good afternoon thanks for joining us

here at NASA's Johnson Space Center in

Houston we're excited to be here with

the expedition 54 an expedition 55 crew

who will be watching to the

International Space Station from the

Baikonur cosmodrome in Kazakhstan on

december 17th at 1:20 a.m. Central time

which will be 120 p.m. and Baikonur

with us today is first time space flier

scott tingle and the next to him we have

Japanese aerospace astronaut there at

north CJ Kenai and then finally you have

anton shkaplerov from the ross cosmos
Russian space agency it's Cotton the

most first flight and Anton has is a veteran cosmonaut all right I want to recognize also some special guests we have here in the room we have several Houston maker organizations including Innovation Spark which is a nonprofit organization who is committed to the advancement of STEM in the Greater Houston area you will have a chance to ask questions in a little bit after we introduce the crew first let's have Scott Norrish EJ and Anton talk a little bit about their upcoming mission that
they are currently training for and then

we'll take questions for them with that

let me turn to Scott Tingle. Scott, this is your first time leaving this planet.

so how excited are you feeling? What are you looking forward to?

Well, there's a lot of things to be excited about being the first time... almost everything I'm going to do on a day-to-day basis for the timeframe that we from now until I come back will be the first time that I've ever done it and with that, it's just a pure excitement but I think the big thing I'm going to be looking...
forward to is that we've been training

44
00:01:45,540 --> 00:01:49,560
for a long time you know seven years

45
00:01:47,250 --> 00:01:51,359
just at JSC and then two years just for

46
00:01:49,560 --> 00:01:53,219
this mission there's literally been

47
00:01:51,359 --> 00:01:55,409
hundreds and maybe thousands of people

48
00:01:53,219 --> 00:01:57,780
that have had their head their hand in

49
00:01:55,409 --> 00:01:59,670
making us ready and getting the mission

50
00:01:57,780 --> 00:02:01,829
planned and making sure it goes goes

51
00:01:59,670 --> 00:02:03,090
through safe and expeditiously I'm

52
00:02:01,828 --> 00:02:04,648
really looking forward to working with

53
00:02:03,090 --> 00:02:05,880
all those folks on the loops and getting

54
00:02:04,649 --> 00:02:07,500
the science done that they need and

55
00:02:05,879 --> 00:02:10,739
getting the operations done safely and

56
00:02:07,500 --> 00:02:12,360
and expeditiously thank you guys have

57
00:02:10,739 --> 00:02:13,560
been training for a long time and now
we're just couple away from the big launch so thanks excited all right Nora she gay what are you looking forward to for this upcoming mission also your first spaceflight yes this is my first spaceflight and I'm very excited to is flying with these two nice crewmates and Scotland I been working together since 2009 when we selected as an astronaut candidate and anthem our commander is very experienced space flier so I'm pretty much comprehend to this success of our space flight especially this my background is
a medical doctor medical science so I'm looking for doing lots of scientific researches on water station thank you all right so you guys are both our rookies here and you both will be flight engineers on exhibition 54 and also expedition 55 and then Anton our veteran cosmonaut you will be a flight engineer on 54 and also the commander of expedition 55 you've been to the space station before but what are you looking forward to for this mission in those stands abroad yes now stands for open organization on EBU jouvert a bottle to
Cheney which is Sydney napur across me a

key part what we cross the board

engineer a Kotori is not a technical

master presented Modesto Dubin

established a circuit or a mobile

procedure of cosmas in medicine the

cogniser Chilean our specialists I have

prior spaceflight experience I have no

fear going up in space again I have full

confidence in our Soyuz vehicle I was on

board of the ISS practically two years

ago and spent 200 days living and

working on board of the ISS I have great

crew I have full confidence in my

crew I have full confidence in my
wonderful flight engineers I they know

hardware and all that you can

very well and I believe that we're going
to follow the procedures that they

trained us to work with on the ground

thank you all right now we'll start with

questions we have media here and guests

here at Johnson Space Center some

reporters on the phone you can also ask

a question on social media using the

hashtag ask NASA and we also will have

as I said people here in the room and

we'll take questions all right so if you

are on the phone bridge please press

star-1 if you have a question and then
press star 2 to withdraw your question

if it's already been answered

all right you will be allowed one

question and a follow-up please state

your name and affiliation before asking

your question so we'll start with media

and guests in the room here Robert and

please wait for the mic and we'll get

you a mic hi Robert Perlman with collect

space.com for Scott I think it may have

slipped past your expedition but can you

talk a little bit about potentially the

first crew dragon unmanned test arriving

how much preparation you've done for it
as a crew and what that preparation consisted of we didn't really prepare too much for it we you know it's it's on the schedule to happen and if it started looking like it was a realistic target then we would be training quite a bit more the procedures that we would use would pretty much be standard procedures for any visiting vehicle or any transport vehicle to arrive on station so the amount of training that we would do on station real-time just prior to the arrival would probably ramp up and would probably take take a couple of
weeks of training and on getting more familiar with the systems more familiar with the processes and some of the limitations on that but we've had a little bit of overview on drag and you know I used to work Commercial Crew you know several years ago so we all have as a crew we have a general knowledge of the systems and and and how it should work for that but but other than that we don't see it coming into our schedule while we're there but but if it does start looking like it will then then we'll ramp up and start training more
intensely great question and for those
of you who don't know we are looking
forward to Commercial Crew flights where
our contract partners Boeing and SpaceX
are building vehicles to launch
astronauts from America to the space
station so we're very excited for that
all right another question yes my name
is Jared Williams with a creator space
local makerspace in Lake City and I was
going to ask do you have your own
makerspace or are you part of the one
here at NASA cause I know you guys do
have one and if not do you have an
affiliation of with one of the local
maker spaces I do not and I just actually learned about the maker organization as I was preparing for for this interview I got on the web a little bit last night and started looking at all you do and it's it's amazing and and I would like to get more more involved in it when I get back from my mission or maybe during the mission if we can send up some some documents for that for that so thank you for for coming out and and showing us all what you do and I see the bus out there and I got to go take a look at that that looks pretty cool
awesome all right we have another question over here innovation spark and so we're promoting no kids interest in STEM education so seeing has long how long it took you to prepare for this mission what advice would you have for young kids coming up and what would they need to do to prepare to maybe participate in a national mission in the future they can do is to get a good education really focus hard on making that happen if they like you know building systems fixing systems wondering how systems work
that's a benefit that will carry through all of the education that they should have but if they find a point of something that they love whether it's in technology or art or music or whatever it doesn't matter we have room for all of them in the human spaceflight community it takes all types we're probably one of the most diverse groups that you'd ever find in any any corporation out there the mission is incredible and if you
have a love for space it doesn't matter

00:08:56,019 --> 00:09:01,870
what you do do it well do whatever it is

00:08:58,899 --> 00:09:03,639
you like well and then and then bring it

00:09:01,870 --> 00:09:04,200
to the space community because we want

00:09:03,639 --> 00:09:07,240
it

00:09:04,200 --> 00:09:08,920
thanks to Nemo or Anton do you want to

00:09:07,240 --> 00:09:14,710
add anything about education or

00:09:08,919 --> 00:09:17,589
inspiring the next generation I was

00:09:14,710 --> 00:09:20,410
never thinking about you know becoming

00:09:17,590 --> 00:09:27,580
an astronaut but for some reason you

00:09:20,409 --> 00:09:30,189
know I I am here I think it's very

00:09:27,580 --> 00:09:33,759
interesting that the I'm thinking about

00:09:30,190 --> 00:09:36,970
my teachers my parents they directed me

00:09:33,759 --> 00:09:40,149
to the right direction whenever I think

00:09:36,970 --> 00:09:42,730
about I'm you know studying something
else they you know just direct them into

the right direction then because of them

I be there a table image stars

disabilities cosmos yes - Adam show

Katie Michiko tell maker yes Tara

Xochitl salute salute report check

emotional away Nia I would say

that my dream to become a cosmonaut and

go into space has been my childhood

dream and I was advancing the dream step

by step and the makerspace

representative mentioned I was working

hard to advance my education to achieve

their purpose premiere a double name is
over nada pasta is Adina Kershaw pizza

solution sauce tartar radically any

picnic iridium burrows nibbled Marco

team Cinemax a sportin if principal

música shrimp a little cosmos and for

kids all over the world I should say

that using my example it is not that
difficult to become a cosmonaut or an

astronaut you need to study hard you

need to listen to adults full of

directions

drinking no smoking no drugs lots of

sports and you can pursue your dream

over here with PCs for me and my
question is well I've noticed that your
Twitter handle is Astro maker and I'm
wondering what kind of things you like
making and if you will be involved with
the Raspberry Pi Astro Pi program aboard
the International Space Station am i
part of that that's the boss here i
believe it's a European Space Agency
experiment I don't know if you guys have
more info on it but you may you never
know yeah we'll see when we get there i
haven't been been briefed on it or i've
been part of it yet so my call sign is
Astro maker on Twitter and that just

that comes from when I was a pilot in

00:11:48,759 --> 00:11:54,009
the Navy that my colleagues called me

00:11:53,559 --> 00:11:57,609
maker

00:11:54,009 --> 00:12:00,100
and it did not have to do because I made

00:11:57,610 --> 00:12:05,259
things it had other other reasons and

00:12:00,100 --> 00:12:09,070
then which I won't talk about today but

00:12:05,259 --> 00:12:11,019
but it's it's more than a great

00:12:09,070 --> 00:12:12,490
coincidence I do like making things I do

00:12:11,019 --> 00:12:16,029
like fixing things I got a lot of tools

00:12:12,490 --> 00:12:17,620
at home and I have a small garage but it

00:12:16,029 --> 00:12:19,689
it gets everything done and when the

00:12:17,620 --> 00:12:21,850
dishwasher breaks I pull it out and I'll

00:12:19,690 --> 00:12:24,670
put a pump in it or take it apart the

00:12:21,850 --> 00:12:26,440
the clothes washer breaks I'll take it

00:12:24,669 --> 00:12:28,120
out put a new motor in it and if the car
breaks I'll pull that out take the motor

out put another one in it and whatever

whatever it needs to happen and and

occasionally I'll get some tools out and

you know make some nice little ornament

things or or some plaques for my friends

that that I've done in the past so if

it's a system I like getting into it and

seeing how it works and I try to fix it

not just because I'm cheap although I am

cheap but but because it's cool you know

going in and seeing how all the wires

work and how all the mechanical

interfaces work and and just getting it
working and it's a challenge for me

being a little bit older and working all

the electronics into these systems and

and doing the troubleshooting so I'm

starting to gear up my toolbox when it

you know for electronic troubleshooting

as well I'm trying to get my kids

interested in

as well if you guys have any ideas how

to do that I'd appreciate it but that's

pretty much it and that will of course

be a big job for you and the whole crew

on the space station because there's a

lot of maintenance involved on the space
station and I'm sure you'll have plenty of things to fix up there the job won't stop once you get a space all right next question

HDS Army with Kyodo news the Japanese wire for three of you please describe the impression that you have for it for each other as a fellow clue thank you I love these guys like my like my brothers we've trained hard for for a year and a half now and you know it's Bert it can be very challenging it's very intense and and we work very hard very long hours and so we take care of each other
there's I have a hundred and hundred

percent trust for for both these folks

and I couldn't be more luckier than than

going up with with antenna Nemo their

family Scott mentioned we are like

family or brothers and especially Scott

and I who are walking together for 80

years almost and we know each other very

well and Antone is very very experienced

as I mentioned before and he flew with

of course Russian cosmonauts and

American astronauts and the European

Italian astronaut Japanese you stayed

with other Japanese astronauts in the

previous mission so very international
very experienced like a big brother

leading us to the right direction

Percy Bagram was atrocious for like a

super tricky decision American I command

the kikuna Samia I thank you very much

for your kind words I would like to

confirm that yes we're indeed one big

team one big family

state is by years the richness which Kay

against the Keokuk Rose cosmos at Moscow

pseudo Houston me in Tokyo my position

German

: save mr. Supriyo madnikey possible

during the one and a half years of
training our training consists of a lot of trips to different agencies for example risk Ozma's that means going to Moscow Houston here Germany Cologne Japan Tsukuba and we travel as one through trial my absence is not show me see me me Potomac period palliative cosmos was not drill do go Kirk watching bliss colluding in ideation of Kozma see the Ruby Aryan honesty kick problem nice though nanana genomics enemy boot and we not only work together as a three-person crew we also spend time together with our families
with the three of our families and we are hoping that by the time we get to space we're not going to experience any interrelationship or any interpersonal problems the space station is truly international we have a great representation of that here with our American Japanese and Russian representatives and you guys it's amazing to see how well you all work together different languages but you're all doing the job up there so very cool thank you all right next question go to me to you
from the ovary Shimbun Japanese

00:16:39,090 --> 00:16:43,649
newspaper this question goes to mr.

00:16:42,470 --> 00:16:46,980
scelera

00:16:43,649 --> 00:16:49,139
and mr. Singhal so this question is

00:16:46,980 --> 00:17:00,870
related to the previous one

00:16:49,139 --> 00:16:57,720
I would like to impression of mr. Khanna

00:16:53,610 --> 00:17:00,870
in detail so what is the mr. Khanna's

00:16:57,720 --> 00:17:04,170
excellent point as an asteroid and what

00:17:00,870 --> 00:17:07,859
is his role as a team in terms of

00:17:04,170 --> 00:17:10,610
keeping good relations in your chief

00:17:07,859 --> 00:17:10,609
thank you

00:17:11,000 --> 00:17:20,808
Nemo is first a great friend

00:17:15,970 --> 00:17:24,500
he's very trusty very reliable and I can

00:17:20,808 --> 00:17:26,568
count on him to to help me when I need

00:17:24,500 --> 00:17:30,470
it even when I don't know I need it he
knows I need it and he he helps another

great tribute to a Nemo is that he is

incredibly smart when we're doing

simulators together Anton and I will be

looking at the procedures and there's a

choice to make left or right and we'll

talk about and we'll talk about it and

we'll look at Nemo Nemo goes right and

we know that Nemo is always right no

tiny mite Malinois in the were Lena

initially react yeah do much to know

well sure Buddha she even of kozinski

program cast Renata I believe that Nemo

is a young person and he has a great
future in the space exploration program

Liscombe a book wanna disney-esque

alchemist of a vigil walker considered

part a solution instructor offers abyss

periodical and the first time we met he

spoke neither Russia nor English and

several months later I saw him sitting

at a desk and listening to instructors

without interpretation circuit Kakuta to

do EBE a chocolate a mongoose cause i'd

store eastern studies which add to the

church so to postulate neogan tagaytay

songs night so watching

grubach or the esto presenter i
emphasize is what kind of a hardworking person he is and if he study in something you can be sure that he's going to study everything to the very last bolt and he studies the entire process throughout he thinks make room for islamic vodka is my military doctor played Mahavira store teaching iboga will expedite it soon as possible probably misses the rhodium knee - booster village it is miss durability MA and we're four into space with the maker and we're going to have a medical doctor on board so within six months we can be
confident that if something doesn't feel right and when you medical health an

immobile Kuras and will come back to earth fit and healthy to have a doctor

on board that's great

thank you all right we have a follow-up

question are you guys going to be able to make it to the Houston Maker Faire

coming up next week the 21st and 22nd

and also it's an open invitation for both my makerspace and the other maker spaces for any astronauts or other NASA people to you know come and experience what a makerspace is the 22nd I’m in Cincinnati until the 21st so if I can
get up there it'll be on I think Sunday

the 22nd right excellent yeah we'll give it a try okay all right we have another

question in the audience my name is Greg Ratliff and I'd like to ask I know that just spent the last year and a half working together but did you also have time to work with a crew that's already up here that you'll be partnering with for at least three months what are you up there

absolutely you know we had a lot of training with the crew that's currently up there and we've had a lot of training
with the crew that's going to come up

after us as well they're all great

friends they're all great great

colleagues and we've had you know

several emergency simulators we've

shared beverages at Shep's bar and star

city and we've had a lot of family

dinners together so it's it's just a big

extended family for us so about every

three months we have a new crew launch

to the space station and and they launch

them their Soyuz three at a time and

there are usually about six people on

the space station at a time all right I
think we have a question on the phone

bridge just a reminder if you have a question you can press star 1 and you can press star 2 to withdraw your question we have Jill talked with the Randolph Herald yes

maker as you know this is your hometown newspaper that I have a question for you

Anton could you all talk about the importance of your individual hometown communities during their mission if the entire mission but especially on orbit yeah so the the hometown is so critical to I'm sure all of us the people there
the relationships we had the experiences

00:22:04,029 --> 00:22:11,740
we had growing up whether it's with with

00:22:06,160 --> 00:22:14,140
family friends or academic it becomes

00:22:11,740 --> 00:22:16,419
part of you and you don't realize it for

00:22:14,140 --> 00:22:18,788
several years but you get you know 30 40

00:22:16,419 --> 00:22:20,740
years down the road and you start to

00:22:18,788 --> 00:22:23,379
realize all of the little things that

00:22:20,740 --> 00:22:27,880
came together to make you who you are

00:22:23,380 --> 00:22:30,010
so when I launched on Soyuz ms0 seven on

00:22:27,880 --> 00:22:37,870
December 17th all of those folks back

00:22:30,009 --> 00:22:41,079
home are going to be with me my hometown

00:22:37,869 --> 00:22:45,959
is Tokyo but Tokyo is it to be the call

00:22:41,079 --> 00:22:49,779
myself is my hometown but you know as a

00:22:45,960 --> 00:22:55,298
you know former lady officer I station

00:22:49,779 --> 00:22:59,408
the many towns cities in all over Japan
so I feel these I know the towns or

people over there is kind of my you know

not hometown but the close friends and

you know across the family members I

have that kind of feeling about the

city's great I'm sure all the people in

Tokyo are gonna be very proud of you and

watching you as well so I was exciting

Anton oh yeah gorgeous gemstone yeah

reducer Willis now you get a sea of

chrome ooh she was toppling

procrastinator at he kshitij Tamina

venom bulldozer version of short toast

Oh Pam oh goodness tight Tim Kim is just
you guys my hometown where I was born is Sevastopol and I believe the town I gave me everything that contributed to who and what I am today awesome thank you all all right we're gonna take a couple questions from social media now if you do have a question you can ask it on social media using hashtag ask NASA so we have Haley here our social media specialists Haley awesome so the first question comes from Francisco on Facebook he wants to know is English the most common language on the ISS or is there a more common
language spoken between you

unfortunately Japanese is not the most

space station but we use post English in

the Russian language simultaneously or

mixed up

so sometimes we you know call it the

room bridge and they do launch on a

Russian vehicle the Soyuz so in that

vehicle it's pretty much all Russian or

yeah that's why you're launching great

question you have another one this is

for any of you or all three Marissa is

asking on behalf of her five-year-old

son on Facebook how do you exercise in

son on Facebook how do you exercise in
space we have lots of equipment in space

and it's actually very important to

exercise one of the big things we see

when we're in space is is bone loss and

we have found through active daily

exercise that we can minimize that bone

loss over the duration of the

spaceflight and minimize the recovery

when we return so we have a

weightlifting machine called the a red

and I can't remember what that acronym

stands for I'm sorry exercise device

excellent thank you she got me out of

trouble again and and we use that to to

lift weight so we do a lot of squats we
do a lot of you know presses we work our cores as as much as we can and we're afforded a couple hours every day on the schedule to to have a good workout we also have cardiovascular treadmill up there and a bicycle to to exercise with very important to exercise every single day in space all right another question is specifically for noshiko kunai but for anyone really is there any special Japanese food you're bringing with you and for everyone is there any special food that reminds you of whom you're
bringing actually yeah JAXA Japanese

Space Agency provides many kinds of

Japanese space food so I will bring

home all kinds of Japanese food and the

share with my crewmates you guys special

food I'm just gonna try to steal Nemo's

food when he brings it on because it's

always really good no decision on us now

stands the pre-start Lee he does

religion Kosminski against that and

which cancer I see NASA he sees that

among those used in Wicca personal coats

done in Miami at number two it's true we

have food items represented from
different countries on board of the ISS
mostly it's Russian NASA food items and
also the rest of the food compliment
depends on who is another astronaut fine
on board of the ISS brings people across
the world begins to known as his Carosa
Cigna the chytrid it's a my admin um see
due to his kamusta bullsh and arrive
it's a principle that reveal more about
him
NASA footage delivered separately for
each crew member however we have a very
good tradition of food sharing and we
choose the items each of months prefers
and that's the way we work on board

614
00:27:42,480 --> 00:27:46,210
great thank you

615
00:27:44,169 --> 00:27:48,639
I know one thing we haven't talked about

616
00:27:46,210 --> 00:27:50,649
yet of course it's really the main job

617
00:27:48,638 --> 00:27:53,738
of you on the space station and that's

618
00:27:50,648 --> 00:27:55,658
doing science science to figure out how

619
00:27:53,739 --> 00:27:57,608
we're gonna live longer in space so we

620
00:27:55,659 --> 00:27:59,889
can go further into space and also to

621
00:27:57,608 --> 00:28:01,118
help us on earth so I was wondering if

622
00:27:59,888 --> 00:28:03,008
each of you could talk a little bit

623
00:28:01,118 --> 00:28:04,720
about the science you'll be doing on the

624
00:28:03,009 --> 00:28:08,108
space station and maybe an experiment

625
00:28:04,720 --> 00:28:09,759
you're looking forward to not well at

626
00:28:08,108 --> 00:28:13,089
any given time there's on the order of

627
00:28:09,759 --> 00:28:15,799
250 experiments that are that are
happening on board space station it's a busy laboratory some of the specific human research that I'll be working on includes a look at the spine you know when we get in orbit into space our spines extend a little bit and so we're trying to see what the the big impacts are on that we've got a big study going that I'll be participating in on that as well we also take a lot of blood a lot of urine a lot of fluids to to try to see what's going on with within you know humans when they get into space so that's a big part of
the study as well as far as some of the physical science we'll be looking at things like combustion and fluids and some other robotics things going on with through spheres with that program I'm actually fairly excited to see the spheres work and that'll be part of our also part of our education outreach program but watching those things fly around station is pretty cool here's a robot's right little flying robots alright thank you Nemo yes I'm interested in the small satellite deployment it's been I think
five years since the first small satellite deployed from a Japanese module since then I overheard almost 200 satellites are deployed from the space station so I wish I am going to have a chance to deploy this kind of small satellite from Japanese experimental module very cool Thank You Anton see experiment Academy Dilma stanczyk more rapid elite knowledge in a sphere a pair of mr. Chen Nash regime local authority time with each M NASA leadership a net mores not Dolce Selena Shaquille o worried
made little nervous Mitsuko paliotta all

671
00:30:09,799 --> 00:30:14,210
the experiments that we perform on board

672
00:30:11,900 --> 00:30:17,810
of the ISS can be divided into different

673
00:30:14,210 --> 00:30:20,120
categories we study our earth we study

674
00:30:17,809 --> 00:30:23,240
ourselves to see how human body can

675
00:30:20,119 --> 00:30:26,179
function longer in space see

676
00:30:23,240 --> 00:30:28,190
experimental prints periscope Allison

677
00:30:26,180 --> 00:30:30,080
cannonballs own residence permeant a

678
00:30:28,190 --> 00:30:32,450
couture to remove aegis

679
00:30:30,079 --> 00:30:35,029
etiquette almost Petrovic tuturro no way

680
00:30:32,450 --> 00:30:37,430
the British to know where I stood

681
00:30:35,029 --> 00:30:39,589
also the experiments are very useful I

682
00:30:37,430 --> 00:30:42,070
would say our favorite experiments are

683
00:30:39,589 --> 00:30:45,019
of the type where you can touch the

684
00:30:42,069 --> 00:30:47,569
experiment items you are inventing
something new and you can see things
grow in experimental couture scootch
NATO is not such a pro stuff to cheat
people don't use cocoa every meal we
touch it no sir not at all mm guilty
unfortunately there are some experiments
that are boring you just have to turn on
the device and then turn the device off
after some time but somebody has to do
it nice thank you
that's great do we have any more
questions in the room just raise your
hand if you have a question could I just
ask you each of you why you were
inspired to commit your life to space

wow that's uh that's a pretty big question but you know everybody's got their own reasons that for me it wasn't really even a huge decision it was just a natural thing it was in my DNA that was a career path that that I was shooting for and all of the little milestones that lead up to it were or something that I wanted in my life just from being you know from being from childhood so you know was there one thing if there was anything it was Neil Armstrong walking on the moon but then
after that it was just in the middle of my head and it just would not leave and you've taken a lot rate a little bit you've taken you know many steps to get here can you tell a little bit about your journey to be an astronaut your background sure I figured out I went to a vocational high school and and I figured out very early that it was going to take a really in-depth intense education to be able to compete and to have value-added when I to bring to the astronaut corps so I worked real hard get into undergraduate at UMass
Dartmouth I worked really hard there in engineering. I loved engineering and science and so decided to go to graduate school I went to Purdue University for graduate school absolutely love the sciences decided to just hold off I loved flying airplanes and fast cars and motorcycles and things too but I decided to hold off on the aviation thing and go get an engineering job on the west coast which was fantastic now a great learning great experience but I knew I needed to go fly airplanes as I was investigating the route what do I want to go to a PhD and
then try to be an astronaut or do I want to fly airplanes be a test pilot and try to fly it and try to be an astronaut and I decided that the path for me was to go be a pilot and then test pilot knowing that that was a very challenging physically challenging mentally challenging path to take but but it was a natural path for me to take so I ended up doing that and some years later Here I am lucky thank you alright Nemo what inspired you to be an astronaut as I mentioned before I've never dreamed about becoming an
astronaut when I was a kid but before

becoming an astronaut I was working for

the Navy japonais D as a medical officer

and the diving officer so I was working

for the Taiping medicine for a long time

then I got interested in the extreme

evironment medicine and also space

medicine then okay I'm let's think about

becoming an astronaut or working in the

space you know world then I was lucky

enough to be selected as astronaut

candidate from Japanese Space Agency

notable omegam each Telstra see me dc-8

ago they could reduce CML Chiquita
chunky serious crimes are using which

steady-state cosmonaut only as I

mentioned previously was my childhood

dream in the 1970s when I was born in

the Soviet Union

all boys and girls were dreaming of

becoming cosmonauts chatauqua

cosmonautics material religion I hid my

period ah gee he we serve Libya

Nikki plumb cuts that customer off them

I read a lot of books about space

exploration and cosmonauts and I watched

a lot of different documentaries and

programs about space exploration and I

00:34:38,338 --> 00:34:43,079
00:34:40,260 --> 00:34:44,820
00:34:43,079 --> 00:34:47,309
00:34:44,820 --> 00:34:48,240
00:34:47,309 --> 00:34:50,009
00:34:48,239 --> 00:34:52,348
00:34:50,010 --> 00:34:54,810
00:34:52,349 --> 00:34:57,369
00:34:54,809 --> 00:34:59,619
00:34:57,369 --> 00:35:02,528
00:35:04,568 --> 00:35:09,969
00:35:02,528 --> 00:35:07,088
00:35:04,568 --> 00:35:09,969
00:35:07,088 --> 00:35:11,798
00:35:09,619 --> 00:35:04,568
00:35:09,969 --> 00:35:12,879
prepared a plan of how I was going to

become a cosmonaut

Pierre where issues Aetna stand away in

the military Utica got him first of all

I decided I was going to be a military pilot same as Yuri Gagarin yeah cuz I

show juice of Scalia naturally tied

mnemonic experiments a mulatto should

spit not still yet so when I was still

in high school when I turned 15 I

started flying small sports airplanes

was later I can make a post appeal look

Maya Maya knew Alicia same as maker

entered the pilot school contraband was

douche new academia then I graduated
from the Air Force Academy no gap a

little pillow tears the group receive I

served as a pilot for a while in Russia

occurred on abrazo put the conclusive

treat slip yeah an episode or a party

natural-born cosmonaut and when I gained

valuable flight experience 30 years old

I filed my report application to become

a member of the cosmonaut Corps mostly

emotionally gotta suck some opium

pollute oh no just treat your polluter

then I spent eight years training from

my very first spaceflight and now my

third spaceflight is approaching I think
we have another question here in the room you know from Fuji Television it's Japan the question is related to the experiment and I want to ask ask to kinesin as you said you are excited to do the research a lot of research in the space I know most of them is important but which one is most excited to do and also how important is it for us in the earth or in the future okay that can be a difficult question but I'm interested in the human health research like Scott mentioned we are astronaut astronaut are
not only helping supporting experiment

but also we can be a medical or research

subject of the science so we draw Brad's

or corrector urine or saliva as a

researches specimen so I'm interested in

that kind of human research because

partially because I'm former I'm a

medical doctor and also how can I say

you know astronaut human body in space

is a good representative of like a aged

aging process of the human on the earth

so us by studying astronauts body in

space we can figure out what is the

aging process actually what it is it so
maybe the astronaut research can

00:38:32,079 --> 00:38:42,010
contribute good medical treatment on the

00:38:37,150 --> 00:38:44,650
earth great that's a great example of a

00:38:42,010 --> 00:38:46,300
benefit from spaceflight that as you

00:38:44,650 --> 00:38:48,730
talked about you know the muscles on the

00:38:46,300 --> 00:38:51,670
bones deteriorate so much faster and a

00:38:48,730 --> 00:38:54,460
different pace in space and so we can

00:38:51,670 --> 00:38:56,409
study in space what it takes much longer

00:38:54,460 --> 00:38:58,900
to study on the ground for the bones and

00:38:56,409 --> 00:39:01,539
the muscles and I know that one of the

00:38:58,900 --> 00:39:04,030
benefits for people with osteoporosis is

00:39:01,539 --> 00:39:05,949
space research and changing the diet and

00:39:04,030 --> 00:39:08,619
medicines and things like that to help

00:39:05,949 --> 00:39:09,689
with that so great all right we have

00:39:08,619 --> 00:39:13,269
another question over here
I'm George Carlson the kc5 RCC with the makerspace maker burn in Magnolia Texas and I'm an amateur radio guy and I was wondering you guys were amateur radio guys and if you're going to activate the station onboard the ISS while you're up there yep I'm a ham radio guy and we've got several events already planned out - as part of our outreach effort while while I'm on station so hopefully I'll be talking to you on ham radio taking a tour before we got here we noticed that all the patches are different for each
mission they said that you guys designed

the patch for your mission and it's has

special meaning I'm sure do you guys

could you explain the artwork on your

patch sure this patch was actually

designed by Tim Gagnon and we looked at

it and modified it a little bit

obviously the 55 is our expedition when

you look at the earth the earth and the

colors represent how beautiful our

planet is and and how we take care of it

we've got the flags that come up that

represent the three countries that are

representative by the crew on the on

this expedition and as well we've got

the three rings together coming together
to fill a common goal and getting the
science done on station and those three
rings represent Russia United States and
Japan as part of the crew represented in
this expedition for that keep in mind
there are 16 to 18 international partners at anytime and we are
appreciative of all of them thank you
very interesting all right I think we
have another question my room buddy else
all right do we have one for social
media
she asks have you ever wished others
could travel to the Space Station to
gain your perspective and maybe you can
talk a little bit about how you might
plan to share that with us on social media

[Laughter]

premier poeple go to Provo gymnast and
say it's a double net to roll in brittle
materials marabunta

I should say that we spent about six months in word of the ISS it's hard work

but it's very interesting watching
delusion a collective robot Aetna Stan

say nobody asleep emotionally virtually
Rodney he bliss kid resistance every

a well-built team on board of the ISS

and if I were somehow given a chance to

bring all my friends and family members

on board of the ISS I would be very

happy if I had a choice I'd bring you

all with me they would just make it so

much easier be so great and even though

we can't physically I will be bringing

you bringing you all and my family and

friends with me in my heart and soul but

through social media you know it's

really a great capability with
technology that we have these days we'll be sending down pictures will be sending down information and you know 120 word bites onto it on Twitter as well as other public releases that Megan's going to kind of set up for us and and get out so we're going to try really hard to give you the better the best window that we can into into the cosmos and into our daily routine so that so you can see what it's like up there and then what we're doing and and the benefits that we're bringing so stay tuned you mo any thing to add nope
all right yeah one thing we all look forward to here on the ground is to see the pictures that you guys take from space that's really a perspective that most of us will never have a chance to see that you guys will see that and so we enjoy being able to to see your pictures and as easily as getting on Twitter or Facebook and all of that so thank you for that all right we have one more reporter on the phone bridge Barbara LeBrock with UMass Dartmouth I think about the cooperative's we chose it
do you see this is model in any way for

956
00:43:26,289 --> 00:43:32,619
international corporation other

957
00:43:27,989 --> 00:43:37,149
seemingly intractable issues better I'll

958
00:43:32,619 --> 00:43:39,609
get better out there you know this

959
00:43:37,150 --> 00:43:41,970
program has been has been steady it's

960
00:43:39,610 --> 00:43:45,250
been consistent and it's been reliable

961
00:43:41,969 --> 00:43:47,199
when at the working level we are very

962
00:43:45,250 --> 00:43:50,019
tight when I go over to train in Russia

963
00:43:47,199 --> 00:43:51,309
they treat me like their family and and

964
00:43:50,019 --> 00:43:53,980
they're very interested in my success

965
00:43:51,309 --> 00:43:57,009
and when folks from from Russia come

966
00:43:53,980 --> 00:43:59,050
over here they do exactly the same thing

967
00:43:57,010 --> 00:44:01,510
same thing here and the same with Japan

968
00:43:59,050 --> 00:44:02,820
the same with Europe the same as any

969
00:44:01,510 --> 00:44:05,710
other country that we're working with
but I think anybody in this program will pretty much agree that that this is a real good model for international partnership the chemist our story yet sobriety rock immediately she some grouping the Siddhartha she 20 beside it Christmas crumbly a bright cosmos I always had a dream of our gathering together the leaders of all the or just countries in the world putting them in one spaceship and washing them into space just one way ticket nittany a nice way it was I mean we did I saw star Anika can was pretty crass and I go by
I'm the main reason not what you were thinking is that you let them see our planet from space and see how wonderful it is.

denis villeneuve nazim lani by mood store na primary mr. on a cosmic

estas a duty Kotori made razzmatazz gardenias new cultura motorboated

mestizos dutch total optional Sevilla

aged

I hope that after they come back to earth they will understand that Isis is a great example of how people with different backgrounds coming from

a great example of how people with different backgrounds coming from
different cultures can create something together

contribute to the common goal great I think that's a great way to end we're excited to see you guys go to space and such an international crew and we can't wait to see you launch so I just want to remind everybody you guys can follow this whole crew on social media they're all on Twitter

Scott is at Astro underscore maker Nemo is that Astro underscore can I and Anton is at Anton ashtray and then you can also follow Scott and Anton on Instagram
so definitely look forward to all the
pictures that they'll be sending down

and following them throughout their

mission and you can follow the

international space station everything

going on onboard the work they're doing

every day to benefit humanity at Space

Station at Twitter Instagram and

Facebook and learn more about the space

station at nasa.gov station and

don't forget to tune in to their launch

on December 17th you can watch it live

at nasa.gov slash live and also on the

international space station facebook

page on facebook live so thank you all
so much for being here with the room and

online today and thank you guys for

sharing your mission and we look forward
to seeing you in space have a good one

[Applause]

[Music]