

Captain RUBLE. I will refer that to Dr. Rigby. He is more familiar with the specific contract.

Dr. RIGBY. No, sir; they do not. But they are a reasearch group and perform related work internally, because this is their business. and on some occasions, under contract arrangements with others, related work. This particular work is for us only.

Dr. SILVERMAN. I think—if I may interrupt here.

I believe the implication of your question, Mr. Kitchin, is: Is the Government paying double for the same service which they may be performing for ONR?

Mr. KITCHIN. We will say more——

Dr. SILVERMAN. Right.

Mr. KITCHIN. Doubled or more.

Dr. SILVERMAN. Right.

It is our job in dealing with these people to make certain that this sort of redundancy does not occur.

I would like to go back and elaborate a little bit, if I may, the basis on which a proposal of this sort is evaluated by people such as ourselves.

Mr. KITCHIN. Let me interrupt right there.

Dr. SILVERMAN. Yes.

Mr. KITCHIN. If we talk of an evaluation in dollars, fine. But don't get me lost on an evaluation scientifically.

Dr. SILVERMAN. Well, I would get lost there sometimes myself. I will keep it in terms of dollars, too.

By now we have had a pretty fair amount of experience as to what it costs per scientific man-year in a given field of research.

For instance, it costs less to keep an astronomer gainfully employed at an observatory than it does to keep a nuclear physicist gainfully employed at a large accelerator, which has a tremendous industrial complex built up around it.

We also have accumulated a pretty good bit of experience. We know relatively what a university man costs in dollars per year to keep him gainfully employed, compared, let us say, to an industrial scientist.

In fact, this is one of the criteria that we use in trying to judge sometimes whether to do work at a university or at an industry.

The things that one compares are the cost per man against the productivity per man. For example, a man in industry with a big industrial complex behind him must be expected to do more research than a man in a university who is at the same time carrying out teaching duties, working on university committees that keep the university going, and so forth.

So when a proposal comes in from a place like Cowles, here is a statement. And we could submit one of these things as an exhibit for you if you so desire. This is a statement that such a fraction, a given fraction of a senior investigator's time will be devoted to this project, that there will be a certain amount of assistance time, and so forth.

Now Dr. Rigby and his staff have two jobs to perform. One: Is the workload that they are proposing consistent with what he estimates the magnitude of the job is to be?