3 weeks is the diffraction diagram of silver sulfide found.

The rate of reaction of the transformation of silver into silver chloride in air can be considerably increased by exposure at between 200 and 250°C. In this case, in only half an hour, very thin layers of silver are changed to silver chloride. In this way extremely sensitive detection of the chlorine content of air is possible. Silver layers are of course transformed into silver chloride if they are exposed to hydrogen chloride vapor. However, if the layers are heated in chlorine-free oxygen for several hours at 250°C, no silver chloride is formed, and the diffraction pattern shows only the characteristic silver interferences.

The increase in the reflectivity of the silver mirrors after treatment in nitric acid or hydrogen peroxide vapor is therefore caused by a covering layer of silver chloride, and the high refractive index of the covering layer of suitable thickness produces the increase in reflectivity.—K.L.-H.

New Adenovirus Vaccine

The Public Health Service and the Department of the Navy have jointly announced preliminary results of a field trial of a new virus vaccine developed against certain respiratory diseases prevalent in military recruits. The results showed that the vaccine prevented from 50 to 70 percent of the total reported respiratory illnesses characterized by fever. These illnesses are of the grippe variety and do not include the nonfeverish infections generally designated as the common cold.

Approximately 4000 recruits at the Naval Training Center, Great Lakes, Ill., were given the vaccine, which was developed at the National Institute of Allergy and Infectious Diseases in Bethesda, Md. Results of the vaccine evaluation are reported in the 18 Aug. issue of the *Journal of the American Medical Association.* The authors are Joseph A. Bell, Matthew J. Hantover, Robert J. Huebner, and Clayton G. Loosli. Bell and Huebner are PHS investigators, Hantover is in charge of research at the Great Lakes Naval Training Center, and Loosli is head of the department of preventive medicine at the University of Chicago.

The vaccine was prepared from adenoviruses Types 3, 4, and 7, formerly designated as APC viruses. A substantial proportion of the feverish respiratory illnesses that occurred in both vaccinated and unvaccinated recruits was shown to be due to Type 4 adenovirus. Illnesses caused by Types 3 and 7 were not prevalent during the period of observation.

In summarizing their results, the authors state that "all evidence indicates that the vaccine induced a substantial reduction in the occurrence of acute febrile respiratory illness associated with adenovirus Type 4." Similar results have been obtained in vaccine studies by Army investigators working with the same group of respiratory viruses.

Child Care Council

Seventeen leaders in pediatric medicine have announced the formation of the National Council on Infant and Child Care, Inc., an independent nonprofit organization formed for the purpose of providing medical counsel in the utilization of mass media. Allan M. Butler, professor of pediatrics at the Harvard Medical School, and chief of the Children's Medical Service at Massachusetts General Hospital, Boston, is president of the council.

Plans for the NCICC include the establishment of an information service for reporters who write on medical subjects for newspapers, radio, television, and popular magazines. The NCICC will inaugurate awards for outstanding contributions to public understanding of matters pertaining to the health and welfare of infants and children. The council has also adopted a "Code for Advertising" to "encourage truthful, informative promotion of products that are important to child health." The code will be available to manufacturers of medical and nutritional products to assist them in conducting their promotion along lines that would provide factual information to the public.

The NCICC has established headquarters in the New York Academy of Sciences Building in New York City. Margaret Lyman, former pediatrics research fellow of the Public Health Service at the State University of Iowa, has been appointed educational director and will devote full time to this function. The council is supported by grants from interested business concerns and other organizations.

NSF Appropriation

The appropriation for the National Science Foundation for fiscal 1957 as finally approved is $40 million, compared with $16.12 million in 1956. The funds will be allocated in the following principal ways (comparable figures for 1956 are in parentheses): support of basic research in the sciences, $16.25 million ($9.3 million); development of manpower (fellowships, science education, register of scientists, including $9.5 million for summer institutes for high-school teachers), $14.5 million ($3.6 million); scientific facilities, including $3.5 million for the radioastronomy observatory in West Virginia [*Science* **124**, 310 (17 Aug. 1956)], $5.8 million ($800,000); communication of scientific information, including translations from the Russian and making available U.S. Government publications through support of programs in the Office of Technical Services and the Library of Congress, $900,000 ($550,000); policy studies, including statistical studies of research in the United States, $750,000 ($680,000); management and executive direction of the NSF, $1.8 million (1.19 million).

Mist Control Made Easy

Two USDA plant pathologists, C. May and E. Hacskaylo, have improved a device for controlling and maintaining moisture in greenhouse propagating rooms. Despite its relative simplicity, the new device has proved reliable and long-lasting. It is made up of a small porous clay globe, a few inches of small-diameter glass tubing, and a foot or so of copper or nichrome wire.

The clay globe is known to scientists as a Livingston atmometer. The assembly of the other parts is new. During misting, water collecting inside the globe fills the glass U-tube, which also contains one of the wires leading to the switch of the mist machine. When water reaches high enough in the tube to make contact with the other wire, the circuit is completed and the mist machine stopped. When evaporation from the globe drops the water to a level low enough to break the circuit, misting begins again. The device has helped grow a high percentage of strong, well-rooted cuttings, reducing the unit cost of controllers and speeding research.

Stratosphere Laboratory

Two naval observers have just completed a high-altitude meteorological experiment while on a "skyhook" plastic balloon flight. The research involved short-range photography of vapor trails produced by jet aircraft. One phase of the Office of Naval Research "stratolab" program is to conduct research from a manned "space" laboratory attached to a plastic balloon.

This initial manned flight reached an altitude of 40,000 feet. The program's objective is to provide a laboratory in the stratosphere for observers to conduct research that cannot be carried out by other means. The recent successful flight is the culmination of 10 years of "skyhook" research by ONR. The new laboratory will be used for sustained periods at varying altitudes, and future flights are expected to go significantly higher.