

Mr. NEW. In response to your first question, this is not a foxhole digger. We have a requirement for a device to permit rapid digging-in on the battlefield. This goes for command posts, equipment, as well as personnel, per se. The military characteristics for this device require a rate of digging that far exceeds any piece of mobile equipment that, as far as we know, has been produced to date. We analyzed the problem involved, discussed it informally with various manufacturers, and decided that we would like to have three studies made: one from the construction earthmoving industry, one from the mining industry, and the third was from a design, straight engineering design of any concept that might appear to be feasible.

We did seek proposals and awarded three contracts, and these contracts call for making a concept, a preliminary concept design study and furnishing us a one-tenth scale model representing the approach that each contractor thought should be taken.

I think it is only natural that once an organization had come up with a preliminary design that they would recommend that they be permitted to proceed with the detailed design. The reason that we have not gone forward is that we do not have sufficient funding at the present time to finance a contract that would be involved for the detailed design and fabrication of a unit.

Mr. SANDWEG. Now there is a considerable difference in price between the Joy Manufacturing Co. and the other two. Could you explain that?

Mr. HÉBERT. Name the prices, first.

Mr. SANDWEG. Joy Manufacturing was paid \$44,054 for its efforts. Arthur Orlaff Associates was paid \$10,400. And Caterpillar was paid \$22,000.

Now it would seem to me that they were all coming up with a somewhat comparable piece of equipment, depending on the design approach.

Mr. NEW. It would appear so. There was a Government estimate made on what we thought it would cost to make such a study. The estimate was in the vicinity of \$43,000. Normally a contract of this type is negotiated on the basis of the amount of man-hours, based on the design or the engineering disciplines involved, electronics, mechanical, and so forth, and the price is arrived at based on the number of man-hours that are to be applied to the job.

We had mining. Joy had a mining approach. Caterpillar gave an estimate of better than \$40,000, and they were willing to pay half of this out of their own pocket because they felt that this was something that they were interested in getting into. The third approach, Orlaff, was an engineering unique approach, but did not involve the detail or the manpower required by the others to come up with the concept study. Furthermore, it was small business, and he had no overhead whatsoever listed in his statement of services, cost of service to be performed.

Mr. SANDWEG. You wouldn't say you took advantage of him?

Mr. NEW. We did not. He submitted his proposal and we did as we would with anyone else, we attempted to get the best price we could.

Mr. SANDWEG. Was each manufacturer given whatever latitude he felt necessary in this construction, or were they limited, say, to \$45,000?

Mr. NEW. I would like for Mr. Alexander to pick up from here. I