00:00:00,000 --> 00:00:06,929
station this is Houston are you ready

00:00:02,100 --> 00:00:09,480
for the event Houston this is station

00:00:06,929 --> 00:00:10,740
we're ready for the event South by

00:00:09,480 --> 00:00:11,519
Southwest this is Mission Control

00:00:10,740 --> 00:00:13,339
Houston

00:00:11,519 --> 00:00:15,480
please call station for a voice check

00:00:13,339 --> 00:00:17,809
station this is South by Southwest how

00:00:15,480 --> 00:00:17,809
do you hear me

00:00:17,960 --> 00:00:31,679
and South by Southwest we hear you loud

00:00:21,239 --> 00:00:33,988
and clear and good morning hi it's a

00:00:31,678 --> 00:00:35,729
real honor to get to talk with you thank

00:00:33,988 --> 00:00:38,099
you for taking our questions my name is

00:00:35,729 --> 00:00:41,369
Kyle Jones I am an Earthling from

00:00:38,100 --> 00:00:42,960
Nashville Tennessee despite all your
training and preparation what is something you do not expect from your experience in space thank you yeah that's a great question and I think for me you know this was my first flight and so the biggest difference or what you really can't train for is actually floating and what it's like to be in microgravity all the time see we can get just a few seconds during the training during the operations with or practicing for EPA's spacewalks we use the pool but it doesn't give you that true feeling of what it's like to be a
microgravity and that takes some time to get used to once you get here.

Thank you, hi! I'm Dan Edwards from Atlanta, Georgia, and my six-year-old son has a question for you. Can you see volcanoes in space? Good question! We see a lot of volcanic activities and when there's an eruption, ground folks tell us to take pictures. We were able to capture a lot of volcanic activities; it's really vivid and sometimes very amazing to see the air and water vapors coming out of the volcanoes.

Thank you, hi! I'm
tipper at amra I have two questions for

one is what Kyle mission are you working on right now and the other one and how do you keep in touch with your family

well that's an easy one we have lots of ways to communicate with our family we actually have a telephone on board where we can call our families they pretty much show almost any time of the day and then about once a week we do a video conference with our family and of course we have email so we could stay in touch with our friends and our family
quite a bit

your other question is what is our

mission well basically we're doing

science and research up here we have

probably about 200 experiments will go

on while we're up here for the six-month

period and it ranges everything from

biology to earth observation to looking

for a dark matter and in deep space so

it's a wide range of experiments going

on at any time hello this is Peggy

hazley from Planet Earth I just had to

say that and I was wondering what sleep

is like in outer space can you describe
what it's like to sleep when you don't have day and night what's happening to your circadian rhythms to your dreams do you snore differently what's it like out there well hi Peggy from Earth you know sleeping up here is actually is actually quite comfortable of course as I was stating earlier in the microgravity environment there's no up or down so we don't have a bed that we lay on or a cot or anything like that we have our little cubicle that's about the size of a broom closet and in there we have a sleeping bag and we just
attach it to the wall and as far as how do we know when it's time to go to bed and all that well we're on GMT time up here Greenwich Mean Time and so we just go by the clock and so about 10 to 10 to 11 o'clock at night whoever someone will turn out all the lights and that kind of is a good indication that it's time for us to go to sleep and it's actually quite dark and quite comfortable inside our quarters and then you just crawl in your sleeping bag and you you it's really up to you some people like to
when they sleep they'll have their arms

kind of hanging out and they'll float

some people like to be more of cocooned

inside and it's actually quite

comfortable thank you hi I'm Nicola from

London I'm also on gmt times and this is

one of the most exciting things has ever

happened my question is what does space

smell like yeah actually I hope we don't

smell very much in the space station but

I can tell you when Rick and Mike went

out to spacewalk when they came back I

could smell the space of the vacuum it

probably comes from some external

surface of the space station and it's
some mechanical smell and it's very unique as soon as we open the hatch when they came in after a spacewalk is smell that so that's a very unique smell but other than that I think inside of the space station we have really good air circulation ventilation so it doesn't smell very differently from from the ground hello my name's Joe curry my question is what are some ways NASA inspire students to be our future scientists and astronauts well we like to inspire folks on a daily
basis up here that's one of the reasons

why we communicate with folks in these events right now is to try to inspire folks to motivate folks to show them what's possible you know when I was growing up I never knew that I could be an astronaut until I saw an advertisement in a magazine and I answered that ad of course it took me nine years of hard work and applications to eventually get selected but NASA is one of the main reasons for NASA is to promote math promote science to encourage students to study hard and to
go into engineering and technologies and things like that so NASA does a lot of things to try to do that for students we have a lot of outreach programs for teachers in outreach student outreach programs for students on and and astronauts even go off and do Pio events and visit schools on a regular basis so NASA is doing quite a bit in that area hello my name is Miriam likesome and I work in advertising so I'm glad that it works my question is if you could travel to anywhere in the universe where would it be and why well that's pretty
easy it'd be earth you know being being

158
00:07:21,680 --> 00:07:25,519
away from Earth this is an absolutely

159
00:07:23,509 --> 00:07:26,659
incredible experience and it's something

160
00:07:25,519 --> 00:07:28,909
I'll never forget

161
00:07:26,660 --> 00:07:30,650
but I'm getting ready to come home on

162
00:07:28,910 --> 00:07:32,990
Monday night and I'm looking forward to

163
00:07:30,649 --> 00:07:35,269
it you know you see the views of Earth

164
00:07:32,990 --> 00:07:36,620
up here and it's truly stunning and it's

165
00:07:35,269 --> 00:07:39,049
something that never gets old

166
00:07:36,620 --> 00:07:41,149
but at the same time I'm really looking

167
00:07:39,050 --> 00:07:44,120
forward to feeling the earth between my

168
00:07:41,149 --> 00:07:46,429
toes feeling a breeze maybe even

169
00:07:44,120 --> 00:07:48,170
standing out in a rainstorm so earth is

170
00:07:46,430 --> 00:07:51,709
is truly incredible and I think that's

171
00:07:48,170 --> 00:07:58,879
where I'd like to go thank you it's an
honor to speak with you I am Beatrice

from Miami and I wanted to take an Oscar selfie with you guys you don't mind

screen hi you there we are still here my god keep saying something ok yeah we have we still hear you loud and clear and we have not heard the last question could you repeat she took a selfie with you just like at the Oscars this vineet from Jersey City New Jersey you guys are awesome and my question is at Earth we all are always stressed do you get stressed up in space or you handle it yeah actually all of us on board the
space station go through the emergency

medical training like a CPR and then the

injury treatment and in case of an

emergency happens we followed procedure

to to treat and we also have a real-time

support from the flight surgeons on the

ground so we will be able to cope with

that kind of emergency situation

thank you hello I’m Ben from here in Austin Texas and I was curious if you

guys had any protection from cosmic

radiation up there

if the magnetosphere protects you since

you're above the ionosphere just just
worried about that my wife is a flight attendant and I kind of worry about her when she's up in the planes but you guys are up at 250 miles well we don't have any special protection you know the obviously the structure protects us a little bit but know we are above the protection of the atmosphere so we do absorb quite a bit of radiation but we monitor that monitor that very closely we have radiation monitors throughout the vehicle we have radiation monitors that we have to carry on our person at all time and then that numbers are added
up over our lifetime and if we exceed a

certain radiation limit then we're no

longer allowed to fly thank you hi Joe

my name is Christine and I'm from

Atlanta

so my question and this is something you

just kind of addressed a little bit but

things that you're missing about earth

about you know just your normal kind of

daily creature comforts if there's

anything in particular that you're sort

of surprised that you missed while

you've been up there other than of

course friends and family yeah actually

there are things that you do miss and I
would say one of them that I missed is a shower up here we don't have a shower and so when we clean up we just use a wet cloth to wash off and then a towel to dry off but I can't wait to have that shower and the other thing that we get occasionally but not as often as I'd like and that's the fresh fruit sometimes will refresh produce when we have a resupply vehicle will usually get a little bit but it doesn't last very long thank you hi hello I'm Jenny from Denver and I'm in the running for one of the bigger space geeks in the
room I went to Space Camp three times as a child so I might pass out I just wondered if you guys have ever been really scared while you're on Annie VA and if so what caused it it's okay to admit have I ever been scared on a spacewalk I've done a few spacewalks and I can't say that I ever been scared but there there is a bit of pressure when you're out there because of the you know you're working on multibillion-dollar hardware it's very easy to do something wrong or break something and you got the whole world
watching you it feels like so there's a lot of pressure on YouTube course to perform and to do things correctly I've never been scared but we definitely worry while we're out there have you ever messed up or dropped anything or that you can talk about do we have to admit that yeah you know we we actually mistakes are making all the time and and hopefully they're minor but that's one of the things that that we train for as well is when you do make a mistake
you've got to go get past it fix

whatever that maybe you did wrong and

keep going because if it happens early

on in the in a six hour Evie a you know

you've got a lot of work to do and you

can't sit there and worry about

something that didn't go quite right

earlier on wonderful thank you so much

you guys moment of a lifetime hi my name

is Taylor Reid and I'm a total space not

since my fiancee did an internship at

SpaceX so he's probably gonna kill me

after I tell them I gotta talk to

astronauts my question for you is do you

get on social networks while you're in
orbit and how do you communicate with

you know your friends and family down

here on earth are you something

snapchats or you know selfies on

Instagram or anything like that yeah we

actually tweet a lot then the you know

Facebook that we use and then actually

we take a lot of pictures of the earth

and what we do in the space station

outside of the space station and tweet

and then send a message and then

actually a lot of people retweet and you

know reply to our tweets and it's really

I am really thankful to see the reaction
of the public and I hope we are extending this excitement of what we do in space through the social media and as far as the communication with the family as.

Rick mentioned we have really great tools to communicate with a family telephone videoconference and emails so I think we really keep in touch with a family on a daily basis thank you so much.

hi my name's Richard just super excited to be here chance you guys just now and I was wondering how did it feel the
first time you saw Earth from space and

has being in space changed the way that

you will get life in humanity yeah it's

you know that's a tough question to

answer it's it's a bit overwhelming

because you just you know you see

pictures of it but when you when you see

it live and and really we talked about

the spacewalks and that's and that's one

of the most amazing things about a

spacewalk as well you know when we look

at the earth through the cupola you've

got the windows that you're looking

through and so there's frame and


everything around it so your views can
be somewhat limited but when you go
outside on a spacewalk in and all
you have is just the visor of your
helmet which you know you can just just
see the earth the incredible expanse of
the earth it's amazing and does it
change your perspective on it yeah I
think there's a couple things that that
you notice about it one I would say that
you don't see any borders and and so I
think that's that's a good thing and you
know we're all part of this one planet
and so you know I think it changes
your outlook on that and and what else
you know the other part is you just realize how precious our planet is and how important it is to take care of it

thank you hi this is Daniel Fisher from London England this is a huge childhood dream come true so thank you my question is how much have life support systems changed on Space Station in the last few years and particularly since the 80s you

yeah the biggest probably the biggest changes that we have incorporated into
the space station as we're trying to recycle everything we're recycling the water so you know we drink the water that we urinate we sweat the compensation has collected that water is purified and then we drink it again but it's probably it's purified probably more pure than any water that I've ever drank before so the air is recycled of course continuously the co2 is scrubbed out and recycled so I think the kind of things that we're seeing on board space stations we're trying to recycle everything because if we go off to the
moon or if we go off to the Mars to Mars

or an asteroid we can't carry all the

water that a person needs to drink on a
daily basis we need to be able to
recycle we can't carry all the air it's
just too much weight too much mass too
much volume so we have to learn to
recycle and of course these technologies
applied to earth we could recycle what
the technologies we develop up here can
be used to recycle water back on planet
earth because eventually we're gonna
start running out of water on earth also
my name is Hayley Thicke and I'm from
Houston Texas I'm actually an intern at

Johnson Space Center and this is a popular question a lot of people are wondering about what did you think about the movie gravity were there situations that were realistic or was it all Hollywood drama actually just before Rick and I launched helper was already there but we watched a movie in Russia and it was pretty exciting movie and upon the space station our life here is is not as exciting as you see on a movie but space walks they conducted was really exciting and it's really fascinating to see them
work outside of the space station so on

the wrong run you know the excitement

that we have is pretty you know similar

to what you see in the movie but we're

having a very safe and efficient

operation everyday here thank you

hello my name's oli calling from London

and when do you think we're going to

become a truly spacefaring species given

that we still haven't set foot on Mars

yeah that's that's a great question I

think it is in our future when that is

I'm not quite sure but I definitely

think that we're gonna you know we'll
take baby steps maybe it's going back to

the moon mondo Mars the asteroid but you

know the what's what's interesting

though is here with the space station

we've had a permanent presence in space

for what the last thirteen years

fourteen years so that's pretty exciting

and that's and that's definitely a step

in the right direction for that that you

know a spacefaring species station this

is Houston ACR on behalf of South by

Southwest thank you very much this

concludes our event
are now resuming operational audio

communication

you