

Now, I think there is some argument as to whether the penalty is 10 cents on the dollar or whether it is 15. I think this is a very difficult thing to determine, but it appears that the fixed portion of the cost adds up when the schedule is extended. There are some savings, of course. In other words, there could be some immediate savings in overtime pay, this sort of thing.

Now, unfortunately, these studies tend to look at it in an ideal sense, where you can talk in terms of manpower applied and schedules that you meet and so forth. I think there is another thought that should be considered, and that is, the time which elapses between the substantial completion of the vehicle and the time that it is launched, is already quite considerable, and I believe that if there is a significant stretchout in the speed with which things happen, there is going to be a demand for additional intermediate testing to see whether, in fact, the vehicle is still in sound condition. This is a difficult thing to evaluate, but by comparison with any of our aircraft experience, the longer a vehicle sits without a subsystem being exercised, the more doubt begins to grow as to whether that subsystem is indeed ready at the time you put the switch on.

So as I look at this from the astronaut's point of view, I would say that I want the vehicle checked out just before I go. From that point you would backtrack to the factor sequence, and I think that in a stretchout, it could be expected some additional testing would make sense from the operational point of view. This then represents additional work.

I think that it has been made clear in previous studies that either speeding up or stretching out tends to increase the cost. It is my own feeling, that the valley is somewhat flatter than perhaps has been said in the past.

That isn't a very definitive answer, but these are the things that come to mind, Mr. Teague, when you ask me my opinion as to what would happen if you string things out.

Chairman TEAGUE. The operation that we have just seen, you are running 7 days a week and 24 hours a day?

Mr. EVANS. Yes.

Chairman TEAGUE. Is that because IM is a pacing item or because that is the best way to run the program?

Mr. GAVIN. The around-the-clock operation has to do with the first delivery vehicles and the reason for that is that we are running behind, as I will comment on later.

We are trying to make sure that we do not impact the rest of the program, because there is such a train of events in progress that we just cannot afford to become a limiting element.

Mr. EVANS. During a checkout, it is probably desirable anyway. If you were to run an 8-hour shift only, startup discontinuity would take additional time. Each shift, when it starts up, would just have to look back to find out what had happened.

Chairman TEAGUE. What we are doing today will be printed as a hearing, if you want to revise or put any additional material in.

Mr. GAVIN. I think, Mr. Teague, I would like to consider that question carefully before answering it.

Chairman TEAGUE. Bob, do you have a question?