NASA Goddard Space Flight Center’s Wallops Flight Facility
P-3B Orion Aircraft & Hanger Introduction

Wallops P-3B Orion Airborne Science Research Aircraft

Wallops Main Base
NASA Wallops Flight Facility
P-3B Aircraft and N-159 Hanger
NASA Wallops Flight Facility  
Wallops Island, VA 23337  
Phone: 757-824-1000 (base operator)  

Located off of Rt. 175 Chincoteague Rd.
Directions to NASA Wallops

- **From Washington, DC / Baltimore, MD area**
  - Take Rt. 50 east to bay bridge
  - Cross bay bridge ($2.50 toll, cash or EZPass) and follow signs for Rt. 50 east to Salisbury/Ocean City, MD
  - Follow signs that say east Rt. 50 to Rt. 13 (also known as Salisbury by-pass)
  - While on by-pass follow signs Rt. 13 south to Norfolk, by-pass road will merge with Rt. 13 south, south of Salisbury, MD
  - Continue on Rt. 13 south and cross MD/VA state line
  - Take a left at first stop light in VA, Pizza Hut on left, (town is called Oak Hall, VA), this will be Rt. 175 Chincoteague Rd.
  - Continue on Chincoteague Rd. and turn left at first stoplight
  - Follow this road to main gate and security office

- **From Norfolk, VA area**
  - Take I-64 East to Northampton Blvd. Exit 182
  - Exit onto Northampton Blvd. (also known as Rt. 13) and follow to Chesapeake Bay Bridge Tunnel ($12.00 toll, cash only, EZPass starting in November 2007)
  - Cross Chesapeake Bay Bridge Tunnel and continue north on Rt. 13
  - Approx. 60 miles north of bridge tunnel turn right in Oak Hall, VA (Pizza Hut on right) onto Rt. 175 Chincoteague Rd.
  - Continue on Chincoteague Rd. and turn left at first stoplight
  - Follow this road to main gate and security office
Main Base vs. Wallops Island

- Wallops Flight Facility has two parts: “Main Base” and “Wallops Island”
- The Main Base is the center for most of the facility’s operations
  - Located on Rt. 175 Chincoteague Rd.
  - All experimenters will work here throughout their mission lifecycle
  - Security badges can be picked up at the main gate upon arrival (please note foreign nationals require 30 days notice prior to arrival and receiving badge)
- Access to Wallops Island requires a special badge because it is the launch site for the facility’s sounding rockets
  - There should be no reason for island access to be needed for aircraft work but if required access can be given
Main Base and Wallops Island Maps

P-3B aircraft hanger

Note: Paper copies of this map are available at the Security Office (Bldg. N-127)
A Few Important NASA Rules

• No walking, driving, or biking on runways or taxiways during or after work hours
• No entrance to rocket motor magazine area without escort
• No open toed shoes (i.e. sandals) in hanger or aircraft
• Long legged pants and/or flight suit must be worn on aircraft when flying
• Anyone flying on the aircraft is required to have medical screening
• Strict enforcement of tool control
  – F.O.D. (Foreign Object Debris) is a BIG deal when working around aircraft
  – All experimenters should bring their own tools
  – All tools should be inventoried prior to arrival and this list kept with toolbox for inspection
  – Any lost tools could ground the aircraft until found
• Cameras/video cameras are welcomed
Public Use Aircraft Flight Disclaimer

If you will be flying on the NASA P-3 or any other public use aircraft your health and/or life insurance may not cover you during the flight in the event of a mishap. Please check with insurance providers before flying aboard any public use aircraft. Official NASA disclaimer located in NASA Aircraft Operations Management Manual NPR 7900.3B Appendix B pages 96 and 97.
P-3B Orion Aircraft

- P-3B Orion Aircraft
  - Former Navy anti-submarine and surveillance plane
  - Built mid-1960’s by Lockheed Martin
  - Wing span – 99 feet 8 inches
  - Length – 110 feet 10 inches
  - Height – 34 feet 3 inches
  - Four T56-A-14 turbprop engines
  - Extensively modified for NASA science use
    - 2 bomb bay ports
    - Nose radome port
    - Tailcone port
    - 1 16” dia. zenith port
    - 3 nadir ports
    - Wingtip mounts
    - 4 P-3 bubble and 3 DC-8 passenger windows
  - 115V 60Hz and 400Hz power along with 28VDC
  - Lavatory and galley on board
  - Max. altitude: 28,000 feet
  - Max. endurance time: 12 hours (~3,800 miles)
  - Payload capacity: ~15,000 lbs
  - Max. crew: 24 persons
Experimenter Rooms

• 4 experimenter rooms available on non-interference basis
  – W162 Conference room/office space (1,685 sq. ft)
  – W161 Experimenter office/lab space (568 sq. ft)
  – W160 and E109 experimenter labs (742 and 871 sq. ft)
  – Phone, fax, and wireless internet available
  – Refrigerator/microwave/coffee pot in W162 and W161
  – Large screen TV’s and white boards available
  – Lab benches, tables, chairs available
• If you have any questions please contact the following individuals:
  - **George Postell**
    Chief of Aircraft Office / P-3 Pilot
    Phone: 757-824-1529
    Fax: 757-824-2135
    Email: George.W.Postell@nasa.gov
  - **Anthony Guillory**
    Airborne Science Manager
    Phone: 757-824-2161
    Fax: 757-824-2135
    Email: Anthony.Guillory@nasa.gov
  - **John Valliant/Dave Easmunt**
    P-3B Mission Managers
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    Email: John.Valliant-1@nasa.gov
    Email: David.P.Easmunt@nasa.gov
  - **Michael Cropper**
    P-3B Ops Engineer
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    Fax: 757-824-1997
    Email: Michael.C.Cropper@nasa.gov
  - **Jeff Sigrist**
    Maintenance Lead
    Phone: 757-824-1919
    Fax: 757-824-1843
    Email: Jeffery.L.Sigrist@nasa.gov
  - **Rich Rogers**
    Deputy Aircraft Office Chief / P-3 Pilot
    Phone: 757-824-1403
    Fax: 757-824-2135
    Email: Rich.Rogers@nasa.gov
  - **Ed Sudendorf**
    Chief of Maintenance and Quality Assurance
    Phone: 757-824-1240
    Fax: 757-823-1250
    Email: Edward.W.Sudendorf@nasa.gov
  - **Shane Dover**
    Aviation Safety Officer / P-3 Pilot
    Phone: 757-824-2419
    Fax: 757-824-2135
    Email: Shane.Dover@nasa.gov
Local Information
Shipping and Phone Usage for Experimenters

To receive shipments on base use the following address:
NASA Wallops Flight Facility
Attn: AIRTEC Inc. c/o Jeff Sigrist
Bldg. N-159 Room W139
Wallops Island, VA 23337
Phone: 757-824-1919

Note: If non-NASA property is being shipped please indicate on package who property belongs to (institutions/agency/company/etc.)

To use the telephone on base:
- Internal base/island calls: dial last 4 digits of number (ex. 2424)
- Local calls: dial “9” then 7 digit number (local calls only begin with “824-xxxx”)
- Long distance calls: dial “9” then “1” then area code plus phone number
- Dial “55” to access base-wide PA system
NASA Wallops Main Base Services

- NASA Federal Credit Union: Bldg. N-133; Mon.-Thurs. 8:30AM-3:30PM; Fri. 8:30AM-5:00PM (ATM machine located outside)
- Cafeteria: Bldg. E-2; menu phone number: x2424
  - 7AM to 9AM Breakfast
  - 11AM to 1PM Lunch
  - No Dinner
- Gymnasium with weight lifting and exercise room: Bldg. D-10
- Post Office: Bldg. E-7; 10AM-3:30PM
- Technical Library: Bldg. E-105; 8AM-4:30PM
- Rocket Club Bar: Bldg. F-3; 4:30PM to 11PM
- 24/7 fire and ambulance services
- Medical Clinic: Bldg. F-160; 8AM-4:30PM (ext. 1266)
- Base exchange: Bldg. E-2; gift shop, small convenience store
Local Food and Services

• **Just outside the main gate:** (<1/4 mi. from main gate, walking distance)
  – Royal Farms gas station and convenience store
  – Ocean Deli
  – Corner Mart gas station and convenience store

• **Oak Hall, VA:** (3 miles west of main gate on Rt. 13)
  – Several eating places (Subway, Pizza Hut, Sonics Drive In, etc.)
  – Grocery Store: Food Lion
  – Gas Station: Corner Mart and T’s Corner

• **Chincoteague, VA:** (5 miles east of main gate on Rt. 175)
  – Various local restaurants and stores along with McDonald’s

• **Pocomoke, MD:** (10 miles north of main gate on Rt. 13)
  – Various local restaurants and fast food (Arby’s, Hardee’s, Bonanza, McDonald’s, Friendly’s, KFC, etc.)
  – Walmart
  – Lowe’s
  – Radio Shack

• **Salisbury, MD:** (30 miles north of main gate on Rt. 13)
  – Nearest city with standard city services
Local Business Locations
Map Key to Previous Slide

- A - Ocean Deli: sandwich shop and convenience store
- B - Royal Farms: gas station and convenience store
- C - Corner Mart: gas station and convenience store
- D - Ray’s Shanty: local seafood restaurant
- E - Pizza Hut
- F - T’s Corner: gas station and convenience store
- G - Food Lion
- H - Sonic’s Drive In
- I - Corner Mart: Gas station and convenience store
- J - Subway
- K - Sub Station: sandwich shop and convenience store
- L - NASA Wallops Visitor Center and gift shop
Local Hotels and Phone Numbers

**Chincoteague Island, VA (5 miles east of Wallops on Rt. 175)**
- Comfort Suites: 757-336-7500
- Hampton Inn and Suites: 757-336-1616
- Best Western: 757-336-6557
- Waterside Inn: 877-870-3434
- The Blue Heron Inn: 800-615-6343

**Pocomoke, MD (10 miles north of Wallops on Rt. 13)**
- Holiday Inn Express: 888-400-9714
- Days Inn: 410-957-3000
- Quality Inn: 410-957-1300

**Onley, VA (25 miles south of Wallops on Rt. 13)**
- Comfort Inn: 757-787-7787
Local Attractions

- Eastern Shore Attractions
  - http://www.esvachamber.org/
  - http://www.esvatourism.org/home.asp
  - http://www.easternshorevirginiaportal.com/

- Wallops Island
  - 8 miles south of Main Base (~10 minute drive)
  - Recreation beaches open to everyone (special island badge not needed)
  - Mon.-Fri. 4:30PM to Dusk and Dawn to Dusk on Saturday and Sundays

- Chincoteague Island
  - 7 miles east of Wallops (~15 minute drive)
  - Chincoteague Fireman’s Carnival (every weekend and last full week in July, fireworks on July 4th)
  - Chincoteague Pony Swim and Auction (last Wednesday and Thursday in July)
  - Connects to Assateague Island National Seashore: http://www.nps.gov/asis/
  - http://www.chincoteague.com/

- Salisbury, Maryland
  - 30 miles north of Wallops (~45 minute drive)
  - Plenty of shopping (including a mall) and restaurants
  - Regal movie theatres
  - http://www.salisbury.md.com/
Nearby Attractions/ Weekend Trips

- **Ocean City, Maryland**
  - 60 miles north of Wallops (~1.5 hour drive)
  - Beach Boardwalk with rides, shops, and restaurants
  - LOTS of options for beaches and beach activities
  - [http://www.ocean-city.com/](http://www.ocean-city.com/)

- **Hampton Roads Area of Virginia**
  - 100 miles to south of Wallops (~2.5 hour drive)
  - Museums, clubs, beaches, historical sites, amusement parks
    - Suggested sites:
      - Virginia Air and Space Center, Hampton, VA
      - Nauticus, Norfolk, VA
      - Virginia Beach beachfront
      - Colonial Williamsburg, Yorktown Battlefield, Jamestown Colony

- **Washington D.C.**
  - 155 miles northwest of Wallops (~ 3.5 hour drive)
  - Historical sites, museums, clubs, outdoor activities, amusement parks, and all other manner of activities associated with a heavily urban area
    - Suggested sites:
      - National Mall (Washington Monument, White House, War Memorials, Lincoln Memorial, etc.)
      - Smithsonian Museums- free and VERY good (Air and Space, Natural History, etc.)
    - [http://www.washington.org](http://www.washington.org)