

THE ROYAL AERONAUTICAL SOCIETY

4 Hamilton Place, London W1V 0BQ. Tel: 01-499 3515

HIRING FACILITIES

The Lecture Theatre and certain rooms at the Royal Aeronautical Society headquarters are available for hire. For information on the cost of hiring, please contact Mrs. E. Montagu at the above address.

Sessions: Mornings 08.30-13.00. Afternoons 13.30-18.00. Evenings 18.30-20.00.

LECTURE THEATRE	2000 sq ft, Seating Capacity 304. Air conditioned. Entrance via Foyer suitable for reception. (The services of a fully qualified Projectionist can be provided.)
COUNCIL ROOM	650 sq ft, Seating Capacity 30 (ground floor).
*FOYER	550 sq ft.
COMMITTEE ROOM 2	490 sq ft, Seating Capacity 16 (2nd floor).
COMMITTEE ROOM 5	Seating Capacity 12 (5th floor).
Audio Visual Aids	(Available in Theatre and in all rooms by arrangement.) 35 mm slide projector, 16 mm cine projector, Vugraph, blackboard, audio recording and playback.
Services	Morning coffee and biscuits. Afternoon tea and biscuits. Cloakroom attendant per day or per session.
	Sandwiches for 'working lunches' in committee rooms are available if ordered in good time. For details please apply to the Lectures Secretary.
*Available only on special occasions.	

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(name of publication)





SPECIFICATION

SUBJECT: Fatigue damage estimation under variable amplitude loading.

PURPOSE: This is an interactive program, with graphics, enabling the user to make reasonable engineering estimates of the fatigue life of a component subjected to a variable amplitude and variable mean loading. The package is based on ESDU's well tried methods of fatigue life estimation which take account of inelastic behaviour at stress concentrations, thus overcoming the serious limitations of elementary Miner's Rule calculations, but without demanding expensive and extensive testing to establish special material properties data. The main input data required are the expected loading history together with points from the constant amplitude SN curve for a notched and an unnotched set of specimens of the material, and stress concentration factors for the component and the notched test specimens. The COMpac enables the professionally qualified user, though having no special computer or language knowledge, to make fatigue life estimates directly, to follow the process involved stage by stage, and to ascertain quickly the effect of modifications to the geometry, material or loading on the life of the component.

BASIS: ESDU Data Items 76014, 76016 and 77004 with latest amendments.

MECHANICAL DETAILS: The COMpac comprises a User's Manual, ESDU Data Items 76014, 76016 and 77004, and a program currently available in the following form(s):

1. DC-300A Data Cartridge for Tektronix 4051 (16k version), 4052 or 4054.



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