

# Recollections about library service to physics, mathematics, and astronomy patrons at the PMA Library, The University of Texas at Austin, 1979-1984

by John H. Sandy

**M**y time as head librarian for the Kuehne Physics Mathematics Astronomy (PMA) Library began in April 1979 and lasted until October 1984, covering about five and one-half years. The library had opened on the ground level of the newly built Physics-Mathematics-Astronomy Building, later renamed Robert Lee Moore (RLM) Hall, in 1972, not long before I arrived. In 2020, the name of the building changed to Physics, Math, and Astronomy (PMA) Building.



Photo of Physics, Mathematics, Astronomy Building, 1972. PMA Library gets a prime location on first floor.

Photo courtesy The University of Texas at Austin

During those years, the PMA Library was part of a system of branch libraries in the University of Texas General Libraries, under the direction of assistant director for branch services, Virginia Phillips. The branch libraries in this setup included the geology, biology, chemistry, engineering, and physics-mathematics-astronomy libraries. Leading each library was a professional librarian, Martin Smith, Betty White, Aubrey Skinner, Susan Ardis, and John Sandy.

In the late 1970's and early 1980s, libraires in the U.S. were still largely in the pre-digital era. And this was the case at UT-Austin. Collections, services, and operations were mostly based on paper systems. The PMA Library was bulging with thousands of print monographs, reference books, and conference proceedings, plus numerous print periodicals.

Materials were checked-out by faculty and students using book cards found in a pocket attached inside the back cover of every book. All of this was labor intensive, but everything worked well. In 1982, this system was finally automated, allowing for computer check-out. This was a huge advancement in productivity for staff and patrons alike. With the new automated check-out system, faculty could be in and out of the library quickly, no longer having to use valuable time to complete a charge card for every book in hand. A card catalog showed the library's holdings.

Over time, the digital library slowly came more into focus at PMA. At the beginning of the digital era, from the late 1970s, the library had the ability to search online databases services offered by DIALOG in California. This was not an easy or simple road to get access to the literature and it was costly, plus online database searches required mediation by the PMA librarian.

The technology used to provide database access was rudimentary by today's standards. A Texas Instruments Silent 700 dumb terminal was connected from my office to a remote database on a mainframe computer in California over standard telephone lines, with data sent and received through a modem and acoustic coupler on the terminal at a rate of 30 baud. Primitive is a word to describe this setup.

Due to cost and unfamiliarity, online database searches from remote databases were little used by students and faculty. Seeking to shine light on this situation, I authored a brief story highlighting the value and importance of online database search, and my piece appeared in the journal *Science* (vol. 216, 25 June 1982). Without doubt, remote online databases available from the PMA Library offered a powerful and efficient way to access the scientific literature at the beginning of the digital era in libraries.

During my time in Austin, PMA's holdings rivaled the best physics, mathematics, and astronomy collections found anywhere in the world. The UT-Austin General Libraires had a massive materials budget and PMA was able to acquire everything wanted by the students and faculty and much more.

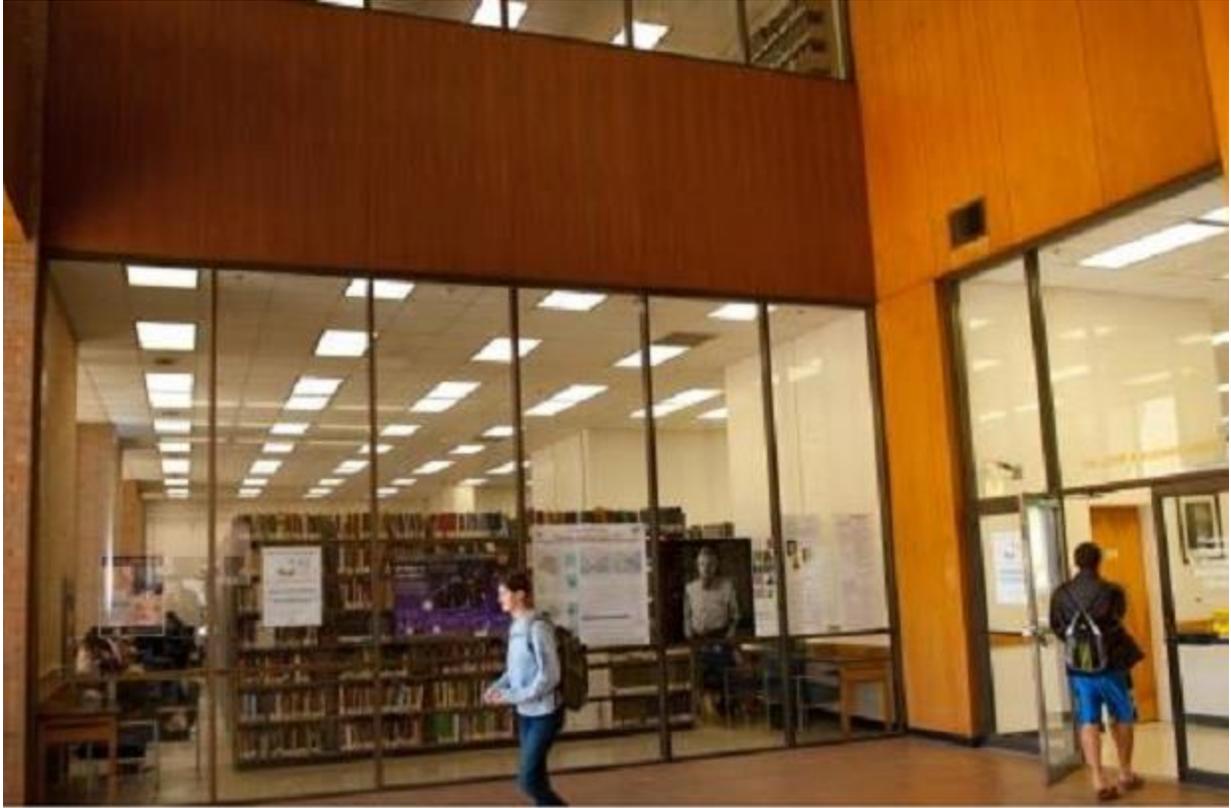


Photo of entrance area to the PMA Library on ground floor of PMA Building.  
Photo courtesy of The University of Texas at Austin.

The book collection consisted of individual monographs and reference books as well as hundreds of books published in series. If Academic Press, Springer-Verlag, the American Institute of Physics, or others, published a monograph or conference proceeding in a series, books in the series arrived automatically in PMA soon after publication, under a system of standing orders.

With standing orders, no action was necessary on the part of the PMA librarian to ensure that a huge swath of national and international scholarship was always available for students and faculty. Of course, the library's large periodical collection also came automatically from subscriptions placed with periodical vendors.

In addition to standing orders for book in series, the PMA Library was allocated a huge discretionary budget to buy even more books and periodicals. PMA routinely acquired most books published in English and added the books to its massive and growing collection. Few libraires in the country enjoyed a luxury such as this.

Over the years before I arrived in PMA, the library had "lost" hundreds of valuable books, meaning the books were unaccounted for after an inventory. The shelf list for the library contained hundreds of cards marked by a paper clip showing which books were missing. Since the library had a huge discretionary budget, funds were available to replace the missing books. After careful review, many of the missing titles were replaced.

As for finding tools, in the late 1970s and early 1980s, the PMA Library demonstrated its international reach. *Physics Abstracts*, *Astronomy and Astrophysics Abstracts*, and *Mathematical Reviews* were common tools used by researchers. But, as a world-class library, PMA sought to give full access to all the world's scientific physics, mathematics, and astronomy literature. As such, graduate students and advanced scholars could consult print editions of *Referativnyi Zhurnal*, *Zentralblatt für Mathematik und Ihre Grenzgebiete*, and *Bulletin Signalétique* found in the reference collection.

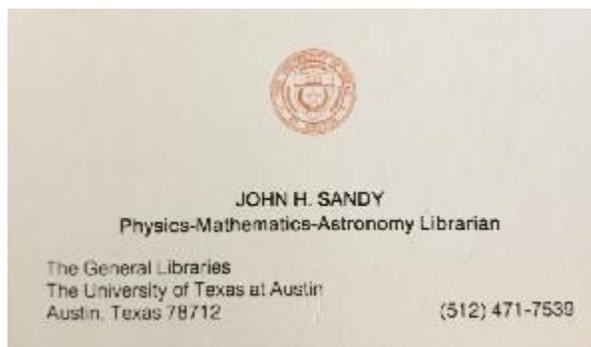


Photo of view from inside of PMA Library. Photo courtesy of The University of Texas at Austin.

In the early 1970s, seizing an opportunity to bridge print-based indexes and emerging digital solutions, the PMA Library developed a custom current awareness product for the physics and astronomy faculty. SPIN (Searchable Physics Information Notices), a magnetic tape containing current bibliographic data for journals, was acquired monthly from the American Institute of Physics. As a next step, individual faculty interests were profiled, and each profile was matched against data on the tape, using a UT-Austin campus computer. Using this method, once a month all participants in the service received a computer print-out showing current research in their field of interest. This was a significant and popular service. In a way, this service was an early approach to outreach, the library placing a product in faculty hands in their campus offices.

Adding to the PMA Library's international presence, as the head librarian for PMA, I had the privilege of knowing and serving international scholars who came to the university. One scholar, particularly, comes to mind. In 1981, Dario Castellanos arrived from a major university in Venezuela as a guest of the department of physics. Dr. Castellanos was a regular library patron during the time of his visit. Not long after his arrival at UT, Dr. Castellanos invited faculty from the department of physics to his gorgeous home in west Austin for a social gathering (and dining) one Saturday evening. Of course, he invited the PMA librarian and spouse to share in the hospitality.

There was always good news for me, the PMA librarian. When annual library conferences arrived, department chairs in physics and astronomy were always happy to provide me with financial support for travel, a supplement to a travel allowance from Harold Billings, director of UT General Libraries. Welcome support indeed. At another time, Dr. Thomas Griffy, chair of the physics department, allowed me to use the physics department's computer facilities to prepare a KWIC (keyword-in-context) index for a book that I had compiled on Nebraska geology.



*PMA librarian 1979-1984*

In the late 1970s and early 1980s the departments served by the PMA Library had an abundance of big-name scholars, people recognized worldwide. John Wheeler was a special person of note. When he visited the library for service, he often had time to stop and talk to me. Dr. Wheeler was a person who enjoyed sharing with others and I was always happy to visit with him. Stephen Weinberg was another regular in the PMA Library. On one occasion, Dr. Weinberg suggested a way to arrange AIP Conference Proceeding on the library's shelves as the arrangement used, filed as a series in a common location, did not satisfy him particularly well. On another visit to the library Dr. Weinberg shared his approach to staying current with the physics literature. He said that he had a personal subscription to ISI's *Current Contents* and read it when traveling, especially while on airplanes and at airports.

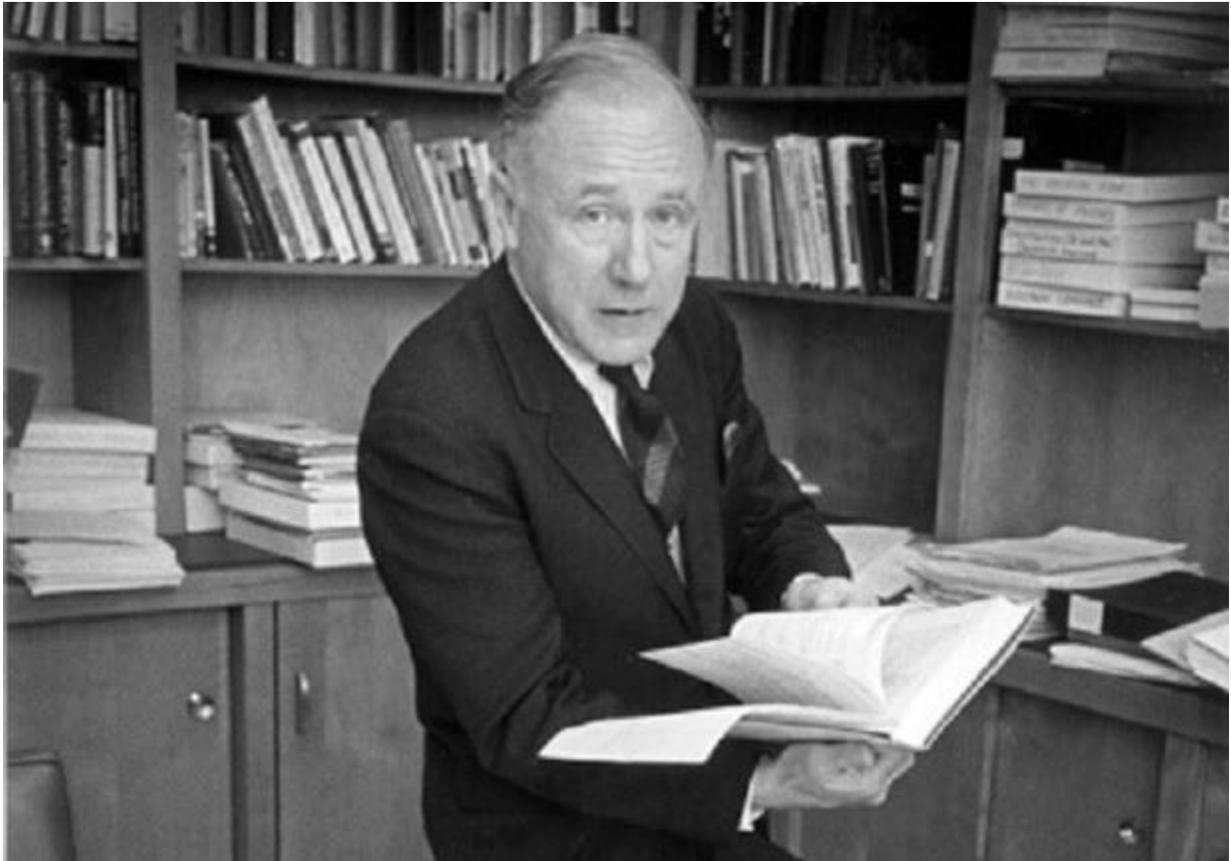


Photo of John A. Wheeler, professor emeritus, physics, The University of Texas at Austin. In his office in RLM Building. Photo date, 1977.

Photo courtesy of The University of Texas at Austin News and Information Service.

The McDonald Observatory in west Texas was not much on my radar. Still, it was important to know about onsite library capabilities at the observatory. Star catalogs at the observatory were obviously important for astronomers who regularly traveled to the observatory from Austin. To get more familiar with the collections at the observatory, I, along with Virginia Phillips, took a flight on a university-charted twin engine plane on a hot July morning in 1979 out to the observatory. Aside from learning about collections at the observatory, the trip was an experience long remembered. The plane was a six-passenger aircraft and had two bench seats, along the sides of the aircraft, behind the pilot. A trip of at least four hours and without any air conditioning aboard. After a full afternoon at the observatory, we returned to Austin on the same day.

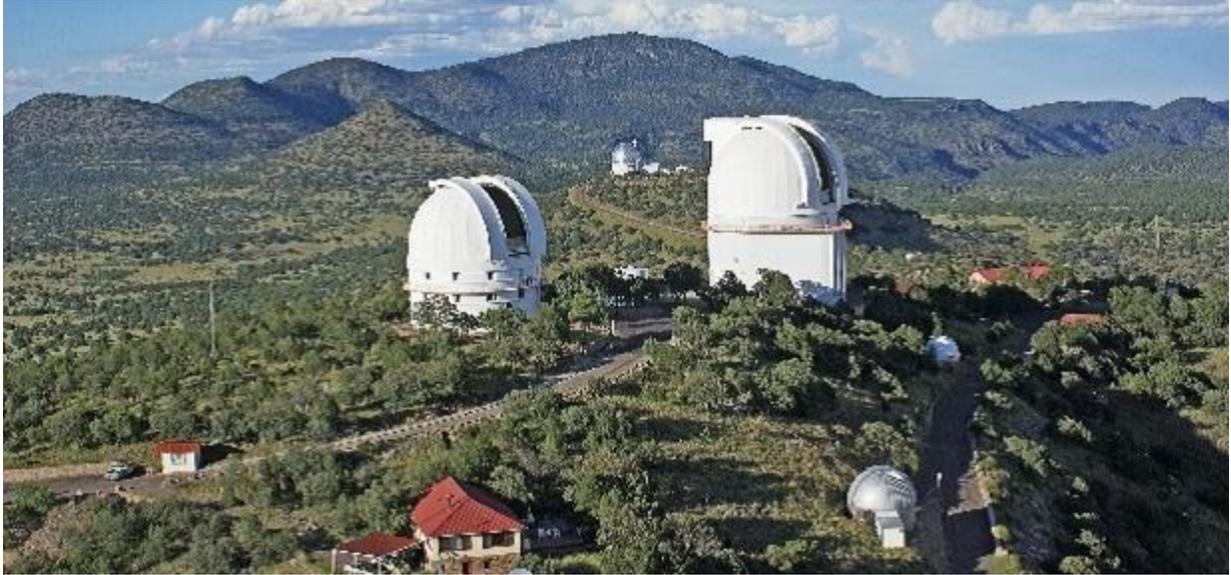


Photo of McDonald Observatory in west Texas. Photo courtesy of The University of Texas at Austin.

The PMA Library was a highly regarded resource and on the front page of those it served, during the years I was at UT-Austin.

Over the years, the PMA Library has faced challenges and adapted to change. On an encouraging note, the PMA Library, on this the 50<sup>th</sup> Anniversary, is still a stand-alone facility on the UT-Austin Campus and offers first-class collections and services to the students and faculty who are engaged in learning, teaching, and research in the fields of physics, mathematics, and astronomy. An accomplishment and legacy all can be proud of for sure.

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