

NEW WORLD

How Far will this Special Action Office Go?

PRESIDENT NIXON's campaign against drug abuse, launched in his message to Congress in June this year, has become bogged down in congressional committees. Last week, the Senate Committee on Government Operations reported out a bill that differs in some important respects from Nixon's original intentions. The bill now goes to the Senate Committee on Labor and Public Welfare which also has an interest in its provisions. Meanwhile, in the House of Representatives, the Subcommittee on Public Health and Environment of the Committee on Interstate and Foreign Commerce is in the throes of marking up legislation after conducting exhaustive hearings on the bill. What was expected to be a quick passage through Congress has therefore become a long drawn out process, but both the White House and key congressmen involved in the legislation are confident that a bill will soon be ready for the President's signature.

In some respects, the delay in presenting the bill to the floor of the House and the Senate reflects the complicated nature of the differing philosophies over how to attack the problem of drug addiction. The nub of President Nixon's original proposal was the creation of a Special Action Office on Drug Abuse and Control within the Executive Office. The office would be responsible for directing federal efforts to rehabilitate drug addicts and directing programmes aimed at education on drug abuse. An important criterion was that the Special Action Office should not be concerned with law enforcement, since rehabilitation should be treated separately from the question of legal sanctions against drug users and pushers.

The Senate Government Operations Committee last week reported out a bill that extended the scope of the Special Action Office but clipped its powers. Essentially, the committee seeks to give the office the power to recommend to the President policies for the Bureau of Narcotics and Dangerous Drugs (part of the Department of Justice) but takes away from the director of the office the power to control and carry out programmes directly from the White House and to transfer money from one agency to another. In the original bill, President Nixon had given the office the power to regulate the budgets of the various federal agencies

that are devoted to drug rehabilitation and education, but the committee decided that his powers should be limited to providing overall policy direction of federal efforts in drug control with the power to modify budgets. The director would not, however, be able to take over the direction of individual projects.

Another important change put in by the committee is that the Special Action Office should have some limited direction over law enforcement and related

activities. The direction would in fact boil down merely to the offering of advice. The House Subcommittee on Public Health and Environment is now likely to report a similar bill to the main committee in spite of the conviction held by some members that the powers of the Special Action Office would not be addressed to one of the most important points—the international regulation of poppy growing and the smuggling into the USA supplies of heroin.

MARINER 9

First Results May Aid Russian Lander

As expected, the safe arrival of Mariner 9 in orbit around Mars (see *Nature*, 234, 67; 1971) has provided accurate data on the orbit of the planet and its gravitational field. These discoveries have provided the first opportunity for practical cooperation between the American team controlling Mariner 9 and the Russians guiding the progress of their probes Mars 2 and Mars 3.

On November 19 the following findings were announced from the Jet Propulsion Laboratory in California, control centre for the mission:

- A large bulge at the equator of Mars
- Gravitational anomalies which may be caused by martian mascons
- Water vapour present in the atmosphere over the south pole
- Surface temperatures ranging from 240 K at mid-afternoon to 200 K at night
- Uniform atmospheric temperature of 350 K from near the surface to a height of 40 km

In addition, the dust storm clouding the martian surface now appears to be clearing and surface features should soon be identifiable.

It seems that improved figures for the exact orbit and ephemeris of Mars have already been relayed to the Russians. These refine standard measurements by only a few kilometres, but the detailed information which is being gathered about the martian mascons could prove extremely valuable when the Russian probes come to attempt the soft landing which has been unofficially promised. Variations in the orbit of Mariner 9 caused by local irregularities in the

planet and by the large equatorial bulge cause changes in the craft's velocity of 2 to 3 millimetres per second, and produced an average 5 second change in the duration of its orbit during each of the first 8 revolutions. This slowing down by 40 s should be regained as Mariner 9 shifts away from the direct influence of the bulge, according to Dr W. O'Neill of the Jet Propulsion Laboratory.

The insertion of the spacecraft into orbit went smoothly, and required rather less fuel than had been allowed. The manoeuvre, which changed the orbit of the spacecraft so that periapsis (closest approach to Mars) is now 868 miles and takes place in the middle of the viewing period available to the Goldstone antenna tracking Mariner 9, left plenty of fuel for subsequent trim manoeuvres using the main engine, which is rated at 300 lb thrust but appears to be performing rather more efficiently.

Just how severely the strong winds seen whipping up the present dust storm on Mars might affect a soft landing can only be determined effectively by making a landing attempt. It does seem certain, however, that the Russians will wait for the storms to clear as much as possible before venturing such a step. Traditional Soviet secrecy makes it impossible to say just what is planned, but it is known that the NASA Viking lander, scheduled for 1974, will be able to wait for up to one month in Mars orbit if conditions are not immediately suitable for a landing on its arrival. With the Russian lander in prospect and Mariner 9 now in full scientific operation after orbital adjustments, the weeks ahead seem likely to produce the hoped for excitement after the necessary tedium of the long interplanetary journey.