

AERONAUTICS

Inter-City Helicopter

► **HELICOPTER DEVELOPMENT** has advanced to a point where this type of aircraft will soon be able to replace ordinary airplanes on inter-city trips up to 350 miles in length, the Society of Automotive Engineers meeting in Los Angeles was told by Frank N. Piasecki of the Piasecki Helicopter Corporation, Morton, Pa. Such helicopters will have a capacity up to 50 passengers.

Main jobs for helicopters as a civilian craft in the near future include acting as feeders carrying passengers from in-town heliports to nearby airports, and serving as transports between cities up to 350 miles apart, he indicated.

For the traveler moving between the downtown centers of two cities, he said, a 300-mile-an-hour airplane is not as fast as a 125-mile-an-hour helicopter on trips up to 260 miles in length. This is because the helicopter can fly in and out of city centers, while the airplane uses airports which average a 35-minute trip at each end by automobile.

The helicopter is a relatively new type of

aircraft. The idea of a rotary-wing craft is perhaps centuries old, but only ten years ago did the helicopter establish for itself a definite place in aviation. That was in May, 1942, when an experimental Sikorsky helicopter made a successful trip, in 15 hops, from Stratford, Conn., to Dayton, Ohio.

In the past ten years helicopter development has been rapid. They now carry payloads 15 times greater than earlier types. Range is six times greater and cruising speeds have doubled. A 40-passenger helicopter under construction by Piasecki Corporation for the U. S. Air Force will be ready for flight later this year.

Before helicopters come into wide use as civilian transports, there must be new air traffic rules to accommodate them, Mr. Piasecki stated. Blind flying and navigation aids must be provided for them. Weather forecasts must be made more often and must be more localized. Then the entire problem of downtown heliports must be explored.

Science News Letter, October 11, 1952

NUTRITION

Food for Teen-Agers

► **CHILDREN THESE** days are encouraged to be independent, to decide and do things for themselves as soon as they are able. By the time they reach their teens many are buying their own clothes and making other decisions, including what to eat.

The way they do their hair or the clothes they wear may not be too pleasing to grown-up tastes, but Mother and Daddy usually leave hands off. When it comes to the diet chosen, the matter is more serious because the teen-ager's nutrition and health may be affected. And teen-agers do rather badly in choosing foods, nutritionists of the U. S. Department of Agriculture find.

For example, a study of teen-age diets in Maine showed that both girls and boys were apt to run low in vitamin C and calcium. Girls also were low in iron and generally had less of several other important nutrients than boys.

A study of diets in Chicago families showed that high school children had less milk and fewer servings of fruits, vegetables, meat, poultry and eggs than elementary school children. Tenth-graders in a New York State study had less of the protein needed for their age than fourth-graders—and had less milk and fewer fruits and vegetables high in vitamin C.

Among 30,000 school children in another study, those aged 12 to 17 years came out shortest on milk, green and yellow vegetables, and citrus fruit. Again in studies of children in Tennessee, New York and Maryland, older children were less likely to

get their quotas of calcium and vitamins A and C than those under 9 years.

Even in Alaska, children over 10 years had poorer diets than younger children. In four Eskimo villages, those over 10 years, especially teen-age girls, drank less milk and had too little of the calcium essential for growth and well-being.

As a remedy, the nutritionists suggest nutrition, or scientific eating, as a hobby for the teen-age group.

Science News Letter, October 11, 1952

VETERINARY MEDICINE

Livestock Diseases Now Near Dangerous Peak

► **THE PEAK** period in a new cycle of livestock diseases in America is foreseen by officials of the American Veterinary Medical Association in Chicago.

"The livestock industry has seldom been faced with as great an assortment of threatening contagious diseases as it is at the present time," association officials declare in reviewing the disease threats that have taken a heavy toll in the nation's barnyards this year.

"These diseases have been on the increase during the past two or three years. Not all are new, but those that are not new have at least developed some new aspects," it is stated.

The list of threatening diseases includes: Anthrax, with new and unusual epidemics

occurring in many swine herds in recent months.

Vesicular exanthema, which spread from coast to coast during the summer and forced quarantine of swine shipments in some areas.

Air sac disease of poultry, a new threat on the eastern seaboard.

Anaplasmosis of cattle, which has infiltrated the northern states.

Leptospirosis, a spreading blood disease of cattle.

Rabies, which continues to spread as a threat both to animals and man.

Science News Letter, October 11, 1952

SCIENCE NEWS LETTER

VOL. 62 OCTOBER 11, 1952 No. 15

The Weekly Summary of Current Science, published every Saturday by SCIENCE SERVICE, Inc., 1719 N. St., N.W., Washington 6, D. C., NORTH 2255. Edited by WATSON DAVIS.

Subscription rates: 1 yr., \$5.50; 2 yrs., \$10.00; 3 yrs., \$14.50; single copy, 15 cents, more than six months old, 25 cents. No charge for foreign postage.

Change of address: Three weeks notice is required. When ordering a change please state exactly how magazine is now addressed. Your new address should include postal zone number if you have one.

Copyright, 1952, by Science Service, Inc. Reproduction of any portion of SCIENCE NEWS LETTER is strictly prohibited. Newspapers, magazines and other publications are invited to avail themselves of the numerous syndicate services issued by Science Service. Science Service also publishes CHEMISTRY (monthly) and THINGS of Science (monthly).

Printed in U. S. A. Entered as second class matter at the post office at Washington, D. C., under the act of March 3, 1879. Acceptance for mailing at the special rate of postage provided for by Sec. 34.40, P. L. and R., 1948 Edition, paragraph (d) (act of February 28, 1925; 39 U. S. Code 283), authorized February 28, 1950. Established in mimeographed form March 18, 1922. Title registered as Trademark, U. S. and Canadian Patent Offices. Indexed in Readers' Guide to Periodical Literature, Abridged Guide, and the Engineering Index.

Member Audit Bureau of Circulation. Advertising Representatives: Howland and Howland, Inc., 393 7th Ave., N.Y.C., Pennsylvania 6-5566, and 360 N. Michigan Ave., Chicago, State 2-4822.

SCIENCE SERVICE

The Institution for the Popularization of Science organized 1921 as a non-profit corporation.

Board of Trustees—Nominated by the American Association for the Advancement of Science: Edwin G. Conklin, Princeton University; Karl Lark-Horowitz, Purdue University; Kirtley F. Mather, Harvard University. Nominated by the National Academy of Sciences: Harlow Shapley, Harvard College Observatory; R. A. Millikan, California Institute of Technology; Homer W. Smith, New York University. Nominated by the National Research Council: Ross G. Harrison, Yale University; Alexander Wetmore, Secretary, Smithsonian Institution; Duane Roller Hughes Aircraft Co. Nominated by the Journalistic Profession: A. H. Kirchhofer, Buffalo Evening News; Neil H. Swanson, Baltimore Sun Papers; O. W. Riegel, Washington and Lee School of Journalism. Nominated by the E. W. Scripps Estate: Frank R. Ford, San Francisco News; John T. O'Rourke, Washington Daily News; Charles E. Scripps, E. W. Scripps Trust.

Officers—President: Harlow Shapley; Vice President and chairman of Executive Committee: Alexander Wetmore; Treasurer: O. W. Riegel; Secretary: Watson Davis.

Staff—Director: Watson Davis. Writers: Jane Stafford, A. C. Monahan, Marjorie Van de Water, Martha G. Morrow, Ann Ewing, Wadsworth Likely, Allen Long. Science Clubs of America: Joseph H. Kraus, Margaret E. Patterson. Photography: Fremont Davis. Sales and Advertising: Hallie Jenkins. Production: Priscilla Howe. In London: J. G. Feinberg.