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00:00:02,950 --> 00:00:07,470

\h George Diller/IRIS Launch Commentator: This is Pegasus Launch Control at an elapsed time of 21 min

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00:00:07,470 --> 00:00:12,700

\h 42 seconds into the flight of the IRIS spacecraft.

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00:00:12,700 --> 00:00:19,780

\h And now joining us here at the console is Tim Dunn, our NASA launch director for tonight's mission.

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00:00:19,780 --> 00:00:28,780

\h And, Tim, first of all tell us briefly what you know about the spacecraft at this point.

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00:00:28,780 --> 00:00:31,420

\h Tim Dunn/NASA Launch Manager: So, George, we're thrilled.

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00:00:31,420 --> 00:00:35,990

\h We're very excited Spacecraft ■ we've made initial contact with it through the TDRS network.

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00:00:35,990 --> 00:00:38,930

\h Gotten good data back.

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00:00:38,930 --> 00:00:45,290

\h The solar arrays did begin to deploy and everything is proceeding right on track with the nominal,

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00:00:45,290 --> 00:00:49,540

\h expected timeline after spacecraft separation from Pegasus.

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00:00:49,540 --> 00:00:53,480

\h Diller: Tell us about the flight. Early on it seemed to go well.

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00:00:53,480 --> 00:01:00,170

\h And then it got interesting toward the end in terms of what we were able to learn.

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00:01:00,170 --> 00:01:01,950

\h Can you give us some insight on that?

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00:01:01,950 --> 00:01:06,950

\h Dunn: It was a thrilling afternoon here at Vandenberg Air Force Base as we watched the

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00:01:06,950 --> 00:01:10,160

\h L-1011 prepare to take off and head out over

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00:01:10,160 --> 00:01:14,680

\h the Pacific Ocean and head northwest, make its turn.

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00:01:14,680 --> 00:01:20,790

\h We had relatively few issues. One minor range asset,

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00:01:20,790 --> 00:01:23,820

\h located down at Point Mugu, gave us a little bit of trouble,

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00:01:23,820 --> 00:01:27,100

\h but we were able to bring that back in online.

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00:01:27,100 --> 00:01:33,500

\h We experienced a little bit of signal issue with our FTS system.

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00:01:33,500 --> 00:01:37,210

\h You may have heard the AGCs were erratic at times.

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00:01:37,210 --> 00:01:46,690

\h the aircraft in relation to the ground assets here at Vandenberg and the Western Range.

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00:01:46,690 --> 00:01:53,300

\h Once we made the turn, coming back toward the south, AGCs locked in very well.

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00:01:53,300 --> 00:01:56,340

\h We were able to do those final FTS checks ■ no problem.

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00:01:56,340 --> 00:01:57,650

\h Diller: Automatic Gain Control ■

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00:01:57,650 --> 00:02:01,300

\h Dunn: Yeah, Automatic Gain Control on those AGC values, right.

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00:02:01,300 --> 00:02:05,340

\h So, that put us minutes away from launch.

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00:02:05,340 --> 00:02:10,200

\h One of the critical events that happen with Pegasus is activate a

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00:02:10,200 --> 00:02:17,580

\h thermal battery onboard Pegasus that is able to move the fins on the rudder of the vehicle.

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00:02:17,580 --> 00:02:24,520

\h So we made that activation at approximately 45 seconds prior to drop.

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00:02:24,520 --> 00:02:30,310

\h And you may have heard the repeated call about "fin sweep, fin sweep."

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00:02:30,310 --> 00:02:36,370

\h That's not fully unexpected. We don't typically see that in flight,

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00:02:36,370 --> 00:02:43,380

\h but the procedure does account for it. And we reissued the can't man numerous times.

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00:02:43,380 --> 00:02:47,700

\h And, I think it was on about the fifth reissuance of that command we did get

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00:02:47,700 --> 00:02:50,850

\h movement of the fins. And once you get initial movement verified,

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00:02:50,850 --> 00:02:53,230

\h you know you're going to be good for flight.

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00:02:53,230 --> 00:02:56,210

\h So, we got through that, it was a very tense moment,

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00:02:56,210 --> 00:02:59,120

\h as you can imagine, here in the control center.

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00:02:59,120 --> 00:03:05,960

\h But once we cleared that, we were about 30 seconds away from launch.

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00:03:05,960 --> 00:03:11,560

\h Had a nominal drop from the L-1011. We had a nominal ignition.

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00:03:11,560 --> 00:03:14,960

\h First, second and third stage burns were all very good.

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00:03:14,960 --> 00:03:18,680

\h You may have heard, we did lose downrange telemetry real time.

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00:03:18,680 --> 00:03:23,760

\h We did have an aircraft in the Pacific Ocean downrange that was scheduled ■

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00:03:23,760 --> 00:03:26,480

\h that did pick up telemetry data from Pegasus.

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00:03:26,480 --> 00:03:32,190

\h However, due to an onboard issue, they were not able to retransmit that data to us live.

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00:03:32,190 --> 00:03:35,140

\h We do have that recorded on the aircraft and we'll be reviewing

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00:03:35,140 --> 00:03:38,580

\h that when the plane lands and we get those tapes.

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00:03:38,580 --> 00:03:42,150

\h Diller: Alright, I think we were watching for some video from the

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00:03:42,150 --> 00:03:48,400

\h L-1011 about to touch down back here at Vandenberg.

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00:03:48,400 --> 00:03:56,020

\h The indication, though, we had a good flight actually came in from the

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00:03:56,020 --> 00:03:59,600

\h Tracking and Data Relay Satellite told us the satellite was,

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00:03:59,600 --> 00:04:02,800

\h I guess, the satellite where it should be when it should be.

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00:04:02,800 --> 00:04:07,970

\h Dunn: We were able to confirm we had a nominal spacecraft separation from Pegasus,

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00:04:07,970 --> 00:04:10,770

\h even though we didn't have the downrange telemetry asset,

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00:04:10,770 --> 00:04:14,340

\h we did have the on orbit TDRS network of satellites.

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00:04:14,340 --> 00:04:18,250

\h And they were able to pick up and confirm spacecraft separation and turn

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00:04:18,250 --> 00:04:23,430

\h on and give us that initial indication that all the initial sequence,

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00:04:23,430 --> 00:04:36,150

\h including solar array deployment was nominal.

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00:04:36,150 --> 00:04:43,190

\h Diller: That's our chase plane coming back, that provided the video to us of the deployment and drop.

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00:04:43,190 --> 00:04:49,430

\h Dunn: I'd like to thank our friends at Dryden for supplying us with the beautiful,

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00:04:49,430 --> 00:04:55,190

\h onboard chase video that we were able to see all afternoon.

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00:04:55,190 --> 00:05:00,190

\h Diller: So the chase plane is on the ground, the L-1011 won't be far behind.

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00:05:00,190 --> 00:05:05,040

\h So, Tim, we'd like to thank, thank you very much for giving us a status.

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00:05:05,040 --> 00:05:08,590

\h It appears we've had a successful launch. And, at this point,

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00:05:08,590 --> 00:05:12,000

\h it appears we've got a happy spacecraft on orbit.

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00:05:12,000 --> 00:05:14,230

\h Dunn: We've got a very happy spacecraft on orbit.

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00:05:14,230 --> 00:05:17,190

\h We've got a thrilled launch team on the ground.

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00:05:17,190 --> 00:05:22,080

\h And this has been just a great couple of weeks we've had here at Vandenberg.

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00:05:22,080 --> 00:05:27,160

\h Would like to thank Col. Boltz, 30th Space Wing commander.

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00:05:27,160 --> 00:05:29,790

\h His team provided exceptional support to us.

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00:05:29,790 --> 00:05:32,820

\h We worked through a couple of difficulties on the range,

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00:05:32,820 --> 00:05:38,330

\h but only cost us one day. And here we are with a successful launch on a backup day.

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00:05:38,330 --> 00:05:42,880

\h We're very happy. Would like to give a shout out to Albert Sierra.

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00:05:42,880 --> 00:05:49,560

\h Albert, I hope you are still watching us from Brevard County. We miss you and we love you.

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00:05:49,560 --> 00:05:53,710

\h Diller: Albert Sierra is one of our mission managers at

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00:05:53,710 --> 00:05:57,090

\h Kennedy Space Center and is key to the Launch Services Program.

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00:05:57,090 --> 00:06:04,810

\h And he has had a setback, but hope will bring him back on to the team very shortly.

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00:06:04,810 --> 00:06:06,580

\h Dunn: Absolutely.

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00:06:06,580 --> 00:06:11,480

\h Diller: So, at this point we are getting ready to show our launch replays.

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00:06:11,480 --> 00:06:16,960

\h And we're also going to keep an eye out for the L-1011 arriving back here at Vandenberg.