

TECHNICAL OVERVIEW
STRUCTURAL DYNAMICS

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Structural dynamics technology development in support of SSME was initiated in November 1980. The objective identified were to develop improved understanding of the operating dynamic characteristics of high-performance liquid rocket systems in order to:

- o increase lifetime and performance
- o decrease weight
- o identify incipient failures
- o meet deflection requirements
- o decrease costs
- o predict effect of imposed changes
- o determine changes to meet specified requirements

A series of tasks was identified and work was started on the most urgent tasks. In 1983, the program was made into a joint program with NASA-Lewis Research Center. A complete description can be found in the RTOP.

The papers presented at this conference give results from some of the earlier tasks as they near completion. A considerable amount of effort is represented and significant progress is reported.