1
00:00:01,040 --> 00:00:02,650
>> We celebrated first here

2
00:00:02,650 --> 00:00:04,860
at the Payload Operations
Integration Center;

3
00:00:04,860 --> 00:00:07,510
for the first time, two
researchers were able to connect

4
00:00:07,510 --> 00:00:09,350
with astronauts at the same time

5
00:00:09,350 --> 00:00:11,350
that their experiments
were being performed.

6
00:00:11,350 --> 00:00:14,730
Now that may not sound like a
big deal but it is a big deal

7
00:00:14,730 --> 00:00:16,150
and the person who
has to facilitate

8
00:00:16,150 --> 00:00:19,280
that is called a Payload
Communicator or a PAYCOM.

9
00:00:19,280 --> 00:00:22,690
Here in the POIC and Stacy Jones
joins me now, she is a PAYCOM

10
00:00:22,690 --> 00:00:26,350
and Stacy, first of all,
tell us what a PAYCOM does.

11
00:00:26,350 --> 00:00:30,170

>> Well, a PAYCOM serves as the
link between the ground team,

12
00:00:30,170 --> 00:00:32,670
that's the scientists and
our other flight controllers,

13
00:00:32,670 --> 00:00:35,500
we serve as a link to them
and to the astronauts onboard.

14
00:00:35,500 --> 00:00:38,810
>> It's a very important job but
now it's a little busier, right?

15
00:00:38,810 --> 00:00:40,220
>> It is, so we're responsible

16
00:00:40,220 --> 00:00:41,940
for the real time
voice communication

17
00:00:41,940 --> 00:00:45,200
on the International Space
Station and previously,

18
00:00:45,200 --> 00:00:47,690
there had only been two space
to ground audio channels

19
00:00:47,690 --> 00:00:50,670
that we shared with
six crewmembers onboard

20
00:00:50,670 --> 00:00:53,660
and then amongst five
control centers on the ground.

21
00:00:53,660 --> 00:00:57,100
>> Wow, so now you

have four channels

22
00:00:57,100 --> 00:01:00,000
and these investigators are
very excited about this, right?

23
00:01:00,000 --> 00:01:02,310
>> Not only the investigators,
we're all really excited.

24
00:01:02,310 --> 00:01:05,530
As you can imagine, it was tough
to share all of those resources

25
00:01:05,530 --> 00:01:08,890
so with the addition of
the KU Com unit onboard,

26
00:01:08,890 --> 00:01:10,430
once the guys installed
the hardware

27
00:01:10,430 --> 00:01:13,300
which was only days before
this experiments ran,

28
00:01:13,300 --> 00:01:16,240
we actually were able to double
our capacity for audio channels

29
00:01:16,240 --> 00:01:17,840
so instead of two,
we now have space

30
00:01:17,840 --> 00:01:19,670
to grounds three and four added.

31
00:01:19,670 --> 00:01:21,900
In addition, we also had
extra video channels,

32
00:01:21,900 --> 00:01:24,160
it's really always nice to get
to follow along with the crew

33
00:01:24,160 --> 00:01:27,330
and see what they're doing
instead of just talking to them.

34
00:01:27,330 --> 00:01:28,910
>> Let's talk a little
bit about the experiments

35
00:01:28,910 --> 00:01:30,730
that were performed
that day, 'kay?

36
00:01:30,730 --> 00:01:32,660
>> To begin, we had CFE,

37
00:01:32,660 --> 00:01:35,590
which is a capillary flow
experiment whose aim is to work

38
00:01:35,590 --> 00:01:39,880
with different wetting angles
and to develop in the end,

39
00:01:39,880 --> 00:01:43,350
better spacecraft fuel and
fuel tanks so that in hopes

40
00:01:43,350 --> 00:01:47,770
that we can improve our
abilities to get us to Mars.

41
00:01:47,770 --> 00:01:50,680
>> And then the other one,
we're talking about fire, right?

42
00:01:50,680 --> 00:01:52,340
>> Yeah, we were -- we
got to work with fire,

43
00:01:52,340 --> 00:01:54,800
the astronauts always
really enjoy both of those

44
00:01:54,800 --> 00:01:57,800
but it was the BASS experiment,
the burning and suppressions

45
00:01:57,800 --> 00:01:59,780
of solids in space
and what they want

46
00:01:59,780 --> 00:02:02,490
to do is basically take a lot
of different materials and prove

47
00:02:02,490 --> 00:02:06,480
that they burn as well as if
not better than they would

48
00:02:06,480 --> 00:02:09,320
in normal gravity as
they do in microgravity

49
00:02:09,320 --> 00:02:11,640
under the same identical
conditions.

50
00:02:11,640 --> 00:02:13,190
>> So while these guys are
talking to these astronauts,

51
00:02:13,190 --> 00:02:14,750
you guys are just
kicked back, right?

52
00:02:14,750 --> 00:02:16,490
>> You would think so
and it does take a lot

53
00:02:16,490 --> 00:02:19,470
of the pressure off of us
because as you can imagine,

54
00:02:19,470 --> 00:02:22,800
we work 24/7 and there's always
something for our teams to do

55
00:02:22,800 --> 00:02:24,810
but we pay very close
attention and make sure

56
00:02:24,810 --> 00:02:25,880
that things are going well

57
00:02:25,880 --> 00:02:29,360
because our PAYCOMs are always
the crew advocate so we want

58
00:02:29,360 --> 00:02:31,330
to make sure things are
going well for them up there

59
00:02:31,330 --> 00:02:33,390
and in addition, maybe
they lost an item

60
00:02:33,390 --> 00:02:35,100
or maybe there's something
else that the team there

61
00:02:35,100 --> 00:02:37,760
in Huntsville can help with
that the scientists may not have

62

00:02:37,760 --> 00:02:38,960
access to.

63
00:02:38,960 --> 00:02:40,100
>> Why is it so important

64
00:02:40,100 --> 00:02:43,510
that these researchers speak
directly with the astronauts?

65
00:02:43,510 --> 00:02:45,910
>> Well, the PAYCOMs are trained
and we work with the crew

66
00:02:45,910 --> 00:02:48,510
to build rapport so that
we know what they expect;

67
00:02:48,510 --> 00:02:51,340
the language they use so
that we can communicate

68
00:02:51,340 --> 00:02:53,090
with them as best we can.

69
00:02:53,090 --> 00:02:54,850
But sometimes you
have such intricate

70
00:02:54,850 --> 00:02:57,610
and really fast paced
experiments when you're dealing

71
00:02:57,610 --> 00:03:00,110
with fluids shifting and when
you're dealing with fire,

72
00:03:00,110 --> 00:03:02,870
it makes better sense to enable
those principle investigators

73
00:03:02,870 --> 00:03:05,890
so that they can provide that
instantaneous answer instead

74
00:03:05,890 --> 00:03:08,270
of going through another
link and delaying the answer

75
00:03:08,270 --> 00:03:11,350
by maybe seconds which is
critical for those experiments.

76
00:03:11,350 --> 00:03:13,900
>> And your job is critical and
I know that you even traveled

77
00:03:13,900 --> 00:03:15,940
to Europe to train folks there.

78
00:03:15,940 --> 00:03:18,670
>> Yes, I actually was the
first female and the first lady

79
00:03:18,670 --> 00:03:20,620
on the Euro COM team
and I got to work

80
00:03:20,620 --> 00:03:22,010
at the European Astronaut Center

81
00:03:22,010 --> 00:03:24,830
for almost four years doing
the same job and it was

82
00:03:24,830 --> 00:03:26,420
such a pleasure to come
back here to Huntsville,

83

00:03:26,420 --> 00:03:28,930
my home town, and get to work
with some of the friendly faces.

84
00:03:28,930 --> 00:03:31,550
And I have to give special
thanks to Carol Wagner,

85
00:03:31,550 --> 00:03:34,460
the lady who was by my side that
day and she helped make sure

86
00:03:34,460 --> 00:03:36,020
that everything went smooth.

87
00:03:36,020 --> 00:03:36,400
So.

88
00:03:36,400 --> 00:03:38,100
>> Awesome; you always
make things smooth.