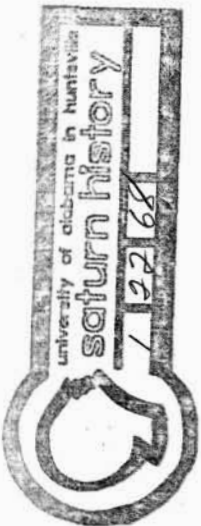


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John F. Kennedy Space Center  
National Aeronautics and Space Administration

Date ----- Doc. No. -----

Monday, January 22, 1968

7:15 P.M.

Major General Samuel C. Phillips, Director, Apollo Program Office,  
Office of Manned Space Flight, NASA  
Rocco A. Petrone, Director of Launch Operations, Kennedy Space  
Center, NASA  
Colonel William Teir, Manager, Saturn I/IB Program Office, Marshall  
Space Flight Center, NASA

Mr. King: The gentlemen from my right, Bill Teir, who is the Saturn IB Project Manager from the Marshall Space Flight Center; General Sam Phillips, who is the Apollo Program Manager, Office of Manned Space Flight, NASA Headquarters; Rocco Petrone, who is Director of Launch Operations for Kennedy Space Center, also Launch Director for the mission. General Phillips.

Gen. Phillips: Ladies and gentlemen, it's a pleasure to be back here again. Apollo 5 was successfully launched at 5:48:08 Eastern Standard Time. The performance of the launch vehicle, in terms of the times of the burns, was completely nominal and you can follow the time lines as they were given in the press kit. The shutdown of the S-IVB occurred on time at 9:58 after the launch and orbital insertion was at 10:08.

The orbit planned was 88 by 118. The actual orbit was 87.6 by 119.5. The velocity at orbital insertion was 25,685 feet per second.

The sequence, up until the time we left the Flight Director's circuit a few minutes ago, had taken us over Carnarvon, where the deployment of the Spacecraft LM Adapter panels was confirmed and the sequence that was the separation of the Lunar Module from the booster occurred and was confirmed. So at 54:15 the separation of the Lunar Module and its proceeding on its own was confirmed.

I'd like to ask Rocco Petrone to say a few words about the countdown.

Mr. Petrone: The count, with the exception of two holds that we had, was...it went according to our expectations. The hardware, as you know, was many, many months in preparation to bring it to the point that we did today and about halfway through our mission we've still got to watch the LM function to know, you might say, if we've done our job right.

I think everything proceeded smoothly. We did have two holds. One, I believe Jack did attempt to describe to you. We were running into some difficulty in keeping the LM at the desired temperature for takeoff. Well, we wanted to keep it at that temperature all the time on the pad and we use a freon cooling system. There are bottles, we call them K bottles. They look like what you'd normally see with welding gas. This has freon liquid.

We had them at the base of the AGCS room, right on the pad, and they feed liquid up into the spacecraft and into a boiler where it vaporizes. We got an indication of a high temperature reading and concluded that

the liquid was not transferring properly. We went out there and did some troubleshooting and isolation of some cylinder banks, brought it in properly, at least to our satisfaction, watched the temperature the rest of the way. Toward the end of the count it started to go up some. It never gave us the alarm because now we could pretty well control the freon flow. Now that hold there took an hour and 28 minutes for the freon.

As you recall, we were in the LOX loading and at the time we sent some people out to work the problem. We stopped loading LOX and of course our lines got "hot" so there was an additional hour and 10 minutes getting the LOX system back where it had been at the time we reverted to go out and troubleshoot and correct the freon problem.

So there's a sum total of two hours, 38 minutes for the LOX and freon. Now the remaining time of the total of 3:48:00 was a DDAS problem. DDAS is part of the electronic data, Digital Data Acquisition System. It's a method of acquiring data, you might be in a hurry, lots of it and transmitting it back to the blockhouse. We have the same system in the blockhouse to decode it for us. It gives us the ability to communicate with all the activities that are going on with the computer. We address the computer and call out test programs through the DDAS.

We had a failure in a power supply within the unit and sent the people out to repair it, did repair it, bring it back up on line, ran some test programs, satisfied ourselves that everything was okay, and then proceeded with the rest of the count.

That's all I have. The DDAS was also at the pad. It was in what we call the Automatic Ground Control Station. It's right at the base of the umbilical.

Gen. Phillips: I'd like to ask Bill Teir to comment on the performance of the launch vehicle.

Mr. Teir: The performance of the launch vehicle--I can't add too much to the comment that it was a very nominal flight from the launch vehicle viewpoint.

For the countdown and checkout the launch vehicle stayed well within redlines through the entire checkout, both propulsion systems and guidance systems. Up until the time of launch we had not busted a redline which is, I think, a very good countdown for a vehicle of this type.

The S-IB stage burn was nominal. We got both the inboard and outboard cutoff very close to the time. I don't have the exact deviation from the planned time yet.

The S-IVB stage, as General Phillips told you, both from the guidance viewpoint and propulsion viewpoint, was right on the mark. The trace actually came out so close that you could hardly tell the difference between the planned trace and the launch vehicle trajectory.

That's about all I can give you.

Gen. Phillips: Well, we have about five hours left before we will be able to judge the total success of this mission. And, as I said, at the time we left the blockhouse and monitoring the Flight Director's loop, the spacecraft looked good and its separation had been confirmed, and I think we would like to see if you have any questions at this time.

Mr. King: It's a little hard to see the hands, but I see Sue Butler's hand there. Do you have a question, Sue?

Sue Butler: I may have missed it, but what was the problem on the Redstone? There was some kind of problem you mentioned, Jack.

Gen. Phillips: Well, the Redstone was positioned in the north Atlantic and it was positioned for command and telemetry in case it was necessary for the flight director to take any kind of alternate mission action in the event of difficulties during boost or the final part of the boost phase.

There were difficulties this morning at about the time we picked up the count with the telemetry computer. These difficulties persisted pretty much during the day, and during the day the Flight Director and his team worked out a satisfactory method to be able to rely on the essential functions they would have to get from the Redstone using its command processor computer in case the telemetry computer indeed was not functioning at the time of the launch. So they had worked out a means of satisfactorily commanding the mission even with difficulties and indeed at the time of launch the Redstone telemetry was not functioning properly.

Mr. King: Dick. Right here in the first row.

Question: Perhaps Rocco Petrone might answer this. Who makes the DDAS? What firm is involved?

- Mr. Petrone: I don't know. Bill, do you know who makes it? One of the components we use, it's not one of the larger systems. I frankly don't know who the manufacturer of the DDAS is.
- Mr. Teir: I'm not sure who makes it, right now it's been in there for some time and I'm not sure who the...
- Mr. Petrone: We've had various components...
- Mr. Teir: ...overall contractor on most of it is.
- Gen. Phillips: Let's find out the answer and Jack can pass it on rather than for us to try to guess it.
- Question: General, would you assess your feeling on the status of the Apollo program at this moment?
- Gen. Phillips: Well, I'm very bullish. I think the Apollo program is in good shape and we're getting back into a mission sequence. This flight today, of course, is a very critical one as all of them are, but it does constitute testing the last major piece of flight equipment and I think the status of the program is good and that we're coming along in good shape at this point.
- Mr. King: Back up here.
- Question: The LM tests still to come--do you consider any one of the tests more important than the others at this point?
- Gen. Phillips: Well, the essential thing that we want out of this test is descent propulsion, the so-called "fire in the hole" staging and ascent propulsion. I would, I think, class all three of those as being very important. Of the three, I think the "fire in the hole" sequence is the one that will tell us the most that's important to us in going on the subsequent flights.
- Mr. King: Mary.
- Mary Bubb: General Phillips, in your opinion what are the chances of manning 503 if you have a good LM flight and a good second Saturn V?
- Gen. Phillips: Well, that question, of course, it will probably be covered at the post-launch too, (laughter) or the postmission conference.
- That question has been and will be getting lots of attention. I think that's about as far as I'll go with it at this point until I see.

- Question: Just a brief one on 502. Are we still looking for an early March launch? Are we on time, no problems right now?
- Mr. King: We're scheduled for the first quarter, as we've said. I don't know whether you want to add to that, Sam?
- Gen. Phillips: Apollo 6/502 is coming along in good shape. We're a little bit off our detailed daily working schedule. There are no serious problems. There's nothing significant at this time and I have every reason to believe we will launch it during the first quarter.
- Mr. King: Go ahead, Sanders.
- Mr. Lamont: Can you give us the schedule for the rollout now?
- Gen. Phillips: I'll turn that one over to Rocco.
- Mr. Petrone: It should be the first week in February.
- Mr. King: Any further questions here?
- We have a little note from Houston that starting at 6:20 a.m. Central Standard Time, tomorrow morning, it's possible the spacecraft may be visible at 30 degrees above the horizon. This is on the run from Houston to the Cape. It would be on any time in that area. This is some information that has just been passed on.
- It seems we've had a rather quick conference in view of the Houston weather we're having here and we'll terminate the conference at this time.
- Gen. Phillips: We'll see you all after the mission is over.