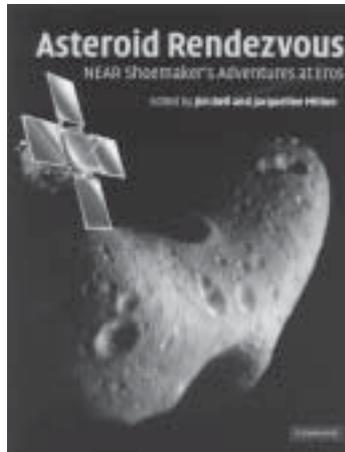


Asteroid Rendezvous: NEAR Shoemaker's adventures at Eros

by Jim Bell & Jacqueline Mitton (Eds)



Cambridge University Press, 2002.
ISBN 0-521-81360-3. Pp xiii + 115,
£27.95 (hbk).

The touchdown of the NEAR–Shoemaker spacecraft on the surface of 433 Eros on 2001 February 12 marked the culmination of the Near Earth Asteroid Rendezvous mission, an extraordinarily successful five-year journey to explore strange new worlds, to search out new landforms, in fact to boldly go where no craft had gone before. Indeed Captain Kirk would have been proud to have been on board, but at 1100 kilograms all-up weight, there was insufficient payload for any human on this occasion. Instead, an array of remote-sensing instruments was on hand to witness the historic landing.

No spacecraft had ever before taken a long close-up look at an asteroid. NEAR–Shoemaker was the first to do so, achieving orbit around Eros, an asteroid named after the Greek god of love, on the suitably appropriate Valentine's Day 2000. It was designed as an orbiting craft and after first making a flyby of the C-type asteroid, 253 Mathilde, NEAR spent virtually an entire year gazing intently at the surface of Eros before finally making a controlled descent to the surface.

Internet users were able to follow the mission as it unfolded on the official NEAR website (<http://near.jhuapl.edu>), including the aborted first attempt to fire the main engine and the failure to put the craft into orbit back in 1998, followed a year later by a whole series of images taken from orbit. With the publication of this book much of this disparate information has now been brought together in one volume, for which this reviewer is especially grateful.

The book is an edited compilation of nine personal essays from members of the mission team, together with a foreword by Carolyn Shoemaker. It does not purport to be a systematic description of what took place in conventional book format but is, instead, a series of stories and vignettes on the nature of asteroids and the workings of a complex space mission. Given this format, it is not the sort of book which impels the reader to devour its contents from cover to cover but is rather a collection of stand-alone chapters, each written in a particular style, and each of which is

a complete story in itself.

There exist a few shortcomings and errors. The rotation period of Eros is 5.270 hours and not '5 hour 27 minute' as stated on page 33. Two small images of the Pleiades and the Beehive Cluster are poorly reproduced with the former being a mirror image of the star cluster and the latter containing no recognisable stars. Also, the text repeatedly refers to 'Comet Hyukatake' whereas the correct spelling is used in an inset photograph depicting the inner coma of Hyakutake. Reading a good portion of the book at one sitting proved rather heavy going mainly because of the rather tiring amount of repetition from chapter to chapter: in the main a consequence of the book's format.

On the whole I am pleased with this hardcopy record of what was an exciting mission with many thrills and spills for the reader to follow. I particularly appreciated the bibliography page, which contains some excellent and very pertinent pointers for further information, including books, general articles, technical papers and websites. I for one will want to follow up on some of the details mentioned in the text for which I now have an appetite to learn more.

Richard Miles

Dr Richard Miles has served as Assistant Director of the Asteroids and Remote Planets Section of the BAA since 1984.

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