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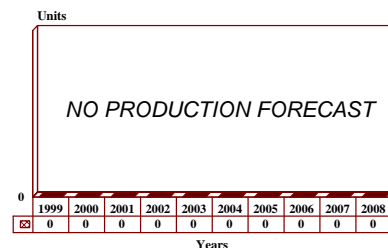
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APA-172 - Archived 01/2000

Outlook

- Installed exclusively aboard E-2C airborne early warning aircraft

- No further production forecast

- **This report will be archived next year (2000).**

10 Year Unit Production Forecast
1999-2008

Units

NO PRODUCTION FORECAST

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
⊠	0	0	0	0	0	0	0	0	0	0

Years

Orientation

Description. Airborne command and control display system.

Sponsor

US Navy
   Naval Air Systems Command (NAVAIR)
   Air-09C/2.0C Bldg. 441
   21983 Bundy Road, Unit #7
   Patuxent River, MD 20670-1127
   USA
   Tel: +1 301 757 9044

Contractors

GEC-Marconi Hazeltine Corp
   Electronic Systems Division
   450 Pulaski Road
   Greenlawn, New York (NY) 11740-1600
   USA
   Tel: +1 516 261 7000
   Fax: +1 516 262 8002

Status. Production complete.

Total Produced. An estimated 136 systems were produced.

Application. C^2 display system for the E-2C.

Price Range. Too little information is available to make a determination of price.

Technical Data

Design Features. The APA-172's function aboard the E-2C aircraft is to provide a vital man/machine interface system. The situation display, tabular display and controls of the APA-172 allow operators to employ the entire resources of the aircraft's central digital computer. The three consoles of the system provide target detection, target hooking, identification, threat evaluation and weapon assignment, and control. The system is composed of the Main Display Unit (MDU), Upper

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Main Display (UMD), Auxiliary Display Unit (ADU), and Auxiliary Control Unit (ACU).

The complete system, as flown aboard the E-2C, is composed of three UMDs, three 12-inch MDUs, three ADUs, one ACU, and three power supplies. The entire APA-172 system weighs approximately 276.8 kilograms (735 pounds).

Operational Characteristics. The MDU is capable of operating as a computer-driven display and/or as an Identification Friend or Foe (IFF)/radar display. (The IFF portion has been purchased with the APA-172 under the designation OL-76.) Alphanumeric and symbology data are displayed as an aid to the operator's decision-making functions. The MDU is used by the operator to mix up to nine separated video signals from the sensors for display.

Alphanumeric functions and category legends associated with 16 push-button switches are displayed on the ADU. The ADU allows the operator to enter and request data to and from the central computer memory. The ACU is used to control the operations of the three display units.

Variants/Upgrades

Enhanced Displays. The old APA-172 is a monochrome display unit. The direct replacement screen, developed through Hazeltine's own funding, features a full-color capability. The multicolor display provides information in a more orderly fashion, aiding in identifying targets and allowing the operator to make friend-or-foe decisions quickly.

Program Review

Background. The Grumman E-2C Hawkeye airborne early warning aircraft first flew in 1971. The E-2C's avionic capabilities, including its ability to detect, track, and classify targets at extreme range (up to 460 miles), were considered a vast improvement over those systems belonging to the earlier E-2A and E-2B aircraft. The APA-172 display system was procured to interpret the voluminous amounts of data from the APS-145 surveillance radar and other avionic systems. Production ended around the late 1980s.

Funding

None mentioned in US budget documents.

Recent Contracts

No recent contracts involving the APA-172 have been identified.

Timetable

Month	Year	Major Development
Jun	1968	E-2C development begun
	1971	First flight of E-2C
	1972	First production deliveries of E-2C
Apr	1973	Bureau of Inspection and Survey trials for E-2C
Oct	1975	Prototype APS-125 Advanced Radar Processing System (ARPS) completed Navy preliminary evaluation
Dec	1976	Delivery of first ARPS-equipped E-2C to Navy
Jan	1985	First of 39 new-build C-2As rolled out
Late	1980s	Production of APA-172 ended

Worldwide Distribution

The APA-172 was sold to the **US Navy** for its E-2C airborne early warning aircraft. Export clients of the Hawkeye include Egypt, France, Japan, Singapore, and Taiwan, but it has not been determined whether the APA-172 was exported. It is equally unclear whether the system was ultimately superseded or remains in service.

Forecast Rationale

Sales of the Grumman E-2C Hawkeye continue for the US Navy, as well as numerous confirmed and potential export customers. According to GEC-Marconi Hazeltine, however, the APA-172 ended its production run around the late 1980s. No further units will be manufactured.

For updated information regarding the E-2C, refer to the report contained in Forecast International's *Aircraft Forecast* or *Military Aircraft Forecast* market-intelligence services.

Ten-Year Outlook

None; the forecast chart has been omitted. **This report will be archived next year (2000).**

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