

Engineers Developing Germproof Apollo Suit

By Arthur Hill, Chronicle Science Editor (abt. 1968)

Will Stop Moon 'Bugs'

Manned Spacecraft Center engineers are working on a bugproof suit to protect Earth from Apollo astronauts returning from the moon.

The chance that America's first men on the moon will pick up germs that might be harmful to Earth is remote, but can't be neglected. So MSC is designing what it calls a biological isolation garment (BIG).

The BIG is a one-piece lightweight garment. A special respirator, built into the headgear, filters the air expelled by the astronaut.



NASA Photo

**SUIT TO PROTECT EARTH FROM MOON GERMS*
Astronauts May Have to Wear It on Their Return**

Blocks Germs

The garment, made of cotton-type material, is still being tested to see if it can do the required job of containing germs. The BIG is supposed to block the germs at least a half-micron in size, according to Milton Heflin, BIG project engineer in MSC's Landing and Recovery Division.

A half-micron is approximately equal to .000017 inches.

"The object of the BIG," Heflin explained, "is to prevent any close intimate contact between the astronauts and others on the recovery team."

Several Needed

If the suit is approved, several probably would be needed for the initial Apollo Moon mission because they would be worn by the helicopter crews as well as the astronauts.

"We are doing some physical - type testing with a man inside the suit and a thermal dummy to see how well it contains heat, but the main thing is to make sure that the material meets specifications," Heflin said.

May Not Be Used

Under normal circumstances, the BIG will not be used unless the Apollo capsule lands far from a recovery ship in the Pacific and the astronauts want to leave the spacecraft.

In that case, BIG suits will be dropped to them by helicopters so the Apollo crew can put them on before they are picked up.

After recovery, the astronauts will be transported to a ship and, with proper care to avoid contamination, placed aboard a special trailer known as the Mobile Quarantine Facility. This trailer will be carried to port, where it will be put in an airplane and flown to MSC.

At MSC, the astronauts will walk from the trailer into the lunar receiving laboratory to continue their period of isolation while physicians determine that no dangerous germs have been brought back to earth.

* BIG test subject in photo is LRD Mike Collins.