amended p radient, and a es require an | RKS: procedu altitude airborr | re, Special l restrictions ne evaluation | Number; AG-(were ATC rec n. Procedure a | 02-283 questec s amer | 3-25, ORLA d for airspa nded is Sat | ANDO INTL ice and traffic isfactory. | (MCO), flow, no | Orlando, o obstacle | FL, JEI change | EMY F es. Veri | OUR DEPA | ATURE (F ed RNAV | RNAV) SID, Am points in JMCO | dt 4, Sat. 2502C | |
| DME/DME STAT | US: | SPEC | IALIST SI | GNATURE: | | | | | | PF | RINTE | D NAME: | | | | |
| | UNSAT | | | | | | | | | | | | | | | |
| SPECIALIST REN | MARKS: | | | | | | | | | | | | | | | |
| | | | | IN- | -FL | IGHT | OBSTA | CLE | REP | ORT | Г | | | | | |
| OBSTRUCTION I | D #: COO | RDINA | ATES OR I | LOCATION: | GNS | SS ALTIT | UDE (MSL): | BAR | OMETR | C ALT | TITUD | E (MSL): | HEIGH | T ABOVE GRO | DUND LI | EVEL: |



V

DEPARTURE ROUTE DESCRIPTION SEE ADDITIONAL REQUIREMENTS ON AAUP

TAKEOFF RUNWAY 17L: Climb on heading 185° to intercept course 168° to cross KAAPE at or above 1500, then on track 140°, for vectors to MDUSA, thence. . . . TAKEOFF RUNWAY 17R: Climb on heading 185° to intercept course 154° to cross KAAPE at or above 1500, then on track 140°, for vectors to MDUSA, thence. . . . TAKEOFF RUNWAY 18L: Climb on heading 185° to intercept course 214° to cross VILNS at or above 1500, then on track 237°, for vectors to MDUSA, thence. . . . TAKEOFF RUNWAY 18R: Climb on heading 185° to intercept course 209° to cross VILNS at or above 1500, then on track 237°, for vectors to MDUSA, thence. . . . TAKEOFF RUNWAY 18R: Climb on heading 005° to intercept course 209° to cross VILNS at or above 1500, then on track 237°, for vectors to MDUSA, thence. . . . TAKEOFF RUNWAY 35L: Climb on heading 005° to intercept course 037° to cross JWOLF at or above 2600, then on track 010° to cross JIRAN at or above 3000, then on track 004° to BIGSE, then on track 342° to cross ALOHH at or below 7000, then on track 329° to SNOBE, then on track 356° to MDUSA, thence. . . .

TAKEOFF RUNWAY 35R: Climb on heading 005° to intercept course 032° to cross JWOLF at or above 2600, then on track 10° to cross JIRAN at or above 3000, then on track 004° to BIGSE, then on track 342° to cross ALOHH at or below 7000, then on track 329° to SNOBE, then on track 356° to MDUSA, thence. . . .

<u>TAKEOFF RUNWAY 36L</u>: Climb on heading 005° to 596, then direct KYOTE at or above 2300, then on track 006° to cross EARRS at or above 3000 and at or below 230K, then on track 359° to cross CHUKG at or below 7000, then on track 353° to SNOBE, then on track 356° to MDUSA, thence. . . .

TAKEOFF RUNWAY 36R: Climb on heading 005° to 596, then direct FACTS at or above 2300, then on track 006° to cross HANDD at or above 3000 and at or below 230K, then on track 356° to cross CHUKG at or below 7000, then on track 353° to SNOBE, then on track 356° to MDUSA, thence. . . .

.... then on track 360° to cross JEEMY at or above 16000, then on transition, RUNWAY 17L/R, 18L/R maintain 7000, RUNWAY 35L/R, 36L/R maintain 16000, expect filed altitude 10 minutes after departure.

ALL AIRCRAFT: ATC climb gradients: If unable to accept climb rates advise ATC prior to taxi. RUNWAY 35R: 548'/NM to 2600, RUNWAY 36L: 599'/NM to 2300, RUNWAY 36R: 589'/NM to 2300.

PAINN TRANSITION (JEEMY4.PAINN)

PROTOTYPE-NOT FOR NAVIGATION



(JEEMY3.JEEMY) 22139

SE-3,

28 NOV 2024 to

26 DEC 2024





V

SE-3,

28 NOV 2024 to 26 DEC 2024

DEPARTURE ROUTE DESCRIPTION SEE ADDITIONAL REQUIREMENTS ON AAUP

TAKEOFF RUNWAY 17L: Climb on heading 185° to intercept course 168° to cross KAAPE at or above 1500, then on track 140°, for vectors to MDUSA, thence. . . . TAKEOFF RUNWAY 17R: Climb on heading 185° to intercept course 154° to cross KAAPE at or above 1500, then on track 140°, for vectors to MDUSA, thence. . . . TAKEOFF RUNWAY 18L: Climb on heading 185° to intercept course 214° to cross VILNS at or above 1500, then on track 237°, for vectors to MDUSA, thence. . . . TAKEOFF RUNWAY 18R: Climb on heading 185° to intercept course 209° to cross VILNS at or above 1500, then on track 237°, for vectors to MDUSA, thence. . . . TAKEOFF RUNWAY 18R: Climb on heading 185° to intercept course 209° to cross VILNS at or above 1500, then on track 237°, for vectors to MDUSA, thence. . . . TAKEOFF RUNWAY 35L: Climb on heading 005° to intercept course 037° to cross JWOLF at or above 2600, then on track 010° to cross JIRAN at or above 3000, then on track 04° to BIGSE, then on track 333° to SNOBE, then on track 356° to MDUSA, thence. . . .

TAKEOFF RUNWAY 35R: Climb on heading 005° to intercept course 033° to cross JWOLF at or above 2600, then on track 010° to cross JIRAN at or above 3000, then on track 004° to BIGSE, then on track 333° to SNOBE, then on track 356° to MDUSA, thence. . . .

TAKEOFF RUNWAY 36L: Climb on heading 005° to 600, then direct KYOTE to cross at or above 2300, then on track 006° to cross EARRS at or above 3000 and at or below 230K, then on track 356° to SNOBE, then on track 356° to MDUSA, thence. . . . TAKEOFF RUNWAY 36R: Climb on heading 005° to 600, then direct FACTS to cross at or above 2300, then on track 006° to cross HANDD at or above 3000 and at or below 230K, then on track 354° to SNOBE, then on track 356° to MDUSA, thence. . . .

.... on track 360° to cross JEEMY at or above 16000, then on assigned transition, RUNWAY 17L/R, 18L/R maintain 7000, RUNWAY 35L/R, 36L/R maintain 16000, expect filed altitude 10 minutes after departure.

ALL AIRCRAFT: ATC climb gradients: If unable to accept climb rates advise ATC prior to taxi. RUNWAY 35R: 566 FT/NM to 2600, RUNWAY 36L: 637 FT/NM to 2300, RUNWAY 36R: 621 FT/NM to 2300.

PAINN TRANSITION (JEEMY3.PAINN)



















1. FLIGHT PROCEDURE IDENTIFICATION:

Orlando, FL Orlando International Airport (KMCO) JEEMY (RNAV) SID

2. WAIVER REQUIRED AND APPLICABLE STANDARD:

Waiver required to not chart IF altitude at the IF for radar vectors (RV). Per Order 8260.46K, Appendix E, Section 1, Para 2.m.(4) : "Document the minimum crossing altitude at the IF on RNAV Radar departure procedures as follows: CHART: MINIMUM CROSSING ALTITUDE AT (RNAV IF)-(Altitude)."

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

Adding unnecessary altitudes at the "IF" on procedures when they are not needed creates unnecessary workload based on the type of climb clearance issued. With this procedure, it's unnecessary to add an altitude restriction at MDUSA as the aircraft will be issued an initial departure clearance containing "MAINTAIN 7000" for RWY 17L, 17R, 18L, 18R departures and will be receiving radar vectors to the waypoint MDUSA to join the procedure. When aircraft depart from the south runways, they will be climbing to 7000 and ATC must ensure they are At or Above the Minimum Vectoring Altitudes (MVA), therefore the aircraft are always operating in airspace at an altitude above any terrain or obstacles.

Adding an unnecessary altitude at MDUSA creates workload for pilots as it could create a climb gradient higher than 200 feet per NM depending on where ATC vectors the aircraft before clearing them to MDUSA. Additionally, it could increase communication between ATC and pilots who will be asking questions about the altitude restriction, which ties up the radios. It also adds pilot workload once airborne when ATC issues an altitude higher than the IDF constraint by stating "CLIMB and MAINTAIN (altitude)". The use of "CLIMB and MAINTAIN (altitude)" deletes any published altitude restrictions, therefore pilots will be heads down deleting the IDF restriction from the FMC.

AFS has approved other procedures within the NAS provided an evaluation has been completed. In this case, the evaluation has been accomplished and is contained under number 4 below.

4. EQUIVALENT LEVEL OF SAFETY PROVIDED:

With a standard climb gradient of 200FT/NM, all surfaces are clear to the IF (MDUSA) which is 33.16 NM from the closest DER. The departure route description for runways 17L,17R, 18L, 18R will provide instruction for the aircraft to conduct an uninterrupted climb to 7000 which is above the MVA from the airport to the IF.

ATC will ensure aircraft departing runways 17L, 17R, 18L, 18R cross the IF At or Above 4000 feet MSL and within the confines of the Class B airspace. This requirement is included in the facility Standard Operating Procedure (SOP).

Additionally, ATC will ensure that all aircraft are assigned altitudes at or above the Minimum Vectoring Altitude (MVA). An OCS with a starting elevation of 1900FT (2900 MVA-1000 ROC) was evaluated for the route starting at MDUSA and the surface was clear.

5. ALTERNATIVE ACTIONS DEEMED NOT FEASIBLE:

Modifying the SID so as to replace the radar vectors segment with RNAV OTG would be incompatible with procedure efficiency in a constrained airspace and cause environmental issues and delays.

6. COORDINATION WITH USER ORGANIZATIONS (SPECIFY):

Eastern Service Area PBN Co-leads Orlando International Tower Orlando Central Florida TRACON (F11) Jacksonville ARTCC (ZJX) American Airlines, Southwest Airlines

FLIGHT PROCEDURE STANDARDS WAIVER

FLIGHT STANDARDS USE ONLY CONTROL NO.

7. SUBMITTED BY:

DATE OFFICE IDENTIFICATION TITLE

8. AFS ACTIONS:

APPROVED DISAPPROVED NOT REQUIRED

COMMENTS:

DATE ROUTING SYMBOL SIGNATURE

SIGNATURE

Digitally signed by **ROBERT G HAMILTON** Feb 27, 2025

1. FLIGHT PROCEDURE IDENTIFICATION:

Orlando, FL

Orlando International Airport (KMCO)

JEEMY (RNAV) SID

2. WAIVER REQUIRED AND APPLICABLE STANDARD:

Publish ATC Climb Gradients (CG). Per Order 8260.46K, Section 2-1-5, Para h.(3)(d) : "Do not chart CGs that may be needed to support airspace, navigation solution, environmental, or ATC operational limitations."

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

The ATC CG's of RWY 35R: 548 FT/NM, 36L: 599 FT/NM, and 36R: 589 FT/NM allow for the departures to be clear of arriving traffic into Orlando Executive Airport (KORL) RWY 25 ILS final approach course. This ensures a safe and efficient traffic flow for both airports. If 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: 548 FT/ NM to 2600, 36L: 599 FT/NM to 2300, 36R: 589 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 and/or assign a different departure.

5. ALTERNATIVE ACTIONS DEEMED NOTFEASIBLE:

Discarding the crossing altitude in favor of a standard climb was considered, but due to the high density of air traffic within the MCO Terminal (F11) airspace, the risk of required additional controller transmissions and disruption of traffic flow was regarded as being too great and introduced an unnecessary safety risk.

6. COORDINATION WITH USER ORGANIZATIONS (SPECIFY):

Eastern Service Area PBN Co-leads Orlando International Tower Orlando Central Florida TRACON (F11) Jacksonville ARTCC (ZJX) American Airlines, Southwest Airlines

7. SUBMITTED BY:

DATE OFFICE IDENTIFICATION TITLE

8. AFS ACTIONS:

APPROVED DISAPPROVED NOT REQUIRED

COMMENTS:

DATE ROUTING SYMBOL SIGNATURE

SIGNATURE

Digitally signed by **ROBERT G HAMILTON** Feb 27, 2025



Federal Aviation Administration

Memorandum

| Date: | October 16, 2024 |
|--------------|--|
| То: | Christopher Hope, Manager, Flight Technologies and Procedures Division THRU: Romana Wolf, Manager, Flight Procedures and Airspace Group |
| From: | Bev Bordy, Manager, Instrument Flight Procedures (IFP) Coordination |
| Prepared by: | Mark Thompson, Sr. ATC Specialist, NAVTAC CTR Support |
| Subject: | Approval Request: Orlando INTL, Orlando, FL (KMCO) |
| | JEEMY (RNAV) SID, ATC CLIMB GRADIENT |

The purpose of this memo is to request approval to publish the JEEMY (RNAV) SID with climb gradients higher than 500 FT/NM as stated in FAA Order 8260.46K, Para 2-1-5.b. "The FPAG (or appropriate military authority) must approve DPs and DVAs requiring a CG in excess of 500 ft/NM (600 ft/NM for helicopters). See paragraph 2-1-5.h.(3) for additional information regarding establishing/publishing greater than standard CGs."

(1) "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 CG values."

The KMCO JEEMY (RNAV) SID Departure was intended to overlay the initial climb of the Conventional SIDs to protect the arriving aircraft into Orlando Executive Airport (KORL) on the ILS RWY 25 IAP. The crossing restriction is required to ensure separation and optimal traffic flow in extremely congested airspace. The crossing restrictions result in ATC climb gradients of: RWY 35R; 548 FT/NM to 2600, 36L: 599 FT/NM to 2300, 36R: 589 FT/NM to 2300. This ensures a safe and efficient traffic flow for both airports. If the departure aircraft cannot accept the required ATC climb gradient, ATC can stop or delay aircraft executing the KORL ILS RWY 25 IAP until the departure traffic is airborne and clear of the final approach course. Historically all aircraft have been able to comply with all crossing altitudes.



KMCO:RW35R:JEEMY:PAINN Evaluation Results Part 1/2

| Leg To | End Pt | Turn Tp | Alt Restr | Alt Restr 2 | Spd Restr | Min CG Calc Alt | Turn Ang | Leg Length | Min Seg Lenath |
|-----------|--------|---------|-----------|-------------|-----------|--------------------|----------|------------|-------------------|
| VI | | | | | | 294.12 | 26.28 | 1.02 | 1.02 |
| CF | JWOLF | FLY BY | +2600.00 | | | 1006.56 | 22.2 | 3.56 | 2.29 |
| TF | JIRAN | FLY BY | +3000 00 | | | 1424.83 | 5 72 | 2 09 | 4 63 |
| TF | BIGSE | FLY BY | | | | 1834.88 | 21.59 | 2.05 | 1.76 |
| TF | ALOHH | FLY BY | -7000.00 | | | 2570.95 | 13.36 | 3.68 | 3.65 |
| TF | SNOBE | FLY BY | | | | 4111.06 | 26.65 | 7.7 | 4.55 |
| TE | MDUSA | FLY BY | | | | 6670,75 | 4.97 | 12.8 | 2 66 |

KMCO:RW35R:JEEMY:PAINN Evaluation Results Part 2/2

| Leg Tp | End Pt | Turn Tp | DTA1 | DTA1 Turn Rad | DTA1 Turn Alt | DTA1 Turn Sod | DTA1 Bank Ano | DTA1 Tailwind | DTA1 True Airsod | DTA1 vGround | DTA2 | DTA2 Turn Rad | DTA2 Turn Alt | DTA2 Turn Spd | DTA2 Bank Ano | DTA2 Tailwind | DTA2 True Airsod | DTA2 vGround |
|-----------|--------|---------|------|------------------|------------------|---------------------|---------------------|------------------|------------------------|-----------------|------|------------------|------------------|---------------------|---------------------|------------------|------------------------|-----------------|
| VI | | | | | 0.0 | 0.0 | COTT - | I | ÷ | | 0.66 | 2.83 | 600.0 | 265.0 | 25.49 | 30.0 | 274.24 | 304.24 |
| CF | JWOLF | FLY BY | 0.66 | 2.83 | 600.0 | 265.0 | 25.49 | 30.0 | 274.24 | 304.24 | 1.63 | 8.32 | 2600.0 | 265.0 | 11.1 | 52.15 | 282.58 | 33472 |
| TF | JIRAN | FLY BY | 1.63 | 8.32 | 2600.0 | 265.0 | 11.1 | 52.15 | 282.58 | 334.72 | 0.0 | 19.4 | 3645.78 | 265.0 | 5.0 | 54.22 | 287 08 | 341.3 |
| TF | BIGSE | FLY BY | 0.0 | 19.4 | 3645.78 | 265.0 | 5.0 | 54.22 | 287.08 | 341.3 | 1.76 | 9.25 | 4671.01 | 265.0 | 10.8 | 56.25 | 291.6 | 347 85 |
| TF | ALOHH | FLY BY | 1.76 | 9.25 | 4671.01 | 265.0 | 10.8 | 56.25 | 291.6 | 347.85 | 1.89 | 16.11 | 6511.49 | 265.0 | 6.68 | 59.89 | 299.99 | 359.88 |
| TF | SNOBE | FLY BY | 1.89 | 16.11 | 6511.49 | 265.0 | 6.68 | 59.89 | 299.99 | 359.88 | 2.66 | 11.24 | 10253.89 | 300.0 | 13.33 | 67.3 | 360.18 | 427.48 |
| TF | MDUSA | FLY BY | 2.66 | 11.24 | 10253.89 | 300.0 | 13.33 | 67.3 | 360.18 | 427.48 | 0.0 | 35.78 | 14734.88 | 300.0 | 5.0 | 76.18 | 387.32 | 463.49 |

KMCO:RW35R:JEEMY:PAINN Criteria Failures and Warnings

RDO308: [Approval Required] In the route beginning at RW35R, the segment from DER to JWOLF requires an ATC climb gradient of 547.68... feet/NM in excess of 500 feet/NM/600 feet/NM.

KMCO:RW36L:JEEMY:PAINN Evaluation Results Part 1/2

| Leg Tp | End Pt | Turn Tp | Alt Restr | Alt Restr 2 | Spd Restr | Min CG Calc Alt | Turn Ang | Leg Length | Min Seg Length |
|-----------|--------|---------|-----------|-------------|-----------|--------------------|----------|------------|-------------------|
| VA | | | +600.00 | 2 | | 600.00 | 0.0 | 2.53 | 2.51 |
| DF | KYOTE | FLY_BY | +2300.00 | 3 | | 830.91 | 0.15 | 1.15 | 0.0 |
| TF | EARRS | FLY_BY | +3000.00 | 3 | 230.00 | 1269.19 | 6.22 | 2.19 | 1.0 |
| TF | CHUKG | FLY_BY | -7000.00 | | | 2198.25 | 6.16 | 4.64 | 1.0 |
| TF | SNOBE | FLY_BY | | | | 3654.79 | 2.29 | 7.28 | 1.0 |
| TF | MDUSA | FLY_BY | | | | 6214.43 | 4.97 | 12.8 | 1.0 |

KMCO:RW36L:JEEMY:PAINN Evaluation Results Part 2/2

| Leg Tp | End Pt | Turn Tp | DTA1 | DTA1 Turn Rad | DTA1 Turn Alt | DTA1 Turn Spd | DTA1 Bank Ang | DTA1 Tailwind | DTA1 True Airspd | DTA1 vGround | DTA2 | DTA2 Turn Rad | DTA2 Turn Alt | DTA2 Turn Spd | DTA2 Bank Ang | DTA2 Tailwind | DTA2 True Airspd | DTA2 vGround |
|-----------|--------|---------|------|------------------|------------------|---------------------|---------------------|------------------|------------------------|-----------------|------|------------------|------------------|---------------------|---------------------|------------------|------------------------|-----------------|
| VA | | | | | 0.0 | 0.0 | | | | | 0.0 | | 600.0 | 230.0 | 0.0 | 30.0 | 238.02 | 268.02 |
| DF | KYOTE | FLY_BY | 0.0 | | 600.0 | 230.0 | 0.0 | 30.0 | 238.02 | 268.02 | 0.0 | 14.56 | 2300.0 | 230.0 | 5.0 | 51.55 | 244.15 | 295.7 |
| TF | EARRS | FLY_BY | 0.0 | 14.56 | 2300.0 | 230.0 | 5.0 | 51.55 | 244.15 | 295.7 | 0.0 | 15.19 | 3395.79 | 230.0 | 5.0 | 53.72 | 248.22 | 301.95 |
| TF | CHUKG | FLY_BY | 0.0 | 15.19 | 3395.79 | 230.0 | 5.0 | 53.72 | 248.22 | 301.95 | 0.0 | 20.95 | 5718.77 | 265.0 | 5.0 | 58.32 | 296.33 | 354.66 |
| TF | SNOBE | FLY BY | 0.0 | 20.95 | 5718.77 | 265.0 | 5.0 | 58.32 | 296.33 | 354.66 | 0.0 | 23.95 | 9360.92 | 265.0 | 5.0 | 65.53 | 313.68 | 379.21 |
| TF | MDUSA | FLY BY | 0.0 | 23.95 | 9360.92 | 265.0 | 5.0 | 65.53 | 313.68 | 379.21 | 0.0 | 34.89 | 14033.47 | 300.0 | 5.0 | 74.79 | 382.87 | 457.66 |

KMCO:RW36L:JEEMY:PAINN Criteria Failures and Warnings

RDO308: [Approval Required] In the route beginning at RW36L, the segment from DER to KYOTE requires an ATC climb gradient of 598.15... feet/NM in excess of 500 feet/NM/600 feet/NM.

KMCO:RW36R:JEEMY:PAINN Evaluation Results Part 1/2

| Leg Tp | End Pt | Turn Tp | Alt Restr | Alt Restr 2 | Spd Restr | Min CG Calc Alt | Turn Ang | Leg Length | Min Seg Length |
|-----------|--------|---------|-----------|-------------|-----------|--------------------|----------|------------|-------------------|
| VA | | | +600.00 | | | 600.00 | 0.0 | 2.54 | 2.52 |
| DF | FACTS | FLY_BY | +2300.00 | | | 842.55 | 0.07 | 1.21 | 0.0 |
| TF | HANDD | FLY_BY | +3000.00 | | 230.00 | 1290.18 | 9.33 | 2.24 | 1.0 |
| TF | CHUKG | FLY_BY | -7000.00 | | | 2203.94 | 2.97 | 4.57 | 1.0 |
| TF | SNOBE | FLY_BY | | | | 3660.48 | 2.29 | 7.28 | 1.0 |
| TF | MDUSA | FLY BY | | | 2 | 6220.11 | 4.97 | 12.8 | 1.0 |

KMCO:RW36R:JEEMY:PAINN Evaluation Results Part 2/2

| Leg Tp | End Pt | Turn Tp | DTA1 | DTA1 Turn Rad | DTA1 Turn Alt | DTA1 Turn Spd | DTA1 Bank Ang | DTA1 Tailwind | DTA1 True Airspd | DTA1 vGround | DTA2 | DTA2 Turn Rad | DTA2 Turn Alt | DTA2 Turn Spd | DTA2 Bank Ang | DTA2 Tailwind | DTA2 True Airspd | DTA2 vGround |
|-----------|--------|---------|------|------------------|------------------|---------------------|---------------------|------------------|------------------------|-----------------|------|------------------|------------------|---------------------|---------------------|------------------|------------------------|-----------------|
| VA | | | | | 0.0 | 0.0 | | | | | 0.0 | | 600.0 | 230.0 | 0.0 | 30.0 | 238.02 | 268.02 |
| DF | FACTS | FLY BY | 0.0 | | 600.0 | 230.0 | 0.0 | 30.0 | 238.02 | 268.02 | 0.0 | 14.56 | 2300.0 | 230.0 | 5.0 | 51.55 | 244.15 | 295.7 |
| TF | HANDD | FLY BY | 0.0 | 14.56 | 2300.0 | 230.0 | 5.0 | 51.55 | 244.15 | 295.7 | 0.0 | 15.2 | 3419.16 | 230.0 | 5.0 | 53.77 | 248.31 | 302.08 |
| TF | CHUKG | FLY_BY | 0.0 | 15.2 | 3419.16 | 230.0 | 5.0 | 53.77 | 248.31 | 302.08 | 0.0 | 20.94 | 5703.86 | 265.0 | 5.0 | 58.29 | 296.26 | 354.56 |
| TF | SNOBE | FLY_BY | 0.0 | 20.94 | 5703.86 | 265.0 | 5.0 | 58.29 | 296.26 | 354.56 | 0.0 | 23.94 | 9346.01 | 265.0 | 5.0 | 65.51 | 313.61 | 379.11 |
| TF | MDUSA | FLY_BY | 0.0 | 23.94 | 9346.01 | 265.0 | 5.0 | 65.51 | 313.61 | 379.11 | 0.0 | 34.87 | 14023.03 | 300.0 | 5.0 | 74.77 | 382.81 | 457.57 |

KMCO:RW36R:JEEMY:PAINN Criteria Failures and Warnings

RDO308: [Approval Required] In the route beginning at RW36R, the segment from DER to FACTS requires an ATC climb gradient of 588.34... feet/NM in excess of 500 feet/NM/600 feet/NM.

ATTENTION ALL USERS PAGE (AAUP)

1. **PREFLIGHT:** All aircraft capable of conducting terminal RNAV procedures should expect an RNAV SID clearance. If unable to accept the RNAV SID clearance, advise Clearance Delivery. Upon assignment of an RNAV SID, crosscheck the charted RNAV SID with the aircraft navigation system against the ATC clearance. Consider the following cross items:

- Preplan runway using guidance in Section 5, ensure expected departure runway is selected/displayed
- Ensure all transitions are selected/displayed correctly
- Ensure sequence of waypoints match the appropriate charts
- Use the LEGS page to verify routing (for navigation systems with ROUTE and LEGS pages)
- Ensure altitude set in the altitude window matches the TOP ALTITUDE of the SID or altitude assigned by ATC
- Advise ATC prior to takeoff if unable to verify correct loading or if unable to comply with the SID
- Do not modify or manually construct RNAV procedures

2. **BEFORE TAKEOFF:** Ensure that the Departure Runway assigned on taxi is displayed by the navigation system.

- Verify all modification, including runway changes, in the navigation system with the RNAV SID
- Verify aircraft symbol relative to the runway symbol, lateral track, and displayed route agree with the ATC clearance (electronic navigation map displays)
- Confirm proper navigation/FMS selection are displayed when runway or route changes are issued by ATC

3. <u>LINE UP/TAKEOFF</u>: Pilots can expect a takeoff clearance from ATC that will include "RNAV to" the first waypoint on the SID, or a heading. If tower issues an initial departure heading in take-off clearance, DO NOT DELETE the ATC issued RNAV SID from active FMS, and expect ATC DIRECT/JOIN clearance to resume RNAV SID during departure.

SAMPLE PHRASEOLOGY

SE-3,

20 MAR 2025 to 17 APR 2025

- i. Clearance: "RNAV to FACTS, Runway 36R, Cleared for Takeoff"
- ii. Response: "RNAV to FACTS, Runway 36R, Cleared for Takeoff"
- Verifiy the correct runway and SID are selected/displayed and the correct lateral navigation mode is available and ready for use after takeoff
- If the takeoff clearance does not match the selected/displayed procedure, request an initial heading from tower or refuse the takeoff clearance until the discrepancy is resolved
- 4. AFTER TAKEOFF: Unless instructed to fly a heading by ATC, engage lateral navigation flight guidance as soon as practical but no later than 400 feet AGL, and fly the departure. Strict compliance with the lateral and vertical tracks and charted speed restrictions is imperative.
- Once established on the procedure, maintain route centerline, as depicted by onboard lateral navigation indicators and/or flight guidance based on established/published RNP tolerance
- Manually intervene if necessary, to stay on track to avoid transgressing in the direction of a
 parallel runway, track, or aircraft
- If unable to comply with the SID profile, either laterally or vertically, immediately notify ATC

(CONTINUED ON FOLLOWING PAGE)

ATTENTION ALL USERS PAGE (AAUP)

(CONTINUED FROM PREVIOUS PAGE)

5. SPECIFIC INFORMATION: 0700-2300 local runway 36L/R, 35L/R RNAV simultaneous departures, all RNAV equipped aircraft departing should expect to fly an MCO RNAV DEPARTURE SID. In the event of weather or other non-standard events, headings may be issued in lieu of an RNAV off the ground take off clearance.

- Final runway assignments will be issued on initial contact with Ground Control
- For planning purposes, pilots can anticipate the preferred runway assignment based upon the information below

Departing Runways 35L/R 17L/R

DDANY, MZULO, JEEMY, FATHE - Expect to Depart Runway 35L

Departing Runways 36L/R 18L/R

SE-3,

20 MAR 2025

to 17 APR 2025

RDSOX, OSPRY, FSHUN - Expect to Depart Runway 36R

