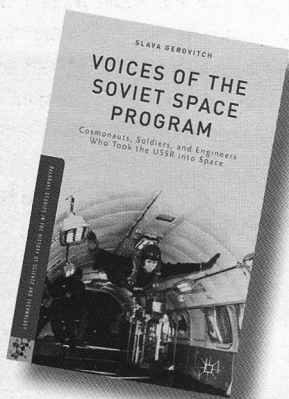


coverage of an industry that gave birth to the space age. There must be many members of the BIS out there with an equal interest in the development of aviation as well as space and for them this is a little gem.

**Michael Sharp**



**Slava Gerovitch**  
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## Voices of the Soviet Space Program

A lot of information about the Soviet space programme up to the point of the collapse of the communist government in 1991 has been made public. Some of it has been unearthed through erudite research by Western historians and specialists and a lot of it has come from the Russian scientists and engineers themselves. Of this latter category, most has come in the form of diaries, notes and autobiographical texts. It is the role of the historian to extricate motive from narrative and to separate subjectivity from assertion. That has sometimes been difficult due to the strained circumstances in which most of these Russian specialists operated. Rarely has such a diverse group of people been directly interviewed, as they have been for this book, with searching questions revealing new aspects of the Soviet space programme for which they worked.

Slava Gerovitch is a lecturer in Mathematics at the Massachusetts Institute of Technology and David Mindell, author of the seminal work *Digital Apollo*, persuaded her to conduct an oral history project through interviews in Russia conducted during 2002, 2004 and 2006. Gerovitch has not chosen to interview the senior leadership in the former Soviet space programme but rather the less well known scientists and engineers in addition to some cosmonauts who frequently have a very different story to tell. Great biographies and the writings of the senior space dignitaries, while useful in telling the relationship with political leaders and decision-makers, frequently resort to image-

protection and self-justification for flawed action.

Because this book concentrates on the men and women who went out to do the work the world would come to admire and respect, it has the more intense and uncompromising narrative of honest people speaking of events during turbulent and dangerous times. In some instances, it is informative to compare the management-line with that of the cosmonauts living with rapidly advancing technology and working problems only theorized about in offices and among planning groups separated from the events they planned.

This ability to make comparisons in recollection and to analyse different perspectives allows historians to balance personal subjectivity with fact. One example being the explanation for the near-failure of the Soyuz 15 in 1975, attributed by Chertok in his four-volume memoir to crew ineptitude. Crewmembers Sarafanov and Demin tell a very different story. Recollections vary and each defend their individual conclusions about the events in which the crew were blamed for not shutting down the automatic systems quickly enough and which they claim they were never briefed on procedures to rectify the failure. The official line was tempered by the forthcoming Apollo-Soyuz docking flight and the Soviets wanted to avoid American concerns that their spacecraft had dangerous technical flaws.

Official histories and comprehensive archived memoirs are one source but they invariably paint a skewed picture defined by the objectives of the commissioning body – be it government department or publisher. Slava Gerovitch has purposely set out to go beyond the familiar territory and record the history of those times through the recollections of engineers from rival design bureaus, cosmonauts and cosmonaut trainees, information technology specialists and military officers responsible for construction and operational running of facilities and government machine works.

There are several fascinating insights to Soviet bureaucracy and entrenched cultural and ideological traits such as the distrust of the individual, which infuriated most cosmonauts when it resulted in an almost complete absence of manual authority over their Vostok, Voskhod and Soyuz spacecraft. But not all thought that way, a counter-view expressed by spacecraft design engineer Konstantin Feoktistiov, the only cosmonaut not to carry a Party card. He believed that cosmonauts were there to carry out research and not to fly the vehicle. It was a judgement sustained when he flew aboard Voskhod 1 in October 1964.

This book is a valuable resource rich in frank recollections of less well known Russian and Soviet personalities, as well as important cosmonauts such as Vladimir Shatalov, who reveals a complex web of contacts across the industrial, scientific, engineering and political hierarchies in this small but seminal work. It has no illustrations but is all the better for a comprehensive set of notes and references.

**David Baker**