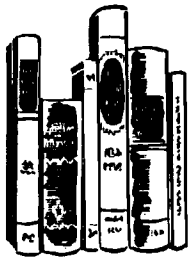

books reviewed

The Technique of the Motion Picture Camera

By H. Mario Raimondo Souto. Revised and enlarged edition, published (1969) by Hastings House, Publishers, 10 East 40 St., New York, NY 10017. 263 pp. incl. index, technical terms. Illus. 5½ by 8½ in. Price $16.00.

This new edition of *The Technique of the Motion Picture Camera* is a very interesting effort attempting to cover in considerable detail the design considerations and features of many modern professional picture cameras. The book contains material on many different types of equipment including those manufactured in many different countries of the world including Germany, France, Great Britain and the USSR, as well as the United States.

Chapter One contains a description of the basic units needed for any camera, those parts generally considered as a part of the camera itself, the detachable parts such as motors and magazines; and accessories such as matte boxes, tripods, pan and tilt heads and soundproof covers. It also goes into mobile camera supports such as cranes and dollies. Chapters Two and Three are a survey of both 35mm cameras and 16mm cameras divided as to studio cameras, field cameras, sound-on-film cameras, special wide-screen cameras, and other equipment which might be found in professional use. Chapter Four deals with various types of specialized cameras such as low- and high-speed cameras, multiple-film cameras, special underwater cameras, and equipment for other film width formats such as 65/70mm and 8mm. Chapter Five contains the operating instructions for a number of 35mm and 16mm cameras. The new edition provides for recently introduced equipment.

Chapter Six is essentially a new chapter. A section has been added on the reasons for selecting certain equipment for specific applications including both economics as well as operational characteristics. The material on maintenance is included in this chapter along with information on inspection and testing.

Chapter Seven, in the space of some 30 pages, goes into shooting techniques including focusing, composition, the handheld camera, anamorphic, zoom, and varifocal lenses, along with a number of hints on spot coverage. The last part of the book has a number of tables containing trouble-shooting charts dealing with malfunctions, characteristics of various makes of cameras, a directory of sources for the purchase of equipment and a short glossary of terms.

This book is an extremely ambitious undertaking and should prove valuable to

the cameraman who is already quite familiar with motion-picture cameras. Its particular value might be considered to help him to understand the features of the various makes of equipment with which he is not already somewhat familiar.

Perhaps the biggest shortcoming of the book is that the treatment does not live up to the title in that it does not deal with the *techniques* of operating motion-picture cameras as much as it does with the *features* built into the various makes of equipment. The material in Chapter Six on shooting techniques is rather superficial and for the most part is information which a person operating professional equipment might already be expected to know. The book should not be considered as a substitute for an instruction manual supplied by the manufacturer for any specific make of equipment.

The other problem is that the audience for whom the book is intended is not clearly defined. It is too advanced for the interested amateur and is not really comprehensive enough for the experienced professional. It is not a textbook for the advanced camera classes since a great deal of the book covers makes of equipment which the average cameraman in the United States will not have the opportunity to see, much less work with. The design features of the Russian cameras, for example, are touched on only to the point of creating interest but not to the extent that they would be of use to camera design people in the United States.

In spite of these drawbacks, the book is a worthwhile contribution to the literature of the field. It should be valuable for a person who is familiar with manuals for the equipment, has read and studied a number of instruction manuals for the equipment with which he has the opportunity to work, and who is interested in the equipment which is available to the professionals all over the world. It does contain in one compilation a large collection of instruction manuals and equipment specifications and is worthy of study by the individual interested in familiarizing himself with the features of the various kinds of equipment which are available and with which he may be confronted from time to time. As a reference, it includes information which would be valuable if a cameraman were confronted with a piece of equipment and its instruction manual was not available to him, at least in the English language.—*Herbert E. Farmer*, Director of Services, School of Performing Arts, University of Southern California, University Park, Los Angeles, CA 90007.

Holography State of the Art Review — 1969

Ed. Thomas Kallard. Published (1969) by Optosonic Press, Box 883, Ansonia Post Office, New York, NY 10023. 182 + v pp. Illus. Diagrams. 8½ by 11 in. Paperbound. Price $12.00.

(This review is reprinted by permission from *Applied Optics.*)

Holography State of the Art Review—1969 is another example of the proliferation of material that is spawned by any new field of active research interest. This 182-page paperback book is divided into two main parts. The first part is composed of copies of 20 patents and the latter part of a listing of 887 references and 37 books. The patents span the period from 1949 to 1968. They include some historically interesting patents by Gabor, El-Sum and excerpts from a French patent by Leith and Upatnieks. The bulk of the patent application dates are from 1965 and 1966. Unfortunately much of this work has been published and it is to some extent outdated. The most beneficial aspect of this patent literature is that it allows the reader to consider the hardware and techniques which are being proposed and used to implement and apply holography. No attempt was made on the part of the reviewer to determine the completeness of this list of patents but it seems reasonable to assume that the twenty listed here represent only a small part of the total number of patents in this area. It would appear that a more valuable list of patents would be a list of each patent number, country and date of each application, date the patent was granted, inventor, and assignor. Included within each entry might also be a one or two sentence description of the patent. This list could then be more comprehensive and occupy less than the 96 pages taken by the word-for-word account given to the twenty patents.

The Bibliography of 887 references within holography is the most disturbing aspect of the book. The first part of this list is a compilation of 37 books and the remaining part is a listing of holography references. Included within this list are 39 references to "U. S. Government Research and Develop-

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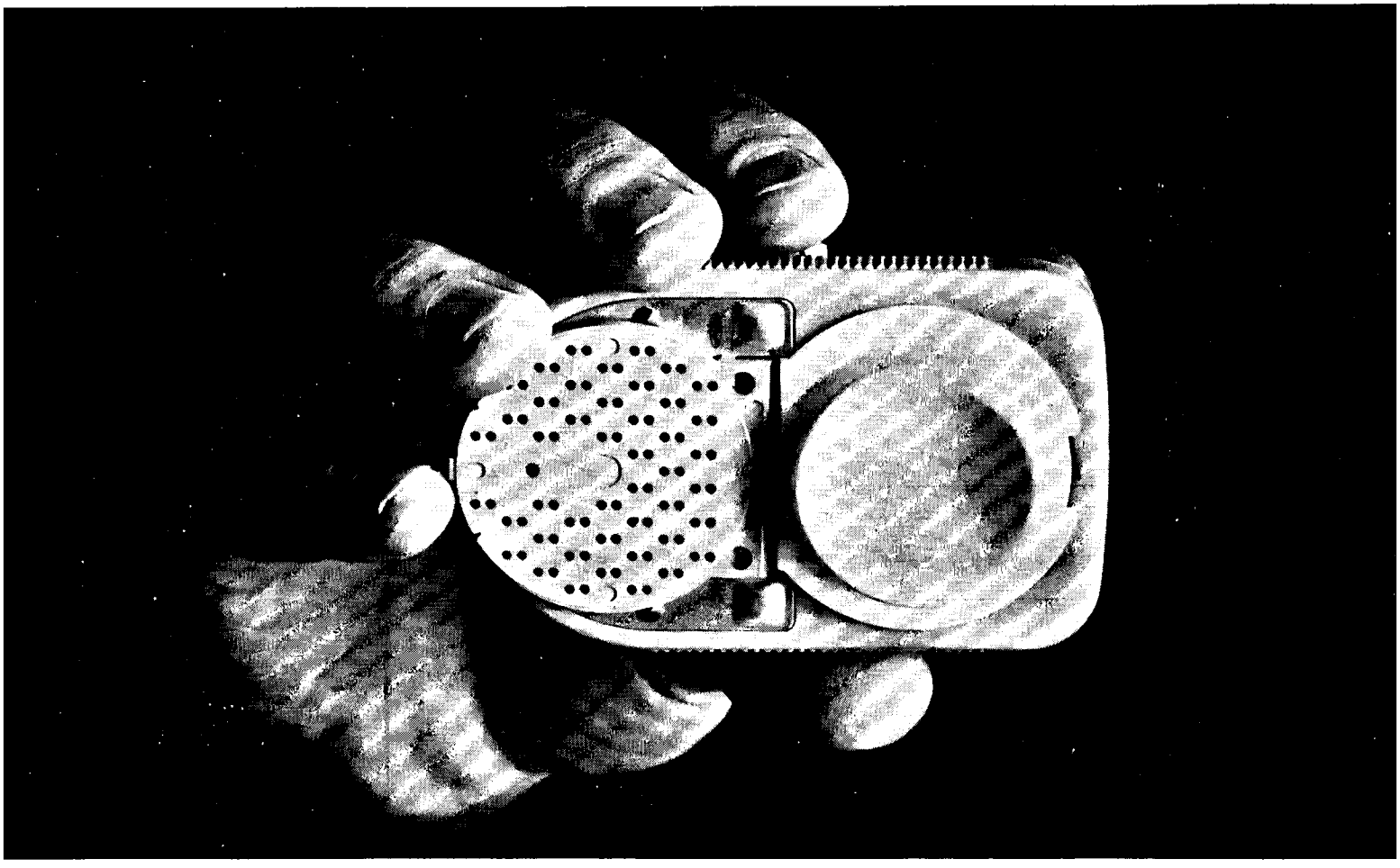

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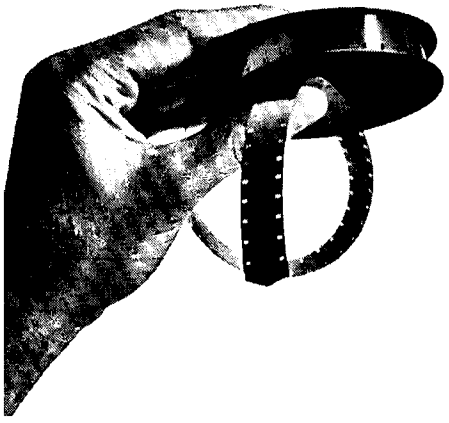

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ment Reports." The holographic literature contains four bibliographies which cover holography and optical information processing up to January 1968.[1–4] Another bibliography in this area would be expected to update and supplement the previous work. Unfortunately, this book falls short of these goals.

The bibliography is divided into six parts by chronological order as follows: Up to 1961, 1961–1964, 1965, 1966, 1967, and 1968. Each reference contains the title of the article, author(s), journal, volume, pages and year. There are no groupings, classifications or annotations provided with the references. The reference format varies considerably. Some references include the issue number and month. The format for references with multiple authors also varies considerably. In some cases all the authors are listed, in other references one or two of the authors are included while the remaining are denoted by "and others," however, in some references the "and others" is omitted altogether. For example, in reference number 794, the fourth author is listed as the primary author and the other five authors simply denoted as "and others." There are several references that are not placed within the proper chronological category or alphabetized properly because of errors. There are four references whose dates are 1951 and 1960 that are included in the 1961–1964 category. Reference 279 is the same as number 283 except that the primary author's name is misspelled in 279 and thus placed in the wrong alphabetical order. For the period up to and including 1967 it appears that most of the references were derived from the previously published bibliographies.

The bibliography includes references of 90 articles which are either un-authored or popular news reprints of technical articles. Also included in the list are 19 references whose technical suitability is questionable in a bibliography on holography. This reviewer counted 36 errors or omissions which ranged from simple misspelling to omission of author names, volume numbers, incorrect page numbers, and incomplete titles. There are 28 references to papers in abstract form, e.g., Optical Society of America meeting papers published in the *Journal;* however, no attempt is made to differentiate these references from complete papers.

An increasingly important aspect of the holographic literature is the published proceedings of meetings which contain exclusively, or in large part, holography papers. Four such conference proceedings are noted below. The bibliography makes no mention of the first conference.[5] The second[6] conference on holography is, likewise, not included in the bibliography. The third *Proceedings*[7] is referred as a book but the individual papers are not referenced. There are 11 holography and one nonholography articles referenced in the *Modern Optics Symposium*.[8] Two important holography papers from this proceedings are not included in the list.

The references for the year 1968 are the most incomplete and contain numerous errors. It appears that the editor has gathered the bulk of the references from the following sources: *Abstracts in Photographic Science and Engineering*, *Electrical and Electronic Abstracts* (EEA), *International Aerospace Abstracts* (IAA), *Physics Abstracts*, *Scientific and Technical Aerospace Reports* (STAR), and *U. S. Government Research and Development Reports* (USGRDR). However, even a careful search of these sources does not realize a comprehensive bibliography. One of the outstanding deficiencies of this listing of 1968 references is the large number of missing foreign references. A brief survey of the following foreign journals illustrates this. The first number is the number of references in the journal and the second number (in parentheses) is the number included in the bibliography: *Jap. J. Applied Physics*, 10 (5); *Nature*, 11 (1); *Optica Acta*, 5 (1); *Oyo Buturi*, 11 (2); and *Physics Letters*, 16 (3).

The listing of 39 Government reports is a very small part of the total number of reports on holography. In fact, some of the theses included in this section are not government reports but references from *STAR* which originally appeared in *Dissertation Abstracts*.

Because of the many shortcomings of the bibliography, the reviewer cannot recommend this book as a reference work. The primary contribution of this book is the reprints of the twenty patents.—*John N. Latta*, Electrical Engineering Dept., University of Kansas, Lawrence, KS.

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5. *Holographie — Abeitstagung*, Battelle Institute, e. V. Frankfurt (Main), Germany, 1967 (20 papers).
6. *Proceedngs SPIE Seminar-In-Depth Holography*, Society of Photo-Optical Instrumentation Engineers, 1968 (22 papers).
7. *Applications of Lasers to Photography and Information Handling*, Society of Photographic Scientists and Engineers, 1968 (8 papers on holography).
8. *Proceedings of the Symposium on Modern Optics*, Polytechnic Press, Polytechnic Institute of Brooklyn, Brooklyn, NY, 1967 (13 papers on holography).