

PROGRESSIVE WELDER & MACHINE COMPANY

Special Machine Division

915 Oakland Avenue

Pontiac, Mich.

FINAL REPORT

CONTRACT: NAS8-11787

GPO PRICE \$ _____

CFSTI PRICE(S) \$ _____

FACILITY FORM 802

N 66-16067

N 66-16067	
(ACCESSION NUMBER)	(THRU)
7	1
(PAGES)	(CODE)
CR 69693	15
(NASA CR OR TMX OR AD NUMBER)	(CATEGORY)

Hard copy (HC) 1.00

Microfiche (MF) 50

ff 653 July 65

**PREPARED FOR: George C. Marshall Space Flight Center
National Aeronautics & Space Administration
Huntsville, Alabama**

**PREPARED BY: Carl H. Baum, Project Manager
October 15, 1965**

In the initial phase of this contract, we performed design studies to determine the feasibility of a "Soft tooling" approach for the Semi-Toroidal Test Tank. These studies were developed on the basis of concepts and criteria originated by MSFC.

A conference was held at MSFC on August 28, 1964 to discuss and evaluate the design proposals resulting from our studies. The predominating opinion of the conference was that the feasibility of "Soft tooling" had not been conclusively demonstrated, and that no further design efforts in this direction should be undertaken.

The design of tooling for the Semi-Torodial Test Tank was thereafter performed by MSFC. These designs were submitted to the contractor for cost and lead time estimates. Although this tooling represented solutions to novel production problems, the tooling itself was based on concepts of locating and clamping components which had proved to be workable in the past.

In producing this tooling, the problems encountered were of the kind that is normally anticipated whenever a new design is transformed into hardware. Specific problems encountered on the drawings were covered with Deviation Approval Requests, Tool Design Change Requests, or noted in the monthly progress reports.

Final Report - NAS8-11787

Under the circumstances there was no occasion for the contractor to generate "tables, graphs, diagrams, curves, sketches, photographs, and drawings." Any requirements of this nature would have to result from directives specifying objectives to be achieved, and the allocation of funds to perform the work.

The period of performance under Contract NAS8-11787 ended on September 1, 1965. All work was stopped at that time, and all tools produced under the contract were shipped to MSFC.

PROGRESSIVE WELDER & MACHINE CO.

Carl H. Baum

Carl H. Baum, Project Manager

CHB:vr