

~~OFFICIAL USE ONLY~~

- 4 -

to spill around to this side. (2) The infra-red scans which show hot spots. These would be interpreted as indications of cities or at least mining camps. (3) The fact that no lunar or planetary probe of significance has been successful, in spite of major efforts on the part of two very successful earth orbitfaring nations. It would be supposed that someone was denying us deep space. (The other-side-of-the-moon pictures from Lunik III show no details of consequence, and the same can be said of the data from Mariner II compared to what we had already known about Venus from earth-based measurements.) Should the Martians have colonized the moon without discovering nuclear energy, then they represent no real problem, and our current national policy would be made to order for the situation. If all of this were true, of course, I would expect the Martians to be scared to death of what they have seen recently on this planet, and would expect that the highest priority development program in the solar system is being conducted by the Atomic Energy Commission of Mars.

Even if we are secure in our belief that intelligent life never would develop on Mars or some other solar planet, there is still the question of visitors to the solar system from other stellar systems. This is normally written off as an extremely low probability, due to the tremendous distances between stars, and the Einstein limitation on travel faster than the speed of light. Therefore, even if there are a large number of intelligent life forms in the galaxy, and even if they are continuously searching for other races, the frequency of investigation of any stellar system would be only once in many thousand of years and contact would rarely, if ever, be achieved. It might never be achieved, since presumably intelligent races die out. (What happened to the planet whose pieces now are spread around the Asteroid Belt? Or, for that matter, why is Uranus lying on its side?) I am not sure that this travel restriction is quite as infallible as it sounds. I believe that it is possible with what we now know about nuclear energy to envision ships driven at half to three-quarters of the speed of light. This, since the galaxy is 100,000 light-years across, still does not make a search of the entire galaxy feasible within the life span of the average man. But suppose some race under pressure of population explosion were expanding as fast as technically feasible from star to star throughout the galaxy. If their ships averaged half the speed of light, and if, on the average, they stopped every 10 light-years for a twenty-year stay at a stellar system to deposit colonists, refuel, and build extra ships, they would only take two hundred thousand years, starting at the center of the galaxy, to spread

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