



# The E-3A Component NATO Air Base Geilenkirchen Germany

The E-3A Component flies the AWACS aircraft as one of two operational units comprising the NATO Airborne Early Warning and Control Force or NAEW&CF. It is NATO's first standing, operational flying unit with integrated, multinational aircrews. The Component's mission is to provide aircraft and trained aircrews to deliver a surveillance and/or control platform wherever and whenever directed by the NATO Airborne Early Warning Force Commander on behalf of the Supreme Allied Commander Europe. Seventeen NATO E-3A AWACS aircraft are assigned to the Component.

The Component operates in four other locations as well as NATO Air Base Geilenkirchen: a Forward Operating Base in Italy, Greece and Turkey and a Forward Operating Location in Norway. Overall, integrated manning of the Component consists of about 2,900 multinational military and civilian personnel.

Eighteen nations are members of the NATO AWACS program with 16 providing military personnel to the Component. The eighteenth nation, Luxembourg, provides a financial contribution and licenses the Component's aircraft.



## The NATO E-3A Aircraft

### Primary function:

Airborne surveillance, command, control and communications

### Power plant:

Four TF33 Pratt & Whitney 100A turbofan engines.

### Thrust:

20,500 lbs Each engine/9.523,5 kp each engine

### Dimensions:

#### Aircraft

Wingspan: 44.45 m / 145 ft 9 in  
Length: 46.68 m / 152 ft 11 in  
Height: 12.70 m / 41 ft 9 in

#### Rotodome

Diameter: 9.1 m / 30 ft  
Thickness: 1.8 m / 6 ft  
Height: 3.35 m / 11 ft  
Rotation: once every 10 seconds

### Speed:

More than 800 km/h / 500 mph

### Operational altitude:

Above 9,150 m / 30,000 ft

### Maximum take-off weight:

147,429 kg / 325,000 lbs

### Fuel capacity:

89,610 liters / 70,371 kg  
22,768 gallons / 148,000 lbs

### Endurance:

More than 10 hours  
All E-3A aircraft are air-refuelable

### Armament:

None

### Aircrew:

#### Flight Crew

2 Pilots  
1 Navigator  
1 Flight Engineer



#### Mission Crew

1 Tactical Director  
1 Fighter Allocation Officer  
2 Weapons Controllers  
1 Surveillance Controller  
1 Passive Controller  
3 Surveillance Operators  
1 Communications Technician  
1 Systems Technician  
1 Radar Technician



### Radar coverage:

One E-3A flying at 30,000 ft / 9,150 m has over 312,000 km<sup>2</sup> in its field of view. Three E-3As in overlapping orbits can provide complete coverage of Central Europe. An E-3A can detect low flying targets within 400 km or 215 nautical miles and at medium altitude targets within 520 km or 280 nautical miles

### Prime contractor:

The Boeing Company, Seattle, Washington, United States

### Locations:

#### Main Operating Base (MOB)

Geilenkirchen, Germany

#### Forward Operating Bases (FOBs)

Konya, Turkey  
Aktion, Greece  
Trapani, Italy

#### Forward Operating Location (FOL)

Ørland, Norway

### Cost per aircraft:

70 million US dollars (June 1977)