NEWS AND NOTES

Our Remarks on Several Annual Reports Previously Received from Mosquito Abate-MENT DISTRICTS APPARENTLY INSPIRED OTHERS FOR TURLOCK AND SAN MATEO, CALIFORNIA, AND DESPLAINES, ILLINOIS, sent in theirs and they are all so good in entirely different ways that we would do them an injustice to try to abstract them here. You'll just have to send for them. The Desplaines report includes a large amount of population data for several species (Indexed!) and also describes some interesting comparativesuitability studies on various sorts of equipment in adulticiding. The report on the Turlock District gives a very complete breakdown of costs of operations for every type of control. The costs of vehicles, manpower and materials are analyzed and the report even tells how much of each insecticide was bought and from whom! (Boy, is that Ed Washburn ever brave!)

Don Grant, of San Mateo, has ye Assoc. Ed. sort of at his mercy, geographically, so we will give him a separate paragraph to butter him up. The San Mateo report, too, contains an excellent summary of costs and manhours, giving the proportions expended on source reduction, larviciding, ditch maintenance and new drainage, etc. Of especial interest, too, is the fact that Don has now added another pest to his District's control studies, one which is sometimes of major proportions and which is increasingly gaining attention in California, the biting genus of black gnats, Leptoconops. Don also recently sent us a preliminary but very instructive synopsis and key covering some of the culiciform diptera such as the Nematocera (Simuliids, Chironomids, Tipulids and Heleids). This is a symposium by members Brooks, Brydon, Grant, Keh, Kramer, Lauret and Mallars, and they expect to work it into a finished form within the next year. value is obvious and we wish, as the Irish say, that the wind may be always at their backs in

CHESTER ROBINSON, OF ALAMEDA (CALIFORNIA) MOSQUITO ABATEMENT DISTRICT, reports that of thirty service calls in March, all but six were due to *Chironomids*, while the 35 service calls in February were all because of this nuisance. The District did considerable mist spraying to alleviate the inconvenience to residents caused by this pest. Elsewhere in California, where the floods of last winter had increased breeding areas and mosquito control measures had not also taken care of the midges, residual spraying of entries and fogging for adult control were being extensively practiced into April and May.

THE SKEETER, organ of the Virginia Mosquito Control Association, comes up with a nifty in the April issue. "At least, mosquitoes seem to be honest," Skeeters avers, "You might say that they settle their bill before each meal!!"

Mo Hirst, in his Navy pep sheet, subtitled "More Hot Air from the Land of Sun," not to be outdone, comes back with, "Consider the mosquito: He rarely gets a slap on the back until he goes to work." (She, Mo.)

Francisco Dy Writes, "We had quite a successful malaria conference in Phnom-Penh, Cambodia, last January. . . WHO convened another inter-country malaria conference (The First Borneo Inter-territorial Malaria Conference) in Kuching, Sarawak, on 22–24 February 1956. This was attended by the Directors of Medical Services of North Borneo and Sarawak, the State Medical Officer of Brunei, and a representative of UNICEF. This was also a good conference. Among other things, the conference stressed the importance of achieving close co-ordination of national malaria programs, particularly among countries with common borders."

A press release on the Phon-Penh Conference, which Dr. Dy enclosed with his letter, states that the agreement was adopted by Cambodia, Laos, Thailand and Vietnam, and it closes with a statement by Dr. I. C. Fang, Director of the WHO Regional Office for the Western Pacific, that "mosquitoes recognize no territorial or political boundary." He also expressed his appreciation for the interest and material support given by the United States Operations Missions to public health programs.

HARRY STAGE, MAKING HANDSOME RESTITUTION FOR HIS MONTHS OF COMPARATIVE SILENCE, sends in a report on a malaria control study and observation tour, made during the period from 17 February to 20 March, 1956, which is packed with information on the Southeast Asian programs. The primary objective of the tour was to study the use of dieldrin as a residual spray (see previous News and Notes items by George Burton from Liberia and Nepal). Harry and his entourage visited the Institute of Medical Research in Kuala Lumpur, Malaya, the Malaria Control Headquarters of the English Army in Singapore, the Anti-Malaria Campaign Headquarters in Colombo, Ceylon, the anti-malaria bureaus of Rangoon, Insein, and Mandalay, in Burma, and several Control methods ranged offices in Thailand. from residual sprays, through the use of granules for the control of Mansonia, to fogging as an This latter method, using handportable foggers, sometimes gave control for a very considerable period after a few initial applications and despite the fact that the fogs left no residuals in the area. Harry notes that again and again he heard emphasized the statement that malaria control is not MOSQUITO control, a point all can appreciate who have battled to control disease vectors and successfully done so only to have the area's inhabitants complain that "nothing has been done about the damn mosquitoes." In areas having such tremendous populations of pest mosquitoes, largely breeding in carclessly-managed backyards and roadsides, the necessity of species control is especially marked.

MILTON BUEHLER SENDS IN THE PROCEEDINGS OF THE FIRST ANNUAL MEETING OF THE OREGON MOSOUITO AND VECTOR CONTROL ASSOCIATION, which was held the 17th and 18th of November of last year. It contains many good articles, but one in particular bears on this important subject just mentioned in the paragraph above. "Species Identification as a Prerequisite to Control Operations," Professor Paul O. Richter points out many examples of situations where lack knowledge of breeding habitats, gained through a thorough knowledge of species involvement, permitted widespread and completely fruitless activity in applying control to the wrong places. Lack of proper species identification can, he points out, result not only in controlling mosquitoes which are non-vectors of human or domesticated animal diseases but even of non-biters which may, by their numbers, be assuming the blame in the public mind for the sufferings inflicted by a far less numerous species.

HERB SCHOOF, OF THE COMMUNICABLE DISEASE CENTER AT SAVANNAH, GLORGIA, in amplification of his article which appeared in the March issue, writes that their program for the coming year will include further studies of the relative effectiveness of many types of applications, residual and transitory, for the control of adult mosquito infestations. The initial studies will be made under semi-field conditions, using caged flies and mosquitoes. Following this, operations will be conducted in and around premises.

T. E. McNeel, Who Has Been in the Philippines Until Now, is another of our illustrious members joining the malaria eradication program in Mexico. In line with the doctrine mentioned in Francisco Dy's report, that mosquitoes know no boundaries and control must be practiced jointly by countries having common borders, the eradication program is a joint effort and is projected to cover five years. Mac expects to be there for the first two of them, at least, and is adding his efforts to the previously-noted contributions of AMCA members Roy Fritz and Don Pletsch.

DR. HANNES LAVEN, A NEW GOOD-NEIGHBOR MEMBER WHO IS RESEARCHER IN GENETICS AT THE MAX-PLANCK-INSTITUT FÜR BIOLOGIE, writes a letter about his present studies on the *Culex pipiens* complex which is so interesting that we take the liberty of summarizing it for you. The starting point, writes Dr. Laven, was the detection of very strange crossing relations within the species complex, which he explained some years ago by hypothesizing cytoplasmic inheritance of the crossing type. But positive proof could only

be made by formal genetic studies of the insects. This is now progressing and Dr. Laven has obtained several mutations by X-ray irradiation and has also picked up several spontaneous mutations.

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"Besides the investigation of the crossing relations in Culex pipiens," he continues, "I am planning to start with two other investigations: (1) the genetics of insecticide resistance in Culex and (2) the inheritance of autogeny vs. anautogeny in Culex. Both problems are in my opinion of some interest also for the control of mosquitoes. In the first-named problem the interest is obvious, because it is desirable to get information from an animal closely related to the many disease vectors . . . we have only information on the inheritance of insecticide resistance in the standard genetical animal Drosophila. The practical aspect of the second named problem is not so obvious. But according to my observations it is clear that the autogenous form of Culex pipiens, the so called Culex molestus, is only a mutant form of the anautogenous form. Two points must be remembered in this connection. The percentage of autogenous animals in every population of Culex pipiens varies with latitude; it is very high in the south and declines to the north. And this form is one of the voracious biters on human beings, at least here in Europe in cities and villages. There is also in this problem a practical aspect.

We hope that Dr. Laven's letter will inspire Members Roseboom and Hosoi (Doctors all) to do likewise and let us know what they have

"cooking."

George Burton Might Have Written to Us About the Recent Coronation in Kathmandu, NEPAL, which occupied so much of the attention of the world's press, but instead he chose to write to us about mosquito control in that remote and inaccessible kingdom. He does diverge to remark, though, that the weather is (or was up to then) ideal, not too cold, not too hot. Dr. Burton feels he has uncovered some hitherto unsuspected malarious areas as a result of the surveys he has been conducting by walking, by bullock carts and "where everything else fails, by elephant." Despite the fact that "the landscapes and panoramas are magnificent in this truly Shangri-La location," George insists that they manage to keep plugging. "We expect to begin our dieldrin spraying program after we get set up in Birguni," he continues, leaving us wondering how that is pronounced, "And have a permanent base from which to work. At present we are using DDT in some areas, and still find it quite effec-In addition to the mosquitoes being knocked off, the flies are dying like flies."

FRED C. BISHOPP LEFT FOR EGYPT on January 25, 1956, to serve as advisor to the Egyptian Ministry of Agriculture under the United States Operations Mission in Cairo, a fact which should have been duly noted in our March selection of News and Notes, had we known of it. To those A.M.C.A. members who, like us, thought Dr.

Fred safely ensconced in Washington, D. C., and to whom the passing reference by Harry Stage to an expected meeting in Cairo may have been a little bit unsettling, our contritest apologies. Dr. Bishopp may be addressed at Cairo c/o U.S.O.M., via the U. S. Dept. of State, Washington 25, D. C., putting on the letter the correct postage to carry it via regular mail to Cairo . . . and may we hope that the mails will run both ways?

WELL, FRED STUTZ CAME THROUGH HAND-SOMELY WITH HIS LIFE HISTORY, AS REQUESTED Not Too Subtly in Last March's Issue and we are happy to give you the lowdown on our new President. He was born (1898) raised and attended school in Chattanooga, Tennessee. In 1918, he started working for the U. S. Public Health Service as a field investigator doing malaria control work in Fort Oglethorpe, Georgia, nearby. Later that year he enlisted in the Student Army Training Corps and at the close of the war returned to the U. S. Public Health Service on a project known as "Studies and Demonstra-tions in Rural Sanitation." He continued in general public health work in Georgia, Alabama and Missouri with county health departments until 1926, when he was employed by the Coral Gables, Florida, Health Department. He continued here until 1935, when he was appointed Director of the then newly-formed Anti-Mosquito Districts of Broward and Dade Counties.

In 1939, Fred was sent by the U. S. Public Health Service to Brazil to study the methods used in the climination of Aedes aegypti. Among the accomplishments of this period was the development of the use of paris green for the control of mosquitoes breeding in artificial containers. In 1947, he resigned from the Broward County District to organize and direct the activities of a Waste Department for Dade County which he now heads in addition to his other duties as Director of the Dade County Anti-Mosquito District. Fred is a past-President of the Florida Anti-Mosquito Association and has served as a member of the Vector Control Committee of the American Public Health Association. He says his hobby is "reading." Studies, we guess.

DR. LOUIS L. WILLIAMS, JR., HONORARY MEMBER OF THE A.M.C.A., AND AN HONOR TO US TO HAVE AS A MEMBER, a retired Medical Director of the U. S. Public Health Service, world-renowned malaria fighter, was a commissioned officer in the Public Health Service from 1915 to 1953. For 26 years a specialist in malaria control, Dr. Williams directed the Public Health Service, Office of Field Investigations of Malaria until 1940, when he became head of the Malaria Commission to the China-Burma Highway. During this more than a quarter-century period he was closely identified with, and guided the development of, many Divisions of Malaria Control in various State departments of health (he served as Divisional Di-

rector in Virginia after World War I). During the depression of the '30s he organized the malaria control programs of the U. S. Federal relief agencies and, at the start of World War II, organized and developed the office of Malaria Control in War Areas, and in time initiated their widely-known campaign for the eradication of malaria in the United States.

In 1943, Dr. Williams was detailed to the U. S. Army as Malariologist for the Mediterranean theatre of operations. He was PHS liaison officer to the Department of State from 1945 to 1948, participating in the development of the World Health Organization, after which he was assigned as Chief of the Division of International Health of the U. S. Public Health Service. He was a member of the U. S. delegation to the International Health Conference in 1946, in New York, at which the constitution of the WHO was drawn up, and in 1947, he was a delegate to the Pan American Sanitary Conference. That same year he was also a member of the organizing committee of the 4th International Congress on Tropical Medicine and Malaria.

After his retirement from the U. S. Public Health Scrvice, Dr. Louis joined the staff of the Pan American Sanitary Bureau of the Regional Office for the Americas of the WHO, where he now is. He says his hobby is "International

Health"!

Now, G. Edwin Washburn, Whom We Have Had Occasion to Mention for His Hard-Workingness and Intrepidity, has had more to his life than these death-defying feats. He doesn't say so, which is almost as odd for a Californian as it would be for a Texan, but we believe that he was born in California, and not far from where he now resides. He worked as a protoentomologist, along with some others of us, for Pete Simmons and W. D. Reed in Fresno, summers, and was graduated as a full-fledged entomologist by the University of California in 1932. After a considerable amount of graduate work, he then spent 9 years teaching Agriculture at the Reedley High School and Junior College. He was with the Public Health Service in the MCWA program during World War II and that was his downfall, for in 1946 he went out into the Turlock Mosquito Abatement District as its manager, and that he is today, as well as Secretary of the California Mosquito Control Association and Regional Director for the Pacific Southwest Region, A.M.C.A. Ed has three children, including 1 married son (incredible!) and daughters in high school. He says music and farming are his hobbies but he spends most of his time on mosquito work, we've noticed.

DONALD R. JOHNSON, WHO IS NOW THE MAN IN THE DIVISION OF INTERNATIONAL HEALTH, OF THE PUBLIC HEALTH SERVICE, WHO SENDS ALL THESP PEOPLE OVERSEAS, was born in 1920 in Chicago, Illinois, and graduated from the University of that State in 1943, with his major in Entomology,

of course. From 1943 to 1946 he was in the Navy, and for 2 years of this time was Officerin-Charge of Malariology Unit 72, in New Guinea and the Philippines. In 1946 he returned to school, at the University of Minnesota, receiving his M.S. in 1048, and until 1951 he was Assistant State Entomologist in that state. However, the virus of malaria control and the lure of the South Pacific eventually got him and he returned to Indonesia for the U.S.P.H.S. in assistance to the Indonesia Ministry of Health. He is presently in Washington, as we indicated above, luring people into these exotic and fascinating assignments. If anyone wants some information about the International Cooperation Programs in over 20 countries of the world, or is interested in a possible foreign assignment, He is also Chairman of the write to Don. A.M.C.A. membership committee and says his hobby is gardening. In Washington, however, gardening isn't really a hobby; it's an essential prophylaxis.

BEN KEH, ASSISTANT VECTOR CONTROL SPECIAL-IST OF THE CALIFORNIA DEPARTMENT OF PUBLIC HEALTH, was born in Lodi, California in 1919, and received his B.S. in 1950 from the University of that State. In 1951, he obtained an M.S. degree, also from the University of California, and joined Dick Peters' Bureau of Vector Control, for which he had been working part-time since 1949, on a full-time basis. Ben says he has no hobbies except an epicurean collection of good eating places with an international flavor, but he has recently got himself a house, and now he knows what the hobby of all house-owners necessarily is. He says it's getting organized, though, so then it will cease to be a hobby. Ben's forte is all arthropods of medical importance, which leaves him wide open to be handed mites, ticks and such types which are hard enough to be universally shunned. His observations on mosquitoes have appeared in Mosquito News and aroused the interest of many members.

DR. ANTONIO EJERCITO Y LISA is Director of the Malaria Control Project (ICA) in the Philippines, who recently announced, with T. E. McNeel, a program for the eradication of malaria in the Philippines. Dr. Ejercito commenced his medical studies in the University of the Philippines, concluding them in the United States in 1923 and then returning to Manila where, in 1925 he joined the Division of Communicable Diseases of the then Bureau of Health. In 1927, he became assistant chief of the Malaria Control Section which he headed a few years later and guided in 1951 into the status of a full Division.

He has been an indefatigable delegate at conferences on malariology, his travels beginning in 1935 when he was sent as a delegate to the International Meetings on Malariology in Malaya and Java. In 1938, he attended the Third International Congress of Tropical Medicine and Malaria in Amsterdam; 1949 saw him in Rome at the

Second World Health Organization Assembly, and in 1953 the Fifth International Congress on Tropical Medicine and Malaria in Istanbul. In 1953, also, he went to Rome to attend the Sixth International Congress on Microbiology and in 1954 he was the chairman of the Second Asian Malaria Conference for the Western Pacific and Southeast Asia Regions.

In 1953 and 1954, he travelled widely in the United States and many of our local control workers had an opportunity at that time to meet or to renew acquaintance with the genial doctor. Those who were stationed in the armed forces in the Philippines during and after the war have good reason to remember his plentiful help during a time when he was facing the disheartening ruins of his malaria control and was "stooping to build them up" with what proved to be far from "worn-out tools." Actually, the darkness was only the prelude to a bright new era. The success with which his efforts and those of other A.M.C.A. members like Archie Hess and Travis McNeel have been crowned is attested by the fact that it is now possible seriously to set forth a plan not alone for the control but for the eradication of malaria in the Philippines.

DR. LUANG AYURAKITKOSOL, Chief of the Division of Malaria and Filariasis Control, and the Deputy Director-General of the Department of Health, Ministry of Public Health of Thailand, one of our distinguished members residing out of the United States, was born and reared in Thailand. He has been actively engaged in the control of malaria in Thailand for over 20 years and in the control of filariasis for 4 years. Together with the late Dr. Bhayung Vejjasastr, Director-General of the Department of Health, Dr. Ayurakit pioneered the control efforts, establishing the first organized malaria survey unit in 1931, while Dr. Bhayung was studying at Johns Hopkins University.

Dr. Ayurakit received his formal training in the Medical College of Chulalongkorn University, Siriraja Hospital in Bangkok, and through Fellowships sponsored by the League of Nations, World Health Organization, and the Thailand Government for advanced studies in various institutions of Malaya, India, Italy, and Ceylon. He has appeared on the programs of International

Conferences.

Prior to 1950 there were estimated to be 4,000,000 cases of malaria annually in Thailand of which 40,000 were fatal. Trained personnel were few, medical supplies scant, laboratory facilities and control measures inadequate... the problem seemed insurmountable. The inadequacies were more than off-set by Dr. Ayurakit's scientific ability, his courage to attack the seemingly impossible, his ability to inspire fellow workers, and his zealous desire to control the number-one-killer of his land. This long sought goal is being realized. His program has been expanded from a small survey unit to a control

organization protecting approximately 10,000,000 people. Rapid expansion has been made possible through a demonstration project sponsored by WHO and UNICEF and through the cooperation of the United States of America International Cooperation Administration during the past five years. The Thai and cooperating agencies were able to show that in areas where houses were sprayed for three consecutive years, the incidence of disease and vector became virtually zero. Plans for the next two years include protection for all who live in the malarious areas of the nation.

Dr. Ayurakit, on the eve of his retirement from the Department of Health, is touring parts of Europe, Asia, the United States, and the Pacific Islands, under the auspices of the ICA, observing the basic research, applied investigation, and public health activities on the federal, state, and local levels in preparation for expansion of his program for investigation and control of vector-borne diseases in Thailand .- E. B. THURMAN

We Close this Installment of Who's Who WITH-ROLLIE DORER. Shux, it shouldn't be necessary to tell you anything about Rollie, who is a Founding Father and has been so long a quiet but effective Moving Spirit. Rowland E. Dorer, whose name is synonymous in most minds with Virginia, was actually born in East Orange, N. J., possibly in order to cement later inter-sectional mosquito control relations. With this auspicious start in 1907, Rollie progressed through the New Jersey schools and Rutgers University to eventual junction with his métier as an employee of the Union County Mosquito Control Commission. In 1933, he came to Virginia to be in charge of mosquito control, which has grown steadily and solidly, building up a strong backlog of loyal citizen support, and has now expanded to include control of all vectors affecting public health. In the Association, Rollie assumed official position as a member of the Board in 1949, continuing as Assistant Secretary and Treasurer, Treasurer, Vice-Chairman and President in the succeeding years through 1954. After "resting" this year as a mere Member of the Board, we trust Rollie will feel ready to start another cycle!

THE CENTRAL CO-OPERATIVE ANTI-MALARIA SOCIETY, LTD. OF CALCUTTA, INDIA, which is now nearing the end of its thirty-seventh year of charitably-supported anti-malaria activities, sends us its report for the year which ended with June, The road of such societies supported by donations has, of course, become far rockier since India attained her independence and while success seems reasonably assured the intervening pathway sets the challenge of unremitting labor. The Society is meeting this challenge with the solution of encouraging local, rural societies which bring the problem and demonstrate the solution to the individual villager, thus building a broad base of popular support. The Society also feels that it is, in this way, contributing to the solution of the over-population problem, since it is helping to make each individual capable of self-supporting productivity.

THE TOLEDO SEMINAR COMMITTEE made a report during the 1956 American Mosquito Control Association Meeting, in which the success of the Seminar was emphasized both from the financial standpoint as well as from the information gained. It was reported that 107 attended the gathering. Mr. Dick Girkins reported that receipts were \$1,273.15 and a check for \$338.33 was turned over to Lester Smith, treasurer of the A.M.C.A. The Seminar Committee will be turning over future receipts for the sale of the Seminar Proceedings from time to time in the future. The supply of these booklets is limited and there will not be any reprinting. Members are urged to make their purchase of the Toledo Seminar Proceedings now.—P. Bruce Brockway,

Mr. Brockway Also Contributes the Fol-LOWING: The Willys Motors was well represented at the Beaumont meeting of the American Mosquito Control Association by the fleet sales manager, Dick McMahan and his assistant, Paul Sutton. During the course of the meeting, these gentlemen met the official board as well as many members of the Association and explained the new cooperative approach that Willys is going to take toward those working in the field of mos-

quito control.

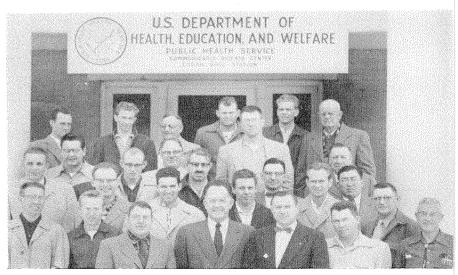
Through the Willys organization in Toledo, their zone and district managers and the 2,100 Willys dealers and distributors, the Fleet Sales Department has arranged for a standard discount of 15 percent. Purchase of vehicles and parts will be through the local dealer. Each Mosquito Control District will be provided with a complete Willys purchase list against which we may check the prices quoted by the local dealer. If the discount does not equal 15 percent, the Fleet Sales Department in Toledo should be contacted at once. The Fleet Sales Department will line out the dealer or else make arrangements for the sale to go through another local dealer who will play ball. Under this plan, the Association Members' money is spent locally and profits stay in the local area instead of going to the main Willys plant in Toledo. Also, this puts the factory in a position to demand that the dealer perform on parts and service. At the same time, a good local community relationship is built up between the Mosquito Control District and the local Willys dealer.

The whole plan is in the best interests of the American Mosquito Control Association. Dick McMahan and Mr. Paul Sutton are going to work hard to make it work and they will appreciate A.M.C.A. members' cooperation and patience until it works smoothly.

THE NORTHWEST MOSQUITO ABATEMENT DISTRICT is a newly-formed organization in the Chicago area, according to a notice received from Mr. F. P. Creadon. For information concerning the position of Technical Director, refer to their advertisement in this issue of Mosquito News.

Training Course for Mosquito Control Specialists was held in Utah on February 21–25, 1956. The course was conducted by Dr. Harry D. Pratt, Chief, Insect & Rodent Control Training Section, C.D.C., U.S.P.H.S., Atlanta, Georgia. It was sponsored by the Logan Field Station of C.D.C., U.S.P.H.S., the Utah Mosquito Abatement Association and the University of Utah. The sessions were conducted at Farmington and Logan, Utah. Some forty individuals registered for the course and attended regularly; others were

present for certain sessions. Assisting Dr. Pratt were members of the staff of the Logan Field Station, in particular Dr. Richard P. Dow, who was in charge of local arrangements. The managers and chief inspectors were present from six organized districts in the state; sanitarians and others interested in mosquito control from city, county, and state health agencies were in attendance, two of them from Boise, Idaho. In addition, members of the staff from Weber College and the University of Utah were in attendance accompanied by graduate students from the University who are majoring in entomology. The lectures, laboratory periods, and demonstrations were concise, well planned and interestingly presented. It is the unanimous opinion of those who attended the course that it was excellent. This concentrated, effective training course will undoubtedly help to improve the mosquito control program in Utah and the Rocky Mountain region.



Some of the Members Attending the Training Course for Mosquito Control Specialists Held in Utah, February 21-25, 1956