



SMITHSONIAN INSTITUTION, WASHINGTON, D. C.

NO. 2 (NEW SERIES), MARCH 1965

RADIATION BIOLOGY LAB NOW INDEPENDENT UNIT

The Division of Radiation and Organisms has been constituted as the Smithsonian Radiation Biology Laboratory, in recognition of the excellent progress and future prospects in scientific research.

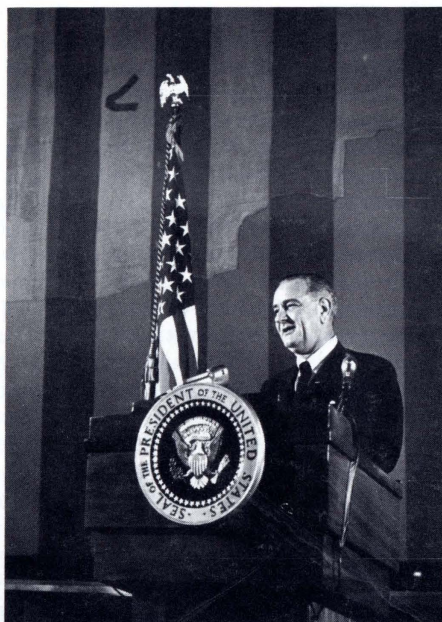
The laboratory, under the direction of Dr. William H. Klein, with Dr. Walter Shropshire, assistant director, is made up of a staff of 36, including senior level researchers, visiting postdoctoral scientists, graduate students, and a supporting staff of technicians and engineers.

To find Dr. Klein's office one almost needs a bird dog—laboratories to the right and left and all in the basement of the Smithsonian Building, west end. The research facilities of the newly named Laboratory include several chemical and biochemical laboratories and a number of constant-condition rooms where environmental factors such as radiant energy, temperature, and humidity are controlled. A wide range of precisely controlled radiation sources are maintained, and, in addition, a radiosotopes laboratory and

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Secretary S. Dillon Ripley at his desk in his office in the Smithsonian Building with Frank Taylor, Richard H. Howland and Victor Lundy (right). Mr. Lundy is the architect for the new music pavilion and shade shelters which will be provided on the terraces of the Museum of History and Technology for use by visitors in spring and summer.



President Johnson stands in front of the original "Old Glory" in the Museum of History and Technology, where he spoke on March 3 in observance of the 34th anniversary of the enactment of the law by Congress declaring the Star Spangled Banner our National Anthem.

TV PROGRAM SPECIAL FOR SMITHSONIAN PLANS

Beautification of Washington, D. C., featuring plans for the Mall, will be the main theme stressed in the NBC-TV Channel 4, "Our Man in Washington" (David Brinkley) program on April 20th, 10-11 p.m.

"OMIW" producer, Ted Yates and William Grayson, SI broadcasting and film consultant, were present in Secretary Ripley's office in the Smithsonian Building with the camera crew to film this planning session.

Smithsonian film and broadcasting activity also has another highlight in progress which will take place before the scheduled "special" just reported. This is a feature on the Smithsonian to appear within the regular evening 6:30-7 p.m. week nights NBC-TV Channel 4, Huntley-Brinkley News Report in the very near future. Watch for it!

BEDINI NAMED TO TOP-LEVEL POST

Silvio A. Bedini, formerly curator in charge, Division of Mechanical and Civil Engineering, has been appointed assistant director of the Museum of History and Technology. Mr. Bedini has held his former job of curator since 1961. Before coming to the Smithsonian Institution, Mr. Bedini was in private business, serving as a consultant to various publishing houses as well as Government agencies.

He is one of the foremost authorities in the history of science and technology, achieving an international reputation in three areas of research: the role of scientific instruments and their makers as a link between science and technology throughout history; the engineers, clockmakers, and instrument makers of Italy from the 14th through the 17th centuries; and the history of science and of scientific instruments in America to the end of the 19th century.

He is the author of numerous articles and publications, including the Smithsonian publication *Early American Scientific Instruments and Their Makers*, which



has been received enthusiastically. Among his manuscripts now in progress is *A History of Scientific Instruments* which will be the first full-length work in any language other than German on this subject.

THE SMITHSONIAN TORCH



AN EMPLOYEES' NEWSPAPER, PUBLISHED MONTHLY

EDITORIAL BOARD: JAMES BRADLEY, PAUL H. OEHSE, WILLIAM WARNER
EDITOR: ELIZABETH BEVERLEY PHOTOS: ALBERT J. ROBINSON

Put to THE TORCH

After listening to numerous speeches, statements, and conversations by Smithsonianites over a long period of years, I am convinced that the most frequent solecism perpetrated among all these educated people is using the nominative-case pronoun as the object of a preposition. Can't we be objective about this and do something to restore "between you and me" to its ancient, honorable, and upright position again? "Between you and I" sends me into an editorial wheeze. I might say that Smithsonian people are not the only offenders.—*Redactio ad Absurdum* (sic)

According to one of our finest students of the English language, Edmund Wilson reports that Ben Johnson, the compiler of what was in effect the first English grammar, used "between you and I," as well as most of the Elizabethan writers. Perhaps "between you and me" is not as ancient as believed!—EDITOR

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The just-revived SMITHSONIAN TORCH hit the streets, specifically Constitution Avenue, in a dead heat with 11 red engines, a chief, and 39 firemen, all critical of our subhead "Put to THE TORCH."

Fortunately, it was little more than a drill in living color. An accumulation of contractor's debris in the new West Wing of the MNH flared up and, well, it could have been worse.

A quick double play, contractor-to-guard-to-fire-alarm covered the situation.

"What a way to go," sighed Night Guard Ed Hall as he retired for the night, or day.—*J. Harry Phillips, Jr. (SD)*

P.S. With such friends as SAO News and Director Whipple lighting the way, who needs press agents?

NEW PERSONNEL JOIN NPG/NCFA LIBRARY

William B. Walker, formerly librarian of the Art Reference Library at the Brooklyn Museum in New York recently was appointed as librarian of the National Portrait Gallery and the National Collection of Fine Arts.

Mrs. Shirley S. Harren is now assistant in the NPG/NCFA Library, transferring from the acquisitions section of the Smithsonian Library where she worked with the gift and exchange program.

MYSTERY FOUND IN SCOTCH STONES

Gerald Hawkins gets THE TORCH's vote for the TV Emmy award for his performance on the CBS Special on Stonehenge. Dr. Hawkins, who used a computer to show that Stonehenge was a stone age calendar, now has turned his attention to the Scots. He believes they might have used a rock-ringed site called Callanish for a similar purpose.

Callanish is just below the Arctic Circle, so that even in midsummer the full moon's transit just skims the southern horizon. The extreme positions of the rising and setting moon or sun, when viewed from certain stones at Callanish, could have signalled the start of the seasons for prehistoric Scottish weathermen. Dr. Hawkins has suggested that the stone circle also could have been used as a counting device. The 13 stones — 12 large and 1 small — could have been the basis for a solar-lunar

calendar based on the usual short years of 12 lunar months and the less-frequent long years of 13 lunar months. The Callanish and Stonehenge observational program and calendar formulation would antedate by 1,000 years any other calendar system known.

Dr. Hawkins, an astronomer at the Smithsonian Astrophysical Observatory, is also a professor of astronomy and director of the observatory at Boston University and a research associate at the Harvard College Observatory.

WASP TRAVELS NORTH

Robert B. Meyer, Jr., curator of flight propulsion, National Air Museum, reports that the original Wasp engine, now in the Air Museum, will be loaned by the Smithsonian for a month to Pratt & Whitney Aircraft, which is celebrating its 40th anniversary in April.

S.A.O. SCIENTIST KILLED IN MOUNTAIN CLIMBING

Dr. Craig M. Merrihue, physicist and a brilliant scientist in meteorites at the Smithsonian Astrophysical Observatory, Cambridge, Mass., was killed while mountain climbing near Mt. Washington on Sunday, March 14.



James Bradley, Assistant Secretary, is shown accepting the Lockheed Agena-B on its presentation to the Smithsonian by the U.S. Air Force, NASA, and Lockheed, in the Arts and Industries Building in February. S. Paul Johnson, Director of the National Air Museum, reports that the Agena was the first satellite to achieve circular orbit, first to make Polar orbit, first to be controlled in three axes during flight, and first to provide re-start capability (pump-fed engine). Since 1959, the Agena has been utilized in more than 140 Air Force and NASA space flights, including the Ranger and Mariner programs to the moon and Mars. The Agena will eventually join the Smithsonian's vast aerospace collection to be displayed in a new National Air and Space Museum.



William H. Klein in one of the laboratories maintained by the newly named and now independent unit, the Smithsonian Radiation Biology Laboratory.

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environmental greenhouse are in operation. To maintain and develop such facilities the laboratory has electronic, optical, instrument, and carpenter shops.

These laboratory facilities and staff have established for the Smithsonian a strong tradition of interest in and experimental investigation of various kinds of radiation and their effects on living systems. One of their recent major undertakings was the design and construction of automatic instruments for measuring the spectral quality of incident sunlight and the daily and seasonal variations in spectral quality and intensity.

Other research and studies in this division concern the interaction of ionizing radiation with these mechanisms, that is, the process whereby a particle that is electrically neutral obtains a positive or neutral charge. And a most significant addition within the last several years has been the construction of a carbon dating laboratory for the determination of ages of samples of archeological and biological interest.

Dr. Klein said that it is difficult to compare this effort in the field that it deals with as a whole because only several laboratories in the world can do this type of work. "The Laboratory has diversified facilities, for it has special capacities for each area that it covers. There are many other laboratories who can do each part of our work more elaborately, but they are specialized only in that."

Dr. Klein came to the Smithsonian in 1951. He received his doctorate from Purdue University in Indiana. Dr. Shropshire, who came to the Smithsonian in 1954, obtained his doctorate from George Washington University and did postdoctoral work at Cal Tech, then returned to the Smithsonian. Dr. Klein pointed out that the division began under Dr. Abbott in 1929 with only four people. It will now report as an independent unit to the Assistant Secretary for Science.

Employees are offered discount prices on all museum sales desk items totaling \$1.00 or more. The discount is 10 percent on publications (including postcards) and

NAGEL, HEAD OF NPG OPENS NEW DOOR

"The National Portrait Gallery will exhibit portraits of men and women who have made significant contributions to the history of our country. It is not to be an art museum in the conventional sense. It will include a study center of major importance." This statement comes from Charles Nagel, under whose direction the Gallery is developing today.

The Gallery is temporarily housed in the Smithsonian's Arts and Industries Building and will move to the "Fine Arts and Portrait Galleries" Building at 9th and F Streets, N.W., now being remodeled for this purpose and scheduled to be completed by 1966.

Recently Secretary Ripley announced that 35 portraits of distinguished Americans, including those of nine Presidents had been accepted for future display by the National Portrait Gallery. The majority of the portraits, formerly held by the National Gallery of Art and transferred to the National Portrait Gallery at a recent meeting of the Board of Trustees, were gifts from the late Andrew Mellon. Among the pictures are those of Presidents Jackson, Tyler, Buchanan, Pierce, William Henry Harrison, and Washington. Artists represented include John Singleton Copley, Charles Willson Peale, George P. S. Healy, and John James Audubon.



Charles Nagel, director of the new gallery, comes to the Smithsonian from the City Art Museum in St. Louis, Missouri. He was born in St. Louis and attended Yale University where he received his MFA degree in architecture in 1928 and served from 1930 to 1936 as Curator of Decorative Art in the Yale Gallery. He is the author of *American Furniture 1650-1850*, published in 1950.

Mr. Nagel reports that he and his wife are happy to be in Washington and the job as director of the Portrait Gallery is a new experience for him, a change in point of view, for he is developing his gallery from the historian's approach rather than the artistic.

20 per cent on three-dimensional reproductions. The National Gallery of Art gives varying discounts on different items. Employees must show ID cards.



If you would like to get a close look at old phones, and many other interesting exhibits, go to the new Hall of Electricity in the Museum of History and Technology. Above are Barbara Broughton (Photographic Laboratory) and Roy V. La Roche (Division of Electricity).

GET YOURSELF A TINGLE IN NEW MHT HALL

The first of the permanent exhibits to be installed in the Hall of Electricity opened in the Museum of History and Technology, joining special satellites and transformers which have been there for several months. Others to follow will deal with radio communications and electrical properties of matter.

Interspersed with the static displays of artifacts on the development of motors and generators, the telegraph, and the telephone are some opportunities for the visitor to get the "feel" of the material directly—for example, the mock-up of some of Ampere's early experiments, or the two dynamos that can be turned to show the benefit of good versus poor design, or the magneto generator that literally gives you that tingling sensation.

OCEANOGRAPHER LECTURES

Carrying out the Smithsonian's intent to advance education, the second lecture in the Edwin A. Link lecture series was given on February 17 by Lt. Comdr. Don Walsh, a recipient of the Legion of Merit award for having descended in the bathyscaphe *Trieste* to a depth of 35,800 feet—the greatest depth yet explored by man.

Commander Walsh gave an introductory lecture on the sea and its present importance to mankind in the use of the oceans for working and living—farming, undersea, fisheries, harvesting, the weather, mining, undersea defense, and undersea vehicles. He mentioned the above projects as being explored today by not only the government, but private organizations. He also told his own personal story of his experience in deep-ocean exploration on board the *Trieste*.

The Edwin A. Link lectures, which presented Astronaut Alan B. Shepard in 1964, are administered by the Smithsonian in cooperation with the U. S. Office of Education.

FOCUS: 209,643 VISITORS VIEW DEAD SEA SCROLLS

SMITHSONIAN EXHIBIT

The exhibition of the Dead Sea Scrolls, sponsored by the Government of Jordan, opened to the public in the Foyer Gallery of Smithsonian's Natural History Building and ran until March 21. The picture on this page shows the public's reaction to the exhibit—one of intense interest, excitement and patience.

The exhibition attempted to show the highlights of the incredible story of the Dead Sea Scrolls. The purpose of the exhibition, as pointed out by Secretary Ripley, was to explain and show all aspects of the scrolls: their discovery, the people and culture that produced them, their importance for historical and religious studies, and modern scroll research. This was accomplished through succinct captions, photographs, maps, and charts, outlining the story of the exhibit.

In addition to the scrolls, other objects of interest on display were the jars in which the scrolls were contained, Herodian and Hellenistic lamps, a Roman iron arrowhead, various cooking ware, and an Ostrakon and Hebrew alphabet.

TOUR FOR THE SCROLLS

The Dead Sea Scrolls Exhibit from Jordan left the Smithsonian headed for the University of Pennsylvania Museum, Philadelphia, where it will remain from April 3 to April 25. Secretary S. Dillon Ripley announced that the exhibit will circulate throughout the United States. Plans also are being made to exhibit the scrolls and objects in Canada and Great Britain following the American tour.



Dr. Gus Van Beek, associate curator in the office of anthropology, along with the Office of Exhibits and the Smithsonian Traveling Exhibition Service, worked hard and long to present the Dead Sea Scrolls in the Museum of Natural History from February 27 to March 21.



What happened to the shepherd who found the scrolls? We can't answer that but we do know that here is a shot of what happened to many of the viewers who wanted to see the Dead Sea Scrolls the day the exhibit opened. They are shown lined up on Constitution Avenue outside the Museum of Natural History.—*Star Staff photo by Paul Schmick.*

REACTIONS TO EXHIBIT

PLACE: Natural History Museum, Dead Sea Scrolls Exhibit

TIME: Between Feb. 28 and March 1

PEOPLE: Inquiring Editor, Mr. and Mrs. Cornelius Van Schelven, Alexander Dilella OFM, Mr. and Mrs. Wm. Gallagher, and Messrs. Rouhier, Blundy, and Vick.

The script from the viewers of the scrolls and the questions asked can not be quoted exactly, but the general theme was complete enjoyment, and a bit of awe and excitement from those who were filing out after seeing the scroll exhibit. Mrs. Van Schelven, who lived formerly in the Netherlands, explained: "My interest is history, and it is most wonderful to actually see it here; to know the Bible existed for so long; to read so clearly the history of the scrolls; and to see the patience with which they were put together."

The young man in the priesthood from Catholic University had not been back in this country very long—he had been digging in the vicinity of the area where the scrolls were discovered! As for the exhibit, Alexander DiLella, OFM, said: "Very good, but point 8 has a misuse of the word 'contexts'!"

The young couple from Ohio, Mr. and Mrs. Gallagher, went home with a problem, for he reported immediately: "Very nice with obviously lots of work put into preparing such an exhibit. It is easy to read and I liked it." Mrs. Gallagher, on the other hand, said in a disappointed

tone: "It was not at all what I had planned on seeing. It is so compact, small. I expected something more elaborate, dramatic."

And the three young men from St. Johns High School here in Washington differed two to one. For Messrs. Rouhier and Blundy it was one big review. They had studied the complete history in their classes the year before, leaving only Mr. Vick to get the story for the first time: "We were walking up Constitution Avenue, and they said to me, 'Come on, let's stop in and see the Dead Sea Scrolls,' and I said, 'What are the Dead Sea squirrels?'" After seeing the exhibit he said he felt he had a head start when he takes the course!

DISCOVERY, HISTORY AND SIGNIFICANCE

The first scrolls were found by a shepherd boy in the early spring of 1947 in the region of Qumran, about 18 miles from Jericho. The Essenes, who produced them, were members of an important religious group. In 140 B.C. numbering about 4,000 persons, they established their own Community in the Judean desert. After 44 A.D. when all Palestine was under direct Roman rule, the Essenes put their precious manuscripts into jars prepared for them and hid them in caves. Some day, when the fighting was over, their scripture still would be their treasure. And they are ours today! Their significance 20 centuries later fills large gaps in knowledge of religious currents at the beginning of the Christian era.