

WEAPONS FOR B-57—Some of the destructive fire power of the U. S. Air Force's Martin B-57 is revealed in this photograph showing the napalm tanks hanging under its broad wings. The bomber, now in production, is equipped with a rotary bomb door, here shown open, for quick release of its bombs. The plane made its first appearance before the general public at the National Aircraft Show, Dayton, Ohio, over Labor Day weekend.

METEOROLOGY

Special Hurricane Research

➤ HURRICANE "CAROL," the season's third tropical storm, was the first to be probed by methods never tried before:

Constant-level balloons were released in the hurricane's "eye," and special radar methods traced its circulating wind systems.

Combining results from these new avenues of attack with exploratory methods previously used, weathermen hope to learn more about the energy sources of hurricanes as well as how to predict their paths more accurately. Their results will not be available for some time.

The scientists on this joint research project of the U. S. Weather Bureau and Air Force flew Bermuda-based planes, loaded with special equipment, into hurricane Carol's center, or "eye."

There they released constant-level balloons that can be tracked by radar in order to learn more about the nature of air currents in the "eye." With this information they can complete design on a hurricane beacon device that can be released in the center core of future storms, and then travel with them, sending out signals from which the "eye" could be tracked constantly.

This method of tracking would be particularly important as storms approach the coast line, since it would give more accurate prediction of exactly what areas will be hit by the hurricane gales.

The second new feature involved the use of special radar methods in order to study

the great squall lines, or rain bands, that spiral inward toward the center of the disturbance from the outer fringes. These squall lines are the portion of the storm that is visible to radar. With the new methods, the scientists were able to track air movements in all parts of the disturbance more accurately.

The special hurricane flights also explored the "steering current," which is a current of air in the high levels of the storm that seems to steer or point to the direction of the hurricane's movement.

The research project is the third special hurricane research program. The first, also in Bermuda, was in 1947. The second operated from Guam in 1951.

R. H. Simpson of the Weather Bureau heads the research team, which is using facilities and personnel of the 53rd Strategic Reconnaissance Squadron, Air Weather Service, with headquarters at Kindley Air Force Base, Bermuda. Maj. Lloyd Starrett, U. S. Air Force, represents the Air Weather Service in the joint project.

Science News Letter, September 11, 1954

About 23 persons die of *cancer* every hour.

New possibilities for using *television* in teaching deaf children have been demonstrated in the United Kingdom by recent experiments, UNESCO reports.

PSYCHOLOGY

Discuss Jobs for Those Over 65

➤ MEN AND women over 65, who are now being excluded from more and more jobs by age requirements and compulsory retirement plans, are being attracted in disproportionate numbers to certain jobs.

A survey of these jobs was reported to the American Psychological Association meeting in New York by Prof. Harvey C. Lehman of Ohio University.

You do not see many umbrella menders and scissors grinders any more, but when you do, the artisan is more than likely to be a man over 65. Whitewashers were on the way out as far back as 1890, but the census of that year showed a disproportionate number of old men working at that job, Prof. Lehman told the psychologists.

By contrast, new occupations and rapidly growing fields attract large numbers of young people, and this influx tends to decrease the proportionate numbers of their elders. Aeronautical engineers, for example, were not even listed in the census for 1940. In 1950, there were 17,034 aeronautical engineers, but only 0.07% of them were 65 or over.

Certain positions that require a long period of "working up" are over-represented by those over 65.

Among the jobs in which men over 65 contribute more than their share of the workers are gardeners, beekeepers, farmers, guards, watchmen and doorkeepers, cemetery keepers, charwomen (there is apparently no such word as charmen) and, at the other end of the scale, clergymen, bankers and brokers, city and county officials and judges.

Women over 65 seem to work as boarding house keepers, midwives, dressmakers, farmers and gardeners, fruit growers, fortune tellers, music teachers, physicians, religious workers and librarians.

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PUBLIC HEALTH

Fight Baby Epidemics With Washing Machines

➤ WASHING MACHINES of the kind used in homes for the family wash can help fight dangerous epidemics of diarrhea in hospital nurseries for children and babies.

The diapers come out clean and sterile, even without preliminary rinsing, and hospitals will be saved considerable money in diaper purchases and labor in handling them if they use automatic home laundry machines instead of the general hospital laundry. Studies showing this are reported in the Journal of the American Medical Association (Aug. 28) by Drs. Ernest H. Watson and James L. Wilson of the University of Michigan Medical School, Ann Arbor, Mich., and Dr. Arthur Tuuri of the Mott Foundation, Flint, Mich.

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