

# CHRONOLOGY OF THE LIFE OF ROGER REVELLE

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Compiled on December 13, 1995, this chronology gives an overview of Roger Revelle's career, and does not represent his entire life in detail.

**March 7, 1909** Roger Revelle (RR) born in Seattle, Washington, son of attorney William Roger Revelle and Ellen Robena Dougan Revelle. Family completed with birth of Eleanor two years later.

**July 31, 1910** Ellen Virginia Clark, daughter of Rex Clark and Grace Messenger Scripps born in La Jolla, California.

**July 1, 1912** The Marine Biological Association of San Diego endowed by Ellen Browning Scripps, deeds its property in consideration of a sum of \$10 to the Regents of the University of California. Marine Biological Association ceases to exist, and the Scripps Institution for Biological Research of the University of California is established.

**1917** The Revelles move to Pasadena, California seeking a better climate for invalid Ella Revelle. RR is identified by Louis Terman as a gifted student and included in the Terman Study.

**1925** RR enters Pomona College, Claremont, California. Plans to major in journalism.

**October 13, 1925** Regents formally change the name of the station from Scripps Institution for Biological Research to Scripps Institution of Oceanography (SIO).

**Valentine's Day 1928** Ellen Clark and RR meet at a Scripps College dance.

**1929** RR receives an A.B. in geology from Pomona College, remains at Pomona for a year of graduate study.

**September 1930** RR enters University of California, Berkeley as a geology graduate student. There he meets Scripps Director T. Wayland Vaughan who invites him to register as a graduate student at SIO.

**June 22, 1931** RR and Ellen Clark marry at San Marino, California.

**August 15, 1931** RR arrives at the Scripps Institution with a stipend of \$1200 as a research assistant and graduate student in oceanography. He and his bride move into cottage 24.

**1932** First child Anne Revelle born in La Jolla. Followed by Mary (1936), Carolyn (1939) and William Roger ("Bill) (1944).

**July-August 1935** RR is aboard USS BUSHNELL, flagship of the navy's submarine force, on a cruise from the Aleutian Islands to Pearl Harbor. BUSHNELL Captain Bidwell urges him to apply for a commission in the Naval Reserve.

**May 22, 1936** RR receives a doctorate for his graduate 1936 work at Scripps.

**September 1936** RR and family arrive in Bergen, Norway for a postgraduate year of study at the Geophysical Institute. Revelle receives his commission as an officer of the U.S. Naval Reserve. While in Norway, the Revelles receive a bequest as the trust of ECR's grandfather James Scripps is dissolved.

**September 1, 1936** Norwegian oceanographer Harald Ulrik Sverdrup becomes the third director of SIO.

**September 1937** Revelles return to La Jolla.

**February 5 - March 1939** RR and SIO scientists conduct the first Gulf of California Expedition, the first of a series of cruises which constitute the first comprehensive hydrographic survey of the Gulf.

**Summer 1939** Graduate students RR and Walter Munk meet for the first time at the library of the Scripps Institution.

**February 1941** RR called for naval training duty as a sonar officer on USS RATHBURNE.

**July 10, 1941** RR leaves SIO and reports for active duty in the U.S. Navy, assigned to U.S. Navy Radio and Sound Laboratory, San Diego.

**July 14, 1941** Scripps Director Harald Sverdrup announces plans to offer training in meteorology and surf and tide forecasting to military officers at Scripps. Officers trained in this program later prepared the surf forecasts for allied landings in North Africa, Normandy, and the Pacific.

**August 15, 1941** A contract is concluded between the Office of Scientific Research and Development (OSRD) and the University of California to support wartime research by the University of California in San Diego. The University of California Division of War Research is established after war is declared. By the end of the war, it has become the largest single laboratory working on problems of underwater sound and submarine warfare and has spent more than \$12,000,000 federal dollars on research. Lieutenant Commander RR administers the

work of the laboratory for the navy. German Admiral Doenitz acknowledges allied scientific advances in submarine detection in December 1943, when he writes that "...the enemy has rendered the U-boat war ineffective...through his superiority in the field of science..."

**May 1942** RR promoted to rank of Lieutenant Commander, USN.

**October 1942** RR reassigned to Navy Hydrographic Office, Washington. Serves as principal liaison officer between USN and those divisions of the National Defense Research Committee (NDRC) which dealt with oceanography. Meets astronomer Lyman Spitzer, a mentor and friend.

**December 1942** RR appointed Officer-In-Charge, Subsection on Water Studies Sonar Design Section, Bureau of Ships.

**December 30, 1944** RR promoted to rank of Commander, USN. Works with other officers to promote the establishment of the Office of Naval Research.

**January 30, 1945** Naval Commander RR is assigned to Joint Task Force One to lead the oceanographic and geophysical components of Operation Crossroads, the first postwar atomic test on Bikini Atoll.

**July 1, 1946** An agreement is concluded between the Scripps Institution and the newly formed Office of Naval Research. ONR agrees to provide funds for "research in the fields of oceanography, including geographical investigations (surveys), experiments in the laboratory and at sea, theoretical studies, analysis and compilation of data..." Beginning of continued federal support for oceanographic research.

**August 1946** RR transferred to the Office of Naval Research and appointed head of Geophysics Branch.

**1947** California State Legislature passes a law which provides \$300,000 for the support of research to investigate the depletion of the sardine in California waters. These funds lead to the establishment of the Marine Life Research Program.

**1947** Roger Revelle returns to resurvey Bikini Atoll after the atomic blast. Cores are drilled which prove Darwin's theory that atolls are sunken volcanic islands on which enormous layers of skeletons of reef-building organisms accumulated during the sinking process.

**March 1948** Carl Eckart becomes Director of SIO. RR returns from naval service to become Associate Director. He assists SIO in acquisition of retired military and coastal vessels which allow SIO to begin a program of deep water oceanographic research in the Pacific. Munk recalls that RR said that the SIO fleet is now larger than that of Costa Rica.

**February 24, 1950** UC Regents pass ultimatum requiring faculty to sign a special loyalty oath, precipitating a crisis with the faculty. RR supports faculty position and participates in compromise that ends the crisis.

**July-October 1950** RR led first Scripps expedition to the deep Pacific, Mid-Pacific Expedition (MidPac). The expedition contributes to a new understanding of oceanic processes and geology of the sea floor. Studies of heat flow conducted by Bullard, RR and Maxwell pose problems eventually resolved by plate tectonics theory. RR organizes continuous program of Pacific expeditions through the next two decades.

**July 1951** RR is appointed Director of the Scripps Institution.

**1951** SIO announces discovery of the largest submarine mountain range, the MidPacific Mountains on NORTHERN HOLIDAY expedition.

**1951** RR spearheads effort to establish Scripps Estates Associates, providing housing near the SIO campus for faculty, and along the way persuades La Jolla realtors to abandon longtime anti-semitic housing covenants.

**1954** SIO receives a grant for one million dollars from the Rockefeller Foundation for the development of a research program in marine biology at SIO. RR first raised the possibility of such a grant with Warren Weaver in 1952.

**February 19, 1954** The UC President's Administrative Advisory Conference is held at Berkeley to consider the long range educational policy of the University. RR is asked to prepare a statement of education policy for La Jolla which considers plans for expansion.

**May 1955** UC Regents order RR to prepare a report on the feasibility of establishing a new campus of the University of California in San Diego.

**1956** RR chairs National Academy of Sciences Biological Effects of Atomic Radiation (BEAR) which produces first public study of the environmental effects of atomic radiation. RR also chairs oceanography panel of the U.S. national committee for the International Geophysical Year (IGY).

**July 1956** Scripps is designated as a participant in the Atmospheric Carbon Dioxide Program of the IGY. RR recruits Charles David Keeling to head a program to begin the first continuous measurement of atmospheric carbon dioxide.

**February 1957** RR and Hans Suess of the SIO publish an article in Tellus warning about the increase in atmospheric carbon dioxide caused by the burning of fossil fuels.

**1958** RR appointed first president of SCOR (Special Committee on Oceanographic

Research) which conceives the idea for an International Indian Ocean Expedition. RR discussed this idea at the first International Oceanographic Congress which he organized and presided over in 1959. He supports the IIOE as a member of NASCO and as a member of the SCOR Panel on the Indian Ocean Expedition.

**June 1, 1958**      Nobelist Harold Clayton Urey is first of stellar UCSD faculty recruited by RR.

**July 1, 1958**      UC long time President and RR mentor Robert Sproul retires and is succeeded by Clark Kerr.

**July 18, 1958**     UC Regents endorse the idea of a general university campus adjacent to SIO.

**1959**      RR named to congressional Committee on Science and Technology and becomes nationally known science adviser to U.S. Congress and government.

**July 1, 1960**      RR named Dean of School of Science and Engineering and chief administrative officer of the San Diego campus of the University of California.

**February 15, 1961**      Regents appoint Herbert York first Chancellor of UCSD. Ellen Revelle subsequently recalled her husband's disappointment, "It was a terrible blow, naturally...[the university] was his baby and it was sad not to be chancellor of it."

**September 1961**   RR leaves the university to become the first science advisor to the U.S. Secretary of the Interior. President Kennedy sends him to West Pakistan to study soil salinity and agricultural problems. RR's recommendations lead to fourfold increase in agricultural yield within a generation and begins RR's exposure to population problems and long association with the Indian subcontinent. RR advises Interior Secretary Stewart Udall to support Rachel Carson during controversy following publication of Silent Spring. RR continues international work on science, energy, and world peace and development with UN and other international organizations.

**September 1961**   After briefly returning to SIO, RR resigns to become first director of the Harvard Center for Population Studies. UCSD throws "Farewell to Revelle Party" at SIO. RR gains prominence at Harvard for fostering studies of resource development as well as fertility as factors in population growth.

**April 1963**   RR receives National Academy of Sciences Agassiz Medal for "outstanding achievement in oceanography."

**1965**      UC Regents vote to name UCSD's first college Revelle College in honor of RR.

**1964-1966**   RR serves as member of India's Education Commission which worked to improve higher education in India.

**1965** RR chairs President's Science Advisory Committee Panel on Environmental Pollution which publishes first authoritative U.S. government report in which a rise in atmospheric carbon dioxide resulting from burning of fossil fuels is identified as a potential global problem.

**1974** RR succeeds Margaret Mead as President of the American Association for the Advancement of Science.

**1976** RR returns to UCSD for half of each year as Professor of Science and Public Policy. RR retires from Harvard and returns to La Jolla permanently in 1978.

**June 10, 1981** National Academy of Science and WQED sign agreement to produce a series of television programs to be broadcast by PBS entitled, "TerraNova: The Rediscovery of Planet Earth." WQED to do fundraising. NAS to appoint a Geophysics Film Committee to develop a program plan.

**August 1982** RR informed and influenced public opinion on greenhouse effect through publication of widely read article, "Carbon Dioxide and World Climate" in Scientific American.

**1984** RR received Vannevar Bush Award of the National Science Board, and Tyler Ecology Energy Prize.

**March 1984** RR appointed chair of National Academy of Sciences Geophysics Film Committee, charged with developing a program plan and overseeing and authenticating scripts for a 7-hour prime time television program entitled, "Planet Earth." This was the first attempt to produce a program that tied together all the scientific disciplines involved in the study of the earth. It was also the first television series ever produced in collaboration with panels of NAS scientific experts. The series "Planet Earth" aired January 22-March 5, 1986.

**July 1, 1986** Edward Allen Frieman becomes Director of the Scripps Institution of Oceanography. RR moves to an ocean front office at SIO, where he works up to his death.

**December 1986** Revelle Family buys San Diego Daily Transcript

**June 1990** RR receives National Medal of Science from President George H.W. Bush. He tells a reporter, "I got it for being the grandfather of the greenhouse effect." He told another reporter that starting UCSD was the most important thing he ever did.

**July 15, 1991** RR died in La Jolla, California.