

The AEGIS System: A Historical Perspective

Presenter: Mr Robert T. Hill

Venue: SA Water Lecture Theatre
Mawson Centre
Mawson Lakes Blvd
(Library Building)
Mawson Lakes SA

Date: 21 November 2007,
5:00pm–6:00pm

Abstract

There has been considerable interest around the world in the important “AEGIS” system used extensively by the US Navy and other partner nations. The heart of this important combat system, particularly of its AAW capability, is its phased array radar, the S-band AN/SPY-1. In his civil service career with the US Navy, Mr. Hill was responsible for the earliest (1960s) concept formulation of this radar, from the beginning designed fully as a part of the system it supports, and then was the Navy’s project manager of its development (1970s) and its subsequent deployment in the AEGIS cruisers. He was also the first total combat system engineer of the successor destroyer system (then the DDGX, now the Arleigh Burke class) during the industrial competition for that development (1979, 1980).

Mr. Hill will informally discuss early “tradeoffs” leading to various design decisions, various experiences (typical of such a project) during development and testing, and conclusions one can draw about such engineering.

Seminar Outline:

- A little AEGIS history;
- Answering the skeptics’ questions: “How will I know it’s forming a beam?” among others;
- The transition “from paper to practice” – a half dozen or so stories;
- Experienced principles of “System Engineering”, and challenges today.

Of course, AEGIS performance is itself not addressed; the nature of such engineering development is the focus.

Presenter

Mr. Robert T. Hill received the BS (Iowa State University) and the MS (University of Maryland), both in EE, in 1957 and 1967. In 1960, after working in industry and as an Air Force officer, he began government civilian service, retiring in 1988, in the development of naval radar. He began teaching professional seminars in 1975, continuing today with many sponsors worldwide. He chaired the IEEE international radar conferences in 1975, 1980, 1985 and 1990, and continues in the organisation of those and related conferences abroad. He has written chapters of books, conference papers and magazine articles, and writes radar entries for the McGraw-Hill Encyclopedia of Science and Technology. During the last six years he has taught more than 12 radar courses to enthusiastic Defence audiences, both civilian and military.

Bookings Essential

Bookings for this FREE event are essential.

Phone: (08) 8302 3928

Fax: (08) 8302 3115

Email: industryeducation@nicta.com.au

Format of the Seminar

17:00–18:00 Presentation
SA Water Lecture Theatre

18:00–19:00 Refreshments