

on the color of the horse" instead of first finding out whether the horse is really there, will acknowledge that the authors have done a splendid, interesting, and painstaking job. In their introductory chapters, for instance, they display a behind-the-scenes knowledge of the world of science fiction, and present a convincing account of the role science fiction, and science fiction magazine editors, played in setting the stage for the coming of flying saucers in this country.

Menzel and Boyd will cheerfully admit that not all reports of sightings of UFO's give up the ghost when the light of a scientific approach is turned on them. But, whereas the UFO aficionados will see in this support for their horse in the bathtub, most readers will recognize that when a UFO report lacks the data for a scientific evaluation—authentic photographs, spectroscopic analysis of lights, hardware, position-fixes, parallax measures, photometric data, etc.—it is futile to expect more than a reasonable conjecture, based on experience, as to the most probable stimulus that gave rise to that particular report.

There are UFO reports which one might wish were far more precise than they are, because of their probable

scientific value, those UFO reports, for instance, which have been tentatively ascribed by the authors and by the Air Force to ball lightning. Yet, as in the Levelland, the Lock Raven Dam, and other cases, the reports, if they are to be believed at all, do not describe ball lightning as commonly reported. Ball lightning is generally held to be a small-scale phenomenon, the balls generally being only a few inches in diameter and highly temporal. If the reporters of the Lock Raven case, and others, are even reasonably correct, then we have much yet to learn about ball lightning. These sightings reportedly were of large (5 to 10 feet?) luminous balls of light which had a remarkably long lifetime (5 to 10 minutes?). Such UFO reports may hold the key to controlled thermonuclear reactions!

The authors confirm the Air Force findings that the most frequent producers of UFO reports include balloons, bright meteors or fireballs, stars and planets (especially when viewed under mirage-producing meteorological conditions), artificial satellites, birds (including luminous owls, sea gulls, plover, starlings, and pelican!), migrating spiders, and refueling and other special aircraft missions. The

book is dedicated to the reasonable postulate that all UFO's have always been, are now, and probably will continue to be *usual* objects, or phenomena, seen under *unusual* conditions, such as Jupiter viewed through a contrail, or a nocturnal advertising plane which has failed to get across the advertiser's message.

The most significant thing about UFO reports is that they do not seem to pertain to any one thing but appear to be spawned by a most heterogeneous collection of stimuli. The authors establish this point but do not belabor it. Instead, they treat some of the fascinating sidelights of the Flying Saucer World—meetings with flying saucer pilots ("contacts" is the accepted word in the UFO world), and conversations with "extraterrestrials," G-Fields, Angel Hair, UFO conventions, UFO clubs, travels in flying saucers, etc.

Your reviewer, as consultant to the Air Force for many years in these matters, can heartily attest that the world of flying saucers is a wonderful, wacky world—yet one from which something can be learned. And, *The World of Flying Saucers* is a wonderfully well told story of this bizarre phenomenon which, a generation later, refuses to die out.

BOOKS RECEIVED

EXPERIMENTAL TECHNIQUES

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■ **Quantum Optics and Electronics: The 1964 Les Houches Lectures** edited by C. DEWITT, A. BLANDIN, C. COHEN-TANNOUDJE. The contributors are: N. KROLL, R. J. GLAUBER, W. E. LAMB, J. BROSEL, N. BLOEMBERGEN, J.-M. WINTER, and A. AIGRAIN. January. paper \$8.50, cloth \$10.50.

■ **Transition Metal Compounds: Transport and Magnetic Properties** edited by E. R. SCHATZ. The informal proceedings of the Buhl International Conference on Materials, Pittsburgh, October 31-November 1, 1963. Ready. paper \$5.00, cloth \$9.50.

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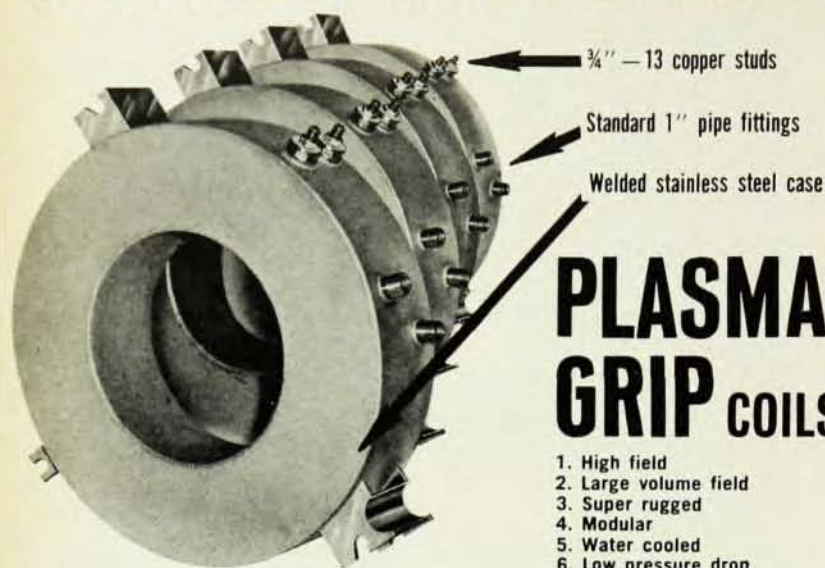
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Stability and Control of Airplanes and Helicopters. By Edward Seckel. 506 pp. Academic, New York, 1964. \$15.00.

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