

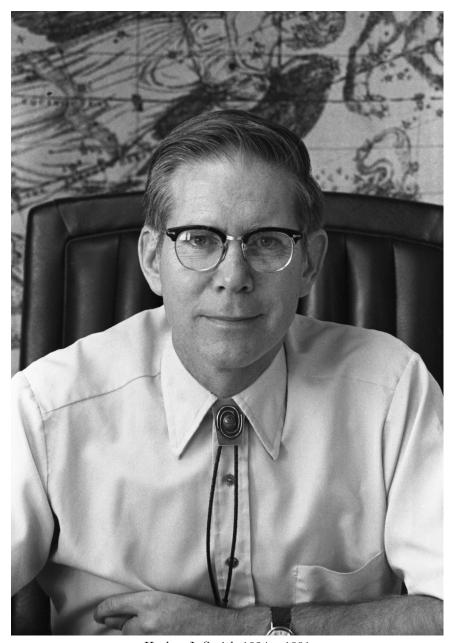
CATALOGUE OF THE HARLAN J. SMITH COLLECTION OF SCIENCE BOOKS IN THE OTTO STRUVE LIBRARY OF THE McDonald Observatory Fort Davis, Texas

compiled by James R. Fowler

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27 26 25 24 23 6 5 4 3 2 1

The McDonald Observatory would like to thank Joan Smith, Nat Smith, and the rest of the Harlan J. Smith family for generously donating this collection to the observatory. This collection will be of scientific as well as historic interest to the staff and visitors of the observatory.



 ${ Harlan\ J.\ Smith\ 1924-1991 } \\ from\ Wikipedia\ (https://en.wikipedia.org/wiki/Harlan_James_Smith \\ Licensed\ under\ CC\ by-sa\ 4.0 \\ }$

Harlan J. Smith

Harlan James Smith (1924–1991) was born in Wheeling, West Virginia on 25 August 1924, graduating high school there in 1942¹. Joining the Army Air Corp in 1943, he finished his service career as a meteorologist on Guadalcanal in 1946. Harlan obtained his undergraduate degree in 1949 and his Ph.D in 1955, both from Harvard. His dissertation focused on short period variable stars where he recognized that they were more like Cepheids than RR Lyrae stars. These stars he called dwarf Cepheids though they are now called delta Scuti stars [Smi55a], [Smi55b],

Harlan joined the faculty at Yale in 1953, ultimately obtaining the rank of Associate Professor. There he began working in radio astronomy where he and his students studied the decameter radio pulses from Jupiter. He and Dorrit Hoffleit also studied the optical variability of the newly discovered quasars and found unequivocal evidence for variations in the quasar 3C273 implying a small physical size [SH63].

While in graduate school at Harvard, Harlan met Joan Greene who was attending Radcliffe College. There were married in December 1950 and had four children, Nat, Julie, Tad, and Hannah.

In 1963 Harlan was recruited to be the first "Texas" director of the McDonald Observatory as well as Chairman of the Astronomy Department at the University of Texas at Austin. During his leadership the observatory increased the number of support staff and the department grew in faculty, with a strong emphasis on undergraduate teaching. He resigned as Department Chairman in 1978 citing the heavy work load but remained as Director of McDonald Observatory. He was appointed to the Edward Randell Jr.,MD Centennial Professorship in Astronomy in 1984 (see catalogue entry 5). Harlan was strongly committed to public education and outreach. He encouraged the publication of the McDonald Observatory News (later Star Date magazine) and the construction of the Moody Visitor's Center.

A large observatory needed to have the best telescopes and instrumentation so the 82-inch telescope was refurbished in the mid-1960's and talks for a larger telescope were begun. The 107-inch telescope (see entry 303) was dedicated in 1969 and was later renamed the Harlan J. Smith Telescope in 1995. Lunar laser ranging signals from the moon were first detected at McDonald in August 1969 and lunar ranging continued at the 107-inch until 1985. The project was continued on a series of smaller telescopes until September 2020; one of the longest running experiments at the McDonald Observatory.

The construction of the 107-inch telescope required more housing for the visiting astronomers as well as for the additional support staff so the Transient Quarters (later the Astronomer's Lodge) was built as well as 15 additional staff houses.

¹Much of this information has been taken from the obituary written by James N. Douglas in the Bulletin of the AAS [Dou92] as well as from the pamphlet "The Harlan J. Smith Centennial Professorship in Astronomy" (see entry 3 in the catalogue.) and the pamphlet "The Edward Randall Jr.,M.D. Centennial Professorship in Astronomy" (see entry 5 in the catalogue).

A program in radio astronomy was also developed with the construction of the University of Texas Radio Observatory (UTRAO) in Marfa, Texas. Later on the Millimeter Wave Telescope was moved from campus to the observatory. In 1978 Harlin started advocating for an even larger telescope at McDonald, the 300-inch Eye of Texas (see entries 396 and 417 of the catalogue). This was not to be due to the collapse of the Texas oil economy in 1985. He did, however, start discussions with Penn State University about the 433-inch Hobby-Eberly Telescope (the former Spectroscopic Survey Telescope, see entry 4 of the catalogue) which was dedicated in 1997,

Harlin was a member of the Royal Astronomical Society, the International Astronomical Union, the American Association for the Advancement of Science, and the American Astronomical Society (AAS). As a member of the AAS he served as Chairman of the Planetary Division from 1974–1976, as a Council Member from 1975–1978, and as Vice-President from 1977–1979

Harlan was strongly committed to public service for astronomy. He served on the Committee on the Large Space Telescope (later the Hubble Space Telescope) from 1966–1970 and was a member of the Space Science Board (SSB) of the National Academy of Sciences where he was also Chairman of the Committee on Space Astronomy and Astrophysics.

He served as a member of the Board of Directors of the Associated Universities for Research in Astronomy (AURA), 1972–1983, and was Chairman of the Board from 1980–1983. He was also Chairman of the Management/Operations Working Group for Planetary Astronomy at NASA from 1988–1991. He received the NASA Distinguished Public Service Medal in 1991 (see entry 507 of the catalogue).

Harlan retired as Director of the McDonald Observatory in 1989 but continued to teach at the university and engage in public service work until his death on 17 October 1991.

The Books

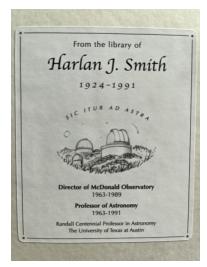
The Harlan J. Smith Collection of Books at the McDonald Observatory consists of 511 catalogued entries. However, a number of the entries refer to multi-volume works or contain multiple reprints and articles so there are quite a few more than that number of items in the physical collection.

These works represent only a small part of Harlan's reading interests. The collection consists of his science library; the working books he might have used on a daily basis or for reference. Harlan's interests, as indicated by these books, are primarily in planetary studies and space exploration/development. But there are also works on math, physics, the history of astronomy, philosophy of science, life on earth, alien intelligence, and the colonization of space. There is also a strong interest in climate change dating back to the 1970's. The collection includes reports from his work with the various boards and committees on which he served, while others are gifts from their authors or interesting works he picked up in his travels.

Many of the items contain the bookplate 'FROM THE LIBRARY OF Harlan J. Smith', usually on the inside front cover. This bookplate was designed by Joan Smith and added to the books when they were first sent to the McDonald Library. The bookplate shows Mt. Locke as viewed from the north-east with the 107-inch Harlan J. Smith telescope in the foreground, the 82-inch Otto Struve telescope behind it, and the 36-inch telescope in the small dome to the left. The Latin inscription "SIC ITUR AD ASTRA" translates as "SO WE GO TO THE STARS"².

Many of the books also contain the embossed library stamp of Harlan J. Smith, usually in the lower-right corner of the title page. These personalized stamps were quite popular in the 1980s and this stamp was added by Harlan.

In addition, there is usually a signature or the initials HJS in the upper-right corner of the front free end paper, though occasionally they may appear elsewhere. These ownership marks are indicated in



Bookplate from the HJS library. Designed by Joan Smith.

the catalogue. Signatures and initials are given as written in the item.

A number of books appear to have been purchased from used book dealers. There are also a number of duplicate books to be found among all the entries.

²At least according to Google Translate

The first books were sent to the McDonald library in 1993–94. According to Phil Kelton, Superintendent at the time, the books were located in his office. Jane Wiant, who started as the librarian in 1978, recalls that the collection was later housed in the HJS telescope building. At some point the collection was moved to the Otto Struve library. When the books arrived in west Texas an inventory of the collection was created listing 315 items. I have a paper copy of the Microsoft Excel spreadsheet of this inventory. Comparison with the 307 items identified in the Struve library for this catalogue located 300 items on the 1994 inventory. There are also 14 items found in the current catalogue which are not in the 1994 list. Some of these additional items contain the HJS bookplate so they belong with the collection; other works are relevant to the observatory so they certainly might belong in this collection. The counts don't match because some items in the current list are grouped as one item while they are listed as separate items in the 1994 list. The inventory work for this catalogue on this group of books was begun on 1 Dec 2021 and finally finished on 23 Oct 2022, after a long delay.

A second set of books were sent by Nat Smith on 2 November 2021. Cataloguing occurred 10-11 April 2022. There were 4 boxes and 57 items in this second shipment. A third set of books was received from Jeffrey Mallon on 29 March 2022. These were catalogued on 9-10 April 2022. There were three boxes and 94 items in the third shipment. Finally, a fourth shipment was received on 13 April 2022 and catalogued on 16-17 April 2022. There were two boxes (1 cu ft each) and one small box (1/2 cu ft) with a total of 54 items in the fourth shipment. Work on the software to produce the catalog was started on 18 April 2022 and mostly finished at the end of June 2022. Further work on the design and layout was incorporated during the proofreading of the catalogue in the fall of 2022.

The catalogue entry format is,

index Author/Editors(s) TITLE
year, place, publisher, pagination
edition/printing, if known
series name, if a part of a published series
publishing comments
comments about the condition of the item
ownership marks of HJS, if any
HJS catalogue number

The catalogue is sorted by year and then author/editor. If there is no note about the binding, then you may assume a hard-bound book. If there is an intact dust jacket, it is noted. A paperback book is notated as having paper covers. (Entry 98 is interesting; it has paper covers but also a paper dust jacket as well as a one inch paper ribbon.) Any interesting features of the item are noted as are any articles by HJS. The HJS catalogue number is "HJS Shipment#.Box#(0).count" where shipment 1 is the existing collection at McDonald while shipments 2, 3, and 4 were the later boxes shipped in 2021/22. The HJS catalogue number is my ordering of the books as I catalogued them and form a basic shelf list that allows me to locate the books again. The 1994 inventory is also provided in the same format with links to the current catalogue. Finally, an index of author/editor(s) and the associated entry number(s) is provided.

Bibliography

- [Dou92] James N. Douglas. "Harlan J. Smith (1924–1991)". In: Bulletin of the AAS 24.4 (Sept. 1, 1992). https://baas.aas.org/pub/harlan-j-smith-1924-1991. URL: https://baas.aas.org/pub/harlan-j-smith-1924-1991.
- [SH63] Harlan J. Smith and Dorrit Hoffleit. "Light Variations in the Superluminous Radio Galaxy 3C273". In: *Nature* 198.4881 (May 1963), pp. 650-651. DOI: 10.1038/198650a0. URL: https://ui.adsabs.harvard.edu/abs/1963Natur.198..650S.
- [Smi55a] H. J. Smith. "Low-luminosity intrinsic variables with periods less than 0.2 day." In: Astronomical Journal 60 (June 1955), p. 179. DOI: 10.1086/107208. URL: https://ui.adsabs.harvard.edu/abs/1955AJ.....60..179S.
- [Smi55b] Harlan James Smith. "Some investigations of short-period cluster-type variables". PhD thesis. Harvard University, Massachusetts, Jan. 1955. URL: https://ui.adsabs.harvard.edu/abs/1955PhDT.......80S.

Catalogue of the Harlan J. Smith Collection

1 File folder with a Xerox copy of Volume 1 of "Publications of the McDonald Observatory"

volume 1 consists of a biography of W.J. McDonald and descriptions of the observatory laid in with a letter from Curt Laughlin to Harlan Smith listing the books in W.J. McDonald's personal collection at the Observatory HJS 01.01(0).123

2 Eclipse totale de Soleil du 30 août 1905

Montpellier, G. Firmin paper covers stapled binding laid in with a catalog card entry HJS 01.01(0).188

3 The Harlan J. Smith Centennial Professorship in Astronomy

In 1983 the Harlan J. Smith Centennial Professorship in Astronomy was established in honor of HJS. Dr. William H. Jefferys, a former student of Smith's, was the first recipient HJS 04.02(0).03

4 The Spectoscopic Survey Telescope; An innovative approach to Giant Telescopes

fold out brochure the Spectroscopic Survey Telescope was renamed the Hobby-Eberly Telescope in 1989 HJS 04.02(0).05

5 The Edward Randall Jr., M.D. Centennial Professorship in Astronomy

paper covers brochure about the professorship first awarded to Harlan J. Smith HJS 04.02(0).07

6 The Jack S. Josey Centennial Professorship Symposium in Honor of David S. Evans

Oxford (UK), Pergamon Press a rebound hardcover copy of Vistas in Astronomy, Volume 30, part 1 inscription in upper-right corner of front free endpaper "For Harlan Smith in slight recognition of your support over many years. David S. Evans 2nd October 1987" HJS 04.02(0).26

7 Notes and Agenda from the July 1985 Board of Visitors Meeting ${ m HJS}~04.02(0).31$

- 8 Newspaper clipping on the Peridier 12-inch refractor with a copy of the "The Comets Tail", July 1984, Vol. 1, Nr. 11, enclosed in a July 1984 Board of Visitors Meeting Jacket HJS 04.02(0).32
- 9 VHS video tape of the Harlan Smith 25th Anniversary, 50 minutes, 9/30/88 HJS 04.03(0).50
- $10~{
 m A}$ collection of reprints and articles by Harlan J. Smith HJS 04.03(0).53
- 11 Froehlich, W., SPACESTATION: THE NEXT LOGICAL STEP
 Washington DC (USA), NASA
 series NASA EP-213
 glossy paper covers
 bookplate of HJS on table of contents page
 library stamp of HJS on title page
 HJS 01.01(0).69
- 12 Oberg, J.E., RED STAR IN ORBIT; THE INSIDE STORY OF THE SOVIET FAILURE AND TRIUMPHS IN SPACE three Xerox copies of chapter 13, 'Things to Come', from Oberg's book HJS 01.01(0).127
- 13 Ogden, C.K. and I.A. Richards, The Meaning of Meaning;
 A STUDY OF THE INFLUENCE OF LANGUAGE UPON THOUGHT AND
 OF THE SCIENCE OF SYMBOLISM
 New York, Harcourt, Brace, & World, Inc., xxii, 363 pp
 series Harvest Book, HB-29

series Harvest Book, HB-29 a reprint of the 1923 edition paper covers
HJS 03.02(0).58

14 Percy, J.R., The Observers Handbook 1972

Toronto, The Royal Astronomical Society of Canada, 101 pp with 8 pages of advertisements in the back bookplate of HJS on inside front cover initials of "HJS" in upper-right corner of front cover HJS 01.01(0).19

15 Smith, H.J., AST 309K LECTURE NOTES

copy 2 of the lecture notes from the undergraduate library, Univerity of Texas reserve collection two-hole black binder bookplate of HJS on inside front cover HJS 01.01(0).119

16 Weyl, H., SPACE — TIME — MATTER

New York, Dover Publication, xv, 330 pp

a reprint

first American printing of the fourth edition of 1922 paper covers with stapled binding signature of "H. J. Smith" in upper-right corner of front free endpaper HJS 03.02(0).57

17 Ball, R.S., The Story of the Heavens

1892 London, Cassell & Co., $\,$ xix, $556\,\mathrm{pp}$

inscription on inside front cover

"In remb: of our trip together in the 'City of Paris'

To Samuel Goodman Esqr.

with the best wishes of

T. Reginald Jones

26 Lorne Road Birkenhead"

revised edition of the first edition of 1886

bookplate of HJS on front free endpaper

library stamp of HJS on half-title page

HJS 02.02(0).11

18 Ball, R.S., Great Astronomers

1895 London, Isbister and Co., xii, 372 pp bookplate of HJS on inside front cover library stamp of HJS on title page HJS 02.02(0).14

19 Péridier, J., La Rotation de la Terre et les expériences de Foucault

1903 Le Havre, H. Micaux, 23 pp paper covers spine has been taped

laid in with a library card description

HJS 01.01(0).187

20 Russell, H.N., et. al., Astronomy; A revision of Young's Manual

OF ASTRONOMY; VOLUME 1, THE SOLAR SYSTEM

1926 Boston, Ginn and Company, $\,$ xi, 470 pp, 21p app. A

ex-lib McDonald Observatory

bookplate of HJS on inside front cover

library stamp of HJS on title page

HJS 01.01(0).99

21 Russell, H.N., et. al., Astronomy; A revision of Young's Manual

OF ASTRONOMY; VOLUME 2, ASTROPHYSICS AND STELLAR ASTRONOMY

1926 Boston, Ginn and Company, xii, 462 pp, 30p app. A

ex-lib McDonald Observatory

bookplate of HJS on inside front cover

library stamp of HJS on title page

HJS 01.01(0).100

$22\ Eddington,\ A.S.,\ {f The\ Internal\ Constitution\ of\ Stars}$

1930 Cambridge (UK), At the University Press, x, 407 pp second printing of first edition of 1926 inscription on front free endpaper "Bought Dec, 1950, Harvard Observatory Harlan J. Smith" bookplate of HJS on inside front cover library stamp of HJS on title page HJS 02.02(0).17

23 White, H.E., Introduction to Atomic Spectra

1934 New York, McGraw-Hill Book Co., xii, 457 pp series International Series in Physics bookplate of HJS on inside front cover library stamp of HJS on half-title page signature in upper-right corner of front free endpaper "Harlan J. Smith Harvard Observatory" HJS 02.04(0).53

24 Russell, H.N., et. al., Astronomy; A revision of Young's Manual

of Astronomy; Volume 2, Astrophysics and Stellar Astronomy 1938 Boston, Ginn & Co., xii, 489 pp, 30p app. A possibly a second printing of the edition of 1927 bookplate of HJS on inside front cover library stamp of HJS on title page signature in upper-right corner of front free endpaper "Harlan J. Smith Harvard College Observatory Cambridge, Mass, USA" HJS 02.04(0).46

25 Smart, W.M., STELLAR DYNAMICS

1938 Cambridge (UK), At the University Press, viii, 434 pp with clipped dust jacket in poor condition bookplate of HJS on inside front cover library stamp of HJS on title page signature of "Harlen J. Smith" in upper-right corner of front free endpaper HJS 02.03(0).35

26 THE McDonald Telescope; Commemorating the Dedication and the Formal Opening of the McDonald Observatory of the University of Texas

1939~ Clevland OH (USA), Warner & Swasey Company, $~55\,\mathrm{pp}$ laid in with a presentation slip

"The Warner & Swasey Company takes pleasure in presenting you this book commemorating the dedication and formal opening of the McDonald Observatory of the University of Texas May 5, 1939" bookplate of HJS on inside front cover library stamp of HJS on title page HJS 01.01(0).169

27 Addresses made at the Dedication Exercises of the W. J. McDonald Observatory

1939 48 pr

not stated in the book, it was published by the Warner and Swasey Company of Cleveland Ohio HJS 01.01(0).168

28 Hildebrand, J.H. and W.M. Latimer, Principles of Chemistry and Reference Book of Inorganic Chemistry

1940 New York, The Macmillian Company, xi, 359 pp and xii, 563 pp $4^{th}\,$ edition

laid in at back is a folded periodic table through element 103 with no date, element 103 was discovered in 1961

the work is two books in one

Principles of Chemistry was written by Hildebrand alone

Latimer and Hildebrand are the authors of Reference Book

bookplate of HJS on inside front cover

library stamp of HJS in lower-right corner of title page

HJS 01.01(0).25

29 Reichenbach, H., From Copernicus to Einstein

1942 New York, Philosophical Library, Inc.

with dust jacket

many notes from previous owner

ownership marks of Theodore C. Green, Nashville TN

HJS 03.03(0).70

30 Ephemeriden von Bedeckungsveränderlichen für das Jahr 1943

1943 Krajau, Sternwarte Krakau, 122 pp

paper cover

covers loose from text block

 ${\rm HJS}\ 01.01(0).122$

31 Herzberg, G., Atomic spectra and atomic structure

1944 New York, Dover Publications, xiii, 257 pp

 2^{nd} edition

with dust jacket

bookplate of HJS on inside front cover

library stamp of HJS on half-title page

signature of "Harlan J. Smith" in upper-right corner of front free endpaper

HJS 02.03(0).31

32 Jahnke, E. and F. Emde, Tables of Functions

1945 New York, Dover Publications, 306 pp, 76p app. A

 4^{th} edition

student edition

paper covers

bookplate of HJS on recto of first leaf

library stamp of HJS on title page and preface page

signature of "Harlan J. Smith" in upper-right corner on recto of first leaf

HJS 01.01(0).90

33 Planck, M., Treatise on Thermodynamics

1945 New York, Dover Publications, xiv, 297 pp 3^{rd} edition with dust jacket a translation of the seventh German edition bookplate of HJS on inside front cover library stamp of HJS on title page signature of "Harlan J. Smith" in upper-right corner of front free endpaper HJS 01.01(0).196

34 Russell, H.N., et.al., Astronomy; A revision of Young's Manual of Astronomy; Volume 1, The Solar System

1945 Boston, Ginn & Co., xi, 470 pp, 21p app. A a revised edition of the edition of 1926 bookplate of HJS on inside front cover library stamp of HJS on title page signature in upper-right corner of front free endpaper "Harlan J. Smith Harvard Observatory" HJS 02.04(0).45

35 Courant, R., DIFFERENTIAL AND INTEGRAL CALCULUS; VOLUME 1

1947 New York, Interscience Publishers, xiii, 616 pp 2^{nd} edition tenth printing of the revised second edition of 1937 HJS 03.01(0).14

36 Lemon, H.B. and M. Ference, Analytical Experimental Physics

1947 Chicago, The University of Chicago Press, xvi, 588 pp the third printing of the revised edition of 1946 the first edition is from 1943 bookplate of HJS on inside front cover library stamp of HJS on half-title page signature of "Harlan J. Smith" on front free endpaper HJS 02.02(0).21

37 Milham, W.I., TIME & TIMEKEEPERS

HJS 04.03(0).43

1947 New York, The Macmillan Co., xix, 616 pp sixth printing of the 1923 edition inscription on front free endpaper "For H.J.S. who knows a lot and is learning more about the care and feeding of Time

Las Cruces
Aug 2, 1952"
with hand drawing of a clock and insects on front free endpaper bookplate of HJS on inside front cover

38 Reprint of newspaper article about the McDonald Observatory

1948 King Features Syndicate, 1 pp dated 1948-01-24 pictures of the building, the telescope, P. Jose, Thornton Page, P. Swings, and A. Blaauw HJS 01.01(0).145

39 CENTENNIAL SYMPOSIA

1948 Cambridge MA (USA), Harvard College Observatory, viii, 385 pp series Harvard Monographs in Astronomy, Nr. 7 bookplate of HJS on inside front cover library stamp of HJS on half-title page signature of "Harlan J. Smith" in upper-right of front free endpaper HJS 02.03(0).25

40 Harrison, G.R., et. al., PRACTICAL SPECTROSCOPY

1948 New York, Prentice-Hall, xiv, 605 pp series Prentice-Hall Physics Series second printing of 1949 bookplate of HJS on inside front cover library stamp of HJS in lower-right corner of title page signature of "Harlan J. Smith" in upper-right corner of front free endpaper HJS 01.01(0).45

41 Skilling, H.H., Fundamentals of Electric Waves

1948 New York, John Wiley & Sons, vii, $245 \,\mathrm{pp}$ 2^{nd} edition bookplate of HJS on verso of front free endpaper library stamp of HJS on half-title page HJS 02.04(0).52

42 Stuik, D.J., A CONCISE HISTORY OF MATHEMATICS

1948 New York, Dover Publications, Inc., $\,$ xix, 299 pp 2^{nd} edition series The Dover Series in Mathematics and Physics printed paper covers signature of "Harlan J. Smith" in upper-right corner of front free endpaper HJS 03.01(0).25

43 Baldwin, R.B., The Face of the Moon

1949 Chicago, The University of Chicago Press, $\,$ xiv, 239 pp with dust jacket bookplate of HJS on inside front cover library stamp of HJS on half-title page signature of "Harlan J Smith" in upper-right corner of front free endpaper HJS 02.04(0).49

44 Kuiper, G.P., ed., The Atmospheres of the Earth and Planets;

Papers presented at the Fiftieth Anniversary Symposium of the Yerkes Observatory, September 1947

1949 Chicago, University of Chicago Press with dust jacket

compare to entry 55, this volume contains papers from a symposium on Planetary Atmospheres held to celebrate the 50th anniversary of the Yerkes Observatory library stamp of HJS in lower-right corner of title page and preface page signature of "Harlan J. Smith" in upper-right corner of front free end paper HJS 01.01(0).07

45 McVittie, G.C., Cosmological Theory

1949 New York, John Wiley & Sons, viii, $103\,\mathrm{pp}$ 2^{nd} edition with dust jacket, missing spine signature of "Harlan J. Smith" on front free endpaper HJS 04.03(0).51

46 Page, L. and N.I. Adams, Electrodynamics

1949 New York, D. van Nostrand Company, ix, $506\,\mathrm{pp}$ 1^{st} edition the third printing of the 1940 first edition bookplate of HJS on inside front cover library stamp of HJS on title page signature of "Harlan J. Smith" on front free end paper HJS 01.01(0).179

47 Alfvén, H., Cosmical Electrodynamics

1950 Oxford (UK), At the Clarendon Press, viii, 237 pp series The International Series of Monographs on Physics with price clipped dust jacket signature of "Harlan J. Smith" in upper-right corner of front free endpaper HJS 03.02(0).37

48 Chandrasekhar, S., RADIATIVE TRANSFER

1950 Oxford, At the Clarendon Press, $\,$ xiv, 393 pp 1^{st} edition series The International Series of Monographs on Physics with price clipped dust jacket signature of "Harlan J. Smith" on front free endpaper HJS 03.02(0).44

49 Frenkel, J., Wave Mechanics; Elementary Theory

1950 New York, Dover Publications, 312 pp with dust jacket bookplate of HJS on inside front cover library stamp of HJS on title page signature of "Harlan J. Smith" on front free endpaper HJS 01.01(0).269

50 Frenkel, J., Wave Mechanics: Advanced General Theory

1950 New York, Dover Publications, 524 pp a reprint of the 1934 edition originally published by Oxford University Press with dust jacket bookplate of HJS on inside front cover library stamp of HJS on front free end paper and title page signature of "Harlan J. Smith" in upper-right corner of front free end paper HJS 01.01(0).103

51 Kopal, Z., The Computation of Elements of Eclipsing Binary Systems

1950~ Cambridge MA (USA), Harvard Observatory, $~181\,\mathrm{pp}$

series Harvard Observatory Monographs, Nr. 8

donation plate from Peridier Library

laid in with an errata page

some pencil notes from HJS on rear end paper

bookplate of HJS on front free end paper

signature of "Harlan J. Smith" in upper-right corner of front free endpaper

HJS 01.01(0).213

52 Rogosinski, W., Fourier Series

1950 New York, Chelsea Publishing Company, vi, 176 pp

translation of "Fouriersche Reihen", the 1930 edition published by Sammlung Goschen signature of "Harlan J. Smith

Harvard Observatory" on front free endpaper

HJS 04.03(0).52

53 Sears, F.W., An Introduction to Thermodynamics,

THE KINETIC THEORY OF GASES, AND STATISTICAL MECHANICS

1950 Cambridge MA (USA), Addison-Wesley Press, $\,$ x, $348\,\mathrm{pp}$

series Principles of Physics Series

bookplate of HJS on inside front cover

library stamp of HJS on title page

signature of "Harlan J. Smith" on front free endpaper

HJS 01.01(0).197

54 Clarke, A.C., THE EXPLORATION OF SPACE

1951~ New York, Harper & Brothers, ~ viii, $199\,\mathrm{pp},\,14\,\mathrm{plates}$

a Book-of-the-Month club edition

with dust jacket

signature of Elliot Kone on verso of front free endpaper

HJS 03.03(0).94

55 Hynek, J.A., ed., Astrophysics; a Topical Symposium; Commemorating

THE FIFTIETH ANNIVERSARY OF THE YERKES OBSERVATORY AND A HALF CENTURY OF PROGRESS IN ASTROPHYSICS

1951 New York, McGraw-Hill Book Co., xii, 703 pp

 1^{st} edition

compare to entry 44, this volume contains invited papers reviewing the progress

of Astronomy and Astrophysics over the last 50 years

series McGraw-Hill Astronomical Series

bookplate of HJS on inside front cover

library stamp of HJS on half-title page

signature of "Harlan J. Smith" in upper-right corner of front free endpaper

HJS 02.01(0).08

56 Sawyer, R.A., Experimental Spectroscopy

1951 New York, Prentice-Hall Inc., x, 358 pp

 2^{nd} edition

bookplate of HJS on inside front cover

library stamp of HJS on title page

signature of "Harlan J. Smith" in upper-right corner of front free endpaper

HJS 01.01(0).254

57 Sneddon, I.N., FOURIER TRANSFORMS

1951 New York, McGraw-Hill Book Company, xii, 542 pp series International Series in Pure and Applied Mathematics bookplate of HJS on inside front cover library stamp of HJS in lower-right corner of title page signature in pencil of "H. J. Smith" in upper-right corner of front free endpaper HJS 01.01(0).17

58 Knopp, K., Elements of the Theory of Functions

1952 New York, Dover Publications, 140 pp first American edition paper covers bookplate of HJS on verso of half-title page library stamp of HJS in lower-right corner of title page signature of "Harlan J. Smith" in upper-right corner of front free endpaper HJS 01.01(0).60

59 Phillips, H.B., DIFFERENTIAL EQUATIONS

1952~ New York, John Wiley & Sons, Inc., ~ viii, $149\,\mathrm{pp}$ 3^{rd} edition second printing ownership mark of James J. Morse, February 1953 Price in upper-right corner of front free endpaper is crossed out HJS 03.01(0).04

60 Sarton, G., A HISTORY OF SCIENCE;

ANCIENT SCIENCE THROUGH THE GOLDEN AGE OF GREECE

1952 Cambridge MA (USA), Harvard University Press, xxvi, 646 pp with dust jacket bookplate of HJS on inside front cover library stamp of HJS on half-title page HJS 02.04(0).56

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"A Monsieur Harlan J. Smith

Hommage de l'auteur

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"With good wishes and congratulations on your new appointment. BMP see page 216"
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238 NICOLAUS COPERNICUS 1473-1973

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240 Heuer, K., City of Stargazers

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$251\ Holton,\ G.,\ {f The\ Thematic\ Component\ in\ Scientific\ Thought;}$

ORIGINS OF RELATIVITY THEORY AND OTHER ESSAYS

1973 Austin TX (USA), University of Texas Press, 533 pp

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$252\ \mathit{Moranzino},\ \mathit{C.},$ Instaurazioni di un regolare servizio del tempo

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253 Morrison, D. and D.P. Cruikshank, Physical Properties of the

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254 Roach, F.E. and J.L. Gordon, The Light of the Night Sky

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"July 25, 1989

To Harlan Smith

On the occasion of the

dedication of the

McDonald Observatory,

fifty years later.

Franklin Roach

Janet Gordon Roach"

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255 Sagan, C., The Cosmic Connection; An Extraterrestrial Perspective

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1980 Washington DC (USA), NASA, xi, 199 pp series NASA SP-439 printed paper covers bookplate of HJS on half-title page initials of "HJS" in upper-right corner of front cover HJS 01.01(0).146

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$381\ Smoluchowski,\ R.,\ \mathbf{Origin}\ \mathbf{and}\ \mathbf{Structure}\ \mathbf{of}\ \mathbf{the}\ \mathbf{Solar}\ \mathbf{System}$

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Masters thesis of van Newberry

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391 Tombaugh, C.W. and P. Moore, Out of the Darkness; The Planet Pluto

1981 Harrisburg PA (USA), Stackpole Books, $\,$ 221 pp second printing of the 1980 first edition

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inscription on half-title page

"To my good friend Harlan Smith with best wishes Clyde W. Tombaugh 28 May 1982" bookplate of HJS on inside front cover library stamp of HJS on title page ISBN 0-8117-1163-3 HJS 01.01(0).189

$392\ Trafton,\ L.,\ {f The\ Atmospheres}\ {f of\ the\ Outer\ Planets}\ {f and\ Satellites}$

paper covers a reprint from Reviews of Geophysics and Space Physics 19 (1) 43 bookplate of HJS on inside front cover HJS 01.01(0).215

393 Soviet Space Programs: 1976 - 1980

1982 Washington DC, US Government Printing Office, $\,$ xvi, 445 pp paper covers

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394 ASTRONOMY AND ASTROPHYSICS FOR THE 1980'S;

Volume 1, Report of the Astronomy Survey Committee

1982 Washington DC (USA), National Academy Press, $\,$ xx, 189 pp paper covers

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395 Draft Report on the Utilization of the External Tanks of the Space Transportation System; A Workshop held at the University of California - San Diego, La Jolla, California, August 23–27 1982

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Winter 1982 issue

primarily articles about McDonald Observatory and the 300" Eye of Texas telescope HJS $04.02(4).04\,$

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1982 Cambridge MA (USA), Sky Publishing Corporation, 240 pp

 2^{nd} edition

first edition published in 1981

published simultaneously with Cambridge University Press

with dust jacket

inscription on inside of front cover

"To Harlan J. Smith

From

Sky + Telescope

June 7, 1985

Think TEXAS, Harlan

Ron Shorr"

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398 Beatty, J.K., et. al., eds., The New Solar System

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401 de Vaucouleurs, G., The Cosmic Distance Scale and the

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1982~ Canberra, Mount Stromlo and Siding Springs Observatories, $~112\,\mathrm{pp}$ paper covers

presentation on outside front cover

"To Harlan J. Smith

with my appreciation

of his constant support

in this long battle

G. de Vaucouleurs"

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402 Hart, M.H. and B. Zuckerman, Extraterrestrials; Where Are They?

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404 Schwarz, W., ed., IMMANUEL KANT: CRITIQUE OF PURE REASON

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1984 New York, John Wiley & Sons, viii, 226 pp
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419 Layzer, D., Constructing the Universe

1984 New York, Scientific American Books, xi, 313 pp series Scientific American Library with dust jacket ISBN 0-7167-5003-1 HJS 03.02(0).35

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1984 Richmond VA (USA), Willman-Bell, Inc., xix, 424 pp 2^{nd} edition this is the second English edition the first English edition was published in 1957 by Interscience Publishers bookplate of HJS on inside front cover library stamp of HJS on half-title page signature of "H. J. Smith" in upper-right corner of front free endpaper ISBN 0-943396-04-2 HJS 02.03(0).28

421 Bailey, S.T., LIFE IN SPACE

1985 Temple TX (USA), 67 pp laid in with a letter from Shannon Bailey to HJS thanking him for the interviews laid in with a picture of Shannon Bailey, 8 years old on inside front cover

"June 11, 1985
Dear Dr. Smith
Thanks again for your time spent during the interview! I'll always remember it!
Your friend,
Shannon Bailey"
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422 Bozyan, E.P., The Impact of Local Environment on the Properties of Radio Galaxies: A Study of Galaxies from the Texas Survey

1985 The University of Texas at Austin, xv, 437 pp

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laid in with a memo from Curt Laughlin to HJ Smith dtd 6 Aug 1987

concerning the visit of Mr. Ralph Thomas

ISBN 0-671-60573-9

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430 VERY LARGE TELESCOPE: INTERIM REPORT

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431 McDonald Observatory

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1986

two certificates, one for successfully observing comet Halley and one for not observing it both with printed signature of HJS $\rm HJS~04.02(0).14$

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1986 New York, American Physical Society, xix, 118 pp with paper covers signature of "Smith" in upper left corner of inside front cover signature in upper-right corner of title page "Harlan Smith UT McD Observatory" ISBN 0-88318-493-1 HJS 04.03(0).44

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1987 Cambridge UK, Cambridge University Press, xi, 368 pp the reprint of the edition of 1981 bookplate of HJS on inside front cover library stamp of HJS in lower-right corner of title page HJS 01.01(0).57

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1987 Colorado Springs CO (USA), Teledyne Brown Engineering, vi, 115 pp 6^{th} edition series The Soviet Year in Space printed paper covers library stamp of HJS on title page HJS 01.01(0).309

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1987 Aviation Week and Space Technology, $63\,\mathrm{pp}$ printed paper covers bookplate of HJS on inside front cover library stamp of HJS on title page HJS 01.01(0).306

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1987 Austin, University of Texas at Austin, 110 pp

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450 Stern, A., The U.S. Space Program After Challenger;

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1987 New York, Franklin Watts

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— Alan S."

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451 Exploration Studies Technical Report;

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1988 NASA, xvii

series NASA Technical Memorandum TM-4075

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1988 Alexandria VA (USA), Challenger Center for Space Science Education, $\,$ 52 pp printed paper covers

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1988 Washington DC (USA), NASA, 88 pp

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454 Space Science in the Twenty-First Century;

Imperatives for the Decades 1995 to 2015; Overview

1988 Washington DC (USA), National Academy Press, xxi, 84 pp

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1988 Washington DC (USA), National Academy Press, xiii, 93 pp paper covers bookplate of HJS on inside front cover library stamp of HJS on title page ISBN 0-309-03841-3 HJS 01.01(0).279

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IMPERATIVES FOR THE DECADES 1995 TO 2015;

PLANETARY AND LUNAR EXPLORATION

1988 Washington DC (USA), National Academy Press, $\,$ x, 111 pp paper covers bookplate of HJS on inside front cover library stamp of HJS on title page ISBN 0-309-03885-5 HJS 01.01(0).280

457 SPACE SCIENCE IN THE TWENTY-FIRST CENTURY;

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1988 Washington DC (USA), National Academy Press, x, 143 pp paper covers bookplate of HJS on inside front cover library stamp of HJS on title page ISBN 0-309-03880-4 HJS 01.01(0).281

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ASTRONOMY AND ASTROPHYSICS

1988 Washington DC (USA), National Academy Press, $\,$ x, 72 pp paper covers bookplate of HJS on inside front cover library stamp of HJS on title page ISBN 0-309-03875-8 HJS 01.01(0).282

459 Space Science in the Twenty-First Century;

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1988 Washington DC (USA), National Academy Press, x, 139 pp paper covers bookplate of HJS on inside front cover library stamp of HJS on title page ISBN 0-309-03848-0 HJS 01.01(0).283

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1988 Washington DC (USA), National Academy Press, xvi, 121 pp paper covers bookplate of HJS on inside front cover library stamp of HJS on title page ISBN 0-309-03890-1 HJS 01.01(0).284

461 A CELEBRATION TO HONOR DR. HARLAN J. SMITH ON THE OCCASION OF HIS 25TH ANNIVERSARY AS DIRECTOR OF McDonald Observatory

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462 Baugher, J.F., THE SPACE-AGE SOLAR SYSTEM

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463 Blades, J.C., et. al., eds., QSO ABSORPTION LINES: PROBING THE UNIVERSE 1988 Cambridge (UK), Cambridge University Press, viii, 348 pp

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464 Burns, J.O., et.al., eds., A Lunar Far-Side Very Low Frequency Array

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465 Clifford, S.M. and R.M. Haberle, eds., MECA Workshop on Atmospheric H2O Observations of Earth and Mars

1988 Houston TX (USA), Lunar and Planetary Institute, 94 pp series LPI Technical Report Nr. 88-10 paper covers bookplate of HJS on inside front cover HJS 01.01(0).116

466 Clifford, S.M., et.al., Scientific Results of the NASA-Sponsored Study Project on Mars: Evolution of its Climate and Atmosphere

1988 Houston TX (USA), Lunar and Planetary Institute, 33 pp series LPI Technical Report 88-09 paper covers stapled binding bookplate of HJS on inside front cover

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467 David, L., Space Station Freedom; A Foothold on the Future

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468 Matney, C.G., The Use of Narrow Band CCD Photometry for Determining the Spatial Distribution of Molecules in the Coma of Comet Halley

1988 Austin TX (USA), The University of Texas at Austin, $\,$ viii, 221 pp Masters thesis of C.G. Matney HJS 01.01(0).75

469 Nuth, J.A. and P. Sylvestor, eds., Workshop on the Origins of Solar Systems

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470 Wray, J.D., The Color Atlas of Galaxies

1988 Cambridge (UK), Cambridge University Press, $\,$ i, 189 pp, 94 plates 1^{st} edition with dust jacket laid in with a letter from Cambridge Press offering a discounted price laid in with a review from Scientific American that Harlan annotated and sent to James Wray many of the photographs were taken at McDonald Observatory

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471 SOVIET SPACE PROGRAMS: 1981-87; PART 2, SPACE SCIENCE, SPACE APPLICATIONS, MILITARY SPACE PROGRAMS, ADMINISTRATION, RESOURCE BURDEN, AND MASTER LOG OF SPACEFLIGHTS

1989 Washington DC, US Government Printing Office, i, 271 pp paper covers constitutes pages 281-551 of the report bookplate of HJS on inside front cover library stamp of HJS in lower-right corner of title page HJS 01.01(0).10

472 STUDY REQUIREMENTS DOCUMENT; FY 1989 STUDIES

1989 Houston TX (USA), Lyndon B. Johnson Space Center, $\,$ v, 162 pp paper cover stapled binding bookplate of HJS on inside front cover HJS 01.01(0).86

473 PLANETARY OUTPOST SCIENCE FINAL REPORT

1989
paper covers
spiral bound
paper copies of overhead transparency slides
bookplate of HJS on inside front cover
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474 Other Worlds from Earth; The Future of Planetary Astronomy; A Report of the Planetary Astronomy Committee of the

SOLAR SYSTEM EXPLORATION DIVISION 1989 Washington DC (USA), NASA, 97 pp paper covers six copies

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475 Air & Space, June/July 1989

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476 Guidance on Radiation Received in Space Activities

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478 Final Frontier; The Magazine of Space Exploration; Volume 2, Nr. 4, July/August 1989

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479 STRATEGIC PLAN 1989; A STRATEGY FOR LEADERSHIP IN SPACE THROUGH EXCELLENCE IN SPACE SCIENCE AND APPLICATIONS

1989~ Washington DC (USA), Office of Space Science and Applications, $56\,\mathrm{pp}$ paper covers

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1989 Washington DC (USA), NASA, 97 pp McDonald Observatory is mentioned on pp 32, 54, with a picture of the HJS telescope on p 34 printed paper covers see also entry 474 for additional copies found in HJS 01.01(0).203 HJS 03.03(0).79

481 Atreya, S.K., et.al., eds., Origin and Evolution of Planetary and Satellite Atmospheres

1989 Tucson, University of Arizona Press, $\,$ xi, 881 pp 1^{st} edition series University of Arizona Space Science Series bookplate of HJS on inside front cover library stamp of HJS in lower-right corner of front free endpaper and in lower-right corner of title page HJS 01.01(0).03

482 Belton, M.J.S., et. al., eds., TIME-VARIABLE PHENOMENA

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483 Biswas, S.K., et.al., eds., Cosmic Perspectives; essays dedicated to the memory of M.K.V. Bappu

1989 Cambridge (UK), Cambridge University Press, xix, 249 pp with an article by HJS entitled "Understandings the Universe" on page 77 with dust jacket bookplate of HJS on inside front cover library stamp of HJS on front free endpaper ISBN 0-521-34354-2 HJS 02.04(0).57

484 Brailov, M.A., SPACE COMMERCE AND PUBLIC POLICY

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485 Campaccioli, M. and H.G. Corwin, eds., Gérard and Antoinette de Vaucouleurs; A life for Astronomy

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486 DeFrees, D., et.al., eds., Exobiology in Earth Orbit; The Results of Science Workshops held at NASA Ames Research Center

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487 Faughman, B. and G. Maryniak, eds., SPACE MANUFACTURING 7; SPACE RESOURCES TO IMPROVE LIFE ON EARTH

1989 New York, American Institute of Aeronautics and Astronautics, xv, 362 pp printed boards bookplate of HJS on inside front cover library stamp of HJS on title page HJS 01.01(0).248

488 Kohlhase, C., ed., The Voyager Neptune Travel Guide

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1989 Washington DC (USA), NASA, x, 276 pp

489 Longair, M., ALICE AND THE SPACE TELESCOPE

1989 Baltimore MD (USA), The Johns Hopkins University Press, $\,$ x, 198 pp with dust jacket laid in with a review of the book by HJS ISBN 0-8018-2831-7 HJS 04.02(0).23

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491 Milone, E.F., ed., Infrared Extinction and Standardization

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492 Szebehely, V.G., Adventures in Celestial Mechanics;

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494 Chicarro, A.F., et.al., Mission to Mars; Report of the Mars Exploration Study Team

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496 Johnson, N.L., THE SOVIET YEAR IN SPACE — 1989

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There is a page 51-52 tipped into the proper location.

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497 Kassim, N.E. and K.W. Weiler, eds., Low Frequency Astrophysics FROM SPACE

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498 Kondo, Y., ed., Observatories in Earth Orbit and Beyond

1990 Dordrecht, Kluwer Academic Publishers, xii, 572 pp series Astrophysics and Space Science Library, Nr. 166 series IAU Colloquium, Nr. 123 article by HJS on page 366 entitled "Lunar-based Astronomy" bookplate of HJS on inside front cover library stamp of HJS on front free endpaper ISBN 0-7923-1133-7 HJS 02.01(0).09

499 Mumma, M.J. and H.J. Smith, eds., ASTROPHYSICS OF THE MOON

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500 Wheeler, J.A., A JOURNEY INTO GRAVITY AND SPACETIME

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501 Reports of Planetary Astronomy — 1991

1991 Washington DC (USA), NASA, xiv, 188 pp series NASA Technical Memorandum TM-4329 paper covers bookplate of HJS on inside front cover library stamp of HJS in lower-right of title page HJS 01.01(0).80

502 Stardate Magazine Sept/Oct 1991

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503 Bilby, C. and G. Kozmetsky, eds., Modeling and Simulation of Advanced Space Programs

1991~ Austin TX (USA), The University of Texas at Austin, ~ xi, $394\,\mathrm{pp}$ paper covers HJS 02.04(0).39

504 Davoust, E., The Cosmic Water Hole

1991 Cambridge MA (USA), The MIT press, 206 pp with dust jacket with introduction by HJS laid in with a reprint of the introduction by HJS and a page from the Congressional Record ISBN 0-262-04114-6 HJS 04.02(0).18

505 Lambert, D.L., ed., Frontiers of Stellar Evolution

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506 Rastall, P., PostPrincipia; Gravitation for Physicists and Astronomers

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507 AAS/DPS Press Release; Harlan J. Smith Recipient of Marsursky Award

1992 single sheet HJS 04.02(0).10

$508\ Filippenko,\ A.\ V.,\ { m ed.},\ {f Robotic\ Telescopes}\ {f of\ the\ 1990s}$

1992 San Francisco, Astronomical Society of the Pacific, xv, 367 pp series Astronomical Society of the Pacific Conference Series, Nr. 34 dedicated to HJS by Russ Genet inserted at dedication "From the desk of Harlan Smith" ISBN 0-937707-53-8 HJS 03.03(0).66

$509~Kaler,~J.B.,~\mathbf{Stars}$

 $1992\,$ New York, Scientific American Library, $\,\,\,272\,\mathrm{pp}\,\,1^{st}$ edition series Scientific American Library, Nr. 39 with dust jacket ISBN 978-0-7167-5033-8 ISSN 1040-3213 HJS 03.02(0).34

$510~{ m Harvard}~{ m Magazine}~{ m Jan/Feb}~{ m 1992}$

1992 $$136\,\mathrm{pp}$$ paper covers brief obituary of HJS on page 119 HJS 04.01(0).12

511 Ad Astra; The Magazine of the National Space Society; Jan/Feb 1992

 $\begin{array}{cc} 1992 & 56\,\mathrm{pp} \\ \mathrm{printed\ paper\ cover} \\ \mathrm{obituary\ of\ HJS\ on\ page\ }10 \\ \mathrm{HJS\ }04.02(0).13 \end{array}$

1994 Inventory of the first HJS Collection

The first collection from the HJS library was sent to the observatory in 1994. At that time a Microsoft Excel spreadsheet listing the items was created but only a paper copy of that list can be found today. This paper list has been cross-referenced to the current catalogue and a new list, given here, was generated. Note that some of the items in the original list can not be identified. These are listed as missing or unknown.

- 1 Abell, G., Exploration of the Universe 1969 New York, Holt, Rinehart and Winston, 722 pp 2^{nd} edition catalogue entry 210
- 2 Adler, R., et.al., Introduction to General Relativity 1965 New York, McGraw-Hill Book Company, xv, 451 pp series International Series in Pure and Applied Physics catalogue entry 174
- 3 Alfven, H. and G. Arrhenius, EVOLUTION OF THE SOLAR SYSTEM 1976 Washington DC (USA), NASA series NASA SP-345 missing
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 1975 Dordrecht, D. Reidel Publishing Company, xi, 276 pp
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- 5 Atreya, S.K., et. al., eds., Origin and Evolution of Planetary and Satellite Atmospheres
 1989 Tucson, University of Arizona Press, xi, 881 pp 1^{st} edition series University of Arizona Space Science Series catalogue entry 481
- 6 Baldwin, R.B., A FUNDAMENTAL SURVEY OF THE MOON 1965 New York, McGraw-Hill Book Company, x, 149 pp series McGraw-Hill Series in Undergraduate Astronomy catalogue entry 175
- 7 Baugher, J.F., The Space-Age Solar System 1988 New York, John Wiley & Sons, xi, 452 pp 1^{st} edition catalogue entry 462
- 8 Bate, R.R., et.al., FUNDAMENTALS OF ASTRODYNAMICS 1971 New York, Dover Publications, xii, 455 pp catalogue entry 228

9 Beatty, J.K., et.al., eds., **The New Solar System** 1982 Cambridge MA (USA), Sky Publishing Corporation, 240 pp 2^{nd} edition catalogue entry 397

$10\ Bharucha-Reid,\ A.T.,\ {\it Elements}\ {\it of}\ {\it Theory}\ {\it of}\ {\it Markov}\ {\it Processes}$ and Their Applications

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12 Brandt, J.C., Introduction to the Solar Wind 1970 San Francisco, W. H. Freeman & Company, xii, 199 pp 1^{st} edition series A Series of Books in Astronomy and Astrophysics catalogue entry 223

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- 14 Bylinsky, G., Life in Darwin's Universe; Evolution and Cosmos 1981 Garden City NY, Doubleday & Company, xiv, 238 pp catalogue entry 385
- 15 Cadogan, P., The Moon Our Sister Planet 1981 Cambridge (UK), Cambridge University Press, viii, 389 pp catalogue entry 386
- 16 Cole, G.H. A., THE STRUCTURE OF PLANETS 1978 London, Wykeham Publications, vii, 232 pp series The Wykeham Science Series catalogue entry 353
- 17 Craine, E.R., A HANDBOOK OF QUASISTELLAR AND BL LACERTAE OBJECTS 1977 Tucson, Pachart Publishing House, ix, 283 pp series Astronomy and Astrophysics Series catalogue entry 329
- 18 Delsemme, A.H., ed., COMETS, ASTEROIDS, METEORITES; INTERRELATIONS, EVOLUTION AND ORIGINS 1977 Toledo OH, The University of Toledo, xxi, 587 pp catalogue entry 330
- 19 Dodd, R.T., METEORITES; A PETROLOGIC-CHEMICAL SYNTHESIS 1987 Cambridge UK, Cambridge University Press, xi, 368 pp catalogue entry 445

20 Einstein, A., RELATIVITY: THE SPECIAL AND GENERAL THEORY 1961 New York, Crown Publishers missing

21 Encrenaz, T. and J. Bibring, The Solar System 1990 Berlin, Springer-Verlag, xiv, 330 pp series Astronomy and Astrophysics Library catalogue entry 495

22 Evans, R.D., THE ATOMIC NUCLEUS 1955 New York, McGraw-Hill Book Company, xv, 972 pp series International Series in Pure and Applied Physics catalogue entry 76

23 Feller, W., An Introduction to Probability Theory and Its Applications; Volume 1

1961 New York, John Wiley & Sons, $\,$ xv, 461 pp 2^{nd} edition catalogue entry 123

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25 Flügge, S., ed., HANDBUCH DER PHYSIK; BAND LII; ASTROPHYSIK III: DAS SONNENSYSTEM 1959 Berlin, Springer-Verlag. 601 dd

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26 Forsyth, A.R., A Treatise on Differential Equations 1956 London, Macmillian & Company, xviii, $583 \,\mathrm{pp}$ 6^{th} edition catalogue entry 81

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28 Françon, M., Modern Applications of Physical Optics 1963 New York, Interscience Publishers, viii, 106 pp series Interscience Tracts on Physics and Astronomy, Nr. 13 catalogue entry 146

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31 Garrett, H.B. and C.P. Pike, eds., Space Systems and Their Interactions with Earth's Space Environment

1980~ New York, American Institute of Aeronautics and Astronautics, ~ xxx, $737\,\rm pp$ series Progress in Astronautics and Aeronautics, Volume 71 catalogue entry 376

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35 Gribbin, J.R. and S.H. Plagemann, The Jupiter Effect; The Planets as Triggers of Devastating Earthquakes

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36 Hargraves, R.B., ed., Physics of Magmatic Processes

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1985 Belmont CA (USA), Wadsworth Publishing Company, xxiii, 548 pp 3^{rd} edition catalogue entry 424

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42 Hesse, W.H., ASTRONOMY: A BRIEF INTRODUCTION
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43 Hildebrand, F.B., ADVANCED CALCULUS FOR APPLICATIONS 1962 Englewood Cliffs NJ, Prentice-Hall, ix, 646 pp catalogue entry 132

44 Hollander, J.M., et. al., eds., Annual Review of Energy; Volume 2 1977 Palo Alto CA, Annual Review Inc., 522 pp catalogue entry 336

45 Hildebrand, J.H. and W.M. Latimer, Principles of Chemistry and Reference Book of Inorganic Chemistry 1940 New York, The Macmillian Company, xi, 359 pp, xii, 563 pp 4^{th} edition catalogue entry 28

46 Jahnke, E. and F. Emde, Tables of Functions 1945 New York, Dover Publications, 306 pp, 76p app. A 4^{th} edition catalogue entry 32

47 Kadanoff, L.P. and G. Baym, QUANTUM STATISTICAL MECHANICS 1962 New York, W.A. Benjamin, xi, 203 pp series Frontiers in Physics catalogue entry 134

48 Kassim, N.E. and K.W. Weiler, eds., Low Frequency Astrophysics from Space 1990 Berlin, Springer-Verlag, xii, 280 pp series Lecture Notes in Physics, Nr. 362 catalogue entry 497

49 Kaufmann, W.J., The Cosmic Frontiers of General Relativity 1977 Boston, Little, Bown and Company, x, 306 pp 1^{st} edition catalogue entry 337

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51 Kellogg, O.D., FOUNDATIONS OF POTENTIAL THEORY 1953 New York, Dover Publications, ix, 384 pp catalogue entry 69

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- 53~Kovacs,~I., ROTATIONAL STRUCTURE IN THE SPECTRA OF DIATOMIC MOLECULES 1969~ New York, American Elsevier Publishing Company, $~320\,\mathrm{pp}$ catalogue entry 215
- 54 Kraus, J., Big Ear 1976 Powell OH (USA), Cygnus-Quasar Books, iii, 228 pp catalogue entry 300
- 55 Lanczos, C., The Variational Principles of Mechanics 1957 Toronto, University of Toronto Press, xxv, 307 pp series Mathematical Expositions, Nr. 4 catalogue entry 91
- 56 Leighton, R.B., PRINCIPLES OF MODERN PHYSICS 1959 New York, McGraw-Hill Book Company, xii, 795 pp 1st edition series International Series in Pure and Applied Physics catalogue entry 108
- 57 Loeb, L.B., THE KINETIC THEORY OF GASES
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- 58 Lüst, R., ed., STELLAR AND SOLAR MAGNETIC FIELDS 1965 Amsterdam, North-Holland Publishing Company, 460 pp series IAU Symposium, Nr. 22 catalogue entry 181
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- 60 McCormac, B.M., ed., Atmospheres of the Earth and the Planets 1975 Dordrecht, D. Reidel Publishing Company, vi, 454 pp series Astrophysics and Space Science Library, Nr 51 catalogue entry 281
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1953 New York, Prentice-Hall, Inc., $\,$ vii, 412 pp series Prentice-Hall Physics Series catalogue entry 72

65 Michaud, M.A. G., REACHING FOR THE HIGH FRONTIER; THE AMERICAN PRO-SPACE MOVEMENT, 1972-84

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