

these items in a better way than the original study showed that it would increase the cost.

Mr. ROBACK. Could I ask in this connection, is the rationale here to try to contribute to a standardized product with the Navy? That is, they preload and the question is, can you preload, or is it the right thing to do?

Is that the question, or is that a separate thing?

Mr. WITT. Well, let me say this: The fact that the Navy has been preloading and is doing so, we understand, successfully, raises the question whether or not we could do the same sort of thing.

Mr. ROBACK. You fellows developed quite a rationale that there are complications in preloaded shipping and you like to test the rocket out before you slap it on the aircraft, so you want to have the fellows there. You need them there anyway so you are not going to save manpower and handling and all that.

What has happened to all that rationale?

Mr. WITT. That rationale still will hold, but the fact is that monetary savings we feel could probably accrue from the preloading makes us go back and run an actual field test, which we have just now begun.

Mr. ROBACK. In your cost comparisons, be sure you add the cost of those fancy pans on each end now.

Mr. WITT. We are going to take everything into consideration, fancy pans and all.

Mr. ROBACK. Do not use the old crates. If they have a preloaded operation, the manufacturer is going to develop some even fancier pans than he has now, no doubt. So be sure you take the costs into consideration.

Mr. WITT. We will keep that in mind.

Mr. ROBACK. All right.

Mr. DAHLIN. Your statement says that you do not go with the Navy idea, as I understand it, of merely using the launcher as a shipping container.

Colonel MANNING. That is right.

Mr. DAHLIN. The Air Force concept for preloading would be to ship a launcher in a suitable case to reduce damage en route—is that the idea? The case would have to have shock absorbing material to try to reduce that danger to the rocket?

Mr. WITT. You are right.

Mr. DAHLIN. Is that the general concept you are developing?

Mr. WITT. This is correct. We are going to look at the problems, the cost of shipping preloaded versus the cost of shipping the way we are now doing it, separately, broken down, but we have run into a number of interesting facets of this when you look about it.

For instance, when they are preloaded our safety regulations say that if they are already loaded and can be fired, you have to aim them at a 10-inch concrete wall and so forth, things of that type, that earlier studies have not gone into in detail. So this would knock out some of the advantages that we looked at in our first study.

In addition, each of our LAU-3's, when it arrives overseas, and when the men are loading it in the loading areas at base level, we put one white phosphorous rocket head, loaded rocket in each of the assem-