

Mr. TEAGUE. Is that correct at present?

Mr. LILLY. Let me ask Chuck Bingman, who is in our Management Operations office, to comment on this arrangement.

Mr. BINGMAN. They are combining the fire and safety contract and the security guard contract at the Manned Spacecraft Center in Houston. The two services are now performed together by TWA at the Kennedy Space Center.

Mr. FULTON. For example at Marshall Spaceflight Center, were their reductions in the operating personnel or management?

Mr. LILLY. The personnel that I referred to at MSFC were the support contractor personnel and were a combination. I don't have a breakdown here on how many were management and how many were operating.

Mr. FULTON. The question would certainly arise as to whether you could have accomplished the same purpose by simply putting pressures on for economy and cutting out certain overlapping and certain things that needed to be done, so that you achieve this efficiency. Because I can't see that the simple fact of having one contractor or two or a certain type of contract would have that big an effect on operations. It just doesn't seem logical to me.

Could you explain that?

Dr. MUELLER. One place where savings would become immediately apparent is in the area of reducing the number of people supporting those who do the actual work.

Mr. FULTON. George, that wouldn't involve \$15 million.

Dr. MUELLER. That factor could account for a relatively large fraction of the saving inasmuch as the paperwork involved in the commercial enterprises in terms of keeping the tax forms filled out and all the other things that are needed is an appreciable fraction of the cost of labor.

Mr. FULTON. You are saying that small business operations inherently are not efficient and that since large ones are more efficient, NASA should deal with them?

Dr. MUELLER. No, sir; I didn't mean to imply that. We have a very active small business program in each of our centers. Each of these consolidations is very carefully worked out with the local Small Business Administration and with their representatives.

Mr. FULTON. With the chairman's permission, I would like a statement put in the record of the factors that caused the saving; if you would do that.

That is all.

While it is extremely difficult to develop a precise measure of the individual factors which resulted in a reduced cost after consolidation of the service contracts at MSFC from 77 to 11, we believe the following factors contributed significantly to the first year's savings of over \$15 million:

1. More efficient work assignment and greater flexibility in the use of the work force;
2. Elimination of duplication and overlaps;
3. The reduction of interface problems.

For example, there were seven contractors providing various kinds of engineering and fabrication support. After the consolidation, a single contractor was able to provide the total support with fewer people by having complete flexibility in the use of the machine operators and technicians and by more efficient work assignment.