Dale and Virginia Leipper

Book of Memories

Bertha and Bob Darrow
Connie Darrow



Fifthieth Wedding Anniversary

May 14, 1992

Dear Dale and Virginia,

In response to Bryan's letter on the occasion of your 50th Wedding Anniversary it is my pleasure to respond with our Best Wishes for the continuation of your lives as you have always lived them - with purpose and achievement. May you have many more years of good health and satisfying endeavors to enrich the sunset years.

I was privileged to be associated with your department during its beginning years in the early 50s as administrator of the central office and to see at first hand Dale's dynamic synthesis of a new discipline, Oceanography, from the conventional until then largely separate sciences of physics, chemistry, biology, geology and meteorology. With the oceans covering four-fifths of the globe, it's surprising so little solid was known of them by that late date. But doubtless that was because telling research had to wait on the development of all sorts of technology and capabilities in the science explosion which was then taking place after the Russians launched Sputnik and America originated the National Science Foundation. Dale appreciated the inherent opportunities, and seeing the interrelationships and needs, he struck out with enthusiastic leadership to build something new in Texas, a Department of Oceanography 100 miles from the ocean!

It must have kept you humping, Virginia, to keep up your end of things with such a dynamo in action under the roof, who had to coordinate the campus relationships, staff the department, recruit students and supply their needs, procure ships, keep up with the state of research in all of the sciences, make contacts and friendships with so many scientists both National and foreign, plan pertinent research, and between all of this trundle often to Washington to secure money to bring home to the needy campus. I remember Dale's pride when the department budget went over a million, a huge sum for those years. Of course all of this depended greatly upon your friendly personalities, your ability to communicate and get along with people, and to "sell" the department as a good place to be a part of, both from the faculty and the student points of view.

Beginning in the rickity "Old Science Hall", one of the brick walls of which had separated from the others, and with its narrow, foot-worn wooden steps to the second floor, and of course, sans air conditioning so that fans were a must in the hot summer, the ensuing growth and development moved the department first to Goodwin Hall and then, after my days, to a resplendent, huge building all of its own. And the department became a world-class nucleus of oceanographic and meteorologic research and teaching with a large, distinguished staff and many students.

Our link to the Texas A&M Research Foundation where Director Archie Kahan used his good offices in the department's interest to do such things as obtain for us such ships as the A.A. Jakkula, the Elena, and the Hidalgo, was a definite boon, and my memories of those years would be sadly lacking without those of salt-of-the-earth, always congenial, clever and witty Archie. He started out in College Station in our department with a desk near to mine in the large room, and acted as an administrative assistant to Dale, and his upbeat personality livened up the daily routine. The friendliness and cooperativeness of Dick Adams and Ken Drummond, two other early planners, also contributed much to the esprit de corps. Not to forget mentioning two or three "Aggie Wives" at a time who reported to me, and helped in all manner of ways to move the mass of daily work.

I was invited once to join as a scientific crew member - 6 hours on duty and 6 off - a five day cruise of the Jakkula, mission to map the bottom of the Gulf of Mexico off Galveston Bay for the Hydrographic Office and sailing about 75 miles south into the beautiful fresh Gulf. Surprising that the U.S. was still lacking such important data near major ports of the country so recently. My assignment was to gather bathythermographic (BT) readings descriptive of the

temperature changes as the instrument descended. Despite the fact that my folks had a motor launch on choppy Lake Michigan at Chicago, and I should have grown my sea legs long since, I was very sea-sick for the first day of the cruise, in a dead calm! - until my equilibrium adjusted itself and the fresh, cool air of the pristine bay revived me. Suddenly at mid-morning of the second day I had an overwhelming desire for a big Hershey bar, and after that I was ravenous for all the food served, even the rather heavy ship's diet.

The Jakkula was a 120 foot 3-masted schooner which had been the yacht of the Uihlein family of the Schlitz Brewery Company of Milwaukee. It was built by Bethlehem Steel of Baltimore after WW I, using old German U-Boat motors. Its beam was 30 feet, and its decks were of teak wood. When anchored on station it rolled badly, and if your bunk was the upper one, as mine was, and you were off-duty, and sleeping, you had to wake up and be careful not to be pitched out of your bunk! When we made port at the end of the cruise, we tied up next to a Honduran banana boat, and since both crews knew each other, they sent over whole stems of bananas and we were all given huge red snapper fish caught by the Hondurans to take home. Mine was a 9 pounder, and I baked it for our cruise group later.

The Schlitz people had given us the ship just before the end of the tax year to get it off their books, so it had to be brought from Milwaukee down the Illinois and Mississippi Rivers in early spring, a feat largely accomplished by our Walter Lang, others of the department, and a newly hired crew. The three 90ft. masts were taken down and stored on the deck so the ship could go under the myriad bridges, but at New Orleans they were stepped again, and the ship made the last leg of the journey to Galveston, now her home port, under sail. Other treasured memories of my one and only cruise were watching porpoises "lead" the ship by getting a free ride as the prow broke the water, and seeing fluorescent plankton and squids around the boat, and seeing my first flying fish.

The early core teaching staff of the department, some seven professors, together with their wives, were a congenial, friendly group, and it shortly felt as if you had known them a long time. In addition, there were then about 50 others, project leaders and scientific staff, and graduate students. Some 35 women employees, many of them Aggie Wives, Pushing Hubby Through, acted as supporting staff. There was a wide range of abilities and personalities, all adding to the richness of the whole. Much was done by Dale to foster good and pleasant relations, such as having frequent department meetings to inform everyone of what was going on, having staff and visiting scientists address the whole group, and instituting social functions as the Christmas Party, dinner dances, and the annual department picnic to build friendship and unity. As many as 150 or 200 staff and family members would attend such functions as the picnic. The scientific staff was encouraged to attend and present papers at regional and national meetings in their disciplines, thereby advancing personal status and the work of the department. I was especially impressed by geologist, Dr. Armstrong Price, probably because of my geology bent, but Bas Wilson stood out because of his many talents, especially his command and relish of the English language, his drawing and painting abilities, including beautiful calligraphy, all over and above his professional engineering qualifications. We still receive each Christmas his delightful account of their year's activities couched in rhyming poetry with delectable choice of words. Because Betty Wilson's mother lived in the D.C. area, we have continued to see more of the Wilsons than others over the years, and in 1978 actually managed a two-motor-home junket in southern California.

I had always liked and enjoyed Don Hood, and when I branched out into editorial work, I was happy to help with some papers coming out of his chemical oceanography section. Walter Saucier was unfailingly a friendly person, and Guy Franceschini, with his Italian charm, was among my favorites. Of late I have been pleased to receive a letter or two and Christmas cards from Ken Drummond, and pictures of his now-grown family, of Marion, and his Louisiana home. He always had my admiration for his sophistication and abilities, and his far-flung

successful career has borne out his early promise. Dick Adams supported me too, but I didn't get to know him as well as I wished to. I still mourn the untimely death of Dr. Ligda, a wonderfully fair person to work for, and a real brain. I never see a daily weather report on TV, effortlessly using weather satellite expertise without wishing Dr. Ligda could have lived to see this advance over his laborious piecing together of fronts from ADC film and calculating their speed of movement to arrive at a forecast. Decent, generous, steady Stu Bigler remains my true friend, a model of principle in this grabby world.

Among the early graduate students I still regard several as "my boys", because I worked rather closely with them on their course programs and watched their progress - Conrad Neumann, Joe Creager, Jerry Stein, Bill Elliott, Richard Tarble, Charles Proctor, Bill Hildreth, Ray McAllister, and even mature Glenn Jung. I rmember what a bang I got to see Joe Creager on TV in 1964 explaining plate tectonics in connection with the Alaska earthquake and showing core samples drilled from the Pacific Ocean floor.

Among "my girls" I remember with pleasure the generous help in the office of Shirley Wilkinson with her really talented and unsung art for our Monthly Reports, and dear, loyal Nina Johnson, with whom I still correspond. Also Jo Howard, another cooperative helper in the office, and dear Kathryn Downward, and Jeanette Baldauf, always there with unselfish support. Dick wrote of Jeanette's death a year ago in Houston. Of course, we have a double connection with the McCullys, through Mac in Bob's department and Pinky in Ocn.-Met., and we still enjoy visits together. Last, but by no means least, Shirley Pyburn, my right hand in producing flawless radar meteorology reports, so the Press charged us only 1¢ a page to print them, and on both sides of the page, too! She and I still correspond.

I know these early memories are only a tiny representation of the life of the department then and don't even touch the complex structure that followed. Bryan asked for "a memory", and I guess I have complied! Just hope this recitation will fit in your children's memory book. I have also sent an informal snap of Bob and me taken at Christmas, 1987, at Bob's cousins' in Falls Church, Virginia - the othe woman is another cousin of his from Massachusetts, Constance Darrow, the reason we were invited - to see her. Also I am sending a reproduction of the scroll made by Bas Wilson for the surprise party at my house on the occasion of my leaving the department office - an example of the many honoring tributes Bas obliged with over the years. I may have a copy of a Monthly Report to send, too.

Now it is time for me to congratulate you on both of your tremendous accomplishments, and wish you a wonderful day of celebration. We are sorry not to be there - we travel very little now - but we will be with you in spirit on the DAY.

Most Sincerely,

Bertha and Bob Darrow

Frederick, Maryland

February 10, 1992

IN THE NAME & BY AUTHORITY OF

THE · HAVEN · OF · OCEAMETHOGAN† IN · THE · PORT · OF · CULLINGSTATION STATE · OF · EXCESS



By these valid presents be it known to each, all and sundry that

THE GOODLY SHIP ~ "DARROW" OF 135 LBS. BERTHA'N,

HAS BEEN DULY INSPECTED DURING BERTHA'GE IN SAID HAVEN

& IS HEREBY PRONOUNCED, DECLARED & PROCLAIMED

IN ALL MANNERS SHIPSHAPE, SEA-WORTHY, SOUND OF TIMBER,*

WELL FASHIONED IN MAST, SPAR, SAIL; TRIM, PLIANT OF DECK,*

MATURE OF LINE, DEEP ~ BALLASTED & STURDY,

FULLY RIGGED, PROVISIONED & FIT IN ALL RESPECTS

TO SAIL THE HIGH SEAS AS DESTINY MAY ORDAIN.

In Witness whereof is appended the following Citation of Special Merits:

- She has a Heart of Oak.*
- Her Crew are Able Seamen, Honest to the Core
- She has a Captain (sworn to the ship), whose Abilities, Intelligence, & Aptitude are renowned in many ports.
- Her Helm responds readily to sound Navigation.
- She rides the Seas with Ease, come Fair Weather or Foul.§
- From Crowsnest to Keel She is a Ship of Grace & Charm.

Whereunto is set our hand at Cullingstation, Excess, this 1st day of December, 1955



Bob D' Arrow
Ships' Chandler
(Certified Inspector)

R. G. M. Khan
Director, α & μ Lostand Foundstation,
ships' under(water) writers

Dock F. Leapper
Port Captain

D. H. Moregoinon
D. H. Moregoinon
Chairman, Horde of Harbor Commissioners

† 'Oceano-hogan' at time of commissioning of the 'Darrow'; name changed to 'Oceamet-hogan' during mothball period.

*Detailed inspections by forestry expert
§Percentage accuracy Met. forecast, nil.

ODE TO MARIAN

She was the Secret'ry of two, and what a Sec was she,
With goodly looks and eyes of blue, and golden hair 's could be.
Twas fortunate that she had got a chair that turned on wheels,
So she'd not twist her neck to jot down all of their appeals.
From one, 'twas "Marian do this"; the other said "do that",
Somehow she managed not to miss, in playing tit-for-tat.
On top of this the open door invited passers-by
To stop and chat (and often bore), or ask the where and why.

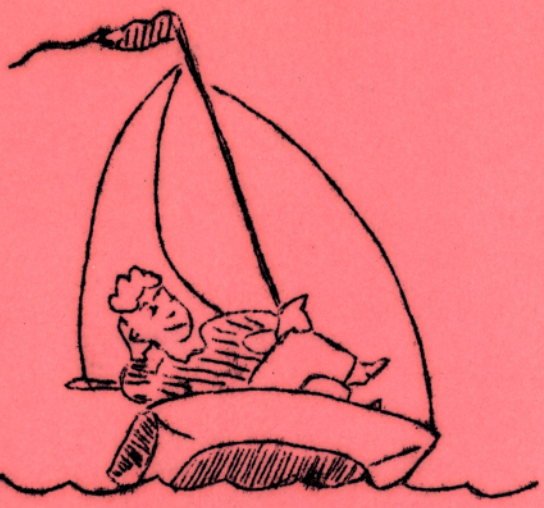
When one produced a monument of scribbled hieroglyphs
Then two would counter the event with garbled monographs.
All these she gallantly rewrote in neatly typed script
To find that one would add a note, or two would have his clipp'd.
By dint of much repeated work, all done without a gripe,
Reports emerged that well might perk up those who doat on type.

With waves for six long years she's dwelt, the Stokes and Solit'ry kind,
Their permanence may long be felt before they leave her mind.
Full wedded to their whims was she, but greater family life
Now steals her from our midst to be a Cincinnati wife.

PHYSICAL OCEANOGRAPHY
A&M COLLEGE of TEXAS

B.W.F.





Department of Oceanography
College Station, Texas
May 18, 1954

MONTHLY REPORT - APRIL 1954

NEW DIRECTOR OF RESEARCH FOUNDATION NAMED

Mr. Archie M. Kahan who has been for the past three months serving as Acting Associate Director has been named Director of the Texas A & M Research Foundation. Mr. Kahan came to Texas from Denver, Colorado, where he was Director of Technical Operations for the American Institute of Aerological Research. He was formerly associated with the U. S. Weather Bureau as Chief of the Hydrology Unit of the Hydrometeorological Section, and as Offical in Charge, Missouri River Forecast Center, Kansas City. His military experience has included weather forecasting for the Air Force in Alaska from 1941-44. In recognition of his distinguished service in this capacity he received the Legion of Merit Award. In 1944 and 1945 he was in charge of research on upper air forecasting and analog selection, serving as Assistant Chief of the Forecast Branch for the Air Force in Washington, D. C.

Before joining the Texas A & M Research Foundation, Mr. Kahan was Administrative Assistant to the Head of the Department of Oceanography. He is a candidate for the Ph.D. degree in Meteorological Oceanography. He succeeds Dr. Howard W. Barlow, Dean of the School of Engineering, who has been serving as Acting Director since the death of Dr. A. A. Jakkula, first head of the organization.

DUTCH MARINE GEOLOGISTS TO BE ON TEACHING STAFF NEXT YEAR.

Dr. Ph. H. Kuenen and Dr. L. M. J. U. van Straaten, Marine Geology Professors of the University of Groningen, the Netherlands, will lecture as visiting professors in the department during the 1954-55 academic year. They will fill the vacancy made by the retirement of Dr. W. Armstrong Price, Professor of Geological Oceanography, and will teach his courses, Geological Oceanography, Oceanography 431, and Geological Oceanography of the Gulf of Mexico, Oceanography 631. Dr. Kuenen is to be here only during a part of October, but Dr. van Straaten will remain for the balance of the year. Dr. Kuenen is the author of a widely used textbook, "Marine Geology", which Dr. Price has used in his classes.

Dr. van Straaten holds a doctorate in geology from the University of Leyden having specialized in sedimentation.

While Dr. Price will retire from active teaching, he will continue with research on his project here, Offshore Bottom Conditions, for the Office of Naval Research.

CRUISE NEWS

TELEVISION CRUISE

On Saturday, April 3, the A. A. Jakkula made a one day cruise for the purpose of photographing the oceanographic equipment of the ship in operation. The movies made were televised on the network program of the Humble Oil Company, "Texas In Review". It appeared on April 19 and 20 from Houston and Temple. Members of the Department of Oceanography participating in the cruise were, Kenneth Drummond, principal scientist, George Austin, Jerome Stein, and Frank Moon. Visitors included Mr. Frank Zehentner and Mr. Howard Pool of the Jamieson Film Company; Mr. Alec Gifford, reporter for the Houston Post and associated with Radio Station K.G.B.C., Galveston; Mr. J. L. Furneaux, Jr. of the Houston Cronicle; Mr. Henderson Shuffler, Director of Information, A. & M. College; Mr. Howard Berry, Director of the Photographic and Visual Aids Laboratory, Texas A. & M. College; Dr. C. M. Pomerat, Professor of Anatomy, the University of Texas Medical School, Galveston; and Mr. C. Stanley Wimberley, Geology student from the University of Texas

Television pictures were also taken at the Department laboratories at College Station showing the processing of cruise data as well as other aspects of oceanographic research.

PROJECT 29 CRUISE

The JAKKULA was employed April 4-10 by Project 29 for making BT observations. The course of the cruise was not set beforehand, but was determined by the thermal structure of the ocean observed. BTs were taken ever half hour. The scientists made special studies and took appropriate measurements whenever their observations indicated conditions of especial interest. Chief scientist on the cruise was Mr. Carter R. Sparger. Dr. John C. Freeman, Dr. Donald W. Hood, Mr. Glenn H. Jung, Mr. Robert A. Gilcrest, and Mr. Rex Rainwater were the other members of the scientific staff.

OCEANOGRAPHY 603 CRUISE

Students enrolled in Oceanography 603, Sea Laboratory Techniques, conducted an 8 day cruise in the Gulf April 14-20. Under the direction of Mr. Charles M. Proctor and Dr. John P. Barlow, they received training in oceanographic techniques and seamanship. Activities included keeping meteorological logs, measuring waves and currents, observing water transparency, getting samples of sea water and sediments, practicing swimming, and skin diving, observing and assisting with the ship's operation, and receiving instruction in ship safety.

SHELL CHEMICAL CRUISE

From April 26-30 Dr. Donald Hood, acting as chief scientist, directed a cruise of the A. A. JAKKULA to observe the disposal of liquid hydrocarbons at sea and to determine the effects of these materials on marine life for the Shell Chemical Company. Mr. Jerome Stein, Mr. Robert Gilcrest and Mr. Phillip Moore completed the scientific group on this cruise.

STAFF TRAVELS

Mr. Robert O. Reid and Mr. Glenn Jung presented papers on the Symposium, "The Interaction of the Sea and the Atmosphere", at national meetings of the American Meteorological Society in Baltimore on Friday April 30. Mr. Reid's paper concerned "The Formation of Surges in an Enclosed Basin or Partially Enclosed Basin by a Moving Atmospheric Disturbance". Mr. Jung summarized his research on the "Heat Exchange over the North Atlantic Ocean".

Dr. Leipper represented the College at a meeting of the members of the Study Commission on Marine Sciences in the Southwest (Southern Regional Education Board) at New Orleans and Grand Isle, Louisiana, and Ocean Springs and Edgewater Park, Mississippi, April 25-28. After preliminary meetings in New Orleans, the group made a tour visiting the Gulf Coast Research Laboratory at Ocean Springs, the Louisiana State University Marine Laboratory and the Texas A. & M Research Foundation Laboratory at Grand Isle.

On April 14 and 15 Dr. Leipper visited the VEMA, Columbia University oceanographic research vessel, which was in port in Galveston. The VEMA has been conducting geophysical research in the Gulf of Mexico.

Dr. Walter J. Saucier was the guest of Project Jet Stream at MacDill Air Force Base, Tampa, Florida, April 4-11. His trip concerned Project 57 business.

In their capacity as representatives of Project 78, Drs. Donald Hood and Kenneth Harwell attended a meeting of contractors, consultants, and advisers connected with projects on the Demineralization of Sea Water at the Department of the Interior, Washington, D. C., April 20-24. The conference was for the purpose of planning the future research program on demineralization sponsored by the Department of the Interior. Secretary of the Interior, Douglas McKay, was present and explained the scope of the undertaking.

Mr. Randolph Blumberg assisted with Project 55 work at the Magnolia Platform at Morgan City, April 8-16. Mr. William Bradley visited the platform April 1 and 2.

Mr. William Clayton spent the greater part of the month conducting Project 30 research at the Sun Oil Pier at Caplen, Texas.

Dr. Myron Ligda made a trip on Project 58 business to San Antonio April 19-21 to confer with officials at Lackland Air Force Base and to provide technical assistance on radar scope photography to the 741st AC&W squadron.

STAFF PROMOTIONS

Dr. Donald W. Hood and Dr. Walter J. Saucier have been promoted to the ranks of associate professor of chemical oceanography and associate professor of meteorology, respectively.

NEW SIGMA XI MEMBERS

Mr. William P. Elliott, Ph.D. candidate in meteorological oceanography, and Mr. George Moskovits, biological oceanography Ph.D. student, have been elected to associate membership in the Society of the Sigma Xi, national honorary research group. They will be initiated at the annual banquet on May 5th.

PROJECT 77 HAS VISITOR FROM HYDROGRAPHIC OFFICE

Dr. Willis L. Tressler, of the U. S. Navy Hydrographic Office, Washington, D. C., visited the department April 9 to discuss the research program of project 77, the Inshore Survey of the Galveston-Port Arthur Harbor Approach Areas, with project personnel.

ONR REPRESENTATIVE VISITS DEPARTMENT

Mr. William Kielhorn, Geophysics Branch, Office of Naval Research, Washington, D. C., was the guest of the Department April 22 and 23. He conferred with representatives of the various ONR projects.

GRADUATE STUDENT LECTURES TO HIGH SCHOOL SCIENCE CLUB

Mr. Jerome Stein showed a colored movie taken of oceanographic operations aboard the A. A. JAKKULA on a recent cruise and explained the scope of oceanography to Mr. Kenneth C. Morgan's Science Club at A. & M. Consolidated High School on April 21.

BLUE CROSS HOSPITALIZATION INSURANCE

Beginning in April employees who work 3/4 or more time for the Texas A & M Research Foundation became eligible for Blue Cross and Blue Shield Health Insurance. 24 oceanography staff members availed themselves of this opportunity.

NEW PROJECTS

Contracts have been received for two new projects, Projects 90 and 91. Project 90 is The Preparation of an Annotated Bibliography Relative to the Seasonal Qualitative and Quantitative Microorganism Content of Surface Waters Within and Adjacent to North America and the Territorial Possessions of the United States. It is sponsored by the Air Research and Development Command, and Dr. John P. Barlow will be Project Supervisor.

Project 91 is, "Maximum Storm Tides", sponsored by the Dow Chemical Company. Mr. Robert O. Reid is Project Supervisor.

METEOROLOGY STAFF PROVIDES EXHIBIT MATERIALS FOR HIGH SCHOOL SCIENCE FAIR

Dr. Walter Saucier has provided Mrs. Joyce Thompson of the Galena Park High School with meteorological instruments and maps, and motion pictures about oceanography for the Science Fair which is being held at her school May 6.

DEPARTMENT MEETINGS

The movie, "We Are the Aggies" was shown at the April 6 department meeting. Mr. Albert Collier who was visiting from the U. S. Fish and Wildlife Laboratory at Galveston spoke about the recent research on red tides done by his laboratory.

On April 13 Dr. Arnold Glaser explained the organization and activities of the National Institute of Oceanography of Great Britain. Dr. Freeman, Mr. Glenn Jung, and Mr. Carter Sparger told about the Project 29 cruise which had just returned to port.

A meeting was called on April 23 to show a movie, "Protected Passage", a film showing the improved shipping facilities provided by the Inter-Coastal Canal which extends along the cost from eastern Florida around the Gulf to west Texas.

On April 27 the movie showing the operation of the University of Minnesota Wave Tank was shown.

TECHNICAL SEMINARS

Mr. R. O. Reid presented a technical seminar; "Water Level Surges in a Canal due to a Traveling Atmospheric Disturbance" on April 23.

PROJECTS COMPLETE TECHNICAL REPORTS

Project 48 released the report, "Wien Bridge and Twin-T Salinity Instruments", by Kenneth E. Harwell and Albert J. Druce.

Mr. George Austin, Project 24, is the author of Part I of a report on "The Circulation and Tidal Flushing of Mobile Bay, Alabama".

FUTURE OCEANOGRAPHERS

Hearty CONGRATULATIONS to Jeanneane and David Cline on their second son, Marc Lewis, born April 26, Weight 8 lbs. 15 oz.

VISITORS

Visitors to the Department during April in addition to Dr. Tressler, Mr. Collier, and Mr. Kielhorn included: Mr. Edward Arnold, U. S. Fish and Wildlife Service, Fort Crockett, Galveston, April 6; Mr. George W. Wood, Department of Physics, Tulane University, April 10 and 11; and Messrs. William Cox, Thomas Smith, and Leon Borgman of the Shell Oil Company, Houston, April 14.

NEW EMPLOYEES

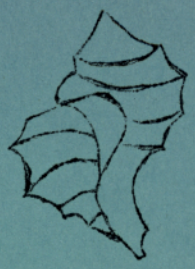
The following persons have been added to the payroll during April: Mrs. Jacklin M. Hudson, Secretary-computer, project 29; Mrs. Adelaide L. Parker, draftsman, project 58; Henry von der Hofen, Captain, G. R. Langtry, Chief engineer, Edward D. Lancaster, messman, Wm. Shine, and Harry A. Wilson, deckhands, project 61; Max R. Faulkner, student labor and Mrs. Ellen B. Thiers, laboratory technician, project 77; F. B. Cox, Max Newson, Wm. W. Scott, Thomas H. Sellers, W. A. Shortt, student laborers, project 80.

The following individuals terminated service in April: Rex E. Rainwater, marine technician, project 24; Mrs. Jeanneane Cline and Mrs. Jacklin M. Hudson, secretary-computers, project 29; Mrs. Sue Burton Cook, computer, project 55; T. A. Clarke, cook, and Harry A. Wilson, deckhand, project 61; John Dunlap, laboratory technician, project 77; Mrs. Doris Franceschini, draftsman, project 85.



Department of Oceanography
College Station, Texas
November 3, 1953

MONTHLY REPORT - OCTOBER, 1953



STAFF TRAVELS

Dr. John C. Freeman attended the Air Weather Service Project, "Silk Hat", at Belmar, New Jersey, October 17 - 24 to obtain information on certain aspects of radar research. On October 30 he represented the department at a meeting of the Central Texas Branch of the American Meteorological Society at the University of Texas, the purpose of which was to make plans in preparation for the Conference on Radio Meteorology, the 125th National Meeting, the American Meteorological Society, to be held in Austin, November 9-12.

Dr. Dale F. Leipper represented the College at a conference of the Southern Regional Education Board at Atlanta, Georgia, October 13 in his capacity as Chairman of the Committee on Marine Sciences, and on October 14 attended with Dr. J. G. Mackin the meeting of the Gulf States Marine Fisheries Commission at Tampa, Florida where plans for a Shrimp Research Program were formulated.

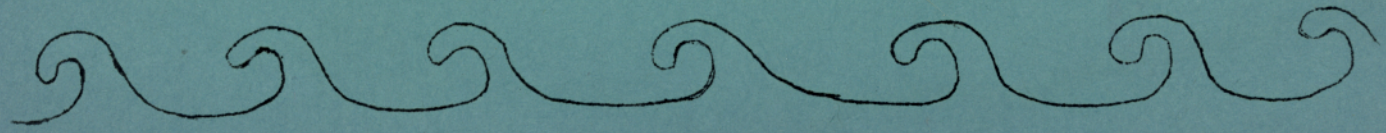
Mr. Robert O. Reid, Mr. William Clayton, Dr. Walter J. Saucier, Mr. Robert Griesser, Mr. Allan Brown, and Mr. John Conner worked at the Sun Oil Pier at Caplen, installing and using the instruments concerned in the research of Projects 30 and 38, October 16-18.

Dr. Leipper, Miss Lela Jeffrey, Dr. Kenneth Harwell, Dr. Eiichi Inoue, Mr. Julius Marcus, and Mr. William Bradley were present at the dedication of the new W. R. Veazey Research Center of the Dow Chemical Company, Freeport, on October 16.

Mr. Charles Bretschneider attended the meetings of the American Society of Civil Engineers in New York City, October 18-24, where he presented a paper, "Surface Waves and Offshore Structures", written jointly by himself and Mr. Robert O. Reid. In returning from the A.S.C.E. meetings, Mr. Bretschneider stopped at Chicago, to go to the meetings of the Fourth Conference on Coastal Engineering, October 28-November 2. Mr. Reid also participated in these Chicago meetings, presenting a paper by Dr. Basil Wilson, "The Mechanism of Seiches in Table Bay Harbor, Cape Town". This paper was illustrated with a motion picture.

Mr. Archie M. Kahan and Dr. Leipper helped staff the Texas A. & M. Water Conservation Exhibit at the State Fair at Dallas, October 9-12 and October 17-19 respectively.

Mr. Richard Adams, Mr. George Austin, and Mr. Joseph Howe of Project 24 left for Mobile, Alabama, October 29th to conduct a week's work continuing the survey of Mobile Bay.



RESEARCH SCIENTIST ARRIVES AT A. & M.

Dr. Eiichi Inoue of the National Institute of Agricultural of Sciences, Tokyo Japan, has arrived at Texas A. & M. College to do research work in meteorology with the Department of Oceanography. Dr. Inoue received his B. E. degree from Tokyo Imperial University in 1941 in Aeronautical Engineering and his Sc. D. degree from Tokyo University in 1951. He is a member of the Meteorological Society of Japan, The Japanese Society of Aeronautical Engineering, the Oceanographic Society of Japan, and the Physical Society of Japan. He is the author of numerous scientific papers on the theory of atmospheric diffusion.

OCEANOGRAPHY STUDENT WINS CARNEGIE HERO AWARD

Mr. Jerome E. Stein, graduate student in Oceanography, was notified on October 31 that he had been chosen as the recipient of one of 35 Carnegie Hero Awards presented over the nation. The award was for bravery in rescuing the engineer of the Oceanography Department's research vessel from drowning. The incident occurred during a routine cruise of the ship, when the engineer fell overboard some 6 miles from shore in the Gulf of Mexico. In spite of the fact that Mr. Stein was recovering from pneumonia, he dove to the drowning man when he saw that the engineer was being pulled down by the propeller. Mr. Stein managed to keep the engineer afloat through a long struggle until a life preserver could be taken to him and the ship could come around. Mr. Stein's award is a bronze medal and $250.00.

DEPARTMENT SEMINARS

Dr. Basil Wilson reviewed the highlights of the meetings of the American Society of Limnology and Oceanography at Madison, Wisconsin, September 6-10 for the department seminar October 7. He summarized several of the outstanding papers and reported several techniques for conducting meeting sessions which he found interesting.

Mr. Robert O. Reid presented a discussion of Wave Tank studies at the meeting October 14.

The development of the program of the Southern Regional Education Board, especially the progress of the planning of the Committee on the Marine Sciences was explained by Dr. Leipper on October 21.

The teaching staff of the department held two sessions, October 2 and October 15 to draft a summary of the space needs of the department, to formulate the plan of activities for the department for the coming year requested by the administration, and to plan changes for the 78th Catalogue. The teaching staff includes the following professors: Dr. John P. Barlow, Mr. William P. Elliott, Dr. John C. Freeman, Dr. Arnold Glaser, Dr. Donald W. Hood, Mr. Glenn H. Jung, Mr. Archie M. Kahan, Dr. Dale F. Leipper, Dr. W. Armstrong Price, Mr. Robert O. Reid, Dr. Walter J. Saucier, and Dr. Basil W. Wilson.

CRUISE

Cruise 53-6 of the A. A. JAKKULA sailed from Galveston October 15. Purpose of the cruise was Project 29 research, the investigation of the time and space variations of the thermocline depth. Those participating in addition to the crew were, Carter Sparger, Robert Gilcrest, Frank Moon, Kenneth Drummond, and Joe Howe. The cruise returned to port, October 21.

FIELD TRIP

Dr. W. Armstrong Price led a field trip of his class in Geological Oceanography (Ocn. 431) to the Galveston Bay Area October 9-11. The purpose of the trip was to study the shoreline of the Galveston Bay and the Gulf of Mexico, as well as the deltas of the Brazos and the Trinity rivers, and other general oceanographic problems in this area. Students participating in the field trip were: William G. Bradley, Randolph Blumberg, William G. Degenhardt, Roy Ellis, Palle Hansen, Vernon J. Henry, Frank Moon, Kenneth Stanton, Joseph Avant, David B. Fagg, Eugene T. Fuller, David B. Hayes, Ben F. Wilson, William L. Walton, Jack J. Zwallen, Bruno C. Homeyer, Edward B. Johnson, Carl D. Lang, Eugene T. Lewis, Hollis D. Marshall, and Arlett C. England.

STAFF MEMBER ADDRESSES TEXAS AGRICULTURAL EXPERIMENT STATION CONFERENCE

Mr. Archie M. Kahan presented a paper on the program of the Texas Agricultural Experiment Station Conference at the Memorial Student Center on October 21. Submect of his talk was, "Weather and Water Supplies for Texas Agriculture".

INSHORE SURVEY

On October 22 the department received a letter from Captain J. B. Cochran, Hydrographer, the U. S. Navy Hydrographic Office, Washington, which is in part quoted below:

"I should like to take this opportunity to express my appreciation for the excellent cooperation the Hydrographic Office has received from your institution in the matter of conducting oceanographic surveys of coastal waters. The cooperation is especially appreciated because I realize the sacrifice you have made in conducting these surveys at the expense of research time and effort." (The Department has recently undertaken an inshore survey of the Galveston-Port Arthur Approach Areas under the sponsorship of the Hydrographic Office, through the Office of Naval Research.)

PH.D. CANDIDATE TAKES PRELIMINARY EXAMINATIONS

Preliminary written examinations were completed by Mr. Glenn H. Jung during the week October 19-26, concluding with the oral examination on the latter date. Mr. Jung's thesis will concern Meridional Energy Transport in the North Atlantic

Ocean. He is currently assisting with the teaching in the department having charge of the class in Physical Oceanography, and is also employed as Associate in Oceanography on Project 29, The Atmospheric Influence on the Thermal Structure of the Oceans.

INAUGURATION OF UNIVERSITY OF TEXAS PRESIDENT

Dr. Leipper was invited to be the representative of Wittenberg College, Springfield, Ohio, where he received his B. S. degree, at the inauguration of President Logan Wilson, new president of the University of Texas at Austin, October 29.

METEOROLOGY SCHOLARSHIP

A $500.00 scholarship in meteorology has been authorized in the department by the Texas A & M Research Foundation. It is available to an outstanding student who has completed at least two years of College work including mathematics and physics. Also established was a loan fund to provide advances for Foundation employees traveling on Foundation business and loans for out of state tuition payments.

CORROSION PAPER

Mr. William G. Bradley, Graduate Assistant and Master's degree candidate in the department has recently completed translating a significant Dutch paper, "Aerobic and Anaerobic Corrosion in Iron Water Mains" by A. H. Von Wolzogen Kuhr and L. S. Van der Vlught. This paper was mimeographed and circulated at the Corrosion Short Course held on the campus September 22-25.

RADAR SETS BEING MODIFIED

Contracts have been received from the cities of Houston, Galveston, and Fort Worth for the conversion of radar sets to form part of the Texas Radar Tornado Warning Network. Tooling is now in progress so that all of the 16 sets which have been received from the U. S. Weather Bureau may be modified in the near future. It appears that Lake Charles, Louisiana will also become a part of the warning system.

COLLEGE STATION BRANCH, AMERICAN METEOROLOGICAL SOCIETY

An election of officers for the coming year was held at the October meeting of the College Station Branch of the American Meteorological Society, October 2. Mr. Charles L. Bretschneider, of the Department of Oceanography, was named President, Dr. John C. Freeman, also of the Department of Oceanography, Vice-President, and Mr. Donald I. Eidemiller, of the Department of Geography, Secretary-Treasurer. Program for the meeting was a discussion of the Texas Radar Tornado Warning Network by Mr. Dewey R. Soltow, the U. S. Weather Bureau, Washington, D. C., Dr. John C. Freeman, and Mr. Archie M. Kahan.

TECHNICAL REPORTS COMPLETED

The following Technical Reports have been prepared by the projects:

"Surface Waves and Offshore Structures, The Design Wave in Deep or Shallow Water, Storm Tide, and Forces on Vertical Piling and Large Submerged Objects", by Robert O. Reid and Charles L. Bretschneider, Projects 30, 38, and 50.

"Transfer Process Operating at The Ocean Boundaries", Second Annual Report, Project 30, by Robert O. Reid and William Clayton.

"The Distribution of the Mean Monthly Wind Stress Over the Gulf of Mexico", Scientific Report No. 1, and "Reliability of Commercial Vessel Reports of Sea Surface Temperatures in the Gulf of Mexico", Scientific Report No. 2, by Guy A. Franceschini, Project 44.

"A New Tephigram", Scientific Report No. 1, by W. J. Saucier and William P. Elliott, Project 57.

GULF OIL COMPANY REPRESENTATIVE SHOWS WAVE FILM

Mr. Richard Lietz of the Gulf Oil Company, Houston, presented a film, "Surface Waves, A Wave Tank Experiment at St. Anthony Falls Hydraulics Laboratory, University of Minnesota", for interested members of the department on September 30.

VISITORS

Visitors to the department during the month were, Mr. Lietz; Mr. Francis M. Lucas, ONR representative, Austin, October 1; Mr. William E. Allen, President of the Student Chapter of the Society of Exploration Geophysicists, the University of Houston, October 10.

NEW PERSONNEL

New personnel added to the staff of the department during October include: Messrs. Luis de Anda, James Barton, Joseph Broesche, Luther O. Cox, Sam T. Curtis, John M. Holley, Bobby Jean Kibby, Carl. A. Pevoto, Jimmie L. Ray, Charles A. Roden, Donald E. Ryan, James P. Scott, Robert A. Sites, and Donald D. Swofford, Project 57; Robert E. Collins, Dr. Eiichi Inoue, Robert Lee Smith, and Joseph E. Warrick, Jr., Project 59; Louis P. Lavelle, Project 61; and James E. Austin, Carl C. Livesay and Jimmie L. Smith, Project 80.

Personnel terminating were Mr. Joe Creager, Project 77, who left for the service, and Mr. Sidney Engstrom and Mr. Henry Von der Hofen, Project 61.

FUTURE OCEANOGRAPHERS

Congratulations to Charles and Yveline Bretschneider who announced the birth of a 5 lb. 13 oz. son, Erick, on October 28.

Department of Oceanography
College Station, Texas
December 3, 1953

MONTHLY REPORT - NOVEMBER, 1953

STAFF TRAVELS

Mr. Archie M. Kahan made a tour of west Texas November 17-20 to consult with representatives of various cities about contracts for the installation of radar sets to form part of the Texas Tornado Warning Network. Cities visited included San Angelo, Abilene, Midland, Lubbock, and El Paso, the first three of which have already signified their intention to install the radar.

Drs. John C. Freeman, Eiichi Inoue, and Mr. Archie M. Kahan attended and presented papers at the 125th National Meetings of the American Meteorological Society, held at Austin November 9-12, the Central Texas Branch, A.M.S. acting as hosts. Titles of the papers presented were, "Radar Echoes in Tornado Situations", by Freeman; "Diffusion of Smoke Puff as a Turbulence Measure in the Atmosphere", by Inoue, and "Summary and Results of the First Texas Tornado Warning Conference", by Kahan.

Dr. Leipper and Dr. John Barlow attended the 6th Annual Session, Gulf and Caribbean Fisheries Institute at Miami Beach, Florida, which met November 16-20. Dr. Leipper returned to College Station November 17.

On November 19 Dr. Leipper, Dr. Howard Barlow, Dr. Basil Wilson and Mr. Robert Reid conferred in Houston with representative of 12 interested industrial concerns about plans to build a wave and towing tank at Texas A. & M. Dr. Leipper and Dr. Barlow discussed the possibility of research on the problem of air and water pollution with Mr. F. M. Law in Houston.

Mr. William Clayton and other personnel of Project 30 worked at the department's installation on the Sun Oil Pier at Caplen weekends during November continuing the calibration of instruments and the collection of the records from the automatic recording devices. Mr. Robert Reid accompanied Mr. Clayton November 27-29.

CRUISES

Messrs. Albert Brown, James Bush, Kenneth Drummond, Jerome Stein, and Dr. Kenneth Harwell of the Oceanography Department with Messrs. Thomas Goedicke and Melville B. McMurry of the Geology Department took part in Cruise 53-7 of the A. A. JAKKULA which sailed from Galveston November 6. Purpose of the three day academic cruise was student training in oceanographic techniques in making routine observations such as are usually taken on oceanographic station, i.e., bathythermograph readings and the collection of bacteriological, plankton and water samples. Instruction was under the direction of Mr. Stein.

An Inshore Survey (Project 77) Cruise, No. 53-8 of the JAKKULA, followed on November 20 with Messrs. Kenneth Drummond, Richard Adams, George Austin, Vernon J. Henry, and George Moskovits sailing. Additional data concerning the Galveston-Port Arthur harbor approach areas were collected. Mr. Drummond sailed as captain.

AIR FORCE OFFICERS VISIT DEPARTMENT

Lt. Col. James V. Carroll, Chief of the Training Division, Headquarters Air Weather Service, Andrews Air Force Base, Maryland, and Lt. Dwight F. Rehberg and Major Donald Iddins, both of the United States Air Force Institute of Technology, Wright Patterson Air Base, Dayton, Ohio were visitors in the Department on November 5. The officers came to meet with the Air Force students registered in the meteorological basic training course, and to confer with the department meteorological staff in regard to future programs.

NEW ELECTRON MICROSCOPE LABORATORY DIRECTOR

Mr. U. Grant Whitehouse, Research Oceanographer and Ph.D. candidate in Chemical Oceanography, has been appointed director of the College Electron Microscope Laboratory, with Mr. Palle Hansen, Ph.D. student in Physical Oceanography, being named technician for the laboratory. Mr. Hansen holds the M.S. degree in electrical communication, having done his thesis work on the study and development of an impedance measuring device for ultra short waves.

DEPARTMENT PREPARES NEW BROCHURE

Galley proof has been read and corrected for the new department publication describing the academic and research program in oceanography at Texas A. & M. The new brochure is scheduled to be available by January 1st, 1954.

PROJECT 63 RENEWED

Dr. W. Armstrong Price has received notification from the Geography Branch of the Office of Naval Research that the contract for Project 63, "Offshore Bottom Conditions and Shoreline Types" has been renewed for the coming year.

DEPARTMENT MEETINGS

For the November 4th Department Seminar, Mr. Charles Bretschneider presented a resumé of the meetings of the American Society of Civil Engineers which he attended in New York City, and Mr. Robert Reid summarized outstanding research presented at the Fourth Conference on Coastal Engineering held in Chicago October 28-November 2. Mr. Carter Sparger told about the 6th Cruise of the A. A. JAKKULA for Project 29, October 15-21.

Mr. Kenneth Spengler, executive secretary of the American Meteorological Society, visiting the department from the National Meeting of the American Meteorological Society in Austin, spoke at the department meeting November 10. He outlined recent developments in the science of meteorology which have augmented the services of this science in solving practical problems in everyday living.

At the department meeting November 18, Mr. William Bradley explained the new procedure being initiated in the department for the wider circulation of incoming research reports and other publications. Dr. John Freeman gave an account of the Conference on Radio Meteorology held November 9-12 in Austin. Dr. Leipper commented on his recent trip to attend the 6th Annual Session, the Gulf and Caribbean Fisheries Institute at Miami Beach, Florida.

TEACHING STAFF MEETING

The teaching staff of the department met November 3 at 2:00 p.m. to consider matters of general departmental interest.

PROFESSOR GERHARD SCHOTT WRITES

Mr. Richard Adams of Project 24 has received the following letter of thanks from Professor Gerhard Schott of Hamburg, Germany to whom the department had sent a series of technical reports concerning the oceanographic survey of the Gulf of Mexico:

"Dear Mr. Adams:

With great pleasure I had your kind letter dated October 6 and with great satisfaction I received the three voluminous parcels containing the observations of the oceanographic survey of the Gulf of Mexico. Up to date I had no knowledge of this great undertaking and therefore I beg to accept my heartiest thanks.

In my age of the 87th year of life I must spare my eyes, but I found immediately many special interesting data, on the influence of Mississippi on the temperature differences over the Yucatan Bank and in the Gulf Stream etc. I know the difficulties as a member of the old "Valdivia" deep sea expedition and later on other European voyages.

I suppose that the Geophysical Institute of the Hamburg University Department of Oceanography has not this material and I shall propose that a student give us a detailed report on your work, especially because now Professor A. Defant is here for 2 months -- you know, the man of the German "Meteor" expedition.

Thanking again, I am,

Sincerely yours,

Gerhard Schott"

DISTINGUISHED ITALIAN ETHNOLOGIST, GUEST OF DR. PRICE, IS GRADUATE LECTURER

Dr. Alberto Carlo Blanc, Professor of Ethnology, University of Rome, presented the Graduate lecture to a large audience in the Biological Science Building, Monday November 23. Subject of his talk was, "Ancient Man in Italy and his Caves". Barone and Baroness Blanc were guests in the home of Dr. Armstrong Price, Professor of Geological Oceanography. Dr. Price had met Dr. Blanc on his recent trip to the 4th Congress of the Association of International Quaternary Research in Rome and Pisa in August, and had invited him to come to study the Quaternary deposits of the Gulf Shore.

Dr. Leipper represented the Graduate Council and presided at the lecture.

COLLEGE STATION BRANCH, AMERICAN METEOROLOGICAL SOCIETY

At the November 6 meeting of the College Station Branch, American Meteorological Society, Dr. Robert R. Shrode of the Department of Genetics presented the paper, "The Use of Meteorological Data in Studies of Heat Tolerance in Cattle". Dr. Eiichi Inoue of the Division of Meteorology, National Institute of Agricultural Sciences, Tokyo, Japan, and currently meteorologist in the department of Oceanography, spoke on the subject, "The National Institute of Agricultural Sciences, Japan".

STAFF MEMBER GIVES SEMINAR PROGRAMS

On November 5th Mr. Archie M. Kahan was invited to address the department seminars of the Civil Engineering and the Range and Forestry Departments. For the Civil Engineers his subject was, "The Measurement of Rainfall", while he spoke about the "Applications of Cloud Seeding to Agriculture" for the Range and Forestry meeting.

TECHNICAL REPORTS

Project 29 has released Technical Report No. 6, "Wind Mixing Currents", by John C. Freeman, Jr.

OCEANOGRAPHY STAFF MEMBERS HAVE PAPERS PUBLISHED

The following scientific papers by members of the department staff and students are currently being published:

"A Precise Electronic Titration Instrument", by Dr. Kenneth E. Harwell, to appear in the January, 1954 issue of Analytical Chemistry.

"Physical Oceanography of the Gulf of Mexico", and "Marine Meteorology of the Gulf of Mexico, A brief Review", two papers by Dr. Dale F. Leipper, to be published in the U. S. Fish and Wildlife Service book, "The Gulf of Mexico, its Origin, Waters and Marine Life".

"Classification of Shorelines and Coasts of the Gulf of Mexico", and "Oyster Reefs of the Gulf of Mexico", by Dr. W. Armstrong Price, also to appear in the Fish and Wildlife Service book.

"Horizontal Deformation in Atmospheric Motion", by Dr. Walter J. Saucier. Transactions of the American Geophysical Union, Vol. 34, No. 5, October, 1953.

"A New Species of Multitestis (Trematoda allocreadiidae) from Sheepshead (Archosargus probatocephalus) in the Gulf of Mexico", by Mr. Albert K. Sparks. To be published in the Transactions of the American Microscopical Society, January 1954.

OCEANOGRAPHY STUDENT MARRIES

All best wishes to Mr. and Mrs. Palle Hansen who were married on November 25 in College Station. Mrs. Hansen is the former Miss Catherine Dunn of Philadelphia, Pennsylvania and Princeton, New Jersey. In Princeton she was employed as secretary in the Educational Testing Service. The Hansens will be at home at 503 B, Culpepper Drive in Bryan while Mr. Hansen completes his work for the Ph.D. degree in Physical Oceanography.

FUTURE OCEANOGRAPHERS

Congratulations to Glenn and Jean, and John and Marjorie, proud parents of two incipient oceanographers, Lawrence Ervin Jung, born November 17 and Cathryn Freeman who arrived December 1.

VISITORS

Visitors to the department during November in addition to Lt. Col. Carroll, Lt. Rehberg, Major Iddins, and Mr. Spengler already mentioned, included: Mr. William E. Hardy, Head, Department of Meteorology, Oklahoma A. & M. College, Stillwater Oklahoma, November 11; Mr. Lloyd A. White, Scientific Research Administrator, Office of Naval Research, Chicago; Dr. William K. Widger, Air Force Cambridge Research Center, Cambridge, Massachusetts; Dr. Myron Ligda, Massachusetts Institute of Technology, Cambridge, Massachusetts; and Mr. Philip H. Gustafson, correspondent and writer, New York City, November 13; and Mr. Richard Riedel, Project Manager, Dow Chemical Company, Freeport, Texas, November 17.

NEW EMPLOYEES

The following new employees were added to the staff of the department during November: Mr. Herbert Helm, student assistant, Project 57; Mr. Frank Dorsett, Mr. Pat Jefferson, and Mr. Roy T. Nichols, Engineer, Mate, and deckhand, the A. A. JAKKULA, respectively (Project 61), and Dr. Mary Futrell, laboratory technician, Project 78. Mrs. Barbara Creager, Project 57, and Captain Homer L. Hadley, Project 61, terminated employment.

