



Soyuz – a universal spacecraft

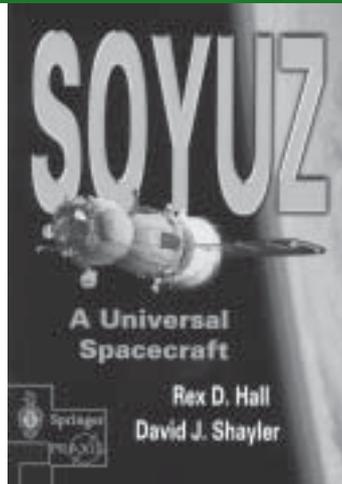
by Rex D. Hall & David J. Shayler

Springer–Praxis, 2003. ISBN 1-85233-657-9. Pp xv + 459. £24.50 (pbk).

The *Columbia* shuttle disaster of last February grounded the American manned space programme. As a consequence the International Space Station became totally dependent on the Russian *Soyuz* spacecraft for re-supply and manned transport. *Soyuz* has an extraordinary history dating from the first manned flight in 1967 through to the present time. Throughout that period the spacecraft has gradually evolved, taking advantage of new systems and an updated carrier rocket to increase the payload it can carry into space. Various derivatives, such as the *Progress* series of unmanned supply vehicles, have been crucial to the Russian, and now international, space programme for years.

The Russians are strong proponents of the ‘if it works, don’t fix it’ approach to space travel and, to the untrained eye, *Soyuz* and its R-7 carrier rocket look the same now as they did back in 1967. In fact this carrier rocket, developed from the early Soviet ICBM, is now used to launch commercial payloads with a very high reliability, and *Soyuz* has even transported fare-paying passengers into space. Both of these applications provide much-needed foreign funds to the Russian economy.

This is an excellent book, probably the definitive reference on the *Soyuz* spacecraft. The two authors have drawn from a wide range of sources, including personal discussions with cosmonauts involved in the programme and material recently made available following the collapse of the Soviet Union. The chapters are well-illustrated and easy to read and the vital statistics of each mission are included in



concise, easy-to-use tables. There are a few minor typographical errors but none of these detract from the overall quality of the book. One which I must mention however occurs during the discussion of the harsh operating conditions at the Baikonur launch site. We are told that workers have to deal with winds ‘gusting at 7–8km per second’. Tough people these Russians...

The future of *Soyuz* is now dependent on the limited and erratic funding available in the new Russia, but following February’s disastrous events *Soyuz* is the only manned show in town and the ISS is totally dependent on this venerable spacecraft. *Soyuz* will be around for many years to come and this book is an excellent reference. I highly recommend it.

Nick James

In addition to serving as BAA Papers Secretary, Nick James is leader of a team which has implemented the latest generation of spacecraft tracking and telemetry receivers now being deployed in the European Space Agency ground station network.

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