



Jacksonville ARTCC

MCO ATCT

Standard Operating Procedures

Document Number	ZJX-1
Version	C
Effective Date	01/01/2021

DOCUMENT INFORMATION

Purpose

This document prescribes the procedures to be utilized for providing air traffic control services at the Orlando Air Traffic Control Tower (MCO ATCT). The procedures described herein are supplemental to the Jacksonville ARTCC Facility Operating Guidelines and FAA Order JO 7110.65, as well as any published FAA guidelines or procedures.

Distribution

This order is distributed to all Jacksonville ARTCC personnel.

Responsibility

The Air Traffic Manager or their designee shall be responsible for the maintenance of this document and any policies that deviate from it.

Procedural Deviations

Exceptional or unusual requirements may dictate procedural deviations or supplementary procedures to this order. A situation may arise that is not adequately covered herein; in such an event use good judgment to effectively resolve the problem.

Updates and Changes

The Air Traffic Manager or their designee may post interim changes to this document in the form of notices via the ZJX website. Controllers are requested to check for any notices prior to controlling for changes in procedures.

Cancellation

This document cancels any relevant procedures or agreements previous to this one, beginning on the date of effectiveness of this document.

TABLE OF CONTENTS

DOCUMENT INFORMATION	2
Purpose	2
Distribution	2
Responsibility	2
Procedural Deviations	2
Updates and Changes	2
Cancellation	2
TABLE OF REVISIONS	3
TABLE OF CONTENTS	4
CHAPTER 1. OPERATIONAL POSITIONS	6
CHAPTER 2. CLEARANCE DELIVERY (CD)	7
2.1 Responsibilities	7
2.2 IFR Departure Instructions	7
2.2.1 IFR Routing	7
2.2.2 Departure Transition Areas	7
2.2.2.1 DTA Diagram	9
2.2.2 IFR Altitudes	11
2.2.4 IFR Departure Frequency	12
2.2.5 Facility Beacon Codes	13
2.3 VFR Departure Instructions	13
2.4 Ground Stops	14
2.5 Scratchpads	14
CHAPTER 3. GROUND (GC)	16
3.1 Area of Responsibilities	16
3.2 Ground Operations	17

3.3 Split Ground Procedures	17
3.4 Pushback and Startups	17
3.5 ATIS	18
3.6 Departure Runway Assignments	18
3.7 GC/LC Transfer Of Control	19
CHAPTER 4. LOCAL CONTROL/TOWER (LC)	20
4.1 Area of Responsibility	20
4.2 Active Runway Selection	21
4.3 Runway Change Checklist	21
4.4 Simultaneous Runway Use	21
4.5 Departure Procedures	22
4.6 Arrival Procedures	23
4.7 Rolling Calls	23
4.8 Automatic Releases	24
4.9 IFR Departure Headings	25
4.10 Missed Approaches/Go-Arounds/Practice Approaches	25
4.11 Radar	26
4.12 VFR Departures	26
4.13 Closed Traffic	26
4.14 "Contact" vs. "Monitor" Operations	27
4.15 Approach Scratchpads	28
CHAPTER 5. APPENDIX	29
5.1 Intersection departure distances during MCO North Operations.	29
5.2 Intersection departure distances during MCO South Operations.	30

CHAPTER 1. OPERATIONAL POSITIONS

Table 1. MCO ATCT Operational Positions

Position	Radio Name	Callsign	Relief	Symbol	Frequency
Flight Data/Delivery* (FD/CD)	Orlando Clearance Delivery	MCO_DEL	1	4D	134.700
West Ground* (GCW)	Orlando Ground	MCO_W_GND	W1	4WG	121.800
East Ground (GCE)	Orlando Ground	MCO_E_GND	E1	4EG	126.400
West Tower (LCW)	Orlando Tower	MCO_W_TWR	W1	4WT	124.300
East Tower* (LCE)	Orlando Tower	MCO_E_TWR	E1	4ET	118.450

Bold/asterisk designates a primary position.

CHAPTER 2. CLEARANCE DELIVERY (CD)

2.1 Responsibilities

1. Issue ATC Clearances to all departing aircraft, both VFR and IFR.

2.2 IFR Departure Instructions

2.2.1 IFR Routing

1. Unless it is necessary to change an aircraft's route, aircraft should be cleared on their filed route.
 - a. As applied to the assignment of the ORLA# and CTR# departure procedures: Aircraft should be cleared via the "ORLA#/CTR# departure, then as filed", unless further amendments are required.
 - b. As applied to the assignment of the JAG# departure procedure: Aircraft should be cleared via the "JAG# departure, MATEO, then as filed", unless further amendments are required.
 - i. Aircraft filing the JAG# departure terminating at GUANO should be reassigned to the MCOY# departure.
 - c. As applied to the assignment of the MCOY# departure procedure: Aircraft should be cleared via the "MCOY# departure, GUANO, then as filed", unless further amendments are required.
2. All routes must comply with routings approved by the facility in intra- or inter-ARTCC LOAs. Aircraft that do not file these routes should have them amended appropriately.
 - a. Aircraft unable to accept preferred routes must not be cleared until coordination has occurred between all affected staffed facilities.

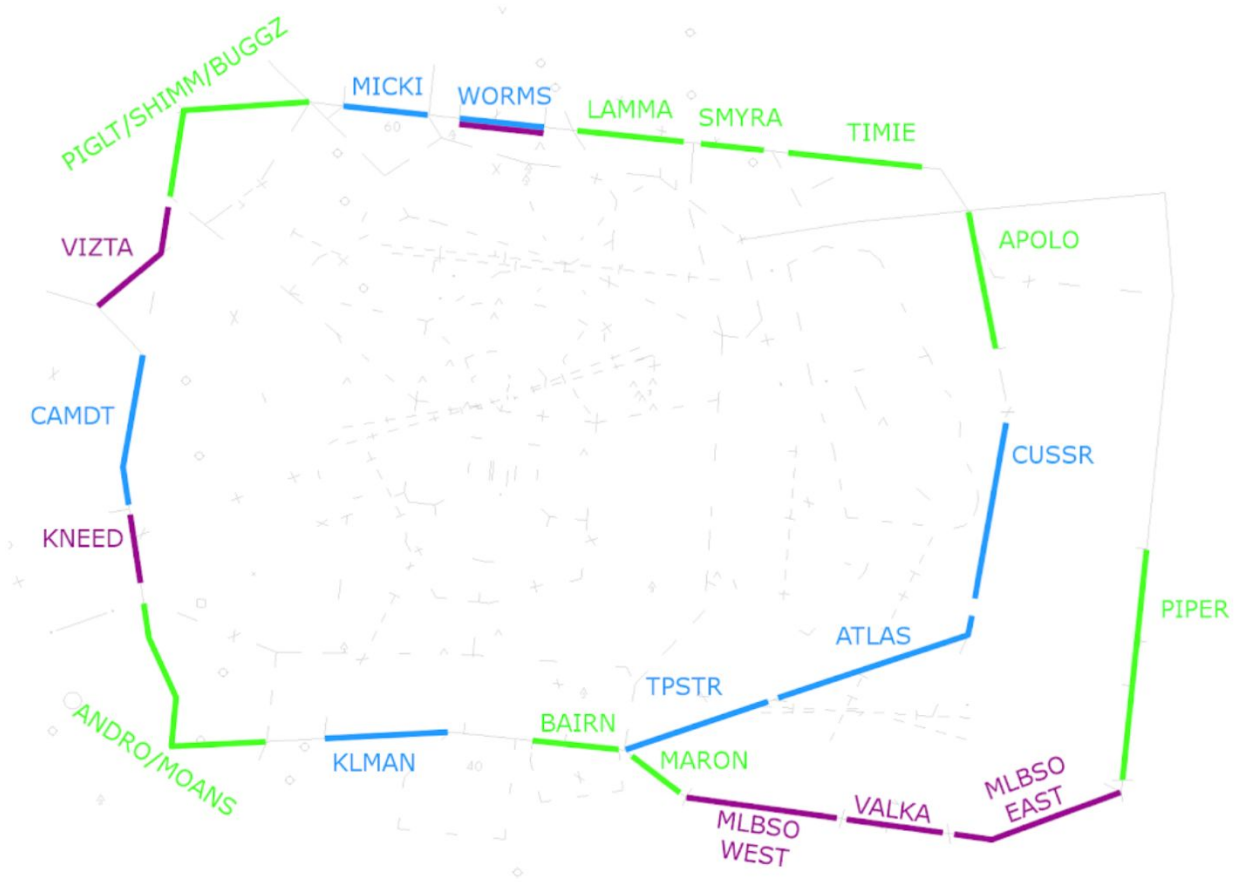
2.2.2 Departure Transition Areas

1. All aircraft departing KMCO to exit the F11 TRACON shall **always** be assigned a Departure Transition Area (DTA). DTAs are determined by the direction of travel of their filed departure procedure.
2. Turbojet or turboprop aircraft not on the JAG# and MCOY# departures shall be assigned the ORLA# departure procedure. The aircraft must depart the F11 through a valid DTA (see table below).

- a. The aircraft's route shall **not** lead with the assigned DTA, unless that aircraft has been cleared on a route including the DTA fix. Aircraft scratchpads shall be updated in accordance with section 2.5 of this document.
Example: Aircraft A has been cleared on a route starting at the fix CAMDT. While CAMDT is a valid DTA, the fix should be left in the flight plan route, as the aircraft has been cleared on a route including the CAMDT fix. The aircraft's scratchpad should also be updated to reflect the letter "C" (CAMDT DTA).
*Example 2: Aircraft B has been cleared on a route starting at the VOR MLB. MLB is not a valid DTA, but the aircraft is exiting via the ATLAS DTA. ATLAS should **not** be added to the route, but the aircraft's scratchpad should be updated to reflect the letter "A" (ATLAS DTA).*
3. Piston aircraft shall always be assigned the CTR# departure procedure. The aircraft must depart the F11 through a valid DTA (see table).

2.2.2.1 DTA Diagram

1. The following diagram depicts FII's various DTAs and arrival transition zones.
2. Departure radar DTAs are depicted in blue, satellite radar DTAs are depicted in purple, and arrival transition zones are depicted in green.



NOTE: The WORMS DTA is a “hybrid” DTA utilized by both departure radar and satellite radar at all times.

Table 2. Orlando Departure DTAs (ORLA#) - Turbojet/Turboprop Aircraft

Direction	DTA	Associated Fixes
West	CAMDT	CTY, SZW, OCF, KNOST, BULZI, HEVFN, PATOY, BRUTS
Southwest	KLMAN	RSW, SRQ, CYY
Southeast	ATLAS	MLB, TRV, PBI, FLL
North	WORMS	TAY, CRG, OMN, SGJ, SSI

Table 3. Citrus Departure DTAs (CITR#) - Piston Aircraft

Direction	DTA	Associated Fixes
Northwest	VIZTA	CTY, SZW, OCF, BULZI, HEVFN
Southwest	KLMAN	RSW, SRQ, CYY
Southwest	KNEED	PIE, MCF, LAL
Southeast	TPSTR	TRV, PBI, FLL, MLB, PHK
North	WORMS	TAY, CRG, OMN, SGJ, SSI

Notes:

1. Aircraft with none of the above as their first fixes shall use the departure gate closest to their first fix as long as the fix is outside of the F11 airspace.
 - a. Example: Aircraft filed directly to PAM (not listed) shall be routed through CAMDT if a Jet or VIZTA if a Prop.
2. Turbojets destined for Savannah or Cecil may receive the JAG# and MCCOY# departure procedures in lieu of the departure gate.

2.2.2 IFR Altitudes

1. Instruct all pilots of turbojet and turboprop aircraft to maintain 5,000 and to expect filed cruise altitude (if higher) 10 minutes after departure.
2. Instruct IFR piston aircraft to maintain 2,000 and to expect filed cruise altitude (if higher) 10 minutes after departure.
3. Substitute 5,000 or 2,000 for lower if an aircraft's IFR cruise altitude is filed for lower.
4. All filed cruise altitudes must be checked for validity for the direction of flight or routing and our LOAs with neighboring ARTCCs.

2.2.4 IFR Departure Frequency

Table 4 describes the appropriate jet departure frequency for each DTA.

Table 4. Jet Departure Frequencies by DTA

DTA/SID	Departure Position (Frequency)
ATLAS	DRE (124.800)
WORMS	DRE (124.800)
JAG# (North Operations)	DRE (124.800)
JAG# (South Operations)	DRW (120.150)
MCOY#	DRE (124.800)
CAMDT	DRW (120.150)
KLMAN	DRW (120.150)

Notes:

1. If F11 satellite radars are open...
 - a. During north operations, aircraft filed at an altitude below 5,000 shall receive SRN (121.100) as their departure frequency.
 - b. During south operations, aircraft that would otherwise go to DRE (124.800) shall receive SRK (134.950) as their departure frequency.
 - c. During south operations, aircraft that would otherwise go to DRW (120.150) shall receive SRD (119.400) as their departure frequency.

2.2.5 Facility Beacon Codes

All departing aircraft must be assigned a unique beacon code in accordance with Table 5.

Table 5. MCO ATCT Beacon Codes

Departure Flight Rules	Beacon Range (Low-High)
IFR / VFR	0701-0757

2.3 VFR Departure Instructions

1. Clear the aircraft into the Orlando Class Bravo airspace.
2. Instruct piston aircraft to maintain VFR at or below 1,500.
Jet/turboprops shall maintain VFR at or below 5,000.
3. VFR aircraft not remaining within the pattern shall be cleared out of the Orlando Class Bravo airspace and given a departure frequency.
 - a. VFR aircraft departing west shall receive SRD as their departure frequency (DRW or DRE depending on where combined).
 - b. VFR aircraft departing east shall receive SRK as their departure frequency (or DRE if not open).
 - c. VFR aircraft departing south shall receive SRD as their departure frequency (DRW if SRD closed or DRE if SRD and DRW are closed).
 - d. VFR aircraft departing north shall receive SRN as their departure frequency (DRE if SRN closed).
4. Assign all VFR aircraft a facility-appropriate, unique VFR beacon code in compliance with Table 5. This includes VFR aircraft remaining within the pattern.

2.4 Ground Stops

1. If Ground Stops are in effect, inform the aircraft after issuance of clearance and acknowledgment there is a ground stop in effect and to monitor the CD frequency for further instructions.
2. Ensure you inform the aircraft their Estimated Departure Clearance Time (EDCT) if known, as well as the cause for the ground stop.
3. GC will notify CD when the aircraft can expect to taxi. Relay this to the pilot.
4. Once the aircraft is released from the ground stop, notify the aircraft *"Push and start at pilot's discretion. Contact Orlando Ground (frequency) for taxi."*

2.5 Scratchpads

1. To assist the departure controllers, CD shall ensure scratchpads are set in a pilot's flight plan only after the clearance has been issued to notify the Departure controller of an active flight plan. Aircraft exiting F11 shall have the proper DTA or departure procedure (JAG# and MCCOY# **ONLY**) input into their scratchpad. See Table 6 for appropriate scratchpad entries.

Table 6. Orlando Scratchpad Entries

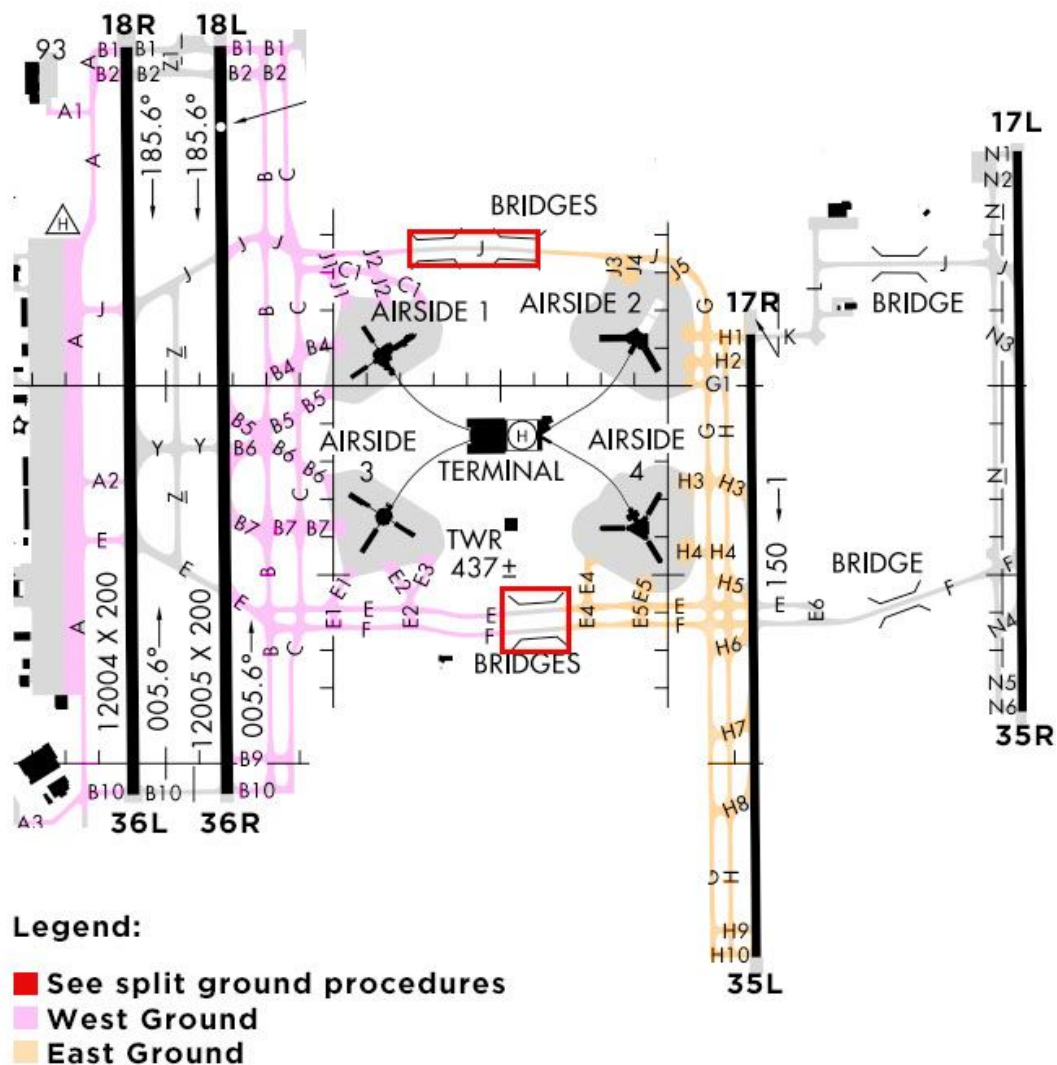
DTA/SID/Destination	Scratchpad Entry
MCCOY#	M
JAG#	J
CAMDT	C
KLMAN	K
ATLAS	A
KNEED	N
WORMS	W
TPSTR	T
VIZTA	V
VFR No Flight Following	N/A
VFR Flight Following	VFF

CHAPTER 3. GROUND (GC)

3.1 Area of Responsibilities

1. GC has control of all taxiways except those between parallel runways.
2. GC West is responsible for all taxiways west of the Juliet, Echo and Foxtrot bridges up to Runway 18L/36R. West Ground is also responsible for the west ramp and taxiways west of Runway 18R/36L.
3. GC East is responsible for all taxiways east of Juliet, Echo and Foxtrot bridges up to Runway 17R/35L.

Figure 1. Orlando Airport Ground Map



3.2 Ground Operations

1. GC shall only taxi aircraft east on taxiway E.
2. GC shall only taxi aircraft west on taxiway F.
3. GC shall utilize taxiway H and taxiway B for arrival aircraft.
4. GC shall utilize taxiway C and taxiway G for departing aircraft.

3.3 Split Ground Procedures

1. Taxi aircraft via taxiways E and F in accordance with Table 7 and instruct the pilot to change ground control frequencies at the bridge.
2. Taxi aircraft via taxiway J in accordance with the following:
 - a. During MCO South Operations...
 - i. Taxiway J is one way westbound between J2 and J3.
 - ii. GC East must instruct aircraft to hold short of J2 and contact GC West at the bridge.
 - b. During MCO North Operations...
 - i. Taxiway J is one way eastbound between J2 and J3.
 - ii. GC West must instruct aircraft to hold short of J3 and contact GC East at the bridge.

Table 7. Split Ground Procedures on Taxiways E and F

Network Callsign	Taxi Route	Hold Short Point
MCO_W_GND	East on E	E4
MCO_E_GND	West on F	E2

3.4 Pushback and Startups

1. GC does not authorize pushbacks or startups unless the aircraft pushing back will enter a controlled area during pushback.
 - a. In these instances, aircraft should be instructed “*Push and start approved, push tail facing (direction).*” The direction should keep the aircraft pointed in the direction the aircraft will taxi.
 - b. If the pilot calls to push, and no controlled area will be penetrated, simply advise the pilot “*Push and start at pilot's discretion.*”

3.5 ATIS

1. GC shall ensure pilots have the current ATIS prior to the aircraft being handed off to Tower.

3.6 Departure Runway Assignments

1. During a period of light or normal traffic, GC shall taxi aircraft to the nearest active departure runway.
2. During a period of heavy traffic, LC will activate Departure Runway Assignments (see Table 8). This will involve taxiing an aircraft to the runway appropriate for their direction of flight.

Table 8. Departure Runway Assignments

East Complex (17L/17R & 35L/35R)	West Complex (18L/18R & 36L/36R)
ATLAS	CAMDT
WORMS/JAG/MCOY	KLMAN
KJAX	KTPA
KDAB	VIZTA
KMLB	KNEED
TPSTR	

3.7 GC/LC Transfer Of Control

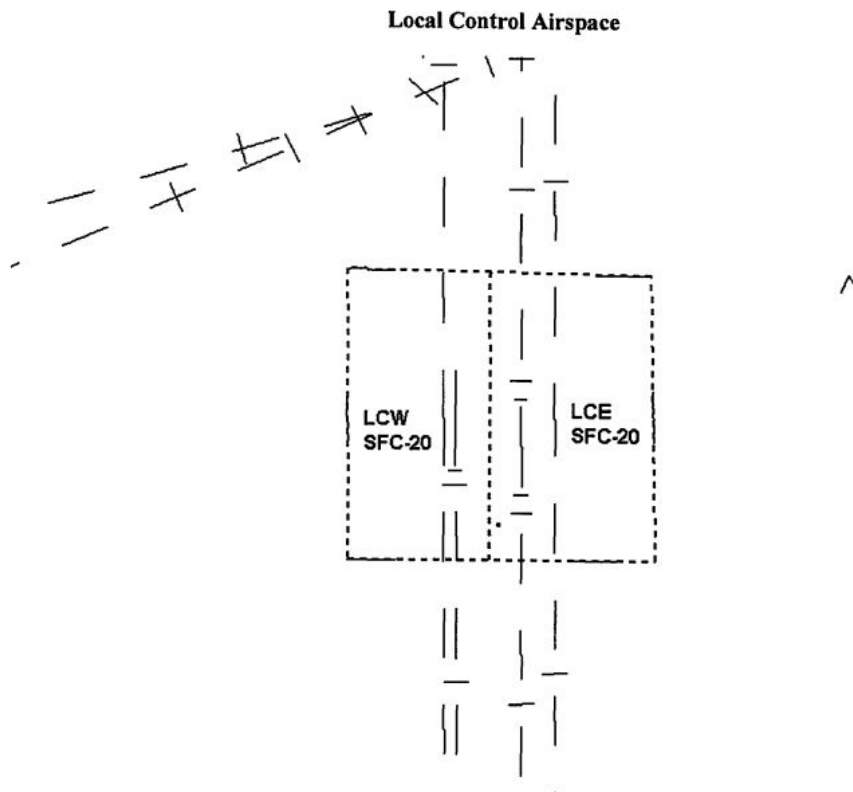
1. During a period of light or normal traffic, GC shall instruct aircraft to *"Contact Orlando Tower (frequency)"*.
2. During a period of high traffic, GC shall instruct aircraft to *"Monitor Orlando Tower (frequency)"*.
 - a. GC shall utilize the radar client's "Point out" feature to the appropriate LC controller to notify LC when a pilot has been given the monitor instruction.
 - b. Alternatively, if agreed upon between the GC and LC controllers, GC may push a flight strip to the LC controller.

CHAPTER 4. LOCAL CONTROL/TOWER (LC)

4.1 Area of Responsibility

1. LC has responsibility for a two-mile by two-mile box from surface up to and including 2,000 MSL.
2. LC has responsibility for all taxiways between parallel runways.
3. LC West is responsible for arrivals and departures on Runway 18L/R & 36 L/R, all taxiways between Runway 18L/R & 36 L/R, and the Terminal Top Heliport.
4. LC East is responsible for arrivals and departures on Runway 17L/R & 35R/L and all taxiways between Runway 17L/R & 35R/L.

Figure 2. LC Area of Responsibility



4.2 Active Runway Selection

1. Runways 17L/R and 18L/R (South Operations) is the calm wind runways and preferred runway configuration.
2. If the tailwind component exceeds 7 knots in South Operations, Runways 35L/R and 36L/R (North Operations) shall be used.
3. When in doubt about configuration, reference the real world configuration from [FlightAware](#).
4. LC may opt to utilize a different runway configuration at their discretion, but must coordinate changes with F11. LC must wait for F11 notification of readiness before executing the new runway configuration.

4.3 Runway Change Checklist

1. When changing runways, LC must verbally coordinate with the appropriate F11 position(s) for the last departure/arrival off the previously used runway and the first departure/arrival off the newly selected active runway(s).
2. Notify F11 of the new runway configuration and last departure and arrivals.
3. When notified by F11, stop all departures on the present configuration.
4. Notify GC East and GC West of the new runway configurations and divert all departures to the new runways.
5. When F11 is ready for the new configuration, F11 will notify LC. Upon completion of notification, departures may resume with the new configuration.
6. Ensure ATIS has been updated to reflect the new configuration.

4.4 Simultaneous Runway Use

1. Runway 36L and Runway 36R may not be used for simultaneous instrument approaches.
2. The ATIS shall indicate at all times "*Caution simultaneous approaches in use*" prior to stating the arrival runways.

4.5 Departure Procedures

1. LC will provide separation for aircraft in the LC airspace.
2. LC shall provide initial radar separation between all successive departures.
3. Departure Runways
 - a. During South Operations...
 - i. Terminal departures will utilize Runway 18L and Runway 17R.
 - ii. General aviation ramp, cargo, and departures west of Runway 18R will utilize Runway 18R.
 - b. During North Operations...
 - i. Terminal departures will utilize Runway 36R and Runway 35L.
 - ii. General aviation ramp, cargo, and departures west of Runway 36L will utilize Runway 36L.
4. Extreme caution should be exercised for departures from Runway 18R/36L due to the close proximity of the parallel runway.
5. IFR departures will be automatically released if the departure heading matches approved headings in Section 4.9, and the departure is climbing to 5,000 feet on the JAG#/MCCOY#/ORL#, or 2,000 feet on the CITR#
6. VFR departures will be automatically released if the departure heading and altitude matches approved headings and altitudes in Section 4.12.
7. From 2300 until 0700 local, Noise Abatement procedures will remain in effect.
 - a. During North Operations, all turbojet departures shall be given a heading of 060°.
 - b. During North Operations, all turboprop and piston departures shall be given a heading of 270°.

4.6 Arrival Procedures

1. LC shall be responsible for separation of all arrival aircraft that have been handed off by TRACON from all departing aircraft still under LC jurisdiction.
2. Communication transfer must be completed prior to five nautical miles from the runway.
3. LC shall not change the approach sequence without coordination with TRACON.
4. Arrival Runways
 - a. During South Operations...
 - i. Arrivals will utilize Runway 18R and Runway 17L.
 - ii. If traffic permits, Runway 18L and Runway 17R may be used to reduce taxi time.
 - b. During North Operations...
 - i. Arrivals will utilize Runway 36L and Runway 35R.
 - ii. If traffic permits, Runway 36R and Runway 35L may be used to reduce taxi time.

4.7 Rolling Calls

1. LC will **not** send rolling calls to F11 departure controllers unless one of the following criteria is met:
 - a. The F11 departure controller requests rolling calls.
 - b. The departure scratchpads are not completed as per Section 2.5 of this SOP.
 - c. The departing aircraft is issued a departure heading not outlined in Section 4.9 or Section 4.12 of this SOP.
2. Rolling calls shall indicate the callsign, departure runway, assigned departure heading, and departure transition area.
 - a. Rolling calls can be completed in VRC through the alias command:
*.d (controller ID) (departure runway) (departure heading)
(departure transition area)*
or via the chat box in other ATC clients.
3. If rolling calls are not in use, LC will monitor tags to ensure correct identification of departing aircraft.

4.8 Automatic Releases

1. LC is authorized automatic releases from the TRACON controller so long as the aircraft departs on the pre-coordinated active departing runway(s) on approved departure headings in Section 4.9 and Section 4.12.
2. In order for automatic releases to be authorized:
 - a. procedures in Section 4.5 and 4.6 of this document shall be followed
 - b. overlying RADAR position is staffed

4.9 IFR Departure Headings

JAG#/MCCOY#/ORLA# Departure Headings

1. Local Control East (LCE)

- a. In South Operations , LCE shall release aircraft on headings **180-140**
- b. In North Operations LCE shall release aircraft on headings **005-060**

2. Local Control West (LCW)

- a. In South Operations, LCW shall release aircraft on headings **185-220**
- b. In North Operations, LCW shall release aircraft on headings **340-360**

Citrus Departure (Piston Departure)

All Runways

DTA	Heading
VIZTA (Northwest)	270°
KLMAN (Southwest)	270°
KNEED (Southwest)	270°
TPSTR (Southeast)	090°
WORMS (North)	270°

4.10 Missed Approaches/Go-Arounds/Practice Approaches

1. Assign runway heading and climb to 3,000, then hand off to the appropriate departure controller.
2. Do not assign the published missed approach for IFR aircraft unless the pilot requests it and traffic allows, or it's requested by the F11 radar sectors.
3. Radar handoffs should be initiated as soon as practical to the appropriate departure controller.

4.11 Radar

1. MCO ATCT is a radar tower. It will receive radar handoffs from the Arrival Radar MINEE (ARM) or Arrival Radar GOOFY (ARG) positions for aircraft inbound on final following an approach clearance.
2. LC shall not terminate aircraft until they have completely landed at the airport.
3. LC shall radar identify VFR aircraft that will not need radar services from the F11 and track the aircraft until they are clear of the Orlando Class Bravo airspace.
 - a. This will only occur if the aircraft will remain below 900 feet to stay clear of the Class Bravo Airspace.
 - b. For all other VFR and IFR aircraft, primary departure radar identification will occur with the appropriate F11 controller.
4. LC shall not modify scratchpads or temporary altitudes of any aircraft.

4.12 VFR Departures

1. All VFR piston aircraft departing the West complex shall be given a heading of 270° with an initial altitude of 1,500 feet and handed off to Orlando Departure.
2. All VFR turbojet/turboprop aircraft departing the West complex shall be given a heading of 270° with an initial altitude of 5,000 feet and handed off to Orlando Departure.
3. All VFR piston aircraft departing the East complex shall be given a heading of 090° with an initial altitude of 1,500 feet and handed off to Orlando Departure.
4. All VFR turbojet/turboprop aircraft departing the East complex shall be given a heading of 090° with an initial altitude of 5,000 feet and handed off to Orlando Departure.

4.13 Closed Traffic

1. General aviation aircraft may operate in the pattern at KMCO at or below 1,500 feet.
2. Runway 18R (right traffic) or Runway 36L (left traffic) shall be utilized for closed traffic.
3. All aircraft in the pattern must receive a discrete beacon code.

4.14 “Contact” vs. “Monitor” Operations

1. During periods of high traffic, LC may request GC to instruct aircraft to monitor instead of contact LC.
2. When these operations are in effect, GC shall utilize the radar client’s “Point out” feature to the appropriate LC controller to notify LC when a pilot has been given the monitor instruction.
3. Alternatively, if agreed upon between the GC and LC controllers, GC may push a flight strip to the LC controller.

4.15 Approach Scratchpads

1. FII uses a three letter format consisting of XYY where X identifies the type of approach and YY consists of the runway truncated to two characters. For example, Runway 18R would be 8R. Therefore, an ILS approach to Runway 18R would be represented by I8R.
2. See Table 9 for scratchpad entries for different types of approaches.

Table 9. FII Type of Approach Scratchpad Entries

Type of Approach	Scratchpad Entry
Localizer	L
RNAV (GPS or RNP)	R
ILS	I
VOR	O
Visual	V
Overhead Break	B

CHAPTER 5. APPENDIX

5.1 Intersection departure distances during MCO North Operations.

Intersection Distances MCO North Operation				
RY 36L			RY 35L	
Location	Distance Remaining		Location	Distance Remaining
TWY E	7900'		TWY H9	9550'
A2	6950'		H8	7550'
Y	6400'		H7	6300'
J	4200'		H6	4950'
B2	400'		F	4600'
			E	4300'
			H5	4000'
			H3	2450'
			H2	400'
RY 36R			RY 35R	
TWY B9	11400'		TWY N5	8550'
E	8850'		N4	7550'
Y/B6	7700'		N3	3000'
B5	6050'		J	1850'
J	3300'		N2	400'
B2	400'			

5.2 Intersection departure distances during MCO South Operations.

Intersection Distances MCO South Operation

RY 17R		RY 18R	
Location	Distance Remaining	Location	Distance Remaining
TWY H2	9550'	TWY B2	11550'
H3	7500'	J	7950'
H5	5950'	Y	5550'
H6/F	5350'	A2	5000'
H7	3650'	E	4050'
H8	2450'		
H9	400'		
RY 17L		RY 18L	
Location	Distance Remaining	Location	Distance Remaining
TWY N2	8550'	TWY B2	11550'
J	7100'	J	8850'
N3	5950'	B5	5900'
F	2350'	Y/B6	5550'
N4	1400'	B7	4250'
N5	400'	E	2950'
		B9	550'