

Flight 1892
November 29, 2001
Voice Transcriptions*
IMPROVE-2



12:23 AM

PH: This is University of Washington Flight 1892 on 29 November. That is Thursday, 29 November, UTC time, although it's Wednesday local time. This is an IMPROVE-2 transit flight from Eugene back to Paine Field, but we'll be doing a full set of profile measurements through the clouds as we climb out of Eugene. On board Hobbs, Rangno, Wilson, Salazar, Rasmussen, McMillen, Sutherland and Calvin Ingram.

12:24 AM

PH: We've got a liquid water profile as we climb up through this cloud over Eugene, Oregon.

12:25 AM

PH: In 2-DC measurements, plenty of crystals, big ones. Getting HVPS measurements.

12:26 AM

PH: It's approximately 9,000 ft, still in clouds.

12:29 AM

PH: The J-W is on again. The J-W is on and is tracking reasonably well the FSSP and the PVM. It was on at the beginning of the last flight earlier today, but then went off for most of the rest of that flight. Getting images on the CPI.

12:30 AM

PH: Just passed through cloud top at 10,900 ft on pressure altitude, although there are some tops higher than that around us.

12:31 AM

* AR = Art Rangno, CI = Calvin Ingram, KM = Ken McMillen, LS = Larry Sutherland, PH = Peter Hobbs, RR = Roy Rasmussen, TW = Tom Wilson, VS = Vidal Salazar

AR: 0032. I'm just getting up in the bubble and taking a look around. Nice cumulus turrets here we're flying amongst. It looks like they stick up anywhere from 1,000 to maybe (there's a tall one) 2,000 ft above the aircraft. I'm looking back now. I did not see the top of the one we're going into unfortunately. It looks like it might be a little taller. Everything seems to be working. The CPI was imaging a minute ago as Peter noted.

12:32 AM

AR: White turbulence. These are post-frontal-type cumulonimbus clouds following the frontal passage. Indeed it was a frontal passage as Peter and Roy surmised on the earlier flight today over the Cascades.

PH: Climbing through 12,000 ft, still cloud here.

AR: There are jillions of short columns and I really don't see needles. Well maybe there is a couple in there.

12:34 AM

AR: I would now classify this as a mesoscale convective complex due to the duration that we've been flying in it, no indication that we are near cloud top. We've already picked up a little clear icing.

PH: Art, we're no longer getting images on the CPI.

AR: It stopped again?

PH: Yes.

AR: I'll come up and see what I can do.

12:35 AM

PH: It says the disk is full.

AR: That's interesting. That sounds like a false error.

PH: Just going through 15,000 ft on the pressure altitude and we're still near cloud top.

AR: Looking back at that mesoscale complex that we just passed through, it looks like tops are running back there probably a kilometer at peak above the flight level.

12:37 AM

AR: It looks like clear sailing here for quite a while. Nice cumulonimbus tops to flight level, which is about 15,000 ft here. Off at 2 o'clock and as I say it was a mesoscale complex back behind us multicelled complex.

12:38 AM

TW: Art, do you have another disk for this thing?

AR: Negative. No. Is it the slide out type?

TW: Yes. Was there an extra in your room there where the machine used to be?

AR: You mean back at the UW? Yes, I think maybe there might be back there.

TW: Any idea where?

AR: I'm guessing it would be where we installed it in that computer that was used for the CPI at one point and in my room on that table.

TW: I'll go grab it then. I think Stan has that computer now. So I'll see if it's still in there.

AR: What is the capacity of these slide outs?

TW: 8 Gig.

AR: How could we possibly filled it up that much.

TW: There was a ton of files from today, 11/28, I believe. Yes, 11/28.

PH: Did it have some of the test flights on it?

TW: I'm moving those off to another disk, but that disk is going to be full now. I mean I can just delete everything from the test flights.

AR: We didn't get too much on the test flights, but it maybe these faster images that were being fired maybe they're continuous. I'm thinking right now that may have been firing in clear air and then they were building up a huge amount.

TW: Right, and even if you have time to go through them all you don't know which ones to get rid of. I'll drop by and see if I can find that disk I guess. I don't have keys to get into anybody's office.

AR: Yes. Well maybe I should do that.

TW: Do you have keys to get in other people's office?

AR: Well, it's in my office.

TW: No, somebody uses that computer now.

AR: Some one took it.

TW: Yes. That is some other computer there now. It's like a Sun. I think Stan has it.

AR: No I don't have any keys to get into anybody else's office.

PH: I have a full set of keys. Take mine.

12:42 AM

AR: I'm looking back at the cloud we just went through.

PH: I'll give you my keys and you return them to me tomorrow morning.

AR: Roger. Looking back that turret it looks like it was about 2,000 to 3,000 ft above the aircraft and that should stand out as a singular event because we really haven't done anything, gone through anything since that.

12:43 AM

PH: Art, have you checked the Ophir?

AR: Roger. It looks pretty good. It's tracking the chilled-mirror or has been anyway. I haven't looked this second.

PH: Good.

AR: Right now it's -36°C to -33°C . Actually usually don't do very well when the absolute humidity is down in that region where the dew point is -33°C .

12:45 AM

TW: Art, that last flight recorded 5.5 Gig of CPI data.

AR: That's not right. There's something wrong there because we weren't in cloud that much. Remember we had a lot of clear air legs.

TW: We've got to sift through that before we make CDs of it.

AR: Yes. We've got to figure out what is going on there.

12:47 AM

TW: Art, I cleared off about 1.5 Gig of space for you.

AR: Okay. I'll get it going again. There are going to be a few more clouds with precip in them up ahead here.

12:49 AM

AR: Dead ahead we're heading into a stratiform precipitating system, no convection indicated. That's quite different from what we passed through 10 to 20 min ago. It looks like the layers merge or ice and precipitation falls from the higher layer into lower layers dead ahead.

12:58 AM

PH: We haven't got any CN measurements again.

VS: The CN isn't working at the moment.

PH: It's not displaying.

1:04 AM

TW: I'll leave a note to Don and maybe he can look at it in the morning if he gets here earlier than I do, otherwise I don't know exactly what's wrong.

PH: You think CNC-2 is the better one to use.

TW: I don't know now. After that last flight it worked.

PH: You put CNC-1 on my strip display.

TW: I'll just have to check to see which one we can get working. They were both pretty much equally difficult or equally easy to get working.

PH: They were both working fine in SAFARI and in CLAMS.

TW: They were just kind of neglected until a couple of days ago.

PH: Once we find what has to be done, then that is something that Vidal can do.

TW: Okay.

PH: Provided you show him what to do.

TW: I think it must be something connection wise or something out of the back, but it's too dark right now to look under there. I can't see.

PH: We've also got the J-W up on this flight. So there's some intermittent data on the J-W.

1:06 AM

PH: The J-W is now out again.

1:07 AM

TW: There's 3 min until we land so I'm going to start shutting stuff down again. Three min until we need to go back to the back.

Summary of UW Flight 1892

1:09 AM

PH: A quick summary of this flight, which was basically a transit flight in postfrontal conditions back to Paine Field from Eugene. We did get a nice profile in climbing out of Eugene up to about 15,000 ft. Good cloud physics measurements, but thereafter not much by way of cloud measurements on the way back to Paine Field.

1:11 AM END OF TAPE