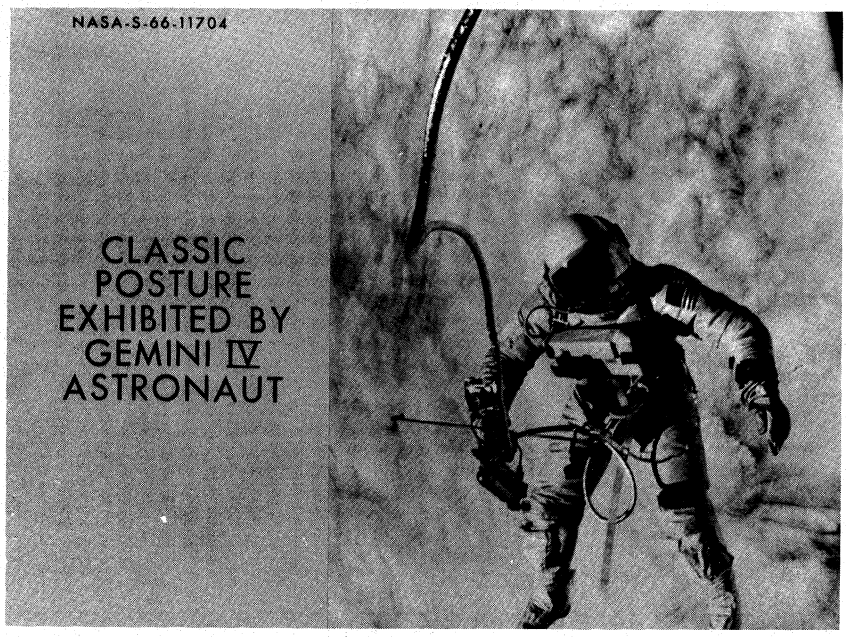

FIGURE 3

The hand-held maneuvering unit, the Model 1 that I have here, has two tractor jets and one pusher jet and is actuated by depressing two different triggers. This particular hand-held maneuvering unit, or HHMU, carried its own oxygen supply with it. The model that I have here, which was used on other flights, had an external supply of propellant connected to it.

In evaluating the hand-held maneuvering unit, we came to the conclusion that it does have a tentative utility in being able to transport the pilot from one place to another. The umbilical itself is very useful as a limiting or distance-limiting device, but not for maneuvering or controlling attitude in space.

We found as a result of Gemini IV that a pilot does not become disoriented when he is placed out away from the spacecraft. Perhaps, as a result of the lack of work tasks that were assigned the pilot on Gemini IV, we were not able to get a taste of some of the problems that were going to be in store for us in the future in some of our EVA efforts; and perhaps we were a little misled by the relative ease of this flight.

In the time between Gemini IV and Gemini VIII, we worked rather hard to develop an improved environmental life-support system, or chest pack. We developed a back pack which would supply its own oxygen source. This back pack was mounted in the adapter. The task was to move from the spacecraft back to the adapter and to don this back pack. It had connections into the chest pack and, also, supplied maneuvering gas to the hand-held maneuvering unit (fig. 4).