

NASA TECH BRIEF

Langley Research Center



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The Langley Research Center NASA/PERT TIME III

The problem:

Many organizations need a practical system for total project management in the areas of planning, scheduling, resource control, and reporting which will utilize existing management and administrative tools and processes and will be applicable to many types of projects/programs.

The solution:

A computer program, the Langley Research Center NASA (LaRC NASA)/PERT TIME III, can be used to develop time, cost, and manpower controls.

How it's done:

The system utilizes a time-oriented logic-flow network structure. The network represents the sequence of work elements required to achieve an objective. Beginning events mark the origin of the network, and ending events mark terminal points. Activities represent the action in the network, such as planning and building.

Time estimates are created for the work elements of the network, and the flow between network elements is established. The time estimates, together with the data on network flow, are prepared as input for processing. The system outputs include activity and milestone reports as well as schedule and resource plots.

The LaRC NASA/PERT TIME III program has incorporated many of the important features of the earlier logic-flow system plus many improved and desirable innovations to further assist the user. These added capabilities include: reduced field length required to process networks; an option to obtain slack-time computations on scheduled completion date; improved plotting capability; an option to obtain multiple-year plotting of resources; the ability to obtain unique reports designed by the user for specific and/or one-time requirements, and others.

Notes:

1. The program is written in FORTRAN IV for CDC 6000 Series Computers with RUN compiler. Plotting is optional and requires Calcomp or Varian plotters.
2. Inquiries concerning this program should be directed to:

COSMIC
112 Barrow Hall
University of Georgia
Athens, Georgia 30601
Reference: LAR-11887

Source: Project Schedules and
Analysis Group
(LAR-11887)

Category: 09 (Mathematics and
Information Sciences)