GEORGE C. MARSHALL SPACE FLIGHT CENTER

USERS MANUAL

MARSYAS

MARSHALL SYSTEM
FOR AEROSPACE SIMULATION

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by

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PREFACE

In the design analysis, evaluation and checkout of complex aero-space systems, many simulations of varying depth have to be performed to test all possible mission conditions. The MARshall SYstem for Aerospace Simulation (MARSYAS) is a software system that allows easy setup and control of the simulation of the continuous dynamics of large physical systems on a digital computer. Moreover, the MARSYAS language has capabilities not found in other digital simulation languages. The language is particularly suited to the engineer who has little experience in simulation and computer programming. The user need only be concerned with specifying the description of the physical model and the conditions of the problem. From the problem specifications, the MARSYAS system automatically produces tables or plots of the various designated variables of interest. The user is freed from any need to concern himself with the mechanics of the simulation.

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January 1974

TABLE OF CONTENTS

2

TABLE OF CONTENTS (Continued)

TABLE OF CONTENTS (Continued)