

DCA09FR008
Lake Buena Vista, Florida
July 5, 2009

Excerpts
Monorail Operations Manual

May 1, 2009

Monorail Operations

Operating Guide

4.13.2 Switching Procedures from Express to *Epcot*[®] Beam

Complete the following procedures for switching from the Express Beam to the *Epcot*[®] Beam:

NOTE: Normally, the *Epcot*[®] Monorail Trains come out of the Monorail Shop after the Resort Monorail Trains have crossed over from the Express Beam. Once Switchbeam 2 is realigned to the spur line, the *Epcot*[®] Monorail Trains are cleared out of the Monorail shop onto the Express Beam. Monorail Central clears each Monorail Train around the Express Beam to the Base Station.

Complete the following procedures from the Monorail Base Station:

NOTE: Monorail Central may authorize you to use MAPO OVERRIDE to enter the Monorail Base Station.

➤ 10-23 radio device from Monorail Central.

NOTE: If Switchbeam 8 is moved to the *Epcot*[®] spur line, power will drop out on the bus bar within the station, and the Monorail Train will receive a 600 VDC and Power System malfunction indications in the Upper Display until power is restored when the switchbeam is lined up with power.

➤ Once power is restored to the bus bar and your Monorail Train:

- Monorail Shop notifies Central when switchbeams 8 and 9 are locked down with power on the *Epcot*[®] spurline.
- Wait for Monorail Central to clear the you with the following transmission:

MONORAIL (COLOR), YOU ARE CLEAR MAPO OVERRIDE, THROUGH SWITCHBEAMS 8 AND 9, TO THE EPCOT[®] MAINLINE, FOLLOWING MONORAIL (COLOR) IN A (#) TRAIN OPERATION. NOTIFY MONORAIL CENTRAL WHEN CROSSING PYLON 27.

NOTE: If another Monorail Train will be switching to the *Epcot*[®] beam, you will also need to notify crossing pylon 45. (Monorail Central will give these instructions.)

NOTE: If Rectifiers Four and Five have no power, Monorail Central will clear the first Monorail Train to pylon 95 to hold and notify Monorail Central, and any subsequent Monorail Trains to the proper hold points.

7.8.5 Two, Three, and Four *Epcot*[®] Monorail Trains to Monorail Shop

Monorail Central notifies the Drivers of the Monorail Trains that are going to the Shop to deadhead and switch ends at the *Epcot*[®] or Concourse Stations.

Monorail Central then directs the Monorail Trains to specific pylons to wait for clearance through Switchbeams 9 and 8.

- Monorail Central will instruct the Monorail Train going out of service to deadhead at the appropriate station.
 - If you are in Cab Six, Monorail Central will clear your Monorail Train to pylon 27.
 - If you are in Cab One, Monorail Central will clear your Monorail Train to pylon 30.

As the Monorail Train arrives at its assigned position, complete the following:

- Place the Master Control Unit in B-4 and bring the Monorail Train to a complete stop.
- Notify Monorail Central that you are holding.
- 10-23 further radio device instructions.

NOTE: Monorail Central will notify Monorail Shop to move the Switchbeam to the Spur Line. After the Switchbeam is lined up with power, Monorail Central will contact the Monorail Train.

Monorail Central uses the following radio device transmission to clear the Monorail Train through Switchbeams 8 and 9:

MONORAIL (COLOR), I SHOW YOU CLEAR MAPO OVERRIDE THROUGH SWITCHBEAMS 8 AND 9 TO THE EXPRESS BEAM. NOTIFY MONORAIL CENTRAL UPON ENTERING MONORAIL BASE.

- After reaching Monorail Base, deliver the appropriate 10-7, 10-8 spiel.

NOTE: The Driver procedures for moving from pylon 62 to the spur line are identical to those outlined in "Express Trains to Monorail Shop."

Central:

10-4, 10-23 RADIO DEVICE

Train:

10-4, 10-23 RADIO DEVICE.

Pylon 27 Epcot® Beam to 62 Express

Central:

MONORAIL (COLOR), CENTRAL

Train:

MONORAIL (COLOR) BY.

Central:

NORMAL VISUAL TO CONCOURSE DEADHEAD AND SWITCH ENDS.

Train:

10-4, NORMAL VISUAL TO CONCOURSE DEADHEAD AND SWITCH ENDS.

After Deadheading and Switching Ends Inside Concourse

Train:

MONORAIL CENTRAL, MONORAIL (COLOR) FOR A CAB SIX RADIO DEVICE CHECK, HOW DO YOU READ?

Central:

I READ YOU 10- (1 OR 2) HOW ME?

Train:

10- (1 OR 2) ALSO, BE ADVISED, DEADHEADED AND SWITCHED ENDS AT CONCOURSE.

Central:

10-4, PLACE YOUR TRAIN IN REVERSE, CLEAR IN REVERSE TO PYLON 27, HOLD AND NOTIFY CENTRAL.

Train:

10-4 CLEAR TO PLACE TRAIN IN REVERSE, CLEAR IN REVERSE TO PYLON 27, HOLD AND NOTIFY CENTRAL.

9.6 Show Information Guide

9.6.1 The Mark VI Monorail Story

The WALT DISNEY WORLD® Resort Mark VI Monorails are electrically powered and operate on 600 volts of direct current transmitted along a pair of stainless steel capped aluminum bus bars. Eight direct current traction motors with a maximum of 113 horsepower each power each of the 12 monorails.

For their use here at the WALT DISNEY WORLD® Resort, the monorails are designed and engineered to operate in either direction, with a top speed of 40 miles per hour between each of the seven monorail stations.

The six-car monorails are 203 feet, six inches in length. They can accommodate 316 Guests in a normal load, and 364 Guests in a peak capacity load with four Guests in the operating cab.

The three beams each offer different types of transportation to our Guests:

- The outer beam of the two beams circling the Seven Seas Lagoon is the Express Beam. It offers only express service between the Transportation and Ticket Center and the MAGIC KINGDOM® Park. It begins operation at 8:30 a.m., and closes approximately 45 minutes after the Park closes.
- The inner beam is the Resort Beam. It offers service to DISNEY'S POLYNESIAN Resort, DISNEY'S GRAND FLORIDIAN Resort & Spa, the MAGIC KINGDOM® Park, DISNEY'S CONTEMPORARY Resort, and the Transportation and Ticket Center. It opens at 7:00 a.m. and closes two hours after the last Park closes. It is possible for the Express Beam to act as a Resort Beam by stopping at the different Resorts. This is done at the discretion of a Guest Service Manager.
- The beam leading south to *Epcot*® is called the *Epcot*® beam. It offers service to our Resort Guests as well as passengers holding valid WALT DISNEY WORLD® Resort admission media. This beam operates between *Epcot*® and the Transportation and Ticket Center. It opens at 7:30 a.m. and closes about an hour and a half after *Epcot*® closes.

9.6.2 Fact Sheet

Monorail Operations	
Date of Manufacture: Monorail Trains: Rail System:	1989 (Mark VI Fleet) 1971 Express, Resort, Spur & Roundhouse 1974 Roundhouse Expansion 1981 <i>Epcot</i> [®] Beam
Vehicle Information:	Maximum in Operation: 12 – 4 on <i>Epcot</i> [®] , 4 on Express and 4 on Resort for normal operation. NOTE: Up to 5 Monorail Trains may be placed on any beam if the other beams are not at full capacity. This is not part of normal operation, but allows flexibility for special events.
Manufacturer:	Bombardier
Length:	203 feet, 6 inches.
Height:	10 feet, 5 ½ inches
Number of tires per Monorail Train:	124
Capacity:	> 316 Guests in a normal load > 364 Guests in a peak capacity load
Drive Motors:	Eight, electric DC motors.
Horsepower:	113 Horsepower
Speed:	40 miles per hour, maximum
Length of Beamways: Resort and Express: <i>Epcot</i>[®]: Spur line to Monorail Shop:	> 2.7 miles > 7.6 miles > .7 miles