

## ADVANCED RANGE INSTRUMENTATION AIRCRAFT (ARIA)

This section represents current capabilities of the Advanced Range Instrumentation Aircraft (ARIA) , based on USAFSPC plans to downsize ARIA capabilities.

### ARIA OPERATING AIRFIELDS PROVIDING MISSION SUPPORT :

ASCENSION ISLAND AFS  
EDWARDS AFB  
JOHANNESBURG, SOUTH AFRICA  
DIEGO GARCIA  
PAPEETE, TAHITI  
SEYCHELLES

### ARIA OPERATING AIRFIELDS:

ANDERSEN AFB, GUAM  
ASCENSION ISLAND AFS  
AUCKLAND, NEW ZEALAND  
CAPETOWN, SOUTH AFRICA  
CHRIST CHURCH, NEW ZEALAND  
DAKAR, SENEGAL  
GRANTLEY ADAMS, BARBADOS  
HICKAM AFB, HI  
KENNEDY SPACE CENTER (KSC)  
Le RAIZET, GUADELOUPE  
MELBOURNE INTERNATIONAL, AUSTRALIA  
PAPEETE, TAHITI  
ROOSEVELT ROADS NAS, PUERTO RICO  
ZANDERIJ, SURANIM

NOTE 1: LAUNCH VEHICLE MARK EVENTS MAY OCCUR IN THE ANTARCTIC ZONE: COVERAGE MAY BE AVAILABLE FROM THE AUSTRALIAN DAVIS SITE, THE JAPANESE SITE, THE NATIONAL SCIENCE FOUNDATION SITE AT McMURDO SOUND, ETC., DEPENDING UPON THE TRAJECTORY AND VIEW.

NOTE 2: SUPPORT MAY BE REQUESTED FROM ESA, CNES, NASDA, AND UNIVERSITY OF CHILE FACILITIES TO PROVIDE LAUNCH VEHICLE AND SPACECRAFT COVERAGE OF CRITICAL EVENTS.

NOTE 3: AN ARRANGEMENT/ AGREEMENT SHOULD BE ESTABLISHED WITH NOAA FOR USE OF THEIR STATIONS IF REQUIRED FOR NASA SPONSORED SPACE FLIGHT MISSIONS.

## ARIA TRACKING FLEET CONFIGURATION

### SUMMARY INFORMATION:

The ARIA Fleet Configuration consists of ten aircraft fleet, seven of which are capable of basic telemetry missions.

- 4 EC-135E
  - Basic Telemetry Mission
  - Three CMMCA Phase 0
- 3 EC-18B
  - Basic Telemetry Mission
  - Two modified with Horn Antenna
- 1 EC-18D Advanced CMMCA Aircraft
  - Being developed and optimized for Cruise Missile Support

CONTACT INFORMATION: MISSION SUPPORT BRANCH  
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4950th TEST WING  
WRIGHT-PATTERSON AFB, OHIO 45433

REFERENCES AND PUBLICATIONS: ARIA OPERATING CAPABILITIES, APRIL 1981

DETAILED FLEET CONFIGURATION INFORMATION: next page

## ARIA TRACKING FLEET CONFIGURATION

NASA Number	Designation	Primary Function	Capabilities
326	EC-135E/326 (Aircraft)	Basic TLM/CMMCA-0	Acquires and tracks TM data using steerable 7 foot antenna. Provides worldwide HF voice communication and real-time UHF satellite data retransmission. Record, monitors and plays back mission data (2 - 14 track wide band recorders w/dubbing capability).
329	EC-135E/329 (Aircraft)	Basic TLM/CMMCA-0	Acquires and tracks TM data using steerable 7 foot antenna. Provides worldwide HF voice communication and real-time UHF satellite data retransmission. Record, monitors and plays back mission data (2 - 14 track wide band recorders w/dubbing capability).
330	EC-135E/330 (Aircraft)	Basic TLM	Acquires and tracks TM data using steerable 7 foot antenna. Provides worldwide HF voice communication and real-time UHF satellite data retransmission. Record, monitors and plays back mission data (2 - 14 track wide band recorders w/dubbing capability).
374	EC-135E/374 (Aircraft)	Basic TLM/CMMCA-0	Acquires and tracks TM data using steerable 7 foot antenna. Provides worldwide HF voice communication and real-time UHF satellite data retransmission. Record, monitors and plays back mission data (2 - 14 track wide band recorders w/dubbing capability).
891	EC-18B/0891 (Aircraft)	Basic TLM	Acquires and tracks TM data using steerable 7 foot antenna. Provides worldwide HF voice communication and real-time UHF satellite data retransmission. Record, monitors and plays back mission data (2 - 14 track wide band recorders w/dubbing capability).
892	EC-18B/0892 (Aircraft)	Basic TLM/Scoring w/ Horn Antenna	Acquires and tracks TM data using steerable 7 foot antenna. Provides worldwide HF voice communication and real-time UHF satellite data retransmission. Record, monitors and plays back mission data (2 - 14 track wide band recorders w/dubbing capability).
894	EC-18B/0894 (Aircraft)	Basic TLM/Scoring w/ Horn Antenna	Acquires and tracks TM data using steerable 7 foot antenna. Provides worldwide HF voice communication and real-time UHF satellite data retransmission. Record, monitors and plays back mission data (2 - 14 track wide band recorders w/dubbing capability).
893	EC-18D/0893 (Aircraft)	TLM/Advanced CMMCA	Being developed and optimized for cruise missile support.