

## **OVERVIEW**

Using as a basis the evaluated data in existing ESDU Data Items there have been prepared a number of prototype interactive programs for use on small computers. These programs, together with the user documentation and related basis material, are called COMpacs. Each COMpac is designed for use by a professionally qualified user though it requires no special computer or language knowledge; plain English is used throughout.

The advent of the powerful small computer with graphics facilities, and the continually decreasing unit cost of such equipment, open up new prospects for the application of high speed computation to engineering design and analysis. The time related costs and inhibitions which often accompany the individual engineer's use of a main-frame computer via a terminal have, in ESDU's own experience, largely been dispersed by the introduction of the small, stand alone computer such as the Tektronix 4050 series.

The increasing availability of such equipment to the engineer in industry, together with interactive programs such as the new COMpacs, allows him to take decisions while the program is executing, removing the need for prior numerical formulation of those decisions which arise with 'batch processing'. Print out and/or graphical display of intermediate results not only aids the user at the various decision points but also makes him more familiar with the technical background of the program and gives him confidence in it. COMpacs return control to the user from time to time, enabling him to apply (and thus further develop) his engineering judgement or to leave the program for as long as he wishes and seek the advice of colleagues on specific issues. These features also facilitate experimentation on the effects of varying one or more design parameters, thus giving scope for exercising the science of design.

Several ESDU COMpacs are now available in prototype form. The title, purpose and basis of each one is described by an individual SPECIFICATION which is accompanied by a SCENARIO outlining the sequence of the program execution and some of the options offered from the loading of the program cartridge to the presentation of a final answer.



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## DECCA AVIONICS FOR THE US COASTGUARD

Decca Loran-C navigation equipment has been chosen by the US Coastguard for their new fleet of ninety HH-65A helicopters.

The Decca ADL-82 equipment, designed for integration with the helicopter's Flight Management System, is the first airborne Loran-C receiver compatible with the MIL-STD-1553B multiplex digital interface.

The total value of this new contract, excluding spares and other options, will exceed \$1.5 million and follows the recent procurement of Decca Loran-C equipment for the US Coastguard fleet of forty one HU25A Falcon Jet aircraft.

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