James A. Van Allen, Discoverer of Earth-Circling Radiation Belts, Is Dead at 91

James A. Van Allen, the physicist who made the first major scientific discovery of the early space age, the Earth-circling radiation belts that bear his name, and sent spacecraft instruments to observe the outer reaches of the solar system, died yesterday in Iowa City. He was 91.

The cause was heart failure, family members said. Dr. Van Allen was a longtime professor of physics and astronomy at the University of Iowa, and, with the discovery of the Van Allen belts of intense radiation surrounding Earth, he became a leading figure in the new field of magnetospheric physics, which grew in importance as spacecraft began exploring the planets.

A legendary lecturer and an inspiration to several generations of budding physicists and astronomers, Dr. Van Allen continued to show up at his office-laboratory until a month or so before he died.

Rapid Rise to Acclaim By WALTER SULLIVAN

James Van Allen, an unassuming but resolute investigator of cosmic rays and other space phenomena, literally rocketed to international acclaim with the launching of Explorer 1, the first successful space satellite of the United States.

It was on Jan. 31, 1958, in the early days of the space race between the United States and the Soviet Union and almost four months after the Russians stunned Americans with Sputnik 1. The American Explorer 1 may not have been first in space, but a Geiger counter developed by Dr.

Walter Sullivan, science editor of The New York Times, died in 1996.



From the left, William H. Pickering, Edward Manning, James A. Van Allen and Wernher von Braun in 1958 after the Explorer 1 launching.

Van Allen sent back data of what would become known as the Van Allen radiation belts.

The radiation detector recorded two belts of charged particles trapped by Earth's magnetic field. One belt is 400 to 4,000 miles above the surface, and the other is 9,000 to 15,000 miles above the Equator, curving toward the magnetic poles. Further evidence for the encircling radiation was detected with Dr. Van Alinstruments carried aloft aboard Explorer 2 and Explorer 3.

In the celebration of the Explorer 1 success, Dr. Van Allen posed for what became an iconic picture of the early days of spaceflight. He is standing with Wernher von Braun, whose team built the rocket, and William H. Pickering, who directed the spacecraft development, all smiling broadly and holding a model of the spacecraft high over their heads. He was the last of the three to die.

For several decades afterward, Dr. Van Allen was a staunch advocate of planetary exploration with robotic spacecraft and a critic of bigbudget programs for human space flight. Describing himself as "a member of the loyal opposition," he argued that space science could be done better and less expensively when left to remote-controlled vehi-

Even before the radiation-belt discovery, Dr. Van Allen was heavily involved in early American rocket research. When, on April 16, 1945, a V-2 rocket captured from the Germans was first sent aloft from the White

Sands Proving Ground in New Mexico, it carried Geiger counters provided by Dr. Van Allen. His goal was to record radiation from space before it was altered by passage through the atmosphere. Such "cosmic rays" had been his lifelong interest, and it had earlier been discovered that they were more intense in outer space.

It has been said that scientists fall into three categories, thinkers, organizers and doers. Dr. Van Allen was a doer.

He was born on Sept. 7, 1914, in Mount Pleasant, Iowa. A physics professor at Iowa Wesleyan College, near his hometown, recognized the 18-year-old student's skill at tinkering. The professor put him to work, at 35 cents an hour, preparing seismic and magnetic equipment for an expedition to Antarctica.

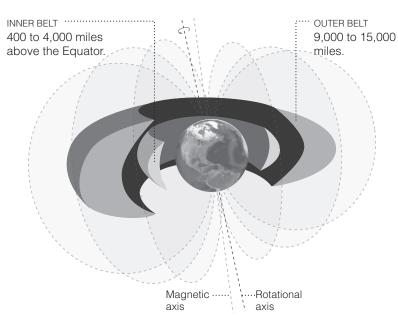
It was to be led by Adm. Richard E. Byrd with the physics professor, Dr. Thomas Poulter, as second in command. Mr. Van Allen wanted to go, but his family thought him too young. He graduated summa cum laude and went to the State University in Iowa City for his graduate work, receiving a doctorate in 1939.

He worked as a research fellow at the Carnegie Institution of Washington until 1942. He then joined the Navy and worked at the Bureau of Ordnance on the proximity fuse, which was, for the first time, effective against dive bombers. Its strictly kept secret was a tiny radar in the projectile's nose that detonated when it flew past a target. He also served as an assistant staff gunnery officer in the Pacific, winning four

At the Johns Hopkins University Applied Physics Laboratory, from 1946 through 1950, he supervised high-altitude research, promoting

Van Allen Belts

In 1958, Dr. James A. Van Allen, an American astrophysicist, discovered two belts of charged particles circling the planet, trapped by the Earth's



development of the Aerobee rocket, which while much smaller and cheaper than the V-2, could lift a

small payload almost as high. In 1951, he joined the University of Iowa as a professor and head of the department of physics and astronomy. He and his graduate students developed the "rockoon," a rocket lifted by balloon 10 to 15 miles high, where air pressure was low, then fired to soar as high as 85 miles. From icebreakers he supervised rocket shots near both the north and south geomagnetic poles in the belief that Earth's magnetic field there was channeling cosmic ray particles down into the atmosphere, causing the aurora. Such radiation was confirmed by the rockoons.

After the successful launching of the Soviet Sputnik and a succession of humiliating failures by the United States Navy's Vanguard launcher, Dr. Van Allen was hastily told to refigure the radiation detectors he had designed for Vanguard to fly on the Army's Explorer 1.

When it was launched, it detected radiation close to the anticipated intensity as it flew over recording stations in the United States. Because it carried no tape recorder, its observations were monitored only as it flew over ground observatories, but when readings began coming in from South America, where high counting rates had been expected, the Geiger counters became strangely silent.

"Our explanations - both wrong as it turns out," Dr. Van Allen said later, "were either that our instruments were faulty or that cosmic rays do not strike the upper atmosphere over the tropics."

The puzzle was resolved when his group realized that when radiation is extremely intense, such a detector is swamped and becomes silent. Explorer 3 carried a tape recorder, and the vast extent of the radiation belt was detected. Evidence then accumulated for two belts, a more intense inner one and a diffuse outer one. The Pioneer probe to the Moon launched on Oct. 11, 1958, documented the outer part of the belts.

The same year Dr. Van Allen took part in Project Argus, the firing of three atomic bombs 300 miles aloft over the South Atlantic to see if, like the radiation belts, their radioactive particles became trapped by Earth's magnetism. The artificial belts were detected worldwide, producing auroras in both polar regions.

He also promoted international cooperation in science. On April 5, 1950, one of the most ambitious scientific efforts of all time, the International Geophysical Year, was born in his living room in Silver Spring, Md.

The guest of honor was Sydney Chapman, a professor of natural philosophy at Oxford and an authority on the link between solar eruptions and magnetic storms on Earth. The assembled scientists agreed that it was time for a global effort to understand the earth and its environment. Dr. Chapman became chairman of the committee that organized the 67-nation research program, which was carried out in 1957-58.

Also in 1958, the year that Sputnik undermined the American ego, Dr. Van Allen was chairman of a group of the country's leading space scientists who recommended a manned landing on the Moon by 1968. The group included von Braun, technical director of the Army's Ballistic Missile Agency, and directors of the Smithsonian Astrophysical Observatory and the Jet Propulsion Labora-

They proposed spending \$10 billion over the next decade to "establish United States leadership in space research by 1960." They recommended prompt creation of an independent national space establishment. The National Aeronautics and Space Administration was, in fact, established

Later, however, Dr. Van Allen had a change of mind. The Apollo lunar landing project, despite its vast cost, proved meager in revolutionary discoveries. None were comparable to those made by unmanned spacecraft, like the Van Allen belts, but the unmanned programs received lower priority and financing.

Dr. Van Allen said Apollo was of primary value as a television spec-

Deaths

Bennett, Saul Bergren, Gaylan Birckhead, Godfrey Brod, Herbert Dansker, Jerome Davis-Minton, D. Favelukes, Carl

Pound Ridge, NY.

Belonged to Post 297 Jewish War Veterans.

BROD—Herbert E. Central Synagogue records with profound sorrow the passing of its longtime member Herbert E. Brod. We extend heartfelt sympathy to his bereaved family.

Peter J. Rubinstein, Rabbi

Fein, Gertrude Fisher, Richard Giangreco, Matthew Hayden, Melissa Heicklen, Lewis Lawrence, Suzanne Parmet, Sonia

Riecker, Charles Saphire, Rose Schlegel, Stacey Siegal, Yoni Stein, Dorothy Tifft, Henry Weinberg, John

BENNETT—Saul. Born October 21, 1936. PR executive and, later, poet, died on August 6, 2006. Incredibly loving husband of Joan, and adoring father of Sara, Charles, and Elizabeth. Author of New Fields and Other Stones and DANSKER—Jerome. Gold-berg Weprin & Ustin LLP mourns the passing of our friend and client, and the dean of New York's real esdean of New York's real estate community, Jerome Dansker. Jerry was a selfmade man, rising from real estate holdings and a lending business to Chairman of the highly successful Intervest National Bank. Jerry's vision was and is an instrumental part of the vibrant real estate market. A call to Jerry often presaged the signing of a contract. Jerry's word was his bond. Integrity was his code. Many of Jerry's achievements were public, but his highest achievement and reason for living was his fa-Harpo Marx At Prayer. Son of Ruth Weinstein and Philip Ostrove, brother of Susan Mishler. Funeral services Wednesday 1P.M. Mt Ararat Cemetery, Farmingdale, NY. In lieu of flowers, donations may be made to a fund in support of Israel. BERGREN—Gaylan C. 71, died on July 27, 2006. Husband of Patricia Bohm-Bergren of Pound Ridge NY; father of Kristen, Erik and Elizabeth; brother of Glory Ann Kurtz and brother-in-law of Eli-rabeth. Behm Schroder. reason for living was his fa-mily - his wife, Jean, his childprominent architect of res ren, and his grandchildren, to whom he was totally devoted, and to whom we extend

prominent architect of residential, public and corporate buildings, including the landmark buildings Independence Plaza and the Ruppert Towers in NYC. A partner at Pruyn Bergren and Associates, NYC, Becker and Becker Assoc. in New Canan, CT. In 1989 established Gaylan C. Bergren AIA Architects in Norwalk, CT. He earned his B.A. (cum laude) and M.A. in architecture at Harvard. Graveside services Saturday at 11:30 am at the Pound Ridge, NY. DAVIS - MINTON—Dorothy Kraus, 103. The members and associates of Scarsdale Equi-ties LLC mourn the passing of the mother of our partner, Dorothy Anne Brimberg, and entire Davis -Minton family.

our heartfelt condolences.

Pound Ridge, NY.

BHATTACHARJI—Pares C.
On August 5, 2006. Beloved husband of Arati, and father of Sandip. He first came to the United States in 1947 as a graduate student and after returning to India for several years, moved to New York City permanently in 1958. He worked for the New York City Planning Commission from 1970 until his retirement in 1995. We will miss him so much. EMMER—Ruth. Died August 6, 2006 in Seattle, WA at the age of 85. She was preceded in death by her loving husband Martin. She is survived by son Fred, daughter Hilary, grandson Josh Gray-Emmer, granddaughters Tamar Dunn and Natasha Dunn, and sister Florence Weissman. Ruth was born, raised and spent most of her life in Brooklyn, NY. She grew up in Bensonhurst where she attended Seth Low Junior High School where she was a founding member of the Modernettes, which startled out as a group BIRCKHEAD—Godfrev. 77, of Indialantic passed away on August 2, 2006 at his residence. He moved backed to Florida 3 years ago form Richmond, Va. He was in the investment business for 55 years and currently a securities analyst for S.B.K. Brooks in Cleveland, Ohio. He is survived by his wife of 25 years which started out as a group of girls and developed into a group of women who stayed in touch with each other for over 50 years. Ruth and Mar-ty were married in 1946. They were an inseparable team. They traveled extensively, driving through much of eastern United States, flying to exotic locations, and taking cruises off the beaten path. Ruth was active in B'nai B'rith, serving as president, treasurer, and recording secretary of the Marine Park chapter. She also served on the National Council of Jewish Women. Family was very important to Ruth. She founded the A-Z Cousins Club which had over 30 active members who met periodically during the year and gothered everyone together in the summer for a grand weekend in the Catskill Mountains. She loved to play Mah Jong, swim in the ocean, and spend summers at the were an inseparable team. Peggy Bickhead of Indialan tic, FI; Sons, Elliott Birckhead of Charleston, W. Va. ., Stuar Birckhead of Roanoke, Va and Peter Birckhead of Car-rsboro, N.C.; Stepsons, Rodger Peirce, Sean Morkan of Oceanside, Ca., and Adam Morkan of Indialantic, Fl.; 11 Morkan of Indialantic, FI; 11
Grandchildren. A memorial
service will be held at Holy
Trinity Episcopal Church in
Melbourne, FI. on Saturday
August 12, 2006 @ 2:00 PM.
Memorial contributions may
be made to American
Friends Service Committee
1501 Cherry St. Philadelphia,
PA 19102 Condolences may
be added at http://www.seawindsfh.com/obit.pho Arrangeindsfh.com/obit.php Arrange-ments are under the care of Mah Jong, swim in the ocean, and spend summers at the Silver Gull Beach Club. As an Silver Gull Beach Club. As an avid knitter, she was generous with gifts of sweaters for the children of her friends. Ruth and Marty loved the theater and spent many wonderful summer afternoons taking their children to Broadway and Off-Broadway shows which were always followed by dinner at a different restaurant. Ruth and Marty retired to the Clearbrook community in Cranbury, Nu where they made many new friends. When their health started to fail, they moved to Seattle, WA so that they Davis Seawinds Funera Home, Melbourne, Fl. BROD—Herbert E. On
August 8, 2006 at the age of 87.
Devoted husband of the late
Evelyn. Caring father, stepfather, grandfather and great
grandfather. World War II
veteran (Europe), CCNY '42
B, enjoyed a long career in
the printing industry and was
an active leader in both local
and national organizations in
the graphic art industry trade.
Belonged to Post 297 Jewish

ry, Farmingdale, NY on Sunday, August 13, 2006, 11:00 AM under the direction of Mount Sinai Memorial Chapels, East Brunswick, NJ www.msmc.us Howard F. Sharrstein, Pres.

DANSKER—Jerome, on August 9, 2006. Devoted husband of Jean (Kandell). Loving father of Helene Bergman, Neil and Lowell. Dear Father-in-law of Barbara and Larry Bergman. Adoring grandfather of Jennifer, Allison, Andrew, Lisa, Tracy and Rachel. Brother of Norman and Penny Gordon. Service Friday 11:15am at "The Riverside", 76 Street & Amsterdam Avenue. FAVELUKES—Carl. On August 8, 2006. We are deeply saddened by the loss of Carl, a caring husband of Hanne, devoted father to Sandra and Robert, and loving father-inaw to Dan and Courtney. A funeral service will be held on Friday, August 11, 11:30 AM, at Frank E. Campbell, 1076 Madison Ave. at 81st St. We will receive friends between 10:30 and 11:30 AM at Frank E. Campbell. In flow E. Campbell. In lieu of flow-ers, family requests dona-tions be made to the Weiz-mann Institute of Science—

Deaths

FEIN—Gertrude. On August 4, 2006 at the age of 90. In accor-dance with her wishes, her body was donated to the Anasey Medical School. Remembered for her wit and directness, a champion player of tennis, Duplicate Bridge and The New York Times crossword puzzles. She will be missed. Preceded in death by her husband of 47 years, Mitchell Fein on August 12, 2001 and survived by a son David of NJ, a son Jeremy and stepdaughter Lisa, of Denver & two grandchildren, Max and Molly of LA.

FISHER—Richard L. Board of the American Friends of The Churchill Museum at the Cabinet War Rooms (London) mourns th loss of our fellow Trustee. A great admirer of Sir Winston S. Churchill, Richard enthu S. Churchill, Richard enthusiastically embraced the concept of a museum dedicated to the life and achievements of Churchill when it was proposed in 2003 and soon thereafter became a Trustee and ardent supporter. We value the passion Richard devoted to this tribute to the statesman he so admired, and his consistent and generous support and guidance. Our condelences to Kristen, Winston, Hadley, and Alexandra and Mrs. Emily Fisher Landau.

Sir Deryck Maughan, Chair Sir Dervck Maughan, Chair Phil Reed, Director

FISHER—Richard L. The FISHER—RICHORD L. INE
Lansco Corporation wishes to
express their sincerest condolences to the entire Fisher
family and Fisher Organization on the passing of Richard
Fisher. Our profound and
deepest sympathies to you.
The Lansco Corporation

FISHER—Richard I Costa Kondylis and Partners ex-tends their deepest sympathy to the family and friends of Fisher as w mourn his passing.

condolences to Kristen and the Fisher family. An inspira-tion to all whom he touched. He will be missed. Stuart White, Pres. and CEO Stuart White Productions

FRANK—E. Renee, Ch'san Sa fer et al. mourn the passing o E. Renee Frank. Visionary

benefactor, friend, RIP GIANGRECO—Matthew On August 9th, 2006. Beloved brother of Christine, Paul, Clare Giangreco, son of the late Agnes McKinney Giangreco and Ernest J. Giangreco, fond brother-in-law of Lillian J. Giangreco, cherished uncle of Karen, Michael, Diane, Pamela and William. Viewing Thursday, August 10th, 2-5pm and 7-9pm at the Bay Ridge Funeral Home, 7614 4th Avenue, Brooklyn NY, 11209. Mass of Christian Burial at St. Anslems RC Church, 4th Avenue and 82nd Street Brooklyn on Friday, 9 am. B.A. Harvard University 1983 and Government bond trader. For information call 718-630-5500. trader. For 1718-630-5500.

HAYDEN—Melissa. Melissa Hayden was one of the great ballerinas of her time. She was a principal dancer at New York City Ballet from 1955 to 1973, and George Balanchine choreographed leading roles for her in over 20 of his ballets, including such masterpieces as Agon, Liebeslieder Walzer, A Midsummer Night's Dream, and Liebeslieder Walzer, A Mid-summer Night's Dream, and Stars and Stripes. With her vi-brant personality and con-fident charm, she stood out both on stage and off, and her loss is deeply mourned by Pe loss is deeply modified by Feter Martins and the dancers, ballet masters, musicians, staff and Board of Directors of New York City Ballet. We extend our condolences to her family.

Seattle, WA so that they could be closer to their daughter, Hilarry, who lives on Vashon Island, a short ferry ride away. Services will be at the New Montefiore Cemeter. her family.

HEICKLEN—Lewis Hadassah, The Women's Zionist Organization of America, mourns the loss of Lewis Heicklen, of Bala Cynwyd, PA, at the age of 101, a major donor and beloved father of Jane Zolot, a long-time member of the National Board. Mr. Heicklen and his wife, the late Betty Payes Heicklen, who was a Past President of the Philadelphia Chapter, were devoted to Hadassah and engendered that love in their family. Mr. Heicklen's passion for Hadassah laso extended to his circle of friends, who through his good services became major donors to the organization, and were affectionately known as the three Lews. He leaves behind Jane and Mickey Zolot, Natalie Bogash and Sandy and Bud Kohn; nine grandchildren; seven great grand-son. May they be comforted among the mourners of Zion and Jerusalem.

Deaths

LAWRENCE—Suzanne Walbridge, on Tuesday, August8, 2006, of Babylon, N.Y. Wife of the late Bryan Lawrence. Survived by her son Bryan H. Lawrence, and his wife Dr. Betsy Lawrence, and her daughters Suzanne L. Goldhirsch and Jane W. Lawrence and her husband Fred Millhiser. She is also survived by her sister Nancy W. Hanaway, and her grandchildren Bryan, Corey, Susanna, Kate, Kristina and Anna and her great grandchildren Maxwell, Emma and Gwendolyn. Service will be held on Saturday, August 12th, 11:30am at Christ Church, 12 Prospect St., Baylon, N.Y. Private burial. In lieu of flowers, contributions may be made to the Church of Point O'Woods or Good Samaritan Hospital Foundation Pollitative Care Program.

MASSEE—William Edman.
Age 87, died at his home in
Santa Fe, NM, on August 5,
2006. Massee, a writer and
poet wrote on wine, food and
design. He is survived by his
son John Massee and grand-

PARMET—Sonia, on August 9, 2006. Beloved wife of the late Herbert. Beloved mother of Nancy Stitham (the late Michael) and Wendy Parmet grandmother of Hayley Stith am and Herb Glazerman.
Dear sister of Lillian Berman
and Abby Shapiro. Service
Friday, 11:30 AM at "The
Riverside", 76th St. at Am-Riverside", 76th 5t sterdam Ave., NYC.



RIECKER—Charles. The Metropolitan Opera mourns the death of our dear friend and colleague Charles Riecker, a valued member of our artistic and technical staffs from tic and technical staffs from 1959-1997. A close friend to many of our artists, Charlie will be remembered for his kindness and warmth to all. We extend our sincerest sympathy to his wife, Wally. Peter Gelb, General Manager

James Levine, Music Director

SAPHIRE—Rose died peace-fully on August 7th in Palm Harbor, Fl; 4 months short of her 100th birthday. Born December 9th, 1906 in Bayonne, NJ, daughter of the late Reuben and Freda Rockoff, eldest sister of her late siblings Louis, Abe and Ruth, beloved wife of the late E. William, adored mother of Larry and Phyllis (Alman), wonderful grandmother of 17 children, she will be sorely missed and fondly remembered. SAPHIRE—Rose died peace-

SCHLEGEL—Stacy. Beloved wife of Jack. Loving mother of Sandee and Steve, Jan and Tommy, and Beth and Jay, Cherished grandmother of Jessica, Jordan, Brendan, Samantha and Caitlyn. Dear sis ter of Phyllis and Murray and Marilyn and Marvin. Devoted aunt and friend to many. Ser vices "Boulevard-Riverside" 1450 Broadway, Hewlett, L.I. 11:30 A.M. Thursday.

HONORED PROVIDER Dignity*

SCHLEGEL—Stacey. The
Board of Governors of
Middle Bay Country Club of
Oceanside, NY, on behalf of
its membership, wishes to
express its sympathy and
condolences to the family
of its esteemed member
Stacey Schlegel. She will be
sorely missed

SCHLEGEL — Stacy. Words cannot express our sadness for we have lost a good friend. We will miss you very much. Our sincere condolences to the Schlegel family.

Lenore and Jerry

SIEGAL—Yoni (Jonathan), 44, of Riverdale, NY, suddenly on Friday night, August 4th, 2006, 11 Av. Profoundly beloved husband and best friend of Yonina Siegal, adoring and adored Daddy of Avi, Zevi and Yehuda. Much loved son of Jerry and Rosailind and dearest brother of Linda, Debbie (David) and Tammy (Paul), treasured brother-inlaw of Rachel and David, precious and devoted son-in-law of Boruch and Judy (z"I) Helman. Donations in Yoni's memory may be made to Bina Stroke and Brain Injury Assistance (Brooklyn), Bikur Cholim of Rockland County and the Jewish National Fund. The family is sitting shiva at the Siegal home until va at the Siegal home until Friday afternoon.

Deaths STEIN—Dorothy Gerner, 92, on August 8, 2006. Survived by her devoted daughter and

Deaths

ne was the son of the late Elizabeth (Taylor) and Henry Neville Tifft. Mr. Tifft had a long career as an executive with First National Bank, now Citibank. He was also Senior VP at First Federated Savings and Loan and ended his career at Connecticul Bank and Trust in Stamford, CT. He was a loving husband, father and grandfather who will be deeply missed by his family and the many friends who treasured his husby or, integrity

treasured his humor, integrity and his loyalty. Survivors include his wife; two sons, William Neville Tifft of Pelham, NY and Phillip McCarter Tifft of NYC; two grandchildren Axel and Anna Tifft. A memorial service will be held on Friday, August 11 at St. Gabriel's Episcopal Church, Front Street, Marion, MA. at 11 A.M. Donations in his memory may be made to the Marion COA, 2 Spring Street, Marion, MA. 02738.

WEINBERG—John L. The

WEINBERG—John L. The Trustees, Life Trustees, Phy-sicians and Staff of New York-Presbyterian Hospital

irustees, Lite Trustees, Physicians and Staff of New York-Presbyterian Hospital mourn the loss of our dear friend and Trustee, John L. Weinberg. A stalwart supporter of the Hospital for more than 45 years, he lent his uncommon wisdom and leadership skills to the goal of furthering our mission of excellence in patient care. He was deeply involved in numerous areas, his progmatic business style providing enormous and lasting benefit to New-York-Presbyterian. Together with his wife, Sue Ann, he helped create the Sue and John L. Weinberg Inpatient Rehabilitation Medicine Center, and the Sue and John L. Weinberg Medicial Intension

ter, and the Sue and John L. Weinberg Medical Intensive Care Unit. The Weinberg fa-

Care Unit. The Weinberg family has demonstrated unique and long-standing loyalty and service to the Hospital, beginning with Johns father, the late Sidney J. Weinberg, who served on the board of The Presbyterian Hospital. His brother, Sidney J. Weinberg Jr., and his son, John S. Weinberg, continue to serve as Life Trustee and Hospital Trustee, respectively. Business leader, philanthropist and gentleman, John L. Weinberg's remarkable intellect, warm sensitivity and generous support will forever

generous support will forever be remembered by all who

benefit from care received a

the Hospital he loved. Our deepest condolences are ex-

tended to his wife, Sue Ann,

and the entire Weinberg fa-

Charlotte M. Ford, Vice

Peter A. Georgescu, Vice Chairman

Jerry I. Speyer, Vice Chair

NewYork-Presbyterian Hos-

o Sue Ann, their children and randchildren. Brooke Russell Astor, Honorary Chairwoman Catherine C. Marron, Chairwoman Samuel C. Butler,

Elizabeth Rohatyn, Marshall Rose,

President

WEINBERG—John L. The community and friends of Teachers College, Columbia University, are deeply saddened by the loss of John L. Weinberg, former Trustee and longtime friend of the College. A giant in the finance her devoted daughter and son-in-law, Bruce and Regina Wilson, adored granddaugh ter, Laurel Wilson; son and daughter-in-law Eric Stein and Sharon Leong; cherished lifelong friend and sister-in-law Claire Gerner; devoted former student and treasured friend Yoshihiro (Hiro) Ya mazaki. Memorial service Friday, August 11, 10AM, at Ballard-Durand Funeral Home, 2 Maple Avenue, White Plains, NY. In lieu of flowers donations may be made to the Alzheimers Association, 20 Squadron Blvd., New City, NY 10956. College. A giant in the finan-cial world and a paragon of good governance, John was also a humanitarian who er braced and embodied the ideal of civic and social responsibility by the private sector. Our condolences to his wife, Sue Ann, a TC alum-na and current Trustee; to their two children, John and Jean; and to their five grand-children New City, NY 10956.
ITIFFT—Henry Neville, 78. Of Marion, MA. and Vero Beach, FL, August 8 in Marion after a short illness. He was the husband of Suzanne McCarter Tifft. Born and raised in NYC and Quogue, L.I. New York, he was the son of the late Elizabeth (Taylor) and Henry

Jedn, and Street, and Children.
Susan H. Fuhrman, President
John W. Hyland
and William D. Rueckert,
Co-Chairs, Board of Trustees
Teachers College,
Columbia University

WEINBERG-John L. The officers, Board of Directors and staff of UJA-Federation commitment and boundless generosity strengthened our ability to serve those in need and enriched our initiatives in New York, Israel, and around the world. We extend our the world. We extend our deepest sympathies to his wife, Sue Ann; his son, John; his daughter, Jean; his brother, Jimmy; and to the entire family.

Morris W. Offit, President Susan K. Stern, Chair of the Board John S. Ruskay, Exec. V.P. & C.E.O.

WEINBERG-John L WEINBERG—JOIN L. THE Board and Staff of the Great-er New York Councils , Boy Scouts of America mourns the passing of John L. Weinberg, our long time friend and generous supporter. Our thoughts and prayers are with his family and friends.

He will be missed. John C. Whitehead, Chairman John F. McGillicuddy, Pres Charles E. Rosser, CEO

WEINBERG—John L.
The Board of Trustees and
Staff of the New York Historical Society are greatly saddened by the passing of John.
L. Weinberg, husband of
Trustee Sue Ann Weinberg.
We will miss his keen intelligence and wit.

Nancy Newcomb
Board Co-Chairs

Board Co-Chairs Louise Mirrer President and CEO

WEINBERG—John L. The Board and staff of Young Audiences express our profound sympathies to our devoted board member, Sue Ann Weinberg and her family on the death of her husband, John. He was a remarkable man and he will be greatly missed missed. Board of Directors & Staff of Young Audiences, Inc.

ZUCKERMAN—Gerald.
Loving husband of Dorothy, beloved father of Marc and Julie Zuckerman and Beth and Scott Wexler. Adored grandfather of Jared, Emily, Andrew, Lauren and Sam. Devoted brother of Arthur Zuckerman. Services Thursday, August 10, 9:30am, Riverside Nossau North. North side Nassau North, No Station Plaza, Great Neck.

In Memoriam

and the entire Weinberg family.
John J. Mack, Chairman,
Board of Trustees
Daniel B. Burke, Chairman
Maurice R. Greenberg, Chairman Emeritus
John F. McGillicuddy, Chairman Emeritus
Dr. Herbert Pardes, President
Frank A. Bennack, Jr., Vice
Chairman
Charlotte M. Ford, Vice
Chairman

SOMKIN—Larry. You will always be missed. Love, Jane and Les

SOMKIN—Lawrence B. You will always be loved, missed and remembered. Your Loving Family.

SUTTER—Beatrice Weinberger August 10, 1992. Beloved mother, You excelled them all. Larry and Betty

WEINBERG—John L. The Trustees and staff of The New York Public Library deeply mourn the loss of John L. Weinberg, their good friend and the beloved husband of the Library's Trustee, Sue Ann Weinberg, John will be remembered for his great leadership in the world of business and finance and for his generous philanthropy in the fields of education, health care and human services. We are extremely grateful for John and Sue Ann's exceptional support for the Library. Our heartfelt sympathy goes to Sue Ann, their children and grandchildren. ANNOUNCEMENTS OF DEATHS MAY BE TELEPHONED FROM WITHIN N.Y.C. TO (212) 556-3900; OR OUTSIDE N.Y.C. TO TOLL FREE 1-800-458-5522 FOR THE FOLLOWING EDITIONS: Until 5:30 P.M. the day before for Tuesday through Saturday editions, Until 5:00 P.M. on Friday for Sunday's Nationwide edition, until 12:45 P.M. Saturday for Sunday's New York Region edition, until 2:00 P.M. Sunday for Monday's editions. Photos must be submitted by noon the day prior to publication Tuesday Photos hiusi be submitted by history the day prior to publication Tuesday through Friday. Photos for Saturday Sunday and Monday must be sub

For a space physicist,

the skies were no

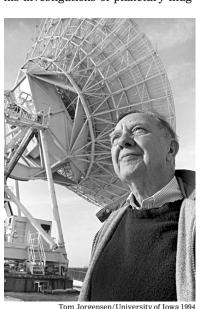
limit.

achievements.

tacular, rather than for its scientific

Although he retired from active teaching in 1985, he continued monitoring data being sent to Earth from far out in the solar system. His instruments on Pioneer 10 conducted in 1973 the first survey of Jupiter's radiation belts. Pioneer 11 followed with observations of Saturn's belts. He was also a member of the scientific team for the Galileo mission orbiting Jupiter.

In 1994, Dr. Van Allen received the Kuiper Prize from the Division of Planetary Sciences of the American Astronomical Society "in recognition of his many contributions to the field of planetary science, both through



James A. Van Allen was a pioneer in the exploration of outer space.

netospheres and through his advocacy of planetary exploration."

He was president of the American Geophysical Union from 1982 to 1984, and he received the group's William Bowie Medal in 1977. In 1987, he received the National Medal of Science from President Ronald Reagan, and in 1989 the king of Sweden presented

him with the Crafoord Prize of the

Royal Swedish Academy of Sciences. Dr. Van Allen is survived by his wife of more than 60 years, Abigail Fithian Halsey Van Allen; five children, Cynthia Van Allen Schaffner of New York; Margot Van Allen Cairns of Vancouver, British Columbia; Sarah Van Allen Trimble of Washington; Thomas Van Allen of Aspen, Colo.; and Peter Van Allen of Philadelphia; and seven grandchildren.

In the early space age, Dr. Van Allen was often asked the value of space exploration. He sometimes replied with a impish smile, "I make a good living at it."

