

**26th Marine Expeditionary Unit  
Realistic Urban Training (RUT)  
6-18 June 2008  
CAMP ATTERBURY**



**Airspace Coordination Brief  
3 June 08**

# **Background: Realistic Urban Training (RUT)**

Realistic Urban Training (RUT) is a semi annual training exercise coordinated by Marines of the Special Operations Training Group (SOTG) in order prepare members of the Marine Expeditionary Units (MEUs) and certify them for real world deployments overseas. RUT exercises cannot effectively be conducted inside the boundaries of military training bases; therefore, they are typically coordinated and conducted in and around large metropolitan areas in order to provide a more realistic urban setting for Marines to train in.

RUT exercises involve ground and aviation based training. This training has been coordinated in detail with law enforcement and FAA personnel to ensure the deconfliction of the training areas. To support the aviation related training, four Altitude Reservations (ALTRVs) have been reserved in the areas of Indianapolis, Columbus, and North Vernon, Indiana, as well as Fort Knox, Kentucky. These ALTRVs and an aerial refueling track will support the aviation training of four AV-8B tactical Harrier jets, two C-130s Hercules, and four CH-53 Super Stallion helicopters. Other helicopters, such as AH-1Ws, UH-1Ns, and CH-46s will also participate, however, they will operate exclusively below 500' and below.

The following slides depict the airspace that has been coordinated to support the aviation based portion of the RUT exercise.

# AIRSPACE SPECIAL CONDITIONS

In order to accommodate RUT operations within the National Airspace System, there are special conditions with which RUT flights will need to comply to allow both military and civil to utilize the airspace while at the same time remain segregated to assure safe flight operations. Should any of these conditions not be viable to RUT flight operations, a re-evaluation of airspace allocation will be necessary.

**FLIGHT PLANS:** All military aircraft utilizing Orbit Sites (ALTRVs) and/or Air Refueling Tracks (ARs) SHALL file IFR flight plans with appropriate delay. Use “Leroy” callsign & squawk as assigned.

**ORBIT SITES (ALTRVs):**

4 Orbit Site labeled in chronological order (ALPHA thru DELTA). Only one ALTRV will be in use at any one time.

***All Orbit Sites have high and low altitude blocks*** as depicted in graphical slides. Military pilots must **file IFR flight plans to assigned entry NAVAID.**

**AIR REFUELING TRACK (RANDOM) :**

- 20 NM refueling track NW of NAAB (AAB) defined by waypoints.
- Left hand turns at 6-9K. 6 NM Radius.
- **Military pilots must File IFR flight plan**
- Military assumes responsibility for separation of aircraft (MARSA)

# ALTRVs for ORBIT SITES

- **10 NM RADIUS IFR ORBITS CENTERED ON VORTAC RADIAL/DME**
- **Stationary ALTRVs**
  - **Orbit Site ALPHA centered on ABB VOR 022 radial / 27 DME (NABB)**
    - **Dates & Times:**
      - 6 Jun 2130-2330 local (2 hours)
      - 8 Jun 2230 -thru- 9 Jun 0130 local (3 hours)
      - 10 Jun 2230 -thru- 11 Jun 0130 local (3 hours)
      - 16 Jun 2230 -thru- 17 Jun 0130 local (3 hours)
      - 17 Jun 2230 -thru- 18 Jun 0130 local (3 hours)
    - **Altitudes:**
      - ALPHA Low: 4-7K
      - ALPHA High: FL 190 – FL 220
    - **Lat / Long: N 39 00' 13" W 085 24' 33"**
  - **Orbit Site BRAVO centered on SHB VOR 310 radial / 14 DME (Shelbyville)**
    - **Dates & Times:**
      - 7 Jun 2100-2300 local (2 hours)
      - 9 Jun 2100-2300 local (2 hours)
    - **Altitudes:**
      - BRAVO Low: 8-10K
      - BRAVO High: 19-22K
    - **Lat / Long: N 39 47.160' W 086 04.020'**

# ALTRVs for ORBIT SITES (Cont.)

- **Stationary ALTRVs**
  - **Orbit Site CHARLIE** centered on IIU VOR 227 radial / 18 DME (**Louisville**)
    - **Dates & Times:**
      - 13 Jun 2200-2300 local (1 hour)
      - 15 Jun 2230 –thru- 16 Jun 0130 local (3 hours)
    - **Altitudes:**
      - CHARLIE Low: 5-8K
      - CHARLIE High: 16K – FL 190
    - **Lat / Long: N 37 54' 12" W 085 51' 37"**
  - **Orbit Site DELTA LOW** centered on SHB VOR 198 radial / 22 DME (**Shelbyville**)
  - **Orbit Site DELTA HIGH** centered on SHB VOR 195 radial / 27 DME
    - **Date & Time:**
      - 18 Jun 2100-2300 local (2 hours)
    - **Altitudes:**
      - DELTA Low: 6K-9K
      - DELTA High: 16K- FL 190
    - **DELTA LOW Lat / Long: N 39 17' 09" W 085 58' 37"**
    - **DELTA HIGH Lat / Long: N 39 12' 00" W 085 59" 05"**
- **Flight schedules will be forwarded to Indi Center on daily basis**



**BRAVO: Indianapolis**

**7 & 9 Jun**

**DELTA: Columbus**

**18 Jun**

**(LOW ALTRV in dashed lines)**

**Refueling Track**

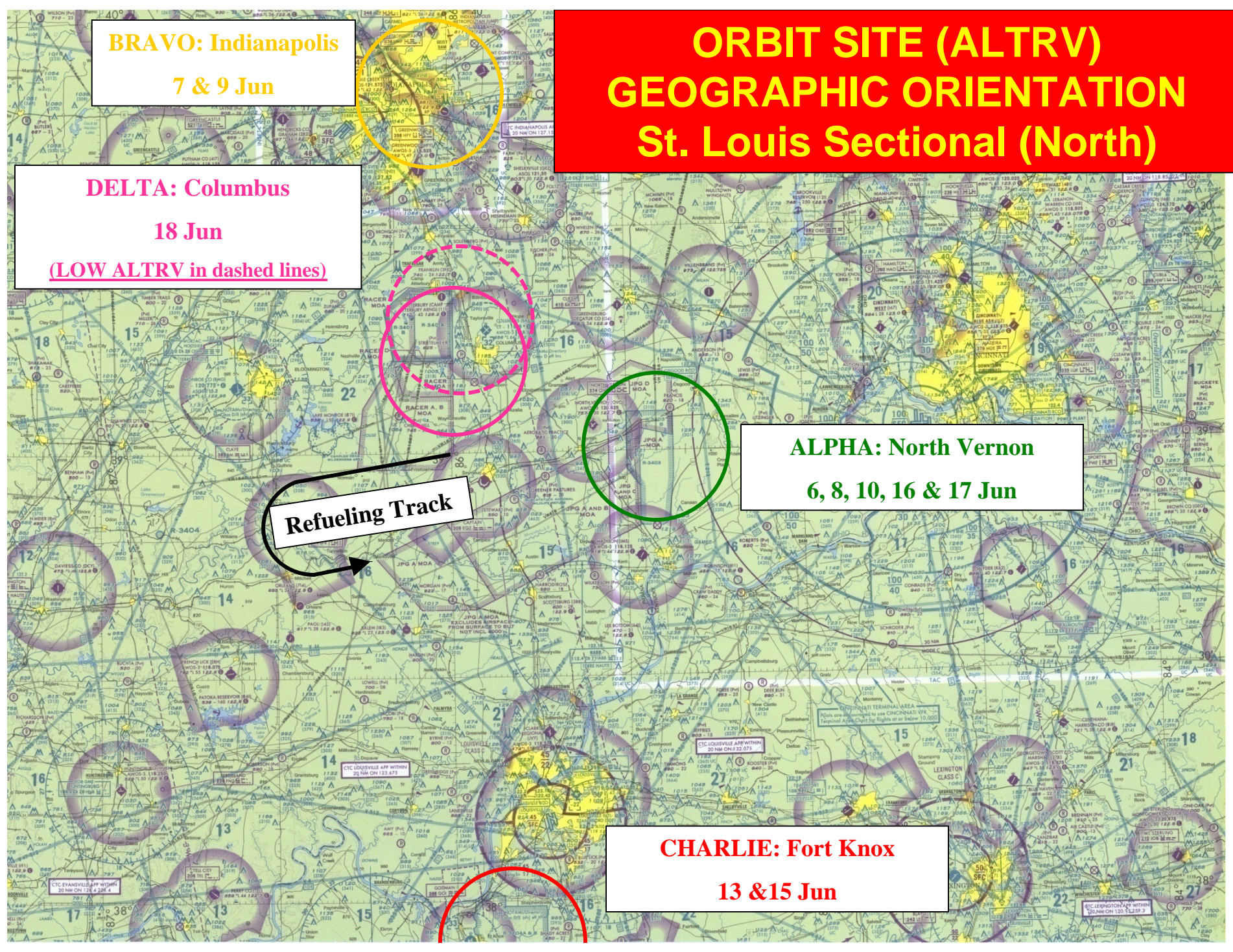
**ORBIT SITE (ALTRV)  
GEOGRAPHIC ORIENTATION  
St. Louis Sectional (North)**

**ALPHA: North Vernon**

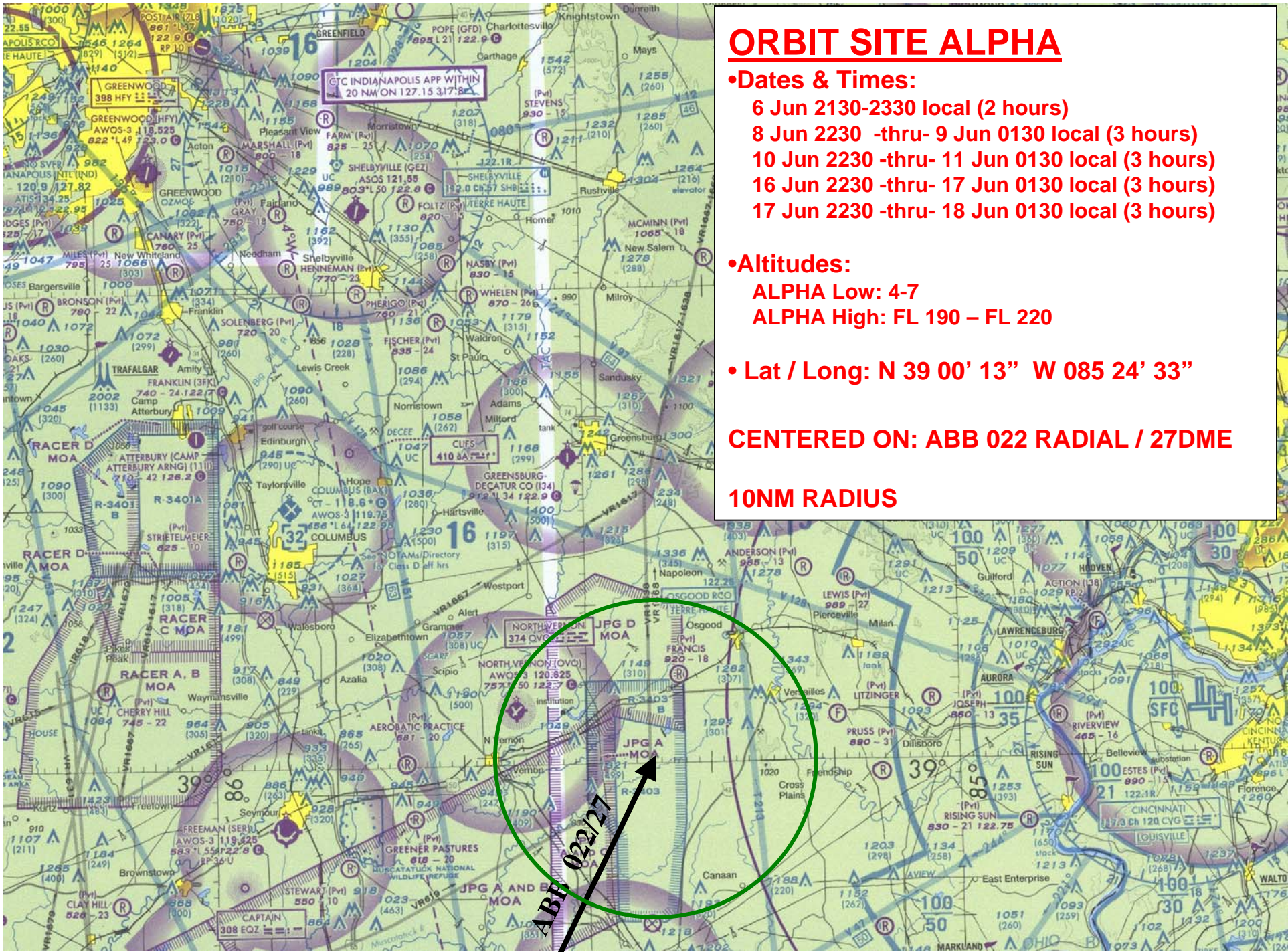
**6, 8, 10, 16 & 17 Jun**

**CHARLIE: Fort Knox**

**13 & 15 Jun**







# **ORBIT SITE ALPHA**

- Dates & Times:
  - 6 Jun 2130-2330 local (2 hours)
  - 8 Jun 2230 -thru- 9 Jun 0130 local (3 hours)
  - 10 Jun 2230 -thru- 11 Jun 0130 local (3 hours)
  - 16 Jun 2230 -thru- 17 Jun 0130 local (3 hours)
  - 17 Jun 2230 -thru- 18 Jun 0130 local (3 hours)

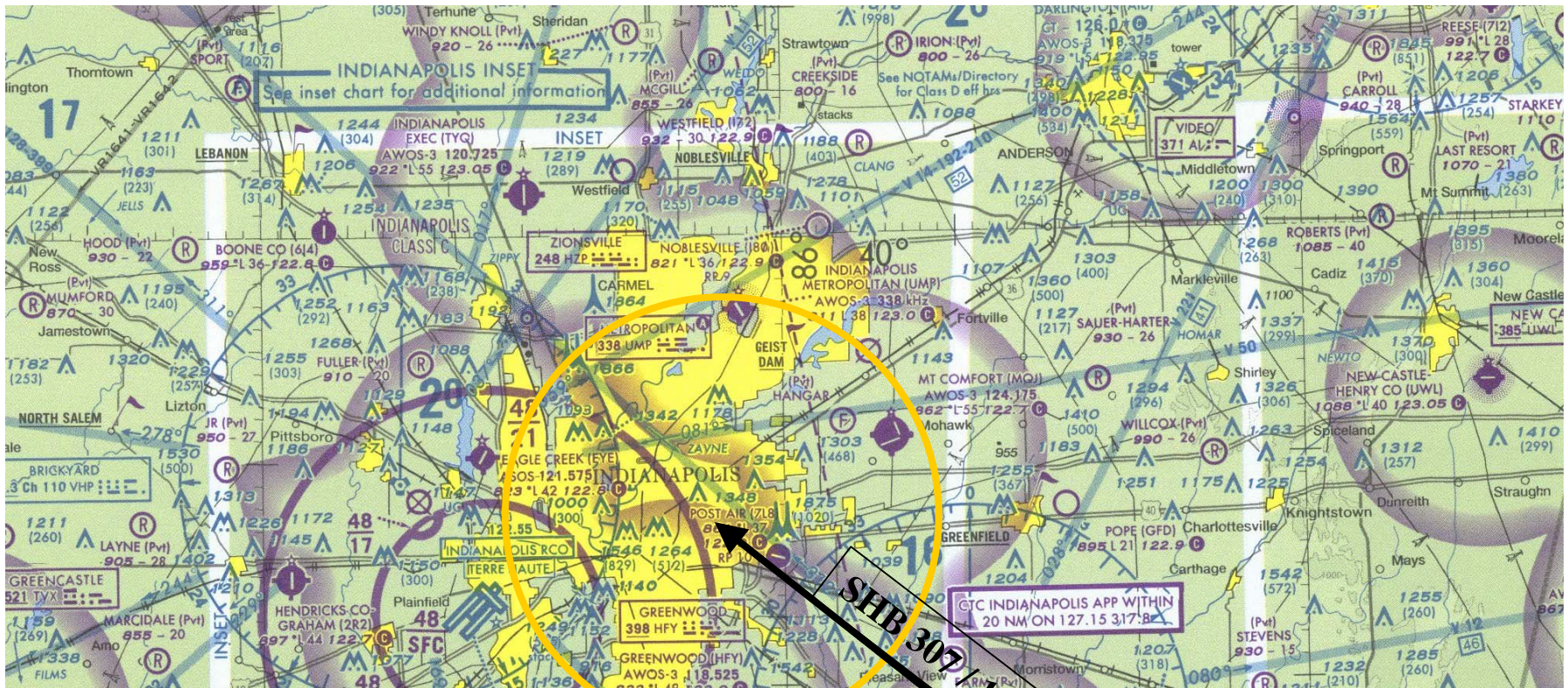
- Altitudes:
  - ALPHA Low: 4-7
  - ALPHA High: FL 190 – FL 220

• Lat / Long: N 39 00' 13" W 085 24' 33"

**CENTERED ON: ABB 022 RADIAL / 27DME**

**10NM RADIUS**





## **ORBIT SITE BRAVO**

### **•Dates & Times:**

7 Jun 2100-2300 local (2 hours)

9 Jun 2100-2300 local (2 hours)

### **•Altitudes:**

**BRAVO Low: 8-10K**

**BRAVO High: 19-22K**

### **•Lat / Long: N 39 47.160' W 086 04.020**

**CENTERED ON: SHB 307 RADIAL / 14 DME**

**10NM RADIUS**



# ORBIT SITE CHARLIE

## •Dates & Times:

13 Jun 2200-2300 local (1 hour)

15 Jun 2230 –thru- 16 Jun 0130 local (3 hours)

## •Altitudes:

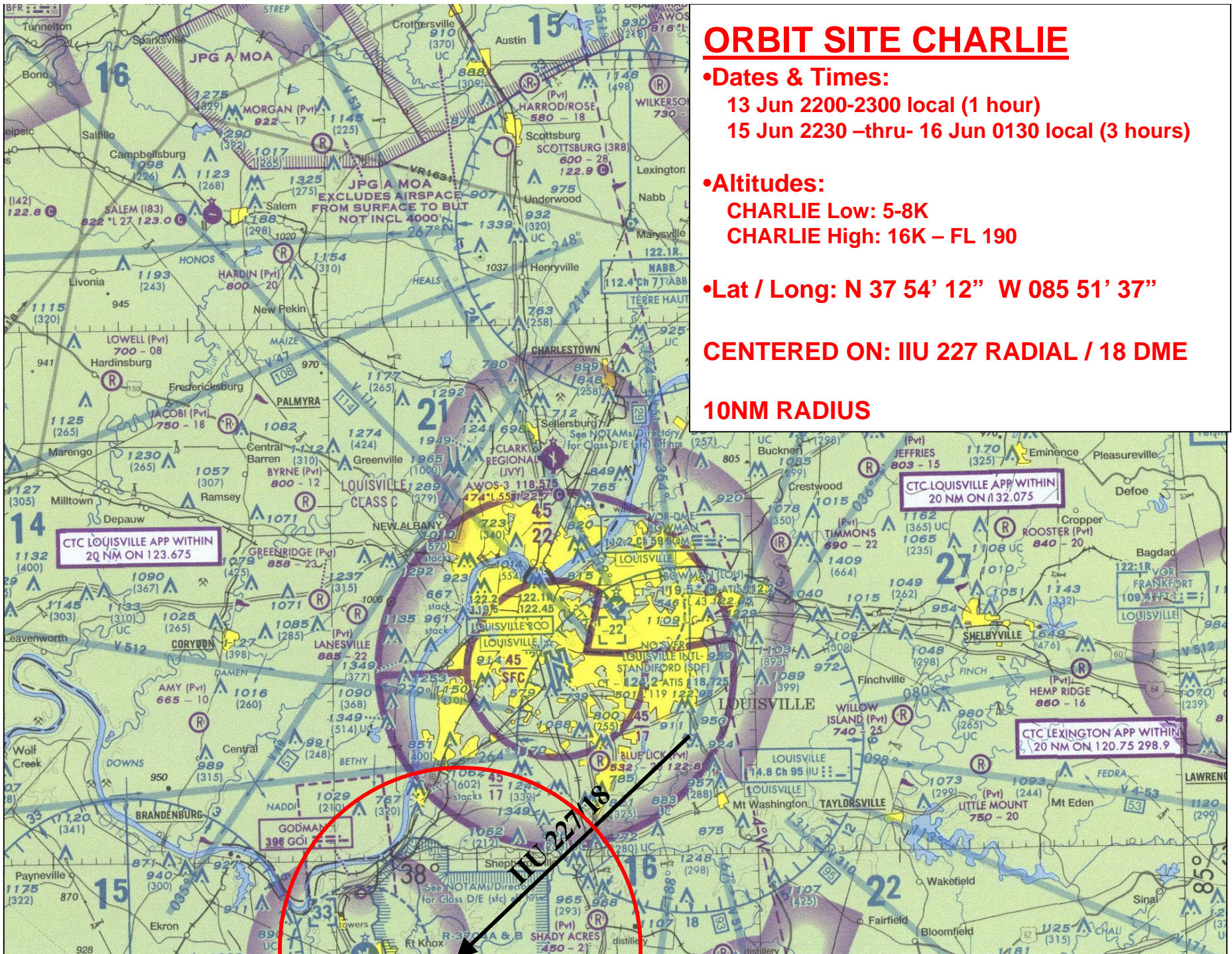
CHARLIE Low: 5-8K

CHARLIE High: 16K – FL 190

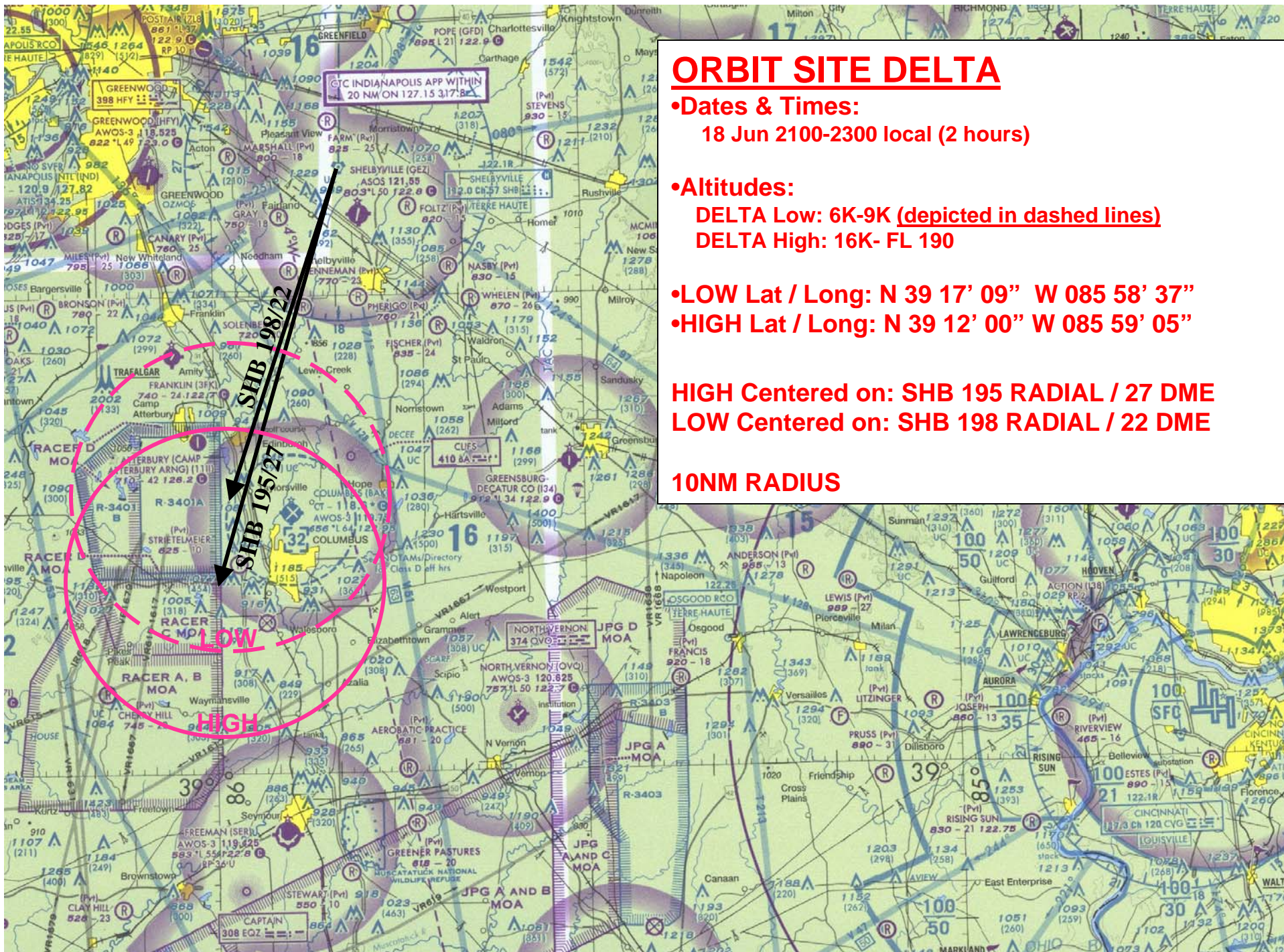
## •Lat / Long: N 37 54' 12" W 085 51' 37"

**CENTERED ON: IIU 227 RADIAL / 18 DME**

**10NM RADIUS**







## ORBIT SITE DELTA

### **Dates & Times:**

**18 Jun 2100-2300 local (2 hours)**

### **Altitudes:**

**DELTA Low: 6K-9K (depicted in dashed lines)**

**DELTA High: 16K- FL 190**

**•LOW Lat / Long: N 39 17' 09" W 085 58' 37"**

**•HIGH Lat / Long: N 39 12' 00" W 085 59' 05"**

**HIGH Centered on: SHB 195 RADIAL / 27 DME**

**LOW Centered on: SHB 198 RADIAL / 22 DME**

**10NM RADIUS**



# REFUELING TRACK

- **Random Refueling Track “Silver Orbit”**
  - 20 NM Refueling Track NW of NAAB (ABB)
  - Entry to “Silver Orbit” at KAPRE Waypoint
  - Left hand turns with 6NM Radius
  - Altitude: 6K-9K
  - Scheduled times as depicted on map (most times are 2130-0230)



# AR TRACK – “SILVER ORBIT”

**BRAVO: Indianapolis**

**DELTA: Columbus**

**ALPHA: North Vernon**

**KAPRE**

**Refueling Track**

## • AR Track Geo Points:

N38 59 19 W86 00 04 (N/E FIX)  
N38 56 34 W86 25 19  
N38 44 37 W86 23 04  
N38 47 22 W85 57 57

- LEFT HAND TURNS
- 6-9K

**CHARLIE: Fort Knox**

## AR Active (Local times)

6 Jun: 2030-0030  
7 Jun: 2000-2359  
8 Jun: 2130-0230  
9 Jun: 2000-2359  
10 Jun: 2130-0230  
13 Jun: 2100-2359  
15 Jun: 2130-0230  
16 Jun: 2130-0230  
17 Jun: 2130-0230  
18 Jun: 2000-2359



**The following standard conditions shall apply :**

- **NOTAMs will advise the flying public of RUT operations.**
- **All RUT aircraft shall utilize the callsign “**LEROY**”**
- **All RUT aircraft in Orbit Sites or AR Track remain on ATC frequency**