
PUBLIC AFFAIRS OFFICER
ASST. LAUNCH DIRECTOR

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00:00:01,020 --> 00:00:02,820
George Diller, NASA Commentator: This is Shuttle Launch Control.

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00:00:02,820 --> 00:00:11,070
Joining us now in Firing Room 4 at our Public Affairs console is Shuttle Launch Director Mike Leinbach.

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00:00:11,070 --> 00:00:18,620
And, uh, Mike, I think we're looking to you to kind of explain how this problem evolved, what it is that you,

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00:00:18,620 --> 00:00:28,210
uh, are seeing and maybe give us some idea what the go-forward plan is and how much time are we going to n

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00:00:28,210 --> 00:00:30,570
Mike Leinbach, Shuttle Launch Director: OK, I'd be glad to do that then. Can you hear me OK?

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00:00:30,570 --> 00:00:32,040
I wasn't hearing you all that well.

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00:00:32,040 --> 00:00:38,100
But, uh, let's see the issue's with one of our auxiliary power units which provides the power to the hydraulic

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00:00:38,100 --> 00:00:42,970
system for the orbiter and the exact problem was some thermos,

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00:00:42,970 --> 00:00:48,330
was a thermostat on one of the fuel lines for that auxiliary power unit and we need to

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00:00:48,330 --> 00:00:52,260
keep those lines warm to keep them from freezing on orbit.

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00:00:52,260 --> 00:00:57,940
So we have two thermostats, two heaters for each fuel line for each APU.

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00:00:57,940 --> 00:01:03,900
And on auxiliary power unit number one, one of those two heater units failed and the

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00:01:03,900 --> 00:01:07,190

troubleshooting we did on it proved that it was a hard failure.

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00:01:07,190 --> 00:01:11,410
We were not able to get it to come to life, no matter what we did.

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00:01:11,410 --> 00:01:17,070
We tried to let the line cool down just by normal means and to see if the, uh,

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00:01:17,070 --> 00:01:20,570
thermostat on that heater would kick in.

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00:01:20,570 --> 00:01:26,850
That did not happen. We tried to command the heater from the cockpit of the orbiter, that did not happen either

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00:01:26,850 --> 00:01:33,270
so we know we had a hard failure in that heater string for that one auxiliary power unit.

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00:01:33,270 --> 00:01:39,840
There is also one heater upstream of that that is also exhibiting some funny behavior.

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00:01:39,840 --> 00:01:45,920
So what we believe we have now is a problem in one of our LCAs, a load control assembly,

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00:01:45,920 --> 00:01:54,910
it's essentially a switch box that says we probably have a short actually in that box or in one of the electrical

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00:01:54,910 --> 00:01:58,480
lines to that box or from that box, we're not quite sure yet.

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00:01:58,480 --> 00:02:03,120
We won't know until we get into the aft of the orbiter and do some detailed troubleshooting.

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00:02:03,120 --> 00:02:10,550
But the issue is we didn't want to commit to flight with only one of two heaters on those auxiliary power unit

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00:02:10,550 --> 00:02:16,600
fuel lines because of the chance that if you lost that one good one on orbit, then you run the very high risk of

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00:02:16,600 --> 00:02:22,150
freezing the fuel in that line and therefore the auxiliary power unit would not function and therefore you

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00:02:22,150 --> 00:02:28,690
wouldn't have full hydraulic power, which is a case you never want to get into for reentry without,

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00:02:28,690 --> 00:02:33,270
uh, hydraulic power coming from one of te three auxiliary power units.

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00:02:33,270 --> 00:02:39,040
So the course of action today is to scrub. We're in the process of draining the external tank right now,

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00:02:39,040 --> 00:02:45,930
that'll take another hour or so. We'll set up to gain entry into the aft compartment of the orbiter overnight

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00:02:45,930 --> 00:02:49,390
tonight and probably tomorrow afternoon we'll get into the aft,

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00:02:49,390 --> 00:02:54,720
start putting in our platform sets to get to this load control assembly,

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00:02:54,720 --> 00:02:59,840
which is down inside the aft quite a ways and so it's going to take us a bit of time to get in and do that.

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00:02:59,840 --> 00:03:06,620
And then once we're in the avionics bay where that LCA exists, we'll be able to do our troubleshooting and see

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00:03:06,620 --> 00:03:11,090
we ned to change out that box or whether we find a short in the line, that type of thing.

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00:03:11,090 --> 00:03:17,110
So right now, obviously it's a scrub turnaround scenario of a minimum of 72 hours right now.

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00:03:17,110 --> 00:03:22,930
We've declared a minimum of 72 and I'm going to have a scrub turnaround meeting with my launch team at 2:3

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00:03:22,930 --> 00:03:29,410

where we will refine that plan based on engineering's input to see what sort of, what level of troubleshooting

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00:03:29,410 --> 00:03:33,780
they want to do to see if it extends that 72 hours even longer than that.

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00:03:33,780 --> 00:03:38,080
But today the orbiter's not ready to fly and as we always say in this business,

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00:03:38,080 --> 00:03:43,480
'We will fly . . . We will not fly before we're ready,' so that's the case we're in today.

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00:03:43,480 --> 00:03:48,260
George Diller, NASA Commentator: So right now we're less than 72 hours but until you get through

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00:03:48,260 --> 00:03:52,470
the troubleshooting in the aft, you really can't tell how much more time you would need.

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00:03:52,470 --> 00:03:56,550
Leinbach: That's exactly right. We're absolute minimum three days scrub turnaround now.