

1
00:00:11,139 --> 00:00:17,220

The Korea U.S.-Air Quality mission, or KORUS-AQ, is a joint field study between NASA and the

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00:00:17,220 --> 00:00:23,160

Republic of Korea aiming to advance the ability to monitor air pollution from space. The campaign

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00:00:23,160 --> 00:00:28,980

will assess air quality across South Korea using observations from aircraft, ground sites,

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00:00:28,980 --> 00:00:35,350

ships and satellites to test air quality models and remote sensing methods. But before the

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00:00:35,350 --> 00:00:39,309

teams can get ready to head to Korea there's a great deal of preparation that needs to

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00:00:39,309 --> 00:00:44,649

happen including integrating dozens of science instruments onto NASA's DC-8 and King Air

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00:00:44,649 --> 00:00:50,350

aircraft. The team at NASA Armstrong has spent this month preparing each aircraft with a

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00:00:50,350 --> 00:00:57,250

suite of sensors, probes, and hardware. Do side and side, whichever one you want to do?

9
00:00:57,250 --> 00:01:03,199

Get the two sides. Start to finish on the upload the instruments will come in from the

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00:01:03,199 --> 00:01:07,929

experimenters, we'll stage them and get them organized. They'll take them into the laboratory,

11
00:01:07,929 --> 00:01:12,030
put them together if they need to assemble
their stuff in the laboratory. Will inspect

12
00:01:12,030 --> 00:01:17,100
it, prior to be installed on the airplane
integrated into the aircraft. Make sure it's

13
00:01:17,100 --> 00:01:22,140
able to fly. And then we go on, start in the
front and start loading the instruments into

14
00:01:22,140 --> 00:01:26,020
the aircraft front to back. A little prior
to that we will if you notice that we got

15
00:01:26,020 --> 00:01:29,930
a lot of probes on the aircraft. The probes
will get installed first. There's quite

16
00:01:29,930 --> 00:01:34,119
a variety of different probes that have to
go into the ports of the windows. This particular

17
00:01:34,119 --> 00:01:38,290
upload, were probably in the third or fourth
week of our upload. It's a very large, for

18
00:01:38,290 --> 00:01:44,040
even for us it's a very large upload. There's
twenty-six experiments on board and each one

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00:01:44,040 --> 00:01:50,159
of them has to go on separately, we treat
them, each one is a separate entity so getting

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00:01:50,159 --> 00:01:55,119
them all sorted out is really quite the challenge.
After all the equipment is installed in the

21
00:01:55,119 --> 00:01:58,939
airplane we usually leave the experiments
alone and so they can play with their toys

22
00:01:58,939 --> 00:02:02,259
and make sure that everything is working.
Once the airplane is ready for flight we'll

23
00:02:02,259 --> 00:02:06,649
take it out in do what we call a shake flight
which is to verify all the instruments had

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00:02:06,649 --> 00:02:11,060
been installed that we don't have anything
loose moving around causing any problems verifying

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00:02:11,060 --> 00:02:15,109
again that the airplane is capable flying
and doing what we expect it to do. The difference

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00:02:15,109 --> 00:02:20,510
between this aircraft and other aircraft is
the fact that we do have up to fifty, sometimes,

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00:02:20,510 --> 00:02:25,010
civilians. I mean these people are from all
over the globe. There trusting us to provide

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00:02:25,010 --> 00:02:28,430
them with a safe airplane and all they got
to worry about is doing their science. Not

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00:02:28,430 --> 00:02:33,129
a big deal Dan, but you got a couple of cables
that could use a little bit of security. This

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00:02:33,129 --> 00:02:37,540
is the hardest working crew that I've seen.
I've had the privilege of working with.

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00:02:37,540 --> 00:02:41,420

It's a hand built load, every single time
we put these things on, it cannot get done