Temp. Workers' Status Is Further Clarified

An expansion and clarification of several questions and answers regarding the status of temporary employes at Cornell has been issued by the Office of Personnel Services. The original queries had been directed to University Ombudsman Byron Yaffe, who asked Personnel Services for responses to issues raised.

"The Personnel Office advised us that University employes fall into the following categories," Yaffe said.

"Regular Full Time Employes" are those hired with the intention of employment for six months or more scheduled to work more than 39 hours per week.

"Regular Part Time Employes" are those hired with the intention of employment at six months or more scheduled to work less than 20 hours per week, or an average of 1.040 hours per year or more.

"Temporary Employes" are those whose term of employment is stated to be less than six months but more than 30 days. Those who work for six months or more but for less than 20 hours per week or less than an average of 1.040 hours per year are also considered temporary employes.

"Casual Employes" are those engaged to work by the day.

Regular full time and regular part time employes are entitled to University fringe benefits. In the case of regular part-time employes, credit toward the following benefits is retroactive to the time of regular consecutive employment: Cornell Children's Tuition Scholarship, non-contributory retirement, contributory retirement, extramural course work and group life insurance. Some benefits became effective July 1, 1972 when benefits for part-time employes were instituted. These are health insurance, vacation, sick leave and holidays.

Temporary and casual employes are entitled to New York State Disability Benefits and Workman's Compensation coverage.

The one group excepted from this policy is the temporary craftsman group which is covered by the collective bargaining agreement with the Building Trades Union.

Employes can and frequently do move from one category of employment to another. It is the responsibility of each supervisor — academic and non-academic — to notify the Office of Personnel Services immediately of any change in an employee's status. All are entitled in all the fringe benefits to which he or she is entitled upon enrollment in all the fringe benefits to which he or she is entitled upon signing of the agreement.

"Employees, their supervisors, and personnel policy, the Office of Personnel Services stands ready to provide information and assistance at all times.

Redding Is Elected Life Member

Saunders Redding, the Ernest I. White Professor of American Studies and Humane Letters at Cornell, has been unanimously elected a life member of the Board of the National Book Committee. Established in 1854, the committee, which has offices in New York City, annually sponsors the National Book Awards.

According to the official announcement, election to the National Board is "in a form of recognition and citation for signal efforts on behalf of books and ideas, libraries and authorship, and intellectual endeavor generally." There are never more than 225 members of the board at one time and since its membership is for life only a few members are elected each year.

Redding joined the Department of English in Cornell's College of Arts and Sciences in July, 1970. Before coming to Cornell he was special consultant to the Office of Endowment for the Humanities in Washington, D.C. and professor of American studies at George Washington University. At Cornell, Redding teaches courses in Shakespeare, English literature, and a course listed as "The Negro in American Literature." He continues his research and writing. A revised edition of his book, "When They Came in Chains," will be published by Lippincott in the spring at about the same time Dubleday will bring out the 10th printing of "The Lonesome Road." Another book, "Cavalcade," published by Houghton Mifflin in 1971 and co-edited by Redding, is an anthology of black writing. One of his earlier books, "No Day of Triumph," a narrative interpretation of the Negro experience in America from 1900 to World War II, was hailed by author Richard Wright, "as another hallmark in the coming of age of the modern Negro; it is yet another signal in the turn of the tide from slavery and change the Negro into a living, breathing and passionate questioning." Redding has served on the selection panel for fiction of the National Book Award and, in 1972, on the selection panel of the Associated Chapters of Phi Beta Kappa for the Ralph Waldo Emerson Award. A Rockefeller Foundation Fellow (1940-41) and twice a Guggenheim Fellow (1945-46, 1959-60), Redding is a member of the editorial board of the "American Scholar," of the Board of Fellows of Brown University, where he received both undergraduate and graduate degrees, and of the Campaign Committee for the Schomburg Collection of Negro History, Literature & Art of the New York City Library. Chosen the first director of the Division of Research and Publications of the National Endowment for the Humanities in 1966, he still serves as a special consultant.

New State of Matter

Physicists Investigate Helium-3

Cornell physicists have observed a new state of matter, a rare form of helium. The new state may also exist in neutron stars, mysterious newly discovered bodies that emit pulsating signals from outer space.

J. Robert Schrieffer, a joint winner of the 1972 Nobel Prize for Physics, described the discovery as "one of the truly significant new developments in the field of matter physics and should provide the stimulus for an enormous amount of new research, both theoretical and experimental in the years to come." The state of matter has been anticipated since the mid-1950s based on some of Schrieffer's own work. While never actually observed until now, its possibility has been used by astronomers in speculating about the nature of neutron stars, sometimes called pulsars.

The physicists at Cornell, according to David M. Lee, professor of physics and one of the principal investigators, have discovered that when liquid helium-3, the rare form of the element helium, is cooled to within a fraction of a degree of absolute zero that year off in a special way, without canceling their magnetic properties. In the only other example of such low-temperature pairing among magnetic particles (electrons in metals) the pairing results in a cancellation of magnetic effects and passive questioning.

The initial discovery of the new behavior of helium-3 was made early last year and since then has been described in several scientific journals. Lee and his colleagues discussed recent developments in the work at the recent annual meeting of the American Physical Society (APS) in New York City.

Also taking part in the initial discovery were Robert C. Richardson, associate professor of physics, and Douglas D. Osheroff, then a graduate student and now a member of the technical staff at Bell Telephone Laboratories, Murray Hill, N.J. Later these investigators were joined by graduate students Willfred Guily, William Halperin and Steven Goldstein, and by Dewey Lawson, a postdoctoral research scientist. These researchers also took part in the more detailed experiments at Cornell that followed. Vanez Ambegaokar and N. David Mermin, professors of theoretical physics at Cornell, have been involved in trying to explain the newly discovered phenomena.

The speculation about neutron stars is that they are in a low-energy state, similar to that of the cold helium-3, with their neutrons paired in the same way as has been observed in the Cornell experiments. While the pairing of the neutrons in these stars has not actually been observed, the Cornell discovery now demonstrates that this type of pairing is possible.

An important point of interest to physicists in the relation between neutron stars and helium observations is that this strange new phenomenon seems to occur under such apparently diverse conditions. The neutron pairing in stars occurs at extremely high temperatures and densities while helium-3 pairing occurs at extremely low temperatures and densities.

A great deal of the excitement created in the scientific world over the Cornell discovery is based on the possibility that, when the helium-3 pairing takes place an effect called superfluidity may result.

For about 40 years superfluidity has been observed only in helium-4, the most common form of the element. It occurs when helium-4 is cooled in liquid form to within a few degrees of absolute zero. The helium suddenly takes on a number of surprising characteristics. For example, stirring a cup full of helium in what scientists call the superfluid state would result in the liquid swirling around in the cup forever.

Absolute zero is the coldest temperature possible, minus 459 degrees Fahrenheit.