GENERAL SCIENCE

## Longer Draftee Service

Based on facts of population statistics, service of three and a half years in the Army would be needed to maintain armed forces at 3,500,000 men.

➤ EVERY DRAFTEE will have to spend three and a half years in the Army instead of the 24 months now prescribed by the law if we are to maintain armed forces of 3,500,000 men.

This is based on the facts of population statistics as brought out by Dr. M. H. Trytten at the Engineering Manpower Convocation in Pittsburgh. Dr. Trytten is the man most responsible for the present Selective Service college draft deferment plan, being chairman of the Selective Service committee which drafted that plan.

Charging that the military manpower planning which has taken place up to now is completely unrealistic, Dr. Trytten said that statistics on the number of men who reach 18½ years of age every year, together with the number of men who are making a career out of the service, prove that "it will be necessary to require three and one-half years of service of each one reaching 18½ years of age if we are to maintain a military establishment of 3,500,000 men."

Dr. Trytten then pointed out that the Institute of Manpower Utilization and Government Personnel said that an armed force of 3,500,000 men cannot be accomplished within the present statutory requirements and administrative policies.

"Moreover," said the Institute, "it is

essential that present statutes and policies be further amended to insure that an adequate proportion of the number coming of age each year be selected for training in the sciences, professions, and skilled crafts so as to be available for specialized service where most needed in the military forces or in civilian employment after their training is terminated."

Dr. Trytten based his figures strictly on the total number of men available each year. Only if three and one-half years service is required, his tables show, will it be possible to provide a continuing armed force of 3,500,000 men.

Earlier Dr. Trytten made the point that the American contribution in both World Wars I and II was primarily one of providing technological superiority over the enemy. He declared that, while "there need never be any depreciation of the heroic quality of American military personnel, nor of its leadership," the superiority of American arms "was primarily due to the productive capacity of the nation."

"The demand for military manpower is

"The demand for military manpower is certain to be so great as to constitute a substantial interference with training in science and technology. Because of the extraordinarily strategic importance, even in the military sense, of training in the sciences and technology this must be considered serious. Added to this is the fact that there exists even at the present time a sharp deficit between the supply of such (scientifically trained) personnel available and the demand for them by activities related to national security and this becomes even more clearly arresting."

Science News Letter, October 6, 1951

PHYSICS

## Chart to Aid Autumn Camouflage of Buildings

➤ BETTER CAMOUFLAGE for buildings during the time leaves are changing color in the fall can be made by using a chart of autumn leaf colors prepared with aid of a partial grant from the U. S. Navy.

The chart is doubled-edged, for it can also be used to help detect on aerial photographs buildings that have been painted for disguise. Drs. Harry J. Keegan of the National Bureau of Standards and Hugh T. O'Neill of Catholic University in Washington prepared the autumn leaf color chart. They are out gathering leaves again this fall in order to make a check on their previous results.

Leaf colors for nine different kinds of trees were found for leaves running the whole possible range of colors, although the leaves were taken from the same branch of each type of tree.

Drs. Keegan and O'Neill found the changes in coloring matter were of three types: disappearance of the green pigment, chlorophyll, followed by development of a temporary red pigment, then a change to permanent brown; disappearance of green pigment, followed by development of a permanent brown; and disappearance of green pigment and simultaneous development of red pigment.

Autumn leaf colors were found for the following trees: beach, black gum, chestnut oak, dogwood, red maple, scarlet oak, sycamore, tulip popular and white oak.

Science News Letter, October 6, 1951

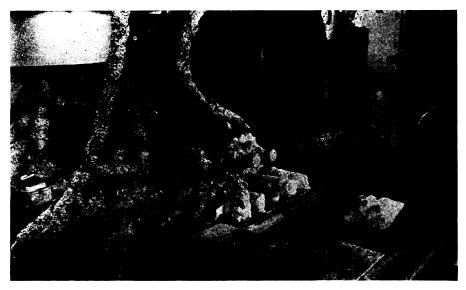
MARINE BIOLOGY

## Blue Crabs Red Tagged To Aid Migration Study

➤ BLUE CRABS, specially tagged with red celluloid plates, are now being "planted" near Tangier Island in the middle of Chesapeake Bay. The crabs, now two to four inches, will be able to shed without losing their tags, a big step forward in crab research.

The marked crabs will help fishery biologists in following the life, growth and migration of Chesapeake Bay's second most valuable seafood product. Fishermen finding the tagged crabs are asked to measure the crab, remove the tag and mail it to the U. S. Fish and Wildlife Service in Washington, giving the size as well as the time and place of capture.

Science News Letter, October 6, 1951



COLD TEST FOR JETS—To make sure that jet engines will work at the very low temperatures found high in the sky, new designs for auxiliary equipment by Westinghouse are put through a rigorous cold test in this weird appearing apparatus. The pipes are covered with crinkled aluminum foil for insulation.