

Reviews & Previews

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Magic in the Mojave

Spacecraft designer Burt Rutan takes us a little closer to the future.



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On August 7, 2003, *SpaceShipOne* made its third test flight. After being released by its mothership, *White Knight*, *SpaceShipOne* glided past the Tehachapi Mountains in southern California and landed safely 19 minutes after separation.

***SpaceShipOne:* An Illustrated History**

by Dan Linehan. Zenith Press, 2008. 160 pp., \$34.95.

THOSE OF US WHO GREW UP during the space race were promised an amazing future. When the 21st century finally arrived, I forgave those who'd suggested that I might date Barbarella or meet Mr. Spock, but how could they have been so terribly wrong about the flying cars? But then, in April 2003, aircraft genius Burt Rutan gave us *SpaceShipOne*, the world's first privately owned spaceship and winner of the

\$10 million Ansari X Prize. In *SpaceShipOne: An Illustrated History*, author Dan Linehan gives a thorough behind-the-scenes account of how the future suddenly became cool again. Packed with more than 230 photographs and detailed drawings, *SpaceShipOne* is a visual feast that puts the reader inside the hangar as well as the cockpit. Don't think of this as a coffee table book, however. Linehan has done his research. Through interviews, transcripts, and flight logs, he tells the story of the history-making effort while revealing many details: Such enormous wings were needed to

help ferry *SpaceShipOne* aloft that it actually took the carrier airplane, *White Knight*, longer to touch down than it took *SpaceShipOne* to go into space and land. Interviews with the people who worked on the project are as fascinating as the spaceship itself, and through their stories I found myself believing that the future is finally here.

■ ■ ■ BOB CRADDOCK, A SMITHSONIAN INSTITUTION GEOLOGIST, HAS BEEN A VISITING FACULTY MEMBER AT THE UNIVERSITE PARIS-SUD AND THE UNIVERSIDAD NACIONAL AUTONOMA DE MEXICO, WHERE HE HAS LECTURED ON SPACE AND PLANETARY SCIENCE.

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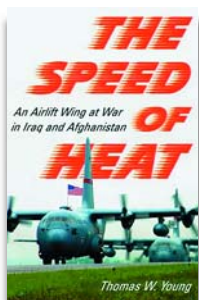
The Speed of Heat: An Airlift Wing at War in Iraq and Afghanistan

by Thomas W. Young. McFarland, 2008. 273 pp., \$35.

IF A HUNDRED PEOPLE in a given military action wrote about that action, you'd get a hundred different accounts of it; so goes an old adage. Thomas W. Young, a former news reporter, flew with the 167th Airlift Wing of the West Virginia Air National Guard, a unit that operated Lockheed C-130s in Iraq and Afghanistan. To build an image of collective experience, he interviewed 70-odd members of the unit, who narrate events during their tours. The result is the opposite of those images you often see of the view of an object through the compound eye of a housefly. This is the product of 70 pairs of eyes looking in every direction and seeing things from different perspectives.

One important impression Young captures is the bond in air guard units, like this one, in which the members have a regional tie and a kinship that most describe as "family." The reader meets a wide range of characters, from the wing commander, Colonel Eric Vollmecke, to Master Sergeant John "Ratman" Ratcliffe, a loadmaster who was on his way to work at Lowe's when terrorists attacked New York City and Washington, D.C., on September 11, 2001. When he called air guard headquarters to find out what was going on, he was told to report immediately. "As soon as I got home I called Lowe's and said, 'I'm not coming in,'" says Ratcliffe. "They said, 'We've been waiting for your call. We expected not to see you.'"

While there are many different reactions to fear, each member interviewed describes the emotion in similar words. They may refer to "pucker factor" and use other expressions common in military



Combat aircraft such as fighters and bombers may get the lion's share of

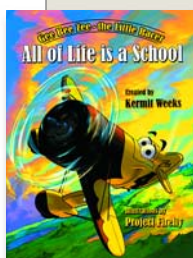
units, but not one of them denies having felt it.

This book makes the case that airlift and logistics are the heart of the military power of the United States.

attention, but they are able to do their jobs only because of units like the 167th. Historians will find this book of interest, but so will those weighing a decision about signing up for the air guard (if they can get past the book's cover price). It's as complete an impression of life in that branch as can be found on contemporary bookshelves.

■ ■ ■ **GEORGE C. LARSON** IS THE FOUNDING EDITOR OF *AIR & SPACE*/SMITHSONIAN.

>>> At a Glance <<<



All of Life Is a School

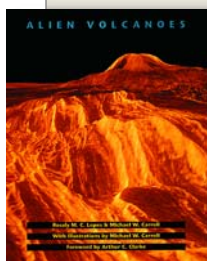
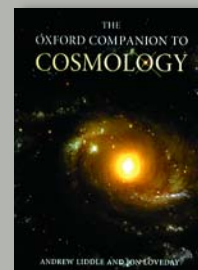
by Kermit Weeks. KWIP Publishing, 2008. 64 pp., \$19.95.

Airplane collector Kermit Weeks has created a whimsically illustrated children's book based on the collection at his Fantasy of Flight museum in Polk City, Florida.

The Oxford Companion to Cosmology

by Andrew Liddle and Jon Loveday. Oxford University Press, 2008. 343 pp., \$89.95.

With more than 350 entries from "axions" to "zone of avoidance," this reference is a must-have for anyone who seeks to understand the universe.



Alien Volcanoes

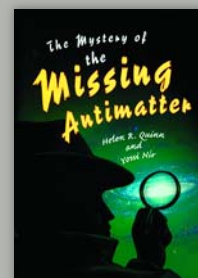
by Rosaly M.C. Lopes and Michael W. Carroll. Johns Hopkins University Press, 2008. 150 pp., \$29.95.

Numerous photographs, beautiful paintings, and carefully written text document volcanic activity across the solar system.

The Mystery of the Missing Antimatter

by Helen R. Quinn and Yossi Nir. Princeton University Press, 2008. 278 pp., \$29.95.

Two physics professors have written an accessible book that explains the history of anti-matter studies and recent advances in particle physics and cosmology.



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The Rescue of Streetcar 304: A Navy Pilot's Forty Hours on the Run in Laos

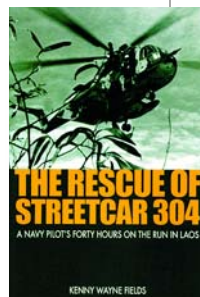
by Kenny Wayne Fields. Naval Institute Press,
2007. 384 pp., 29.95.

VIETNAM WAR books keep coming. Fortunately, the majority are excellent. The title of this book gives away the ending, but I can assure you a gripping adventure awaits. By reviewing military archives and contacting most of the airmen who risked their lives to save his, Kenny Wayne Fields has pieced together the story of his evasion.

In 1968, Fields, a young A-7 Corsair pilot, was stationed aboard the aircraft carrier USS *America* in the Gulf of Tonkin. On May 31, Fields and his wingman had an 0600 brief for their first-ever combat mission. Because of maintenance problems, however, their launch was repeatedly pushed back until the late afternoon, the very last "go" of the day. As a former U.S. Air Force fighter pilot and Vietnam vet, I found it extraordinary that the Navy would send two new guys, on their own, for their first combat mission. In the Air Force, we thought it much better to have an "old head" lead the way for at least the first few missions. (For an excellent book on Vietnam naval air doctrine, read *On Yankee Station* by John B. Nichols and Barrett Tillman.)

Fields, call sign Streetcar 304, checked in with the airborne control center, which advised him of a hot target near Tchepone in southern Laos. On his first dive-bomb run, he scored a direct hit on a river barge off-loading supplies. On his second pass, a blast from an anti-aircraft gun blew his right wing off. He quickly ejected. Fields was so low that after his parachute opened, he swung once and hit the ground. Hard. Two North Vietnamese soldiers saw him and gave chase, but he was able to lose them in the thick undergrowth.

For the next 39 hours, Fields was on the run. There were times when enemy



soldiers nearly stepped on him and times when they seemed to look right at him. Turning to prayer, Fields writes: "Now I wish I had consistently lived by the Golden Rule, and adhered to all the Ten Commandments, but I had not."

Within 40 minutes of his shoot-down, an Air Force rescue operation was in full swing. The book recounts the 189 sorties, with seven aircraft shot down or damaged, before the eventual rescue.

■ ■ ■ BOB HANSON FLEW 122 COMBAT MISSIONS IN F-4 PHANTOMS. HE IS NOW A FREELANCE WRITER LIVING IN KANSAS.

>>> Space Food <<<

IF YOU LIKE ICE CREAM and fresh strawberries, you'll probably want to try their freeze-dried versions, which the National Air and Space Museum sells in small foil pouches. Originally developed as snacks for the early Apollo lunar missions, both the strawberries and the ice cream are frozen to -40 degrees Fahrenheit and then vacuum-dried. The strawberries, which have no added sugar, are both sweet and tart, while the ice cream is surprisingly delicious (probably why it sells at the rate of some 1,500 pouches per week). The appeal of both products is the chalky, melt-in-your-mouth texture - the way space food used to be. Ice cream, \$5, 3/4 oz.; strawberries, \$5, 1/3 oz. To order, call the National Air and Space Museum at (202) 357-1387.



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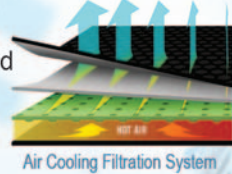
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Down to Earth: A Fighter Pilot's Experiences of Surviving Dunkirk, the Battle of Britain, Dieppe and D-Day

by Kenneth Butterworth McGlashan with Owen Zupp. Grub Street, 2007. 192 pp., \$39.95.

KENNETH MCGLASHAN entered the Royal Air Force as a cadet in 1939, training in aircraft such as Tiger Moths and the elegant silver biplane variants of the Hawker Hart. Flying a Hawker Hurricane fighter over the Dunkirk evacuation, he got shot down, the victim of a German Messerschmitt Bf 109; this was neither the first nor the last time he brushed against death.

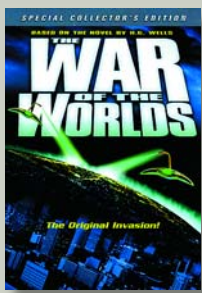
McGlashan carries us in the cockpit through night fighter sorties, wartime airline operations, and missions in his obvious favorite: the twin-engine de Havilland Mosquito. It is our good fortune that the flier returns from war, darkness, abysmal weather, and engine failure, and that the writer Owen Zupp listens patiently and captures McGlashan's voice in a well-written narrative.

The slower, last third of the book, detailing the airman's post-war service into the Jet Age, brings the story full-circle when the author learns that his former mount has been discovered in the sand on the beach at Dunkirk. (McGlashan's Hurricane is currently being restored at Hawker Restorations Limited in Ipswich, Suffolk County, England. See "Best of the Battle of Britain," Feb./Mar. 2008.)

■ ■ ■ **BOB McLEAN** HAS BEEN FLYING LIGHT AIRPLANES FOR NEARLY THREE DECADES, AND IS HALF-OWNER OF A 1948 TEMCO SWIFT. HE RESTORES AIR- AND SPACECRAFT AT THE NATIONAL AIR AND SPACE MUSEUM'S PAUL E. GARBER PRESERVATION, RESTORATION AND STORAGE FACILITY IN SUITLAND, MARYLAND.



>>> **Out of the Vault** <<<



The War of the Worlds: Special Collector's Edition

DVD. Rated G. Paramount Pictures, 2005. \$12.99.

I SAW *The War of the Worlds* in 1967, when it first aired on network television. Watching the movie on my family's black-and-white TV set, I was one scared five-year-old. Three years ago, Paramount released the 1953 science fiction classic in DVD format, allowing home viewers to enjoy this film adaptation of H.G. Wells' terrifying tale of murderous Martian invaders.


Nominated for three Academy Awards (it won for best special effects), *War* opens with a sequence of lush planetary paintings by noted space artist Chesley Bonestell, while the tremulous voice of a male narrator explains that Mars is a dying planet and that its residents deem Earth the best place in the solar system to relocate. The film then cuts to Corona, California, a small town outside Los Angeles, where some of the townsfolk initially welcome the extraterrestrial visitors. In the film's most famous scene, a Bible-clutching minister, reciting the 23rd Psalm, walks toward a hovering Mars craft, only to be killed by a heat ray (the first of many fiery deaths that should have stripped *War* of its G rating).

With well-paced action, good art direction, and beautiful color cinematography, the film has much to admire, including its depiction of 1950s Americana — a collection of church steeples, diners, and square dances. Airplane buffs will appreciate footage of a real Northrop YB-49 flying wing, which in *War* is assigned to drop an atom bomb on a Martian stronghold. An unintentionally funny line has the bomber's pilot saying before takeoff: "Hello tower! This is an Air Force flying wing." The naïveté continues when soldiers and civilians gathered on a hillside are warned: "Attention please. Four minutes to bomb time."

The collector's edition includes interviews with the lead actors, as well as commentary from film historians on *War*'s exalted place in the history of science fiction cinema.

■ ■ ■ **DIANE TEDESCHI** IS AN AIR & SPACE ASSOCIATE EDITOR.

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