

already have been institutionalized for a long time, their decisions would always have been made for them and their conception of their own physical and mental worth would have been greatly diminished during their commitment. All of those factors would reduce their capability to make rational decisions. Another barrier to informed consent, the judges suggested, is the fact that knowledge of brain function and of the effects of psychosurgery is sparse, to say the least, and that makes balancing of risks and benefits virtually impossible. Finally, and perhaps most important, the judges question whether a patient confined against his will in an institution can voluntarily give his consent to anything when his freedom may hang on his decision. "It is impossible for an involuntarily detained mental patient to be free of ulterior forms of restraint or coercion when his very release from the institution may depend on his cooperating with the institutional authorities and giving consent to experimental surgery", the judges assert.

Apart from those considerations, the court also ruled that the experiment would have violated the First Amendment to the US Constitution, which governs freedom of speech and ideas. The rationale for such a determination is that if the First Amendment protects the freedom to express ideas, it also protects the freedom to generate ideas. Psychosurgery, however, often blunts the emotions, deadens the memory, impairs the intellect and, consequently, it can limit the patient's ability to generate ideas. "To allow an involuntarily detained mental patient to consent to the type of psychosurgery proposed in this case, and to permit the State to perform it, would be to condone State action in violation of basic First Amendment rights of such patients", the court ruled.

What are the likely consequences of the court ruling? First, it is clear that unless the case is appealed, which at present seems unlikely, similar psychosurgery experiments on incarcerated mental patients in the United States would be quickly stopped. Less clear cut, however, is the possible effect on the practice of psychosurgery on private, free patients, because the decision hinges chiefly on the fact that the patients in this case are effectively denied freedom of choice through their incarceration. Nevertheless, the judges' opinion that the state of the art of brain research is such that there is insufficient knowledge to allow the balancing of risks and benefits seems to have broad application.

More far reaching is the possible impact of the decision on other types of biomedical research involving prisoners. It has been suggested that many of the court's arguments about the ability of an incarcerated person to give free and

informed consent apply to prisoners who agree to take part in drug trials. Mr Charles Halpern, an attorney with the Washington-based Center for Law and Social Policy, suggested last week, for example, that the ruling will lead to a much more cautious approach in prison research, and that drug companies will probably be forced to scrutinize much more closely the adequacy of their procedures for obtaining consent from prisoners who take part in drug trials.

As for the setting up of national policies, the court ruling is likely to add impetus to legislation pending before Congress which calls for a two-year moratorium on all psychosurgery. It is also likely to influence the deliberations of an Inter-Institute Work Group on Brain and Behavior, which has been set up in the National Institutes of Health, to examine various aspects of the problem. Clearly, the Detroit court has, in a tradition that is by now familiar in the US legal system, handed down a decision that has sweeping social implications. It is believed to be the first time, however, that a court has told scientists that they cannot go ahead with a particular experimental technique.

SOUTH AFRICA

NASA Bows Out

by our Washington Correspondent

THE National Aeronautics and Space Administration has begun to extricate itself from an embarrassing situation by announcing that it plans to close part of a tracking station near Johannesburg, South Africa, next year. And, provided it can be done without harming the space programme, NASA hopes to shut the station completely by the end of 1975.

The tracking station is being phased down, and possibly closed, ostensibly for technical and economic reasons — NASA officials say that it is no longer vital to the space programme—but an underlying motive is that it has become a rather visible thorn in the agency's flesh in the past few years. The problem is that the station, which is operated for NASA by the South African Council for Scientific and Industrial Research (CSIR), is run according to the doctrine of apartheid, and that fact has upset some members of Congress. They argue that although the station is being financed by the US government, it is being operated in violation of US domestic laws, namely the Civil Rights Act.

Charles C. Diggs, a Democrat from Detroit and chairman of the House Foreign Relations Subcommittee on Africa, has hauled NASA officials before his committee to explain why the station is necessary and why NASA has allowed it to be run on racial lines. And

Charles Rangel, a Democrat from Harlem, has twice tried unsuccessfully to delete funding for the station from NASA's budget.

NASA officials and their supporters in Congress have met these challenges with the argument that the station is vital to provide continuous tracking, particularly of planetary missions, and that as it is being operated by the South African government under contract it must conform to South African laws. The agency has, however, managed to wring a few concessions out of the CSIR, such as improved housing and medical care for the black workers at the installation, but, as Mr Ken Hechler, chairman of the subcommittee that oversees NASA's tracking operations, said in a recent debate in the House of Representatives, "the relative salaries of black and white personnel are shockingly unequal and inequitable".

In that same debate, Mr Olin Teague, of Texas, Chairman of the Committee on Science and Astronautics and NASA's chief supporter in the House, said that the "station in South Africa is one of the most important tracking stations we have". What, then has led to the rather abrupt reassessment of the station's importance? According to Mr Gerald Truszynski, head of NASA's Office of Tracking and Data Acquisition, the planned phase-down of the station was "actually a technical decision", but he added that "I will say this, if we didn't need that station in that location we would have been out before now."

The tracking station has two components, a Deep Space Network (DSN) facility for tracking planetary spacecraft, and a satellite tracking (STDN) facility for tracking unmanned Earth orbiting satellites. The total cost of the installation is about \$12.5 million, and running expenses are about \$2.5 million a year. It is the DSN which is being closed next year, and NASA is looking hard at the requirements for the STDN to see whether it can be closed a year later. The reason why the DSN is being closed is partly due to celestial mechanics: the trajectories of the planetary missions of the 1960s and the early 1970s were such that the spacecraft were visible only from the Southern Hemisphere for up to 100 days after they were launched, but the missions planned for the 1970s and early 1980s will be visible from NASA's facilities at Goldstone, California and Madrid.

In making the announcement of the plans to phase down the station last week, Dr James C. Fletcher, Administrator of NASA, said "NASA will always be grateful for the technical support and cooperation we have received from the Council for Scientific and Industrial Research and its dedicated station personnel".