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Editorial Comment

Progress in Space Medicine

THIS IS THE second Space Medicine Issue of THE JOURNAL. The first one was published in August, 1952. During the five years' existence of this special branch of aviation medicine, its scope has become considerably more clear and its goal much closer. Its applicability to flight is now obvious to everyone who has followed the achievements in high altitude flying during these five years. The altitude record of 83,225 feet attained last summer by Lieutenant Colonel Marion E. Carl, U.S.M.C., (reported recently to have been exceeded by an Air Force pilot) rocket flights carrying mice and monkeys up to 100 miles, and the tests of the two-stage rocket "WAC Corporal" up to 250 miles are only a few of the challenging events in this field. Major Charles E. Yeager, U.S.A.F., has flown two and one-half times the velocity of sound.

Analysis of the atmosphere as a whole has already indicated that, from a physiological and technical point of view with respect to one or more fac-

tors, we face conditions typical of interplanetary space above 50,000 feet. Above 120 miles, environmental conditions show no essential difference from those in the exosphere and beyond. When these findings are placed side by side with the altitude records mentioned above, we see clearly where we stand today in space flight. If those regions within the atmosphere which are typical of free space can be said to exhibit "space-equivalent conditions" then we may also say that manned rocket craft have arrived at the space-equivalent phase of flight. Unmanned rockets have gone even further, and have reached the stage of actual space flight.

The situation is well reflected by the various reports in this issue of THE JOURNAL which have been selected from the excellent program, arranged by Dr. Hubertus Strughold, presented at the meeting of the Association in Washington this year. They deal with experimental methods of reaching the upper atmosphere in balloons, with problems of primary and secondary

cosmic rays, and with physiological requirements and climatization techniques in a sealed cabin which is the experimental prototype required for space flight and space travel. In addition, a report on the psychophysiological effects of weightlessness is presented.

These are practical problems of immediate concern to flyers who guide our rocket craft to ever higher levels in the atmosphere. The data reported in the papers reflect the practical way in which the problems of space medicine are being investigated.

French-Speaking Branch To Meet

Authorities in aviation medicine from France, Belgium Switzerland and the United States are scheduled on the program of the Third International meeting of the French-speaking Branch of the Aero Medical Association. The meeting will take place September 20-23 in Zurich, Switzerland. Chairman of the conference is Major Klaus Wiesinger, chief medical officer of the Swiss Air Force and director of the Swiss Institute of Aviation Medicine.

American members of the Association who will appear on the program of the three-day meeting include the following Air Force medical officers: Major General Harry G. Armstrong, Brigadier General Otis B. Schreuder, Colonel Charles H. Morhouse, Colonel Robert J. Benford, Colonel Robert H. Blount, Lieutenant Colonel Henry K. Speed and Captain B. D. Ferguson. An address of welcome will be given by Major General E. Primault, Swiss Air Force Chief of Staff. Social events will include a cocktail party and a banquet.

Opening the program, September 20, will be a Symposium on "Drugs Not to be Taken by Flying Personnel" by Professors R. Grandpierre

and C. Franck and Doctor Tabusse, all of France.

Medical aviation in the United States will be the subject of Colonel Benford and Major General Armstrong. Other speakers Monday will be Dr. L. Pircher and Dr. L. Langraf-Favre of Switzerland and Dr. P. J. Kostelijck, the Netherlands.

Psychological aspects of aviation medicine will be reviewed in papers September 21 by Dr. H. K. Knoepfel, Switzerland, and Professor J. Malmejac, France, with General T. Placidi of France and Dr. R. Kuhn, Switzerland, and in a symposium. Aircraft accidents will be discussed by Lieutenant Colonel Speed and Captain Ferguson. Other featured speakers Tuesday will be: Dr. M. Mumenthaler, Switzerland; Dr. P. Grognot and Professor Grandpierre, France. Colonel Blount will talk on "Escape from High Speed Aircraft by Downward Ejection."

Scientific speakers for Wednesday's program will include: Drs. T. Pias, Bourdinand, A. Corin, and A. Robert, France; Drs. A. Allard and M. Stainer, Belgium; and Brigadier General Schreuder, who will talk on "The Aging Pilot," and Colonel Morhouse, who will outline "Management of Peptic Ulcers in Flying Personnel."

Scientific Program for 1955 Meeting

Members who desire to appear on the scientific program of the twenty-sixth annual meeting of the Aero Medical Association to be held at the Statler hotel in Washington, D. C., March 21-23, 1955, should submit requests without delay to the Chairman of the Scientific Program Committee, Captain Clifford P. Phoebus (MC) USN, Office of Naval Research, Department of the Navy, Washington 25, D. C. Each communication should include the title of the presentation, the names of the authors, and a brief summary of the subject. The final date for the acceptance of speakers is November 1, 1954.

Inquiries concerning scientific exhibits should be directed to Sherman A.

Thomas, M.D., Chairman of the Scientific Exhibits Committee, Medical Division, Civil Aeronautics Administration, Washington 25, D. C.

In addition to Captain Phoebus and Dr. Thomas, the following committee chairmen for the 1955 meeting have been appointed by Brigadier General Otis O. Benson, Jr., USAF (MC), President of the Association: Colonel Robert J. Benford, USAF (MC), General Chairman; Colonel Sheldon S. Brownton, USAF (MC), Reception Committee; Commander Frank B. Voris (MC) USN, Registration Committee; Ludwig G. Lederer, M.D., Publicity Committee; and Colonel Theodore C. Bedwell, USAF (MC), Entertainment Committee.

Required Residency in Aviation Medicine Shortened

Physicians desirous of qualifying for examination for certification in aviation medicine by the American Board of Preventive Medicine must complete a one-year residency in this specialty, instead of two years as previously required, according to a recent announcement by Ernest L. Stebbins, M.D., Secretary of the Board. The residency, however, must be followed by a one-year period of supervised experience in aviation medicine.

This announcement does not change the total requirement of six years' graduate training and experience following internship to attain eligibility for examination, as follows: two

academic years of study in preventive medicine and aviation medicine, one year of which must be in a school of public health accredited by the American Public Health Association and another in an approved school of aviation medicine; a one-year residency; one year of supervised experience in aviation medicine; and two years of teaching or practice in this specialty.

It is anticipated that the first examinations for certification in aviation medicine will be conducted by the American Board of Preventive Medicine in the spring of 1955 and that they may be held in conjunction with the twenty-sixth annual meeting of the Aero Medical Association in Washington, D. C., in March.