

imposition of a multitude of restrictions, no-fly zones, and other rules of engagement also benefited the enemy and frustrated U.S. operations. Failure to adhere to the rules often led to disciplinary actions, such as the high-profile court-martial of General John D. Lavelle, recounted here in detail.

Upon assuming the presidency, Richard Nixon left restrictions in place, but when his patience ran out he unleashed massive air operations against Hanoi and Haiphong, including the B-52's Christmas raids. This campaign finally brought an end to U.S. involvement and the return of many of the American P.O.W.'s—mostly airmen shot down during years of operations in the north. Early proponents of the massive bombing raids seemed vindicated at last.

Thompson's impressive account of the period is supported by inclusion of more than a hundred pages of notes, statistics, maps, documentation, and bibliography. —*Lieutenant Colonel Bob Hanson, U.S. Air Force (ret.), flew 122 missions in F-4Es while assigned to the 469th Tactical Fighter Squadron at Korat air base, Thailand.*

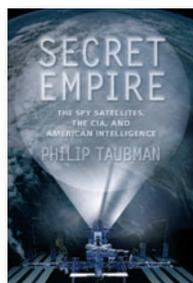
## Secret Empire: Eisenhower, the CIA and the Hidden Story of America's Space Espionage

by Philip Taubman. Simon & Schuster, 2003. 464 pp., \$27.00.

**V**eteran military reporter Philip Taubman has written a gripping and important book about the evolution

of America's high-altitude military reconnaissance during three decades of the cold war beginning in 1946. He deftly contends that elements of the U.S. government were so intent on perfecting the science and technology of spying that they neglected to properly fund enough ground-based human intelligence while spy planes and spy satellites eventually generated too much information to interpret and use in a timely manner.

In concentrating on the development of the CL-282 (otherwise known as the U-2) and the WS-117L—the United States' first orbiting spy satellite—Taubman uses a wealth of detail about flying conditions and political realities to convey the urgency that propelled the engineers, craftsmen, and airmen involved.



The author portrays President Dwight Eisenhower as a strong, intelligent, and farsighted statesman whose twin concerns about Soviet surprise attacks and the

safety of American airmen (from 1950 to 1970 the United States lost more than 250 airmen in spy missions) set the nation on its course toward high-altitude reconnaissance. Eisenhower also determined that the Central Intelligence Agency, rather than the squabbling branches of the military, should take the lead role.

Taubman is at his best when describing the challenges facing aviation engineers, camera designers, and the pilots who initially were asked to fly arduous long-distance flights at altitudes over 70,000 feet. A U-2 pilot, for example, could fly for eight hours at a time in conditions akin to those atop Mt. Everest and expect to lose six pounds attempting to hold the lightweight spyplane at its safe cruising speed—between 446 and 453 mph. Later, pilots were trained to snag parachute-slowed capsules containing high-resolution cameras and instruments as they descended from orbit. The WS-117L experienced a dozen disastrous launches before it finally worked right, though all the while the Soviets were launching ever more audacious space missions.

—*Nan Chase last reviewed Survival City: Adventures Among the Ruins of Atomic America for Air & Space.*

## Celestial Delights: The Best Astronomical Events Through 2010

by Francis Reddy and Greg Walz-Chojnacki. Ten Speed Press, 2003. 249 pp., \$19.95.

**I**f you get turned around in planetariums or wish that someone could explain the night sky clearly—slowly—here's your book. Part star chart, part calendar, and neither narrative nor reference, *Celestial Delights* is a fine primer for those craving a scout leader's familiarity with the heavens.

The authors elucidate the mechanics of eclipses, retrograde planetary motion, comet flybys, moon phases, and other events plainly and accessibly and always include tangential trivia that can be used to impress friends—a device that occasionally leads to longwindedness.

The most charming details by far are star myths from ancient tribes and civilizations. Perhaps the most delightful tells the tale of a vengeful Chinese sun god who places a heavenly river between his daughter Chih-nu (the star Vega) and her mortal lover Ch'ien-niu (Altaire), only to see them reunite on a bridge of magpies. Indeed, Reddy and Walz-Chojnacki take particular pleasure in pointing out historical implications of astronomy, even extrapolating circumstances and dates during which Biblical events may have occurred.

Unfortunately, the book is undermined by maddeningly uneven illustration—an unforgivable sin for such a visual subject.

While charts are well thought out and clear, color plates are wasted on trite close-ups of planets, indecipherable star fields, and *two* time-lapse photos of the moon over Tulsa. Meanwhile, more spectacular shots of comets and coronal mass ejections are printed with all the clarity of a second-generation photocopy.

*Celestial Delights* is alternately fascinating, dry, well written, and repetitive; it's best digested with short bursts of heightened concentration and a caffeinated beverage—try it with a hot cocoa before May 16's lunar eclipse.

—*Sam Goldberg is an associate editor at Air & Space.*



### REFERENCE

#### The Airline Encyclopedia 1909-2000

by Myron J. Smith Jr. Scarecrow Press, 2002. 3,376 pp. (three volumes), \$695.00.

This heavyweight and pricey set is virtually worth its weight in gold. Profiles include all airlines, charter, cargo, firefighter units, offshore helicopter companies, and airship operators. Also provided are company histories, accident/incident statistics, routes, and financial info. The author has compiled 6,556 entries, which prices out to a shade over 10 cents per record.

