NEW BOOKS & MEDIA

Scientists Under Surveillance

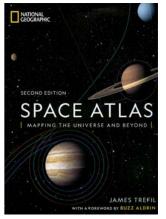
The FBI Files

JPat Brown, B. C. D. Lipton, and Michael Morisy, eds. MIT Press, 2019. \$24.95 (paper)

Throughout the Cold War, FBI director J. Edgar Hoover kept tabs on some of the most renowned scientists in the country. Nonprofit news site MuckRock filed thousands of Freedom of Information Act requests to obtain the files of figures such as Hans Bethe, Richard Feynman, Carl Sagan, and Vera Rubin, and MIT Press has now made them available in paperback. Many of the documents in *Scientists Under Surveillance* are



heavily redacted, but the collection still makes for fascinating reading. The level of detail is often unnerving. For example, the FBI tracked every train, airline, and hotel reservation for the visiting Hungarian mathematician Paul Erdős on the following grounds: "While not identified as a communist, Erdos has maintained his ties with communist Hungary, allegedly to protect the pension being paid to his aged mother." The collection will be a welcome resource for students, teachers, and researchers.



Space Atlas

Mapping the Universe and Beyond James Trefil

National Geographic, 2018 (2nd ed.). \$50.00

In anticipation of the 50th anniversary of the first Moon landing, National Geographic has revised its *Space Atlas*, a beautifully illustrated compendium of photos, graphics, maps of our solar system, and more, with text written by physicist James Trefil. Because of the many discoveries made since the atlas was first published in 2012, new material has been added on topics such as gravitational waves, Mercury's polar craters, and the dwarf planet Ceres. Former astronaut

Buzz Aldrin, the second person to walk on the Moon, provides a new foreword in which he discusses Earth's natural satellite and its role in space exploration.

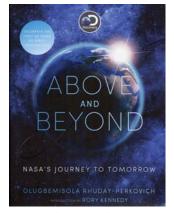
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Above and Beyond

NASA's Journey to Tomorrow

Olugbemisola Rhuday-Perkovich Feiwel and Friends, 2018. \$19.99

To "look back over the last sixty years and look forward to the next" is the goal of this glossy coffee-table book filled with photos and illustrations of spacecraft and space phenomena, profiles of significant figures in NASA's history, and fun facts and trivia. Published to accompany a documentary film of the same name, *Above and Beyond* starts with the creation of NASA in 1958 and covers the agency's original goals, progress over the past six decades, and



plans for the future. Although the book is a celebration of all things NASA, author Olugbemisola Rhuday-Perkovich does touch on such issues as racial and gender discrimination in NASA's early history.

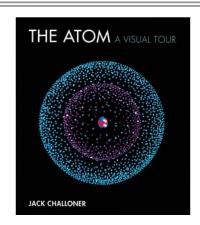
GPS Paul E. Ceruzzi MIT Press, 2018. \$15.95

(paper)
Part of the MIT Press Es-

sential Knowledge series, *GPS* centers on the history and development of the satellitebased radio-navigation system that has become ubiquitous. Author Paul



Ceruzzi, curator at the Smithsonian Institution's National Air and Space Museum, starts off with a brief overview of early navigation systems, then launches into a discussion of how and why GPS developed and became the military and commercial behemoth it is today. The pocket-sized volume is illustrated with blackand-white photos and includes a timeline and suggested further reading.



The Atom

A Visual Tour

Jack Challoner MIT Press, 2018. \$33.00

Beautifully illustrated with photos, diagrams, and artistic renderings, *The Atom: A Visual Tour* lives up to its title. The excellent imagery complements science writer Jack Challoner's text, in which he presents a comprehensive study of what was once thought to be the fundamental building block of matter. As Challoner shows, our concept of the atom has evolved over the past 2500 years as we've learned more about its structure and properties through our ever-improving technologies. Aimed at the general reader, the text is an introduction to current theory and what it has revealed about our world.