tween confidence in design, schedule, and cost. We assign the priority in just that order. When the chips are down, whatever is necessary to make it work well is the choice. I think this is an attitude which the astronaut appreciates. I think that no matter what else occurs, we have to be responsible for the successful operation of the vehicle.

This past year has seen a continuous rearrangement, as test results became available, of test programs, test articles, and test requirements, all aimed at improving the schedule and the cost without impairing the operational quality. The very tight funding situation has made this rather difficult, with a minimum of the trade-off freedom which you would ideally consider to be the consequence of incentive fee contracting.

I might say that the effort to reduce costs has been virtually continuous. There are a couple of things which are listed on this slide which stand out, looking back at the past year. I have already shown in some detail the GSE story. This involved a strengthening of our planning, designing, manufacturing, and procurement activities and, as I mentioned earlier, it required a great deal of effort to proceed from a position which was holding the program back, to one which supported the program.

The tide was turned in midsummer. We were effectively on schedule in mid-October, and we have been supporting the schedule from that time forward.

The second vital program action taken by about midyear to help counter the mounting cost and schedule problems, involved a massive strengthening of our subcontract management group. What we did was to apply more full-time talent, with clearly understood authority, to the management of our subcontractors and interfaces with them. The result has been better insight into and control of the operations in supporting LM.

This slide (fig. 32) indicates the manner in which the subcontract project manager—he is the man in charge of a specific contract—acts for the program manager in bringing the various Grumman groups to bear on a particular subcontract.

A third management action which we think was significant, was the introduction of work packages. The next slide (fig. 33) summarizes as briefly as possible what a work package is, and the fact that we have it in use within our house and at our critical subcontractors. I think the key point here is the fact that, by associating the output with the manpower estimated to do the job, we obtained a more direct indication of progress, and this allows better control of what is going on and we have found it effective and useful. We find, of course, that the effectiveness varies, depending upon the nature of the operation, but we think it does one other thing, and that is that it enhances the sense of responsibility of the work package manager, the person who is the organizational leader in charge of a group of people who have a responsibility for getting the task accomplished. We think it is a step forward.

The fourth management action that I would like to refer to is clearly to the credit of MSC. This was the decision taken late in the summer to reassign priority, to divert and install at Grumman a third ACE sta-