

# NASA TECH BRIEF



NASA Tech Briefs are issued to summarize specific innovations derived from the U.S. space program, to encourage their commercial application. Copies are available to the public at 15 cents each from the Clearinghouse for Federal Scientific and Technical Information, Springfield, Virginia 22151.

## Tube Welding and Brazing

Brochures have been prepared outlining the tools, equipment, materials, and techniques used by the George C. Marshall Space Flight Center for joining tubes by automatic and semiautomatic welding and brazing. Three methods are used in tube joining by welding; one method using a filler, and two methods not requiring filler wire. Induction brazing is being developed to provide high-quality joints, while a solid state induction brazing power supply is in the research and development stage.

A few of the metals being joined by brazing or welding are Hastelloy C, 304L, 321, and 347 stainless steels of various diameters and wall thicknesses. Techniques have been developed for on-site or work-bench repair.

### Note:

Documentation is available from:  
Clearinghouse for Federal Scientific  
and Technical Information  
Springfield, Virginia 22151  
Price \$3.00  
Reference: TSP69-10085

### Patent status:

No patent action is contemplated by NASA.

Source: R. M. Poorman  
(MFS-20348)

Category 05