Problem C16. (Unified Computers and programming)

1. An aircraft in flight is characterized by:
   a. Aircraft number
   b. Latitude
   c. Longitude
   d. Heading
   e. Velocity

   Define an Ada95 record that contains the description of an aircraft.

2. Write an Ada95 program to:
   a. Create an array of 10 aircraft (using user input).
   b. Sort the aircraft in ascending order, based on Latitude
   c. Compute the distances between the first aircraft and all other aircraft.

   Turn in a hard copy of your algorithm and code listing and an electronic copy of your code. Turn in the results based on the test data provided to you.

   **Hint:** Use WGS-84 to transform the latitudinal and longitudinal separation into nautical miles.