

Preface to SMD III Summary

Most of the problems described in SMD III and those which will recur in the future are not the individual items which have been detailed. Rather they spring from much larger omissions or in some cases archaic operating philosophies. Whether we at this level can do anything about them or not begs a question, but the truth of the matter is ^{that} ~~up~~ until several major issues are dealt with problems are bound to recur and ~~xxx~~ in some cases it may not be ~~profitable~~ possible to ^{do} ~~xxx~~ science ^{and} ~~xxx~~ scientific research in space as currently envisioned. It does not seem ~~to me~~ ^{to} leave mageste to at least point these out to management. Firstly, there is the question of what role FOD plays in the payloads of the future. On the one hand, there is a group of qualified scientists who were brought aboard, presumably to help implement scientific operations. At the same time, we are making another effort and bringing an even larger group of scientist aboard for the same role. However, again and again these people stand by and have to watch other individuals with essentially no scientific or in some cases operational background make major decisions effecting the way scientific researchers and experimentation is performed. The simple truth is that FOD has to decide whether it will take then an active role in management of the payloads or will simply see, speak and here no science. As it now stands we're waivering between being some sort of flight engineer and trying to whatever it is that the legitimate scientific community wants to taking some sort of "please, can we show you a better way" attitude. ~~xxx~~ As obvious in SMD III, the resources to mount a scientific effort were not there as regards operational experience ~~and~~ as it was necessary for someone to get in and make the mission work. The alternative was to

stand back, watch experiments installed that couldn't be operated, watch PIs prepare procedures that wouldn't work and then finally I suppose it ^{have} would have been possible to/made some sort of scientific charade which would have kept everyone happy but it simply not going to ~~be possible~~ be possible to continue to fool people like this. Obviously, an entirely different and not necessarily welcome approach was taken and that was that things should work as advertised. Not only is the question of what the MS role involved in this, but again the key question is to what extent does FOD participate in the payload operation. It seems obvious that FOD has the only resource of people with operational experience which in the early days at least should be a unique contribution to scientific exploration.

The second major problem is does management allow ~~scientific~~ business to continue as usual in the payloads. ~~There is already in this short span of time that NASA has been operating~~ In the short period of time that NASA has been operating, a great mass of tradition, this is the only way it could be done and other inertia has been generated which are supported by many ~~in~~ entrenched individuals and organizations. In SMD III, some of the reports reflect that training procedures and the like were done in that same fashion and ~~supportive~~ supported by large dedicated groups of people. It certainly is not the case, there simply will not be enough resources in training procedures and support areas especially hardware to mount the sorts of scientific payloads that are currently planned. Instead and more efficient way of ~~doing~~ doing things is in order. This was demonstrated in SMD III for inspite of what the reports say, the real

training effort was maintained by the crew and ARC, one ~~xxxxxxx~~ training coordinator and the PIs. At JSC, there was another training coordinator for the scientific payloads ~~xxxx~~ whereas the ~~documents~~ reports reflect that the training plans and the like were generated in simple matter of fact that did not appear until the training was effectively over. These are the two crucial questions. Probably the most largest of all which in some ways is even more abstract is the idea of what does NASA truly want to do in space. Is it to be a publicity effort in which majority of the public can be sold by the great things that are being done, or is it to be ~~at~~ true scientific research with all that entailed, which includes frustrations, failures, and a great deal of simple unsung hard work. In another words are they truly going to do science or are they going to appear to do science. This was the finaly major source of difficulty in SMD III which caused trouble from personnel assignments to actual operating procedures in the spacecraft simulator. A large number of the investigators were far more interested in pursuing their own political goals than in obtaining data. In addition, there were center goals~~x~~ such as proving the necessity for a remote operating site at Ames which not only cost several fortunes, delayed and compromised the program as well as stirred up several imaginary difficulties. If you going to run a publicity program then go ahead and run it all the way and don't try to ~~mixxxxxxxx~~ dilute its efforts by really doing some science. Conversely, if you are interested in doing science then do it and take whatever results of worthy publicity out of it.