### Frederick A. Leedy, U.S. Bureau of the Census

On January 15, 1970, the Soviet Union will begin taking its fifth census of population. Soviet law has no requirements for regular censuses, and the four previous enumerations of the population in the U.S.S.R. were taken at varying intervals—1920, 1926, 1939, and 1959. The one comprehensive census of population in Russia prior to the Soviet period was taken by the Tsarist Government in 1897.

Plans for the 1970 census call for the same elaborate and extensive preparations and procedures which have characterized all censuses in the U.S.S.R. since 1926, plus several innovations including the use of sampling procedures for part of the questions to be asked, the use of special schedules to collect data on the able-bodied population that is not employed and on the commuting habits of workers and students within the major urban areas, and the use of electronic computers for processing the results. This paper will describe briefly the preparations being made for the census, the enumeration procedures to be used, the questions to be asked, and the plans for processing and publishing the results.

# Preparatory Work

Preparations for the census have been underway for a number of years. The Administration for the All-Union Census of Population, which was established within the Central Statistical Administration of the U.S.S.R. in 1957 to take the 1959 census, has remained as an integral part of the statistical system and presumably has been developing plans for the 1970 census from the time it completed work on the 1959 census. Since official announcement of this next census was made on May 1, 1966, there have been numerous meetings and conferences held to discuss the census program and procedures, and many articles devoted to the subject in journals and the press.

In March 1967, a test census was taken in nine rayons, or counties, of varied geographic, ecomonic, and social characteristics throughout the country. This census, which covered some 836,000 persons, was designed as a pretest of both questions to be asked and enumeration procedures. As a result of that experience, the questions contained in the present schedules were approved and numerous questions, particularly those on details of fertility, migration, and housing, were deleted. In addition, the Census Administration decided that a self-enumeration procedure did not work well and should not be used in the full census. 1

During the latter part of 1968 and the first part of 1969, regional, county, and local offices of the Statistical Administration have been engaged in the detailed work necessary to delineate enumeration districts. Under direction from the Council of Ministers U.S.S.R., all republic, regional, and local soviets have provided assistance to the statistical offices in preparing lists of populated places, verifying boundaries

of all political subdivisions, correcting updating maps, compiling lists of all propared dwellings in each populated place, and checking the accuracy of urban dwelling registers and village household registers. On the basis of this work, which has been given great attention and apparently is being carried out in exhaustive detail, all cities and counties have been divided into census districts, instructor (crew-leader) districts, and enumeration districts.

As part of this preparatory work, a mass publicity campaign has been building up, and from now until census time it will attempt to acquaint every Soviet citizen with the census and obtain his cooperation. Millions of brochures and leaflets are to be distributed, the press, radio, and television are to be utilized, and massive numbers of "agitators" from the trade unions, Komsomol, and other organizations are to give lectures and lead discussions on the census.<sup>3</sup>

### Staffing and Training

Plans call for the recruitment of some 670,000 special personnel to conduct the census, including 540,000 enumerators, 100,000 instructors, 26,000 census district chiefs, and 4,000 assistants to the heads (inspectors) of the statistical offices at the county level. This is an increase of nearly 100,000 over the 574,000 persons actually used in 1959 (of whom 468,000 were enumerators). Each enumerator in urban areas will list an average of 675 persons; each enumerator in rural areas will list an average of 575 persons.

The temporary personnel will consist of school teachers, instructors and students from colleges and vocational-technical schools, and employees of factories, offices, collective farms, and state farms. All will be selected by the local statistical office, with the approval of the county or city soviets. Employed persons will continue to receive their regular salaries while absent from their jobs, which will be from 17 working days for enumerators to 56 working days for assistants to the heads of the county statistical offices. In 1959 the temporary census workers received an enumeration bonus in addition to their regular pay, although this has not been mentioned for the 1970 census.

Brief training courses are to be held for each of the various categories of personnel. They began in June for the chiefs of the republician statistical administrations and will end in December when enumerators will be trained.

#### Enumeration Procedures

During a period of 4 days before the census begins, each enumerator is to make a complete tour of his district, checking the map and list of dwelling units prepared by the statistical office. He is to call on each household, verify the address and name of the head of the household,

note the number of persons living there, and determine what time will be most convenient for him to call to take the census. When in the opinion of the enumerator the members of the household are capable of completing the census schedule, he will explain it to them and leave it for them to fill in by the time he returns during the census.5

In households where he finds able-bodied members who do not work in a factory or office or study full-time, but who work only in the household or on their small plot of land, he is to leave a special questionnaire for completion prior to his return at the time of the census. This questionnaire is designed to obtain information on the age, sex, education, specialty or profession, and desire for work of each such person and, for women in this category, the number of children and the need for their outside care. Similarly, in cities of 500,000 or more population and their adjoining counties, the enumerator is to leave at all housholds a questionnaire designed to obtain information on the so-called "shuttle" or "pendulum" migration within the urban area -- that is, the age, sex, place of residence, and place of work or study of all employed persons and fulltime students living in the area.

On the last day of this precensus tour, and after the enumerator has checked all dwelling units in his district, the instructor is to designate, by a "mechanical" method, every fourth unit on the enumerator's list as those units which are to be asked the sample questions. In those autonomous republics and regions established for specific nationality groups which have a population of less than 500,000, the full set of questions will be asked at every household, not every fourth, so that information in the sample schedule can be obtained and tabulated for minor territorial subdivisions.

At 8:00 a.m. on census day, Thursday, January 15, the enumerator will begin the actual enumeration. He is to visit each dwelling unit and by personal interview complete the census schedule. All persons living in the apartment or house are to be listed, by family; thus two or more families can be listed on one schedule. The enumerator also will verify and pick up any schedules or special questionnaires he left on his precensus tour.

The census is to be taken during the 8-day period from January 15 through 22. On January 22 and 23 all enumeration materials are to be turned in to the instructors for checking and verification. For the following 6 days, January 24 through 29, the instructor, with each of his enumerators, is to make a series of "control tours." In urban areas, he and the enumerator are to visit half of all dwelling units in each enumeration district. verifying all entries on the schedules for that unit, and adding any persons omitted during the census. In rural areas, the instructor is to visit all dwellings in half of his districts. Thus, all dwelling units are visited two times during the census, and half are visited three times. It is to be noted that during the control tours after the 1959 census some 285,000

additional people (0.14 percent of the total enumerated earlier) were picked up.

### Population to be Covered

The census is to be taken as of a certain moment-the hour of midnight between January 14 and 15. All questions, no matter when asked, are to relate to that moment. Every person present in a dwelling unit on the census moment is to be listed, including those persons residing there temporarily. In addition, persons who usually reside in the unit but are temporarily absent are also to be enumerated. This will permit the tabulation of both an actual, or on-hand, and a usual population. Special procedures and forms are used to verify that a person temporarily absent from his usual residence is actually listed at the address given.<sup>6</sup> Also, special procedures will be used to enumerate the transient and institutional populations.

The population in the regions of the Far North and other areas where travel is difficult in January is to be enumerated in the fall of 1969.

### Information to be Collected

There are 11 questions to be asked of 100 percent of the population:

- 1. Relationship to head of the family
- 2. For persons who are temporarily absent, but usually reside there:
  - a. reason for absenceb. length of time absent
- 3. For persons who are temporarily present:
  - a. place of usual residence
  - b. length of time absent from usual residence
- 4. Sex
- 5. Age (as of last birthday; in months for infants under 1 year of age)
- Is person married at present time? (Yes. no, or widow-widower)
- 7. Nationality
- 8. Native language (also, no more than one other language in which fluent)
- 9. Education (level completed)
- 10. For students, indicate the type of educational institution attended
- 11. Souce of means of existence: work, personal agricultural plot, support by relatives, support by state (pension, stipend, children's home, etc.), other.

For the sample of 25 percent of the dwelling units, seven additional questions are to be asked of all persons who are usual residents:

- 12. Place of work (name of factory, organization, collective farm)
- Occupation at place of work (for pensioners--previous occupation)
- 14. For a person who worked an incomplete year in 1969, record whether he worked permanently, seasonally, or temporarily, and indicate the length of time worked in 1969, in months
- 15. Social group (wage worker, salaried employee, collective farm member, handicraftsman, peasant with individual farm)

- 16. How long has person lived continuously in this populated place?
- 17. For a person residing here less than 2 years, indicate the place of former usual residence
- 18. Reason for changing place of residence.

As noted earlier, special questionnaires are also to be completed to collect information on the characteristics and circumstances of ablebodied persons who are not employed outside the household and on the characteristics and commuting habits of workers and students in all cities of 500,000 population or more.

## Processing the Results

Little detailed information on the plans and procedures for processing and publishing the results of the census has been released. According to Mr. Petr Pod"yachikh, head of the Administration for the All-Union Census of Population, initial processing of the returns will be carried out at the oblast (regional) and republic offices of the statistical administration, but the final tabulation and processing will be done at the Computing Center of the Central Statistical Administration in Moscow. The schedules are not designed for use by an automatic sensing device to read and feed the information directly into a computer, although a Soviet report to the Economic Commission for Europe indicates that such a device--the "Blank" device--is to be used at some stage in the processing. This report also indicates that computers of the "Minsk" series and the "Ural-14" will be used to process the census data. Pod"yachikh noted, however, that in processing the results of the test census it was learned that the system for feeding information into the computers was slow and unsatisfactory. In addition, he stated that the printing system needed improvement, and that if plans for processing and publishing the census results are to be met the equipment must be improved.8

Plans are to complete processing on, and presumably publish, the brief initial results of the census by the beginning of April 1970. Final processing is to be completed in the first half of 1972, and publication is to be completed in 1973. The detail in which the results are to be published is not clear, although the plans call for elaborate and detailed cross-tabulation.

## Comparisons With the U.S. Census

When viewed against the content and procedures of our own 1970 census, several features of the Soviet census stand out. One is that it is a census of population only, not housing, therefore the number of questions to be asked is far less. The Soviet schedules still have fewer population items than ours, however. They contain 11 questions on a 100-percent basis and seven additional questions on a 25-percent basis; counted in the same manner, our schedules have nine questions on a 100-percent basis, 10 on a 20-percent basis, eight on a 15-percent basis, and seven on a 5-percent basis. The Soviet Statistical Administration was besieged by many requests for

additional questions, particularly by academic researchers at an All-Union Conference of Statisticians in April 1968. Some requests apparently were adopted but most were turned down, primarily on the basis that the data could be better obtained through other methods—surveys or established reporting systems. The rejected proposals concerned the subjects of fertility, physical disability, the characteristics of persons in administrative positions, the presence and size of a library in the household, the number of trips taken each year and distance travelled, the presence of a radio receiver or television in the household, ethnic origin, marital status, migration, and others.

In respect to procedures, Soviet census planners have now adopted the use of sampling techniques in the census, and have added the feature of using special questionnaires for certain areas or for special groups of the population. The number of temporary census personnel to be used in the U.S.S.R., 670,000 will be far larger than the 185,000 we plan to use, although the Soviet enumerators may well be employed in the census for a shorter time than our enumerators. And finally, the Soviet procedure of requiring the enumerator to call personally at all households two times, and a third time at half of the households, may indicate a more persistent effort at that level to locate all the population. Whether it truly results in a more complete and accurate census is a question that only speculation can answer. Judging from the published materials of the 1959 census, the results of the new Soviet census, whether more accurate or not, are not likely to give us the detail, either in terms of small areas or of cross-tabulation. that characterizes our own census.

- <sup>1</sup> P. Pod"yachikh, "An Important Stage in the Preparations for the All-Union Census of Population," <u>Vestnik statistiki</u> (Statistical Herald), no. 10, October 1967, pp. 77-90. Some partial self enumeration procedures will be used in the census, as described in the text.
- <sup>2</sup> V. Ivanova, "Census Regionalization--A Most Important Stage in Preparations for the Census of Population," <u>Vestnik statistiki</u> (<u>Statistical</u> <u>Herald</u>), no. 4, April 1969, pp. 57-64.
- P. Pod"yachikh, O metodologicheskikh i organizatsionnykh voprosakh Vsesoyuznoy perepisi naseleniya 1970 g. (On Methodological and Organizational Questions of the All-Union Census of Population of 1970). Materials for the All-Union Conference of Statisticians, 1968. Moscow, Statistika, 1968, pp. 36-37.
  - 4 Ibi<u>d</u>., p. 31.
  - <sup>5</sup> <u>Ibid</u>., p. 16.
- 6 "Instructions on the Conduct of the All-Union Census of Population of 1970 and the Completion of Census Schedules," Vestnik statistiki (Statistical Herald), no. 12, December 1968, pp. 45-47.
- 7 Statistical Commission and Economic Commission for Europe, Conference of European Statisticians, Working Group on Electronic Data Processing. <u>Use of Electronic Data Processing for Statistical Purposes: U.S.S.R. Report By the Central Statistical Office: New Electronic Data Processing</u>

(EDP) Installations. Conf. Eur. Stats/WG.9/82/Add. 20, 11 July 1968.

<sup>8</sup> Pod"yachikh, <u>O metodologicheskikh</u>, pp. 25-26.

<sup>9</sup> <u>Ibid.</u>, pp. 12-15; "Readers Discuss the Questions of the All-Union Census of Population,"

Vestnik statistiki (Statistical Herald), no. 3, March 1968, pp. 38-44; and S. I. Bruk and V. I. Kozlov, "Ethnographic Science and the 1970 Census of Population," <u>Sovetskaya Etnografiya</u> (<u>Soviet Ethnography</u>), no. 6, June 1967, pp. 3-14.