Module 1D

Modern Navigation Systems

The Research Project

Summary of the Project Requirements

- The research project will require a trip or visit to a site important in the history of navigation (e.g., the Mason and Dixon line), or a visit to an operational facility involved with navigation, such as an airport control tower.

- Alternatively, students can conduct telephone or email interviews with a person or persons involved with navigation.

- The fundamental requirement is that students identify and use a <u>primary</u>, rather than secondary, source of information. Using information obtained only from secondary sources (e.g., Wikipedia or textbooks) will not be acceptable.

- The report will be presented online to the instructor and interested students in the form of a trip report, rather than as a traditional research paper. Emphasis will be on creativity and originality, in contrast to the highly mathematical nature of the traditional homework assignments.

What the Research Project is and <u>is</u> <u>not</u>!

- The project is not a term paper
- It is about your activities, not a description of someone else's
- It is okay to crash and burn
- Think of this as a "VisionQuest" for suburbanites
- Get outdoors and do something that you would not otherwise do!

Some example projects

- Visit and GPS-locate sites on the Mason-Dixon Line
  - The Wedge
  - Fort Frederick State Park
  - New Castle, DE
- Get a tour of the operations center at a local airport
  - This sometimes enables a visit to the control tower
- Visit the latitude observatory near JHU's Montgomery County, MD site

Examples (cont'd)

- Visit the Coast Guard's GPS Laboratory or the US Naval Observatory

- Interview a harbor pilot

- Borrow a sextant and make your own celestial observations

- Visit some of the sites on the Underground Railroad

Examples, cont'd

- Visit a ship at Norfolk during the weekly open house

- Visit a historic ship
  - Constellation, in Baltimore
  - Nautilus, in New London

- Visit the Maritime Museum in Newport News

Examples, cont'd

- Note, however, that travel or additional expenses are not required
  - Something local can be identified and pursued just about anywhere in the world!

End of Mod 1D

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