Mr. MULLINS. I believe you said it looked like we drilled a couple of dry holes.

Mr. Sandweg. Yes. One corporation made recommendations which had already been adopted by the Army, and the other made recommendations to use a design already prepared by the Army.

Mr. Mullins. Well, now, I don't believe that the statement that

you are reading there quite reflects the exact situation.

Now, I don't know how the statement got there, it was probably picked up from some report that is not just exactly so.

Mr. Sandweg. This is what we had to proceed on.

Mr. Mullins. I realize that, sir.

I would like to read here, and I think if I read it I probably would do a little better than if I tried off the cuff, you know.

Mr. SANDWEG. That is quite all right.

Mr. Mullins. I believe this will explain it.

In September 1959, we at the laboratories heard that we would be asked to design a bridge of the mobile floating type. This is the type that you gentlemen are looking at. We had not yet received the military characteristics for the bridge, but we immediately began making sketches to determine as many different concepts for doing

In November 1959, I discussed the proposed bridge with engineering representatives of several outside firms to determine if these firms would be interested in doing work on such a bridge, and if they had

any worthwhile ideas as to how the problem should be solved.

This was being done because we anticipated that the time allotted for the complete design of this bridge would be so short that we could not with the force we now have prepare the complete designs for the hull, the superstructure, and all of the machinery in time to ask for quotations in fiscal 1961.

In January 1960, several of these firms submitted unofficial pro-

posals showing how they would solve the problem.

We had asked these people to submit these unofficial proposals with drawings depicting just how they would attack the problem, because we wanted to see what they could do and to make sure that they had an overall appreciation of the problems involved.

We were not interested in having these people come in and just tell us what a fine job they could do. We were interested in having them prove that they were competent.

While this was going on here at the laboratories, we proceeded to work on the design concept which we had worked out, and we considered most satisfactory. We started preparing the details for the hull, the superstructure, and we also made a machinery layout and determined the horsepower requirements at the various speeds when

In the meantime we had come to the conclusion that since this was such an extremely expensive and complicated piece of equipment it would be wise before committing ourselves to a final design and expending any money thereon, that we make sure beyond all reasonable doubt that we were on the correct road, that we had the correct design.

We thought it advisable that we bring some outside engineering talent to bear on the subject. It occurred to us that outside firms working independently might perhaps come up with a more simple 74109 - 61 - 21