Charles a, Berry M. D.

POST FLIGHT PHYSICAL EXAMINATION NOTES - 13 March 1969

Dr. Jernigan: Rusty, one of the things that Houston wanted to know was the GET or the peak rate on the radiation survey meter, if you recall it.

This will be in your log.

Rusty Schweickart: As I recall, it was .037 rads per hour as the peak dose rate but the time is logged onboard the spacecraft, but I don't recall it.

Dr. J: O. K. We can get that from the onboard log when we get it out.

RS: I can tell you this much, it was almost exactly in the middle of the times that Houston called up for us to monitor. And it was not a definite peak. I was moving around the spacecraft also, and it would vary as I moved it, so it's not an exact time. It was just about the middle of the time that they called us, so I figure it was about the middle of the anomaly.

Dr. J: Houston says they called you at GET 1:97:23 to have you read from 23 to 33 minutes.

RS: That's what I did, and it was right about the middle, so it must have been around, what? Half of that $-7\frac{1}{2}$, $27\frac{1}{2}$ or so.

Dr. J: O. K. Fine.

RS: It was not sharp - rounded of.

Dr. J: Fine. Did you take the PRD's into the LEM?

RS: Yes. At least I took mine in.

Dr. J: O. K. Do you recall when you removed the PRD's from the PRA and transferred them to the overalls?

RS: Mine was about, I guess toward the end of the 6th or 7th day.

Dr. J: The end of the 6th or 7th day?

RS: Yes. And actually for one day I had to hang on the wall of the spacecraft. For a day and a half, maybe two days.

- Dr. J: O. K. Did it seem to you that your cold recurred after launch?
- RS: No.
- Dr. J: Do you think that the congestion you had was secondary then, to the oxygen later on?
- RS: No, I don't think it was due to the oxygen, I think it was due to the zero gravity. Because the congestion really came about fairly soon after we got up there. But it was all here, it was all right in the -
- Dr. J: Right in the nose?
- In the nose and sinus area, and it was blowing didn't seem to help it, you just had a full feeling and, first of all, it's hard to blow at 5 psi. You don't have an awful lot you just can't put much head behind it. It feels funny, and, but it didn't really help it any. It felt like it was inside. I got the impression that well I can't it's hard to describe the impression. You can't say sinus because there wasn't any aching or anything like that. Just the full feeling and you could never get rid of it. I also noticed, and I don't know if it was consistent with other people, but if I do a lot of talking, for example, reading back block data where I read something for 5 minutes almost, or 3 minutes, that it tended to at the end of that time, I really noticed that I was stopped up. Now I don't know why.
- Dr. J: Did you notice this just about as soon as you got into orbit, or shortly thereafter?
- RS: It's hard to say exactly when, but I did take an Actifed well, let me put it this way: I noticed that before I took that Actifed the first time, and I think, the Actifed the second day, or third day, maybe. Something like that that's on the log. We called that down to Houston, so if you can find out when that was, it was before then.

Dr. J: O.K. Now, when did you first have an onset of nausea?

RS:

Well, that's difficult to say. I was very careful not to move around a lot, from the time we launched, on. I knew that from the moving around that I did, that I didn't want to move around a lot unless I had to, and the first time that I actually vomited was on the third day before going over into the LEM, and there was a lot of activity that has to go on, and especially on this mission, we had to take our suits on and off, and boy, that's nearly impossible, especially with an LCG. Because you've got so many things hanging in there, you know, it's just a heck of a job just getting your head down into the suit. That was a real challenge, getting that suit on and off. But the first time I got sick, I was not moving around and I had not been moving around. In fact I was very carefully sitting quietly in the lower equipment bay. And Dave Scott was watching me, as a matter of fact. He also noticed that right after I got sick, and it was almost without warning - I didn't feel dizzy, or upset, you know, in the head, the way you do when you're moving around too much at zero g or say, on a ship or something. This came right from the stomach. I mean I felt a couple of rumbles in the stomach, and the next thing I knew, there it was, and I had been sitting there keeping my head still and resting, as a matter of fact, and all of a sudden it came and there it was. I actually vomited and kept it in my mouth and at the back of my nose, unfortunately. We got a bag out and got it all in, but it was a very strange thing. I wasn't moving around. I had been moving around and then stopped to rest and everything was all O.K. again, and then I was sitting there - Jim was dong something over on his side of the spacecraft, and Dave was sitting in his seat and I don't remember - I was just sitting in the L E B, watching, when

it happened. The second time it happened was later that same day and I was - Jim and I were both in the LEM and I had gone over first and done the power up of the LEM, which involves a good deal of moving back and forth, then Jim came over and I don't remember exactly where we were when it happened, at what point in the time line. And then I wasn't really standing still when it happened, I had been moving around and not feeling too well, but I hadn't really felt that well anyway when I got sick that second time. The first thing that happened - the only comment which I think may or may not be significant, there is no way you can tell, is that I had a drink of extremely chlorinated water, and by extremely, I mean it burned my mouth, and we found later that we would clorinate the water the night before, before we went to bed, and the next morning (and that way nobody would touch it until the next morning) and even then on occasion, I remember one time I got a napkin full of water to wipe a window and I smelled it. You could smell chlorine very, very strong, just through that first shot out of the gun. Now before I got sick, that day I had a drink of extremely chlorinated water, and I guess I swallowed two or three gulps of it before I realized how bad it was. I complained about it and the other guys said, "Well, you can always taste chlorine in it." Yeah, you taste chlorine, but it was far worse than anything I had after that. It really was to the point where, as I said, it actually burned the inside of my mouth. The combination of that, the hydrogen bubbles, it's so hard to say what caused the stuff.

Dr. J: Prior to the first time you did vomit, had you had some stomach awareness? The first two days of the mission did you have stomach

queasiness or -

RS: Yes, but nothing - see for example - donning the suit and docking the suit, after I got done - which involves a lot of moving around and putting your head down inside of something - I definitely had a feeling when you put your head down inside, that you were tumbling - for the first few days. After getting the suit on, I'd sit there and kind of swallow. I was aware that I wasn't feeling too good, and it was a sign to sit still after I got that suit on for a while.

And a couple of times, swallow a little hard - things like that.

Dr. J: Did you take a second Marazine after you got your helmet off?

RS: On insertion day?

Dr. J: Right.

RS: Yes. But I had no symptoms at all on that first day, as far as knowing I was going to be sick.

Dr. J: And did you take Marazine subsequent to that?

RS: Yea, I took Marazine on the morning of the second day, and then I also took it on the morning of the 3rd day, and the morning of the 3rd day, was the day I got sick, and I guess I got sick within a half an hour or so after I had taken the Marazine.

Dr. J: Did you have any sensations in the lower GI tract? Any rumblings or grumblings or passing of flatus or any urge to defecate at the same time that you were nauseated, or near that time?

RS: No, not in the lower GI tract - in the stomach I could feel things gurgling around, due to taking all the hydrogen gas. That's something that is very, very objectionable. You just can't get rid of those bubbles, and every time you eat or drink, you'd be swallowing these great big bubbles. It's very discouraging. You knew that

that you were getting all that gas down there, and because of not having any gravity, you know, it wasn't taking any proper direction, it was obviously just sitting in your stomach and gurgling around. And you couldn't burp, because those bubbles aren't going to come up to allow you to burp, so you knew you were just filling yourself with all this gas. Now it seemed as though later on, you'd develop a tendency to pass gas, but that came and went. I passed gas maybe on two days, I really passed a lot of gas. Jim seemed to pass more than anybody else. He ate maybe more than anybody else, I don't know.

Dr. J: How many stools did you have?

RS: One.

Dr. J: Was it formed?

RS: Well no, it was kinda mixed, you know, the first part that came down was hard and the last part that came out was real soft.

Dr. J: What day was that?

RS: It was either 7 or 8.

Dr. J: O.K.

RS:

On that 4th day, it was obvious that I was beginning to adapt to the point that I could move around with relative freedom, and I say relative, because later on I obviously could move with even greater freedom, but nevertheless I no longer had to be continually aware of keeping my head still and not moving fast and rapidly - that kind of thing. At the same time I had no appetite whatever, and even through the fifth day. I can remember that at the end of the fifth day, after having completed the rendezvous, we came back and I was thirsty, and I drank a lot, the juices, but when I made up some food and tried to eat it, I think it was beef and gravy or beef pot roast or something like that, which I never really objected to very much on the

ground, I could not eat it. I'd start to eat it and I'd gag. And I almost got sick trying to eat, even though a couple of times prior to that I had gotten things down and it made me feel better and it was obvious if I got some food down I would feel better. So when I tried to eat something like that, I just couldn't get it down. It was like trying to tell your kid to eat something that he isn't going to eat, you know, and you can force him to do it, he is going to gag and spit it up on his plate. Well, that was exactly the same kind of reaction I had, no matter how much I knew it was good for me. I tried to eat that stuff, and as soon as I'd get it in my mouth, the smell of it, and the taste of it, everything said NO, and I would just gag. So I found that there were several things I could eat, and I kind of concentrated on them, and the breakfast was one of them I could eat, and the peaches. The things that tasted like what they really were, and didn't have a strong smell. The peaches, the fruit cocktail, the drinks, things like that.

- Dr. J: Are you hungry now?
- RS: I'm relatively hungry, but now I have to point out as time went on, my appetite started coming back, and I never really felt hungry at any time until about, I guess the 6th or 7th day when prior to eating it wasn't a case of "It's time to eat now, let's eat", it was a case of "Gee, I feel a little hungry, I think I'll eat."
- Dr. J: Skin. At the sensor sites on the chest, there is one small pustule under the ground electrode. The other sensor sites have a slight bit of reaction to the tape, but not very marked. On the lower abdomen there are round, raised, vesicular looking lesions on a circumscribed red base. On the left side of the scrotum, near the base of the penis, there is a macular scaly rash.

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Dr. Jernigan: Dave, did you have any illness symptoms of any sort?

Dave Scott: No, none at all.

Dr. J: O. K. Any problems with the GI tract? At any time?

DS: No.

Dr. J: How many bowel movements did you have?

DS: Three.

Dr. J: Three - all of them formed?

DS: Ah, the last one was sort of loose.

Dr. J: What day was that?

DS: Today - this morning.

Dr. J: O.K. Did you take any medications?

DS: No, the only thing I took were some vitamin pills.

Dr. J: How did the package work?

DS: Great. Great. As a matter of fact, my friends all used it too.

Dr. J: O.K. Skin. The rash that Dave had pre-flight has recurred and you were telling me a little bit ago, Dave, that you thought this cleared up a little bit when you took the bunny hat off?

DS: Yeah. (Noise) It really got a lot worse at the end of the fifth day. I looked like I had been in the sun for 10 hours the first crack. I was really dry and peeling and my face was real red, and once I got the bunny hat off and washed my face every morning and every night and put that skin cream from the medical kit on it, it actually cleared up pretty good. It's almost back to normal now, but boy, I was really - my face wasn't in good shape after the first five days. I'm pretty sure it's the bunny hat. As soon as I took that off it stared clearing up all right.

- Dr. J: All right. Now he has a fair amount of scaling of the forehead and malar regions with red, somewhat papular rash in those regions.
- DS: It's nothing now.
- Dr. J: There is also a patch of erythematous rash with a few vesicles and some scaliness between the scapula to the right of the vertebral column. The upper sternal sensor site had one small pustule under it.

- Dr. Jernigan: Jim, did you have any illness, any symptoms of any sort during the mission?
- Jim McDivitt: No, the only thing I had was a stuffy nose occasionally,

 like I think I reported I took about five Actifeds, or something

 like that during the flight, usually at night. I took a couple of

 Aspirins too.
- Dr. J: When did the stuffiness first show up?
- JM: Soon as I got in orbit, or you know, every six or eight hours it came and went and came and went.
- Dr. J: Did it seem to you to be a recurrence of your cold, or -
- JM: No, no this is the same kind of stuff I get in the altitude chamber, things like that. Nothing to do with a cold.
- Dr. J: Were you blowing stuff out of your nose?
- JM: I couldn't. I tried to blow my nose, but nothing ever came out very little, anyway.
- Dr. J: You had no sore throat or anything like that?
- JM: No.
- Dr. J: Did you at any time, have any nausea, or stomach awareness?
- JM: No.
- Dr. J: Any problems with the lower GI tract, rumblings or gas?
- JM: Yeah. Yeah, the water had a tremendous amount of gas in it. It was so bad that sometimes you would fill up a food bag and put maybe two squirts in it and the thing would be just like a solid tube and there would be half, or maybe even more than that, was gas. I was initially drinking out of the gun, the water gun, and man alive, after you had a couple of good drinks, you could just feel your stomach churning around and around and around. That happened for probably the first

three or four days maybe. Well the fifth day we weren't there very much. But after that we drank - we filled our water bags up with air, or well, almost air - with the water and tried to separate the gas out that way. But early in the flight we didn't have time to mess around with that stuff. It was really quite bad.

- Dr. J: Did you have any bowel urgency or any loose stools?
- JM: All my stools were loose, but none of them were urgent. I think I had five during the flight. I had I really tried very hard to go on the night of the third day, I think, then again on the night of the fourth day, and then I had I just went a couple other nights. Once this morning and once yesterday, and once about the seventh day, or something like that.
- Dr. J: Did you get thirsty?
- JM: Yeah, I was terribly thirsty, but we couldn't drink the water, so it was really a pretty lousy situation with the water. It was terrible. The more you drank, the worse your stomach felt and the more it growled, and when you flatus, it was just pure hydrogen coming out. I thought it was pretty bad.
- Dr. J: How about skin problems? Did you have any skin irritations or itching, or -
- JM: Yea, my sensors these are the sternal, aren't they? My sternal sensors bothered me from about the third day on. They itched and itched and itched, and they were all sticky looked like there was goop inside of them, and had cozed out around the sensor, and was out on that other paper, sort of sealer that was all wet (?), then the hair started going through and that made them itch more, I think, or probably where the hair was pushed back. I noticed a couple of little whiteheads around a couple of the sensors. I

looked at them a couple times, but I didn't want to tear 'em off because they were working all right. So I just left it go, but it was rather irritating, especially at night when I was trying to sleep. It was very itchy.

O.K. Anything else of note, as far as physical symptoms or sensations? No, just that we were practically unable to eat there in the first JM: four or five days because there just wasn't time and the first night I didn't sleep very well. I don't know whether it was the anxiety of being up there, or what. We had a procedure where we were monitoring both VHFA and VHFB channels and VHFB channel was a tower channel for some Air Field in southeastern Asia. Every hour and a half when we'd go across there, they'd wake us up with about fifteen minutes or, not fifteen, but maybe five minutes of radio chatter, and we'd go back to sleep, then we'd come back across and we - they woke us up about four times the first night. After that we didn't monitor B anymore, we just went to A. And we slept very well after that. Trying to get something to eat, though, is a real problem. I think on the fifth day we had a 26 hour day, and I ate breakfast, then when we started to work, I ate dinner again, like 24 hours later - something like that. It was a long, long time.

Dr. J: Did you take any of the sleeping pills?

JM: No.

Dr. J: O.K.

JM: I slept quite well, as a matter of fact, during the flight. I didn't sleep very well last night because I thought we were supposed to get up at 200:32 hours and it was really 200:33:50 or 35, and I woke up a half hour before when I thought we were going to get up. Then it turned out that it was really an hour before we really had to get up,

so I wasted about an hour and a half sleep time in there, sort of waiting to get up. So I think I got about six hours sleep. All the other nights I slept seven or eight hours during the night - relatively good sleep.

Dr. J: Did you feel refreshed when you woke up?

JM: I didn't feel tired. I didn't exactly feel refreshed. It's kinda —
it's kind of funny sleeping in zero g. I'd turn over on my side, you
know in zero g, your side is like on your back, except that I put my
head on the head rest, or had my body pitched out sideways on the seat.

I felt sort of like I was sleeping on my side. That gave me a
different sensation. I'd actually sleep on my left side for a while,
then on my right side, then my back, but I can sleep any way — upside
down —

Dr. J: Dave mentioned, and Rusty too, that the first couple of days that they had a sensation in their lower back of almost a backache, or tired feeling in the muscles back there. Did you have any of that?

JM: I woke up one night in the middle of the night and my back hurt right around where my kidneys are, and I thought that I had a kidney infection and I'd wiggle around and stretch my legs out, then I bent my legs up like this and turned over on my side, and went to sleep that way. When I woke up it was all gone. I think that may have been either the first night or the second night. It

was the second night. But no, I didn't have a backache.

Dr. J: O.K.