

Now it has a good many elements in it.

First you got body space.

Now, I don't know what they mean by body space. You have self-estimate of body space.

I don't know what self-estimate means as used in that.

And then maybe we ought to find out what factors were developed, so that we can try to understand what this contract is and who was actually performing the work under it.

Dr. HUTCHINSON. The matter of subjective means the self, the individual operator of a weapons system or whatever piece of gadgetry that we might be interested in.

The self is the appropriate thing to concern one's self with here, since the operator is the one who has to reach the pedals, read the dials, and fly by the seat of his pants.

So our feeling is that we are dealing with the one entity in life with which each of us is most familiar.

This is one of the critical factors—

Secretary IMIRIE. In layman's language—and I am certainly a layman—

Mr. HARDY. That is what I am trying to get at—

Secretary IMIRIE. The Air Force has a fond hope, with things like Dyna-Soar and follow-on projects, of going into space. And we are not real sure how a man will react when he goes into space, in terms of his cockpit. We know how he will work in an airplane, and we know how he can read the dials and gauges, and so on.

But under conditions of weightlessness and other phenomena which occur in space, we are simply ignorant of the facts. And this kind of studies, and expressly this one, are connected to that.

Mr. Hardy. So we are talking about—this word "body" in this instance means the body of the astronaut.

Secretary IMIRIE. Yes, sir.

Dr. HUTCHINSON. Of an operator, or an astronaut.

Mr. HARDY. And the word "space" means the space which he is going to occupy for that body up here?

Dr. HUTCHINSON. Yes, sir.

Secretary IMIRIE. I had the same feeling about Bryn Mawr, too. I thought this was one where you might have had us dead to rights as a matter of fact. But as a result of talking with Dr. Hutchinson here and understanding what this was all about I am not at all concerned. I think he has a paper which is direct and to the point. And it is refreshing to learn that this is a well-thought-out contract. It is necessary. It certainly will result in something useful to the Air Force.

And it is done in a scientific community, where the kind of skills we need to do this way-out sort of thing are available to us.

Mr. HÉBERT. You don't have an inhouse operation of this nature?

Dr. HUTCHINSON. No, sir. The nearest thing would be at the Aerospace Medical Laboratory at Wright Field, where they are equipped to do a great deal of applied research.

Mr. HÉBERT. That is where I thought—I had Wright-Patterson in mind, at Dayton, because we saw these experiments going along there for the astronauts.