



Research and Technology Activities Supporting Closed-Brayton-Cycle Power Conversion System Development

By Michael J. Barrett

BiblioGov. Paperback. Book Condition: New. This item is printed on demand. Paperback. 24 pages. Dimensions: 9.7in. x 7.4in. x 0.1in. The elements of Brayton technology development emphasize power conversion system risk mitigation. Risk mitigation is achieved by demonstrating system integration feasibility, subsystem component life capability (particularly in the context of material creep) and overall spacecraft mass reduction. Closed-Brayton-cycle (CBC) power conversion technology is viewed as relatively mature. At the 2-kWe power level, a CBC conversion system Technology Readiness Level (TRL) of six (6) was achieved during the Solar Dynamic Ground Test Demonstration (SD-GTD) in 1998. A TRL 5 was demonstrated for 10 kWe-class CBC components during the development of the Brayton Rotating Unit (BRU) from 1968 to 1976. Components currently in terrestrial (open cycle) Brayton machines represent TRL 4 for similar uses in 100 kWe-class CBC space systems. Because of the baseline component and subsystem technology maturity, much of the Brayton technology task is focused on issues related to systems integration. A brief description of ongoing technology activities is given. This item ships from La Vergne, TN. Paperback.



READ ONLINE
[7.29 MB]

Reviews

Very helpful to all category of individuals. It is definitely simplified but surprises inside the 50 percent of your pdf. I am very happy to inform you that this is actually the very best pdf i have read in my very own lifestyle and may be he finest pdf for actually.

-- **Christelle Treutel**

It in a of my personal favorite book. It is writter in easy terms and never hard to understand. Its been designed in an exceedingly easy way and it is only after i finished reading this publication by which in fact changed me, change the way i think.

-- **Lucinda Stiedemann**

