



ON THE FARM

The census of agriculture will discover what 7,500,000 farmers are doing about their crops, what help they hire, what are their sources of income and other facts.

POPULATION

Political Attack On Census Deplored by Population Experts

University Leaders and Research Men Join To Defend
1940 Census as Best Yet Planned; Data Necessary

ATTACKS on the Census for political purposes are deplored by population experts, whose opinions on the current controversy have been asked by Science Service.

These authorities are among those who will be using the data gathered in scientific studies in order to give a better picture of the American way of life as it is currently lived.

"A complex social and economic civilization cannot be managed without many details and facts," declared Dr. Warren S. Thompson, director of the Scripps Foundation for Research in Population Problems, at Miami University, Oxford, Ohio. "It is a pity to let politics interfere with public needs. Data being asked for in Census are needed by students of population and by those interested in social service. The income data are especially useful to business. Housing data are needed for a better housing program."

Confidence that the American public

will cooperate with the Census as a "democratic, scientific undertaking," when the people clearly understand the fundamental issue at stake, was expressed by Prof. Frank Lorimer, professor of population studies of the American University, Washington, D. C. Calling the progress of the Census from 1790 onward "one of the proudest achievements of American democracy," Prof. Lorimer declared that both Census officials and social scientists cooperating with them have drafted the questions with the one idea of "securing accurate and useful information."

Prof. T. Lynn Smith of Louisiana State University replied that he opposes "the current effort to upset the long established policy of allowing Census Bureau to function without political interference." To justify the expenditure, Prof. Smith said, the questions must be determined by qualified specialists, not publicity seekers.

Praising the 1940 Population Census as the best ever offered any country in the world, Prof. Raymond Pearl of the Johns Hopkins University joined in strongly defending the Census schedule against Congressional attack.

Replying to Science Service's telegraphic request for opinion of scientists on the current Census controversy, Prof. Pearl declared:

"The information this Census will furnish is a prime and fundamental necessity for the Congress of the United States if it is to guide intelligently the destiny of the nation in the difficult times that confront us. No reactionary alterations of the Census schedule should be tolerated."

Stressing that the next administration, whether Democratic or Republican, will be left in "the fog of ignorance" without data which Congressional action may strike out of the Census, Prof. Rupert B. Vance of the University of North Carolina stated:

"One of the greatest lacks of our government is adequate figures and information on relief, unemployment and housing. This need is to be met by certain queries which the Census Bureau, free from the pressure of politicians and acting on the advice of competent social scientists, has introduced into the 1940 Census."

Serious consequences if the public is aroused to react against the Census, the largest scientific undertaking of the United States Government, are feared by Prof. William Ogburn of the University of Chicago. Once public cooperation is undermined, he foresees that census taking is liable to become more costly, less efficient, less complete, more inaccurate. If that is permitted to occur, both the business and economic life of the nation will be damaged.

Income questions are far from new in censuses of democratic nations of the world, Prof. Ogburn pointed out:

"For many years there has been a question on the income of farmers in this country, the 1940 Census merely extends the inquiry to urban wage earners. There was no protest on income questions in earlier censuses. It is a matter of politics."

"Information sought by the 1940 Census is needed by people of the United States to a greater extent than any previous Census," is the view of Frederick F. Stephan, secretary of the American Statistical Association.

Emphasizing that a democracy needs information about the economic and social status of its (Turn to page 186)



COMPLETE MODEL

It would delight any airplane model enthusiast to play with one of the most complete wind tunnel models of an airplane ever built—this tenth-scale edition of the four-engine 33-passenger Boeing 307 Stratoliners that will be flying soon. It has a 10-foot, 9-inch wing span and a hollow fuselage packed full of electric motors, wiring, etc., that will allow it to do almost everything except fly away. In the wind tunnel, flight is simulated by moving air.

AERONAUTICS

Airplane Gasoline Tanks Made of Synthetic Rubber

Bullet Holes or Other Punctures Easily Mended; Greater Fuel Capacity, at Less Weight, is Claim

GREATER fuel capacity for airplanes, easier repair and reduced fire hazard are among the advantages of the new synthetic rubber gasoline tanks for aircraft described at the National Aeronautic Meeting sponsored by the Society of Automotive Engineers in Washington.

The new style tanks are flexible bags of airplane cloth impregnated with the synthetic, gasoline-resisting, man-made rubber called neoprene, declared F. J. Pepersack and C. E. Roberts, engineers of the Glenn L. Martin Company, Bal-

timore, who described the aviation advance.

The fuel tank bags are contained in light-weight frames which fit into the wings, pontoons or other parts of an airplane. The bags are made slightly larger than their containers so that, when full, they will press against the supports. The weight of the gasoline is thus carried on the structure and not by the containing bags.

Based on tests and experience the new tanks—called Mareng Cells—have the following advantages, the engineers reported:

1. They eliminate corrosion from gasoline which occurs in metal fuel tanks. The neoprene rubber material is highly resistant to gasoline's action.
2. They are not affected by vibration or the sloshing of fuel within them.
3. They can be easily repaired in the field by the use of temporary patches and cement in the same way that inner tubes on automobile tires are mended.
4. They permit a greater fuel capacity to be carried in a given space, with less weight per gallon, than is possible with conventional removable metal tanks.

5. They reduce fire hazard in a crash because they tend to reduce spillage of gasoline over wide areas. Bullets fired through the cells produce only small slits which can easily be repaired with small patches.

6. They permit easy removal and replacement because, when empty, the cell bags can be put through small openings and do not require the removal of large portions of the airplane structure as does the repair of permanent tanks built into wing structure.

7. The reduced air space above the fuel, due to the fullness of the cell, and the expelling of chlorine gas from the synthetic rubber material in event of fire, assist in extinguishing the flames.

Actual installation in airplanes shows that the rubber bag type of cell gives satisfactory performance at temperatures from 20 degrees below zero Fahrenheit to 110 degrees Fahrenheit.

Science News Letter, March 23, 1940

From Page 183

people more than any other form of government, Mr. Stephan said:

"Citizens need to know the facts about national development in order to vote intelligently on public questions."

Recalling that when President Hoover appointed commissions to study economic and social trends, these commissions reported a lack of satisfactory information on many important questions relating to American population, Mr. Stephan said that surveys in limited districts have been made since. But these, while useful, point to the need for nation-wide facts.

Information about distribution of income in various districts is needed by business concerns for the efficient marketing of their products, Mr. Stephan explained, in comment on the importance of questioning Americans about their incomes. This information is also needed by Congress, he added, for estimating the probable cost of changes proposed from time to time in Social Security legislation, and for many other uses.

Advising the American public to remember the flurry over a radio broadcast depicting an attack from Mars, Mr. Stephan predicted that many will calmly test the charges of "Census snooping" with all the facts they can find and then decide for themselves what to believe.

"Danger to our liberties in the collection of this information," he added, "is much less than the danger to our liberties from government that is based on rumors and guesses rather than facts."

Science News Letter, March 23, 1940

PATON RANCH

Situated on a mountain stream in the foothills of the Big Horn Mountains. Here a limited number of guests are cordially welcomed.

It is a region of great geological and historical interest. Marine fossils, dinosaur bones and Indian implements are found nearby.

Guest cabins are comfortable and attractive. Food is good. The use of a saddle horse is included in the weekly rate.

Write for illustrated folder with map.

WILLIAM PATON

Shell

Wyoming
