



## Digital Apollo: Human and Machine in Spaceflight

By David A. Mindell

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*Digital Apollo* examines the design and execution of each of the six Apollo moon landings, drawing on transcripts and data telemetry from the flights, astronaut interviews, and NASA's extensive archives. Mindell's exploration of how human pilots and automated systems worked together to achieve the ultimate in flight -- a lunar landing -- traces and reframes the debate over the future of humans and automation in space. The results have implications for any venture in which human roles seem threatened by automated systems, whether it is the work at our desktops or the future of exploration.

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### Editorial Review

#### Review

[A] wealth of research that even the most informed space fans can enjoy. Mindell avoids the temptation to glorify the space program, instead dealing with the nitty gritty logistics involved in getting a man to the moon. *Digital Apollo* succeeds in providing an inside track to one of the most difficult technological challenges of the 20th century.

(James Thorne *coolhunting.com*)

Mindell joyfully plumbs the deep history of Apollo's decade-long clash between the MIT eggheads who built the computers and the thrill-jockey military test pilots who used them.

(IEEE Spectrum)

*Digital Apollo* is an excellent and unique historical account of the lengthy, and often pitched struggle of designers, engineers, and pilots to successfully integrate man and complex computer systems for the Apollo lunar landings. It brings back fond memories.

(Edgar Mitchell, Sc.D.; Captain, USN (retired) Lunar Module Pilot, Apollo 14)

Mindell's well-written book deals with a terribly important and often overlooked aspect of space age technology. Commentators often present space exploration in the form of a two-sided debate, where advocates of robotics confront advocates of human flight. As Mindell adroitly demonstrates, the engineers who designed the spacecraft that actually flew to the Moon created by necessity a third position, fashioning a practical solution that stood in between the astronaut as automaton and the astronaut as a pilot fully in control. This is a 'must read' book for anyone seriously interested in understanding how space flight really works.

(Howard E. McCurdy, author of *Faster, Better, Cheaper*)

David Mindell's very important and accessible book precisely dissects Apollo history, proving Apollo a harbinger of our current digital era.

(Charles Simonyi, President and CEO, Intentional Software, and Participant, Soyuz TMA-10 Mission to the International Space Station, April 2007)

*Digital Apollo* takes the reader on a wild ride following the impact of the increasingly complex world of data processing, control, and display on space flight. The book traces the evolution of man's role aboard high speed aircraft, the hybrid X-15, and ultimately space flight, and the lunar landing. This book is fascinating history and an important resource for future space explorers.

**(Robert C. Seamans, Jr., Former Deputy Administrator, NASA)**

The book is a refreshing reminder that it is still possible to uncover new stories about the early years of the American space program.

**(Dwayne A. Day *Air & Space*)**

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#### About the Author

David A. Mindell is Dibner Professor of the History of Engineering and Manufacturing, Professor of Engineering Systems, and Director of the Program in Science, Technology, and Society at MIT. He is the author of *Between Human and Machine: Feedback, Control, and Computing before Cybernetics* and *War, Technology, and Experience aboard the USS Monitor*.

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This Digital Apollo: Human and Machine in Spaceflight book is absolutely not ordinary book, you have it then the world is in your hands. The benefit you get by reading this book will be information inside this guide incredible fresh, you will get data which is getting deeper a person read a lot of information you will get. This Digital Apollo: Human and Machine in Spaceflight without we understand teach the one who looking at it become critical in considering and analyzing. Don't end up being worry Digital Apollo: Human and Machine in Spaceflight can bring when you are and not make your handbag space or bookshelves' turn out to be full because you can have it inside your lovely laptop even mobile phone. This Digital Apollo: Human and Machine in Spaceflight having very good arrangement in word in addition to layout, so you will not experience uninterested in reading.

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