This is a running dialogue of the October 16th, 2001 QSO at 19:45 UTC of Greenfield Central High School(W9ATG) with Control Operator Gary Stouder (K9SG) in contact with NA1SS international space station commander Frank Culbertson and the students in the ARISS contact.

W9ATG:

NA1SS this is W9ATG, NA1SS this is W9ATG Greenfield Indiana.

NAISS:

W9ATG this is November Alpha One Sierra, NA1SS on the international Space station how do you read – over.

W9ATG:

Very good Frank. Glad to hear you. We have a good copy already. My name is Gary and as soon as we make sure we have a good signal we'll start the kids. They are going to read their questions and then they are going to say over and wait for the answer and then will send it on to the next one. OVER

NA1SS:

That sounds great Gary and let me just say it is terrific to talk to kids in Indiana. My wife is a Hoosier and grew up in Vincinnes, and two of my daughters and one of my son in-laws is a Boilermaker so we get back to Indiana quite often. It is a great state.

W9ATG:

Roger, I'm a Boilermaker too. So OK let go ahead and start the kids here Frank. They will be coming up and they will state their name, grade and question.

NA1SS:

Go ahead

Kate Summers - 8th Grade:

What do you do in your free time for enjoyment while up in orbit? OVER *NAISS*:

Kate the most enjoyable thing is either practicing 0 g flips or looking out the window. I love looking out the window. We also have a lot of CDs and movies and books up here that we can look at or read when we have free time. But we don't have a lot of that kind of free time. And I also spend time on email communicating with friends and family. OVER.

Kierra Leary – 6th Grade:

Is being an Astronaut what you expected it to be? OVER

NA 1SS

Kierra, it's better than I expected it to be. I've wanted to be an astronaut since I was 13 in the 8th grade and I am very very fortunate and blessed that my dreams came true, but its even better than I though it would be. OVER

Michael Duncan -12^{th} *Grade:*

How are your activities affected by weightlessness? OVER

NAISS:

Zero G affects almost everything we do up here, its interesting from going to the toilet to preparing food to trying to sort papers that we have to print out for instructions its everything has changed. For example a little while ago I was trying to move some food into one of our food boxes from a new one and things were flying all over the place.

When you put a tool down it doesn't stay there unless its got Velcro on it, and if you don't keep your feet anchored somewhere you're going to float off. I usually find myself in the middle of the module not being able to touch anything until the air currents drift me over. OVER

Bryan Leonard – 12th Grade:

What do you miss most about being separated from the Earth? OVER *NAISS:*

Bryan what I miss the most is my family but we communicate pretty well. The other things I miss are a few things I really like. Like driving my car, or ice cream , and strangely I miss weather because it is always the same on board here: same temp, no rain, no wind, nothing , and so it will be nice to get back and experience a little weather. OVER

Ryan Rangel-Scott – 9th Grade:

Is it difficult to maintain your physical condition while on the space station? OVER *NA1SS*:

It's not difficult if you have the right equipment, but it is time consuming and it is very important to do it. We spend two to 2½ hours every single day exercising, either on a treadmill or a stationary bicycle, as well as lifting weights that use bungies to put stress on our muscles and bones. If we don't do that we will be in such bad shape by the time that we finish our mission that we won't be able to stand and walk probably for several days, we intend to be able to do that so we are working pretty hard at it. OVER.

Jordan Sirosky – 9th Grade:

Do you have any special protection from meteors or orbiting trash? OVER *NA1SS*:

That's and excellent question Jordan, and you are obviously aware that there is plenty of that stuff up here, ah yes we do have extra protection, all the modules have special shielding on them and if they were hit by a meteor it would destroy the meteor before it gets to the pressure shell ah in addition if there is anything large threatening us the radar trackers on the ground can track it, and they will manuver the station to avoid it several hours ahead of time. OVER

Calvin Welling – 9th Grade:

What is the most difficult part of working with Astronauts from other countries? *NA1SS*:

Another good question Calvin. We are obviously working with different cultures, different languages, we have two Russians and myself on this particular mission and sometimes the mix changes, but we've known each other long enough that we can laugh about the differences and the difficulties, but sometimes we have some very interesting misunderstandings either because of the cultural things like humors not the same in different countries and of course the language when you're speaking a second or third language can sometimes be difficult. OVER

Tyler Shrank – 6th Grade

Have you fixed any broken parts on the Space Station or on a satellite? OVER *NA1SS*:

Tyler we have had to work quite a bit on the computers up here, as well as a few other minor repair jobs on some of the plumbing. Nothing really major, we have been fortunate, has broken on the station and we have not or will not have any contact with satellites, but we work on things all the time to keep em working before they break. OVER

John Fields – 7th Grade:

What are some of the tools and instruments that you use on the ISS? OVER *NAISS*:

John I would say our number one tool is our laptop computers with which we can control the station all the systems as well as communicate with the ground and access our procedures and our timelines and our plans. The next most important tool is a toss up between a 7/16 inch wrench or a 12 mm wrench or a screwdrive – pretty basic tools. We try to stay away from the hammers ground gets nervous when we bring the out. "laughter" OVER

Aaron Smith 6th Grade:

What are some of the interesting Earth Landmarks that you can see from the ISS? OVER

NAISS:

Aaron actually I can see Indianapolis really well when I go over it. I can see the racetrack, I can see the airport and now I am going to look for Greenfield the next time we go over. I would be looking out the window now if I weren't talking to you. We see some great things - I love looking at cities that I'm familiar with - that I have been to around the world. And we can see bridges, for example I can see the Chesapeak bay bridge tunnel very clearly from space. A lot of manmade landmarks are clear, but I can also see some of the interesting things like Niagra Falls and the Great Lakes too. OVER.

Justin Davis 6th Grade:

How many hours did you spend in Simulators before your trip to the ISS? OVER *NA1SS*:

Wow, Justin I don't even know if I want to count that up. It was a lot, but easily a couple hundred hours of simulators just for this trip. Probably more that. For all my trips and all the time I've been training I'm sure that there is several thousand hours in simulators. OVER

12. Zach Henney 6th Grade

Do you miss your family and how do you stay in touch with them? OVER *NAISS*:

Zach, that's another good question. We have email and all my kids have email and we also can phone them. We have a special phone up that we can use up here that is an internet type phone and it works pretty well. OVER

13. Ashley Beeker 6th Grade What changes or additions are you making in the ISS during your stay?

NA1SS:

Another good question Ashley, the Russian docking compartment arrived in the middle of September. We have used it twice now as an airlock for the two Cosmonauts to do space walks and we just did one yesterday that was very successful. And so that added another 12 cubic meters of volume to the ISS. The joint airlock had arrived just a couple of months before that. And that is all of the changes we expect to make during our stay but there will be others coming up soon. OVER

14. Joe Bodkin 6th Grade

How long did you spend training for this mission? OVER

NA1SS:

Joe, I spent over a year and a half training for this particular mission but I have been an astronaut for 17 years. OVER

Rachel Smith tries to get through but unable because of a temporary dropout.

W9ATG:

Frank you still got us there this is W9ATG

NAISS:

W9ATG this is NA1SS thank you very much for the contact those were great questions. (losing signal).

W9ATG:

OK I think were kind of starting to loose it a little bit early early, maybe the antenna is getting in front of the space station, can you still hear us.

NAISS:

Got you loud and clear now.

W9ATG:

OK good - we got a few more kids, here we go again.

Rachel Smith 5th grade

What other missions have you been on prior to this one? OVER

NA1SS:

Thanks for asking Rachel, I've been on two previous missions both on the shuttle, once as a pilot on a department of defense mission and as commander of STS 51 in 1993.

OVER

W9ATG:

We have got 3 other kids and Im going to have them say hello before we lose it.

Katie White 5th grade

Hello this is Katie White.

NAISS:

Hello Katie how are you.

Gabe Fada 5th grade

Hello this is Gabe Fottom.

NA 1SS:

Nice to hear you Gabe - thanks for callin. Over

Jessie Wilkerson 5th grade

Hi this is Jessie Wilkerson

NA1SS:

Hello Jessie are you a Boilermaker or an Indiana fan?

W9ATG:

Indiana He says. OK I think were going to lose it soon but well let you have any final comments there Frank. Go ahead.

NA1SS:

Hey kids you're doing the most important thing you will do in you life right now is going to school. Education will open the doors for everything you will want to do in the future. It made the difference for me. These are the tools your going to use when you keep learning the rest of your life, so pay very good attention and keep doing what your doing, which is obviously working with technology, and keep up the great work. You're all very smart. OVER.

W9ATG:

OK thanks a lot and 73 and Gods Speed up there this W9ATG and thank you a lot bye bye..