

both civilian and military activities for specialized manpower.

We believe that an adequate minimum flow of specialists in the sciences, engineering, and other fields can be provided by this procedure. It is presumed that an R. O. T. C. program in the colleges will be continued. Also, a certain percentage of young men of college age will not satisfy physical requirements for military service. Neither of these groups would be subject to Selective Service. Of the remaining young men subject to Selective Service and who would expect to go to college, a minimum score of 120 would screen out well over half of these. If at the end of the freshman year 90% of these selected individuals were continued into the sophomore year, 95% of the sophomores continued into the junior year and 95% of the juniors continued into the senior year, about 65,000 young men in this class would graduate from each age group. This would be a small number. However, it is our hope that the productivity of this selected group will be at a high average.

This plan will provide the desired flexibility. Adjustments can be made by adjustment of the cutting score and the percentage carried over from year to year. No legislation is necessary to provide authorization for this procedure.

We not only recognize, but call attention to, the fact that opportunities to go to college have not been available heretofore, nor are they now to all elements of our population. However, this is a social problem which the nation must solve. The committees do not believe that an unwise manpower and Selective Service policy should be adopted because of an inadequate national policy with regard to the distribution of educational opportunity.

Science News Letter, December 30, 1950

Utilization

By ALEXANDER C. MONTEITH

Vice President, Westinghouse Electric Corporation

► THE TRAINING program will only be of lasting value to the nation if such highly selective and trained manpower is properly utilized.

Basically behind these deliberations is the full realization that these young men, trained in qualified institutions, are our only long range supply of technical, professional, and specialized leadership.

It therefore becomes clear that if we are to face years of preparedness, rapid development and careful conversion of such personnel is imperative.

The pool of men includes those men who have completed their training some time in the past and, too, who are becoming available through the completion of current training.

Four months should be sufficient to allow for transition from academic life to an

occupation which affords the beginnings of professional life. Reclassification implies that these men in common with others will be subject to general military service unless there is a higher priority for their services in other essential activity.

The registrant or his employer must prove that his training is not just utilized but in an essential activity as well.

During the past three years we have experienced the largest college graduation in history. This reservoir of trained men should be looked upon as indispensable. Thousands of these young men who have entered their professional life since World War II are already contributing constantly to highly essential activity.

As an example in Westinghouse in War Specification Technical Department, whose work is totally on the development of secret military apparatus, 85% of the professional manpower, 67 out of 79, completed their formal education since 1946 and the majority are under 26 years of age. In addition rapidly changing circumstances have rendered the existing classification of numerous registrants obsolete. A review of the classification of trained registrants is currently in order to prevent dissipation of selective manpower.

We view the creation of an advisory committee as a major step in favoring the effective administration of our highly successful selective service system.

Each group of experts forming an advisory committee will continuously survey the essential industries and occupations within its field and advise the local and appeal boards. Guidance, current and authentic, is thus provided in the National Headquarters structure.

Science News Letter, December 30, 1950

GENERAL SCIENCE

Compulsion Doesn't Cancel Individual Responsibility

► DR. ALBERT EINSTEIN believes that "external compulsion can to a certain extent reduce but never cancel the responsibility of the individual."

Discussing how a person should act if his government prescribes actions which his own conscience considers wrong, Dr. Einstein made a statement to the Society for Social Responsibility. (SCIENCE, Dec. 22).

"It is easy to say that the individual cannot be held responsible for acts carried out under irresistible compulsion," Dr. Einstein said, "because the individual is fully dependent upon the society in which he is living and therefore must accept its rules."

"Institutions are in a moral sense important unless they are supported by the sense of responsibility of living individuals," Dr. Einstein observed.

In our times scientists and engineers carry particular moral responsibility, he said.

Science News Letter, December 30, 1950



Snowbirds

► WHEN icicles hang from their tailfeathers, the tiny tumbling birds of winter are in their element. Let the big, honking geese, the toothsome mallard, the strutting robin fly far to the south to palmlands under tropical suns. Snowbirds do not flee the wintry blasts. They revel in blizzards, sing in sleet, sweep snow-covered fields in open defiance of the coldest weather.

The name snowbird has been applied rather indiscriminately to a large number of small winter birds of gray, brown and white. Sparrows and finches, chickadees and nuthatches stay with us from the time of red leaves until the first white flowers of spring. From polar islands north of Alaska and Hudson Bay come the snow buntings, or snowflakes, to haunt snow-swept hillsides or bleak and ice-covered shores. Wherever are cool summers and freezing winters, there are slate-colored juncos, true birds of winter and one of the most common sparrows in America.

These hardy Vikings will spend the coldest months of the year flying over white-coated fields and lawns or clinging to weed stalks which stick up through the snow. It is the weed stalks which give clue to the snowbirds' presence. Without such remnants of harvest crop and garden, ditches and field-corners, the birds could not live through the winter.

Their appetites are highly beneficial to the farmer, for they consume vast quantities of weed seeds. They also gobble harmful insects, eating caterpillars by the droves. The amazing acrobatics of the nuthatcher and chickadee are performed as they search inch by inch over bark and twigs for the sleeping eggs and pupae of the next summer's borers and biters.

Any and all snowbirds are glad for occasional human assistance, however, in warding off winter's hunger. Crumbs from feast-day tables are banquets for them. A lump of suet nailed to a post or limb (with a tin guard beneath it to keep away the cat, an incorrigible heathen even at Christmas) is a veritable barbeque.

Given an occasional helping hand when the snow is deep and even the thermometer

shivers, the little snowbirds will ride your outdoor Christmas trees all winter. Naturalist John Burroughs said of the white snow-bunting:

"A winter bird that really seems a part of winter, that seems to be born of the whirling snow, to be happiest when storms drive thickest and coldest. Its twittering call and chirrup coming out of the white

obscurity is the sweetest and happiest of all winter sounds. It is like the laughter of children. The fox-hunter hears it on the snowy hills, the farmer hears it when he goes to fodder his cattle, the country schoolboy hears it as he breaks his way through the drifts toward the school. It is ever a voice of good cheer and contentment."

Science News Letter, December 30, 1950

• Books of the Week •

TO SERVE YOU: To get books, send us a check or money order to cover retail price. Address Book Dept., SCIENCE NEWSLETTER, 1719 N St., N. W., Washington 6, D. C. Ask for free publication direct from issuing organizations.

AN ANNOTATED CHECKLIST AND KEY TO THE REPTILES OF MEXICO EXCLUSIVE OF THE SNAKES—Hobart M. Smith and Edward H. Taylor—*Gov't. Printing Office*, U. S. Nat'l Museum Bull. 199, 253 p., paper, 75 cents. A systematic treatise.

BEEWAX: Its Properties, Testing, Production and Applications—Huber H. Root—*Chemical Publications Co.*, 154 p., illus., \$4.75. Explains the origin and nature of beeswax.

THE CHEMICAL FORMULARY: A Collection of Valuable, Timely, Practical, Commercial Formulæ and Recipes for Making Thousands of Products in Many Fields of Industry, Vol. IX—H. Bennett, Ed.-in-Chief—*Chemical Publishing Company.*, 648 p., \$7.00.

CUTWORMS, ARMYWORMS, AND RELATED SPECIES ATTACKING CEREAL AND FORAGE CROPS IN THE CENTRAL GREAT PLAINS—H. H. Walkden—*Gov't. Printing Office*, U. S. Dept. of Ag. Circ. No. 849, 52 p., illus., paper, 20 cents.

THE DEVELOPMENT OF FUNDAMENTAL CONCEPTS IN THE SCIENCE OF GENETICS—Ernest B. Babcock—*American Genetic Association*, 50 p., paper, 60 cents.

DICTIONARY OF FOLKLORE, MYTHOLOGY AND LEGEND, Vol. II: J-Z—Maria Leach, Ed.—*Funk & Wagnalls*, 662 p., \$7.50.

EPHEMERIS OF THE SUN, POLARIS AND OTHER SELECTED STARS WITH COMPANION DATA AND TABLES FOR THE YEAR 1951—Donald B. Clement—*Gov't. Printing Office*, 42nd ed., 30 p., illus., paper, 20 cents. Astronomical data are presented.

EXPLORATIONS IN ALTRUISTIC LOVE AND BEHAVIOR: A Symposium—Pitirim A. Sorokin, Ed.—*The Beacon Press*, 353 p., illus., \$4.00.

A volume from the Harvard Research Center in Altruistic Integration and Creativity. Among the authorities contributing to this symposium are Pitirim A. Sorokin, M. F. Ashley Montagu and Gordon W. Allport.

FROM ATOMS TO STARS—Martin Davidson—*Hutchinson's* (U. S. distributor: Macmillan), 188 p., illus., \$2.70. Provides a general outline of up-to-date knowledge of heavenly bodies.

GOOD SCHOOLS DON'T JUST HAPPEN!—Federal Security Agency, Office of Education—*Science Research Associates*, 25 p., illus., paper, 10 cents; free to educators. A booklet to help improve our schools.

A HANDBOOK OF SPACE FLIGHT—Wayne Proell and Norman J. Bowman—*Perastadion Press*, 185 p., \$3.50. Tables on physical, chemical and astronomical data are presented.

MARKET RESEARCH SOURCES: A Guide to Information on Domestic Marketing—Lois E. Randall and Dorothy M. Sharpnack—*Gov't. Printing Office*, 261 p., \$2.25.

MINUTES TO MIDNIGHT: The International Control of Atomic Energy—Eugene Rabinowitch, Ed.—*Bulletin of the Atomic Scientists*, 128 p., illus., paper, \$1.00. Includes United Nations Atomic Energy Commission reports and speeches by Acheson, Lilienthal, Baruch, Vishinsky and others.

THE OAK RIDGE STORY: The Saga of a People Who Share in History—George O. Robinson, Jr.—*Southern Publishers*, 181 p., illus., \$3.50. The story of the development of Oak Ridge into one of the leading atomic research centers.

ON THE POSITIVE SIDE: An Account of the Accomplishments of Mental Hospitals in Canada

and the United States as shown by their applications for the American Psychiatric Association Mental Hospital Achievement Awards in 1949 and 1950—*American Psychiatric Association*, 42 p., paper, 50 cents.

OUR DESERT NEIGHBORS—Edmund C. Jaeger—*Stanford University Press*, 239 p., illus., \$5.00. The author's experiences with the creatures of the desert wilderness. Well illustrated with black and white photographs.

PLATO WEAVES THE VERBAL VEIL, Vol. II of The Historic Approach to the Theory of Relativity—Mary Milbank Brown—*J. J. Augustin*, 279 p., \$4.00. Some background material on the development of the theory of relativity.

RELATIVITY: A Richer Truth—Philipp Frank—*The Beacon Press*, 142 p., \$2.00. Some of the moral, ethical and political implications of modern science are discussed. Foreword is written by Albert Einstein.

REPORT ON A COLLECTION OF BIRDS FROM GUERRERO, MEXICO—Emmet R. Blake—*Chicago Natural History Museum*, 18 p., paper, 25 cents.

REPORT ON A COLLECTION OF BIRDS FROM OAXACA, MEXICO—Emmet R. Blake—*Chicago Natural History Museum*, 24 p., paper, 25 cents.

A SELECTED AND ANNOTATED BIBLIOGRAPHY OF RECENT SOURCES OF INFORMATION ON THE INDUSTRIALIZATION OF TEXAS—Stanley A. Arbingast and Marshall A. Beasley—*The University of Texas*, 15 p., paper, free upon request to publisher, College of Business Administration, Austin 12, Texas.

SEQUOIA NATIONAL PARK: A Geological Album—Francois E. Matthes—*University of California Press*; 136 p., illus., \$3.75. A pictorial volume containing nontechnical annotations which interpret the geologic evidence illustrated.

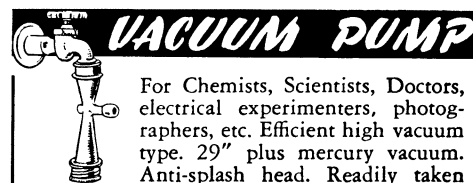
SITES OF THE RESERVES PHASE-PINE LAWN VALLEY, WESTERN NEW MEXICO—Paul S. Martin and John B. Rinaldo—*Chicago Natural History Museum*, 174 p., illus., paper, \$3.00. A report of an archaeological excavation.

SIZES OF FARMS IN THE UNITED STATES—Kenneth L. Bachman and Ronald W. Jones—*Gov't. Printing Office*, U. S. Dept. of Ag. Tech. Bull. No. 1019, 79 p., illus., 25 cents. *Science News Letter*, December 30, 1950

Wide usage of acorns as human food prevailed during pioneer days; meal from them was leached with hot water to remove the tannic bitterness.

ERRATA, Vol. 58, Nos. 1-27, July-December, 1950

PAGE	TITLE BEGINS	CORRECTION
85	Winter Shots	Par. 6, read Dr. Martin has moved to Winnipeg. Delete remainder.
118	Tin	Par. 6, line 8, Zurich for Vienna.
121	BW, Wartime Weapon	Par. 3, lines 4, 5, read in Veterinary Medicine (Aug.).
126	Planes Should Have	Col. 2, line 5, Rentzel for Rentzell.
174	Nature Ramblings	Col. 2, line 7, animal phylum for great order.
259	Rabbit Fever	Par. 3, line 3, after Jellison insert and Glen M. Kohls; line 7, delete and Glen M. Kohls. Par. 4, line 4, read between 1945 and 1949, for during the past year.
260	Rabbit Fever	P. 260, line 3, three for two.
285	Indians Antedate	Col. 2, line 7, Willard for William.
365	Malaria Cure	Par. 2, line 6, after all insert but one.
296	Women in Homes	Par. 3, line 2, delete annual.



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