



# Rockwell Collins Services Training and Information Solutions Course Syllabus: 523-0808167

**COURSE TITLE:** Raytheon AHS-3000 Attitude Heading System  
Level 1 Flightline Maintenance

**AUDIENCE:** Students should be familiar with MS Windows® Based Operating Systems.

**PURPOSE:** This course provides Flightline Maintenance personnel with the knowledge that is necessary to operate and maintain the AHS-3000 Attitude Heading System.

**OBJECTIVE:** Upon completing this course, the student will be able to:

1. Describe the purpose of the AHS-3000 system and the Line Replaceable Units (LRUs) that comprise the system.
2. Briefly describe the theory of operation of the AHS-3000 Attitude Heading System.
3. Describe the controls, indicators, and annunciations associated with the AHS-3000 Attitude Heading System.
4. Troubleshoot the AHS-3000 Attitude Heading System, isolating faults to the Line Replaceable Unit (LRU) level.
5. Perform the Post Installation testing and Compensation Procedures which are required to return the system to service.

**COURSE LENGTH:** Approximately 1 Hr (Course length will vary from individual to individual, depending on the experience level of the participant and the Pre/Post Testing options that are selected.)

**REFERENCES:**

- |   |             |
|---|-------------|
| 1. Raytheon Hawker 800XP Avionics System, ASM         | 523-0780103 |
| 2. Raytheon Premier 1 Avionics System, ASM            | 523-0778447 |
| 3. Raytheon King Air Pro Line 21 Avionics System, ASM | 523-0790063 |

**RAYTHEON AHS-3000 ATTITUDE HEADING SYSTEM COURSE OUTLINE**

- I. Welcome to Rockwell Collins e-Learning
- II. Overview of the AHS-3000 Attitude Heading System
  - A. AHS-3000 System
    1. Attitude Heading Computer AHC-3000
    2. Electronic Compensation Unit ECU-3000
    3. Flux Detector Unit FDU-3000



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## **III. AHS-3000 Theory of Operation**

- A. Normal Mode
- B. Direction Gyro (DG) Mode
- C. Slew Switch
- D. Control Features
- E. Inertial Measurement Unit (IMU)

## **IV. Power Up System**

- A. AHS Mode
- B. AHS Initialization Time
- C. AHS Physical Location
  - 1. King Air
  - 2. Hawker
  - 3. Premier 1

## **V. Post Installation Testing and Compensation Procedures**

- A. Post Installation Test Procedure
- B. AHS Compensation Procedure
- C. MMT Leveling Procedure

## **VI. AHS-3000 Fault Isolation and Troubleshooting**

- A. Fault Isolation of Heading Errors
- B. AHC-3000 Troubleshooting
- C. FDU-3000 Troubleshooting

## **VII. Summary/Test**