## Contamination Of Moon **Concerns Maine Senator**

By BULKLEY GRIFFIN **NEWS Washington Bureau** 

tional Aeronautics and Space time" and this results in "aging the vehicle prematurely and have time to perfect a safe and effective method for sterilizing spacecraft", he explained. NASA effective method for sterilizing spacecraft for landing on the moon, and doesn't think sterilization for moon landings is necessary anyway. NASA has given this answer to Senator Margaret Chase Smith (R) of Maine who expressed concern over any relaxation of plans to prevent contamination of the moon.

The Space Administration's replies to a series of questions from Senator Smith drew a sharp distinction between the likelihood of contaminating the moon and contaminating Mars and other planets. For the latter, NASA stated it believes in sterilized landings and plans to work out such a program. On the moon, special environmental conditions, including no atmosy phere, are hostile to the spread of contamination, it said.

## **Need More Time**

"If the thorough sterilization procedures deemed necessary for planetary missions were to be required for lunar missions, there would not be sufficient time and present schedules would have to be changed", NASA stated in answering Mrs. Smith.

"For the planetary program, time does permit however, and our resolve is to accomplish the necessary developments to assure the launch of spacecraft capsules that are both sterile and technologically reliable for the 1966 Mars (unmanned) op-portunity", it is added. We have already failed in attempted unmanned moon landings, and will try again this year.

reason for lack of a present workable sterilization of spacecraft was spelled out recently by a NASA official

most effective method "is to heat the vehicle to a high tem-WASHINGTON, D. C .- The Na- perature over a long period of is trying to find a heat method without bad results.

## Small Danger

On the moon, there is small danger of contamination, the space agency contended to Mrs. Smith. "The natural environment of the moon is believed suitably hostile to the propagation of earth-like organisms to such an extent that any contamination will be contained in very local areas", said NASA. Moreover, it is asserted that the valuable biological secrets of the moon lie at considerable depth below the surface and contamination would not reach these.

In the questions and answers, which appear in printed hearings of the Senate Aeronautical Sciences committee, NASA indicated a distinction between manned and unmanned flights in the matter of sterilization. It did not assert that complete sterilization of a manned flight is possible. On the other hand, the space agency declared that a human being "is not in a practical sense a sterilizable part of any system". His spacesuit can consti-tute only "a partially effective contamination barrier".