

ASTP (USA) MC285/3

Time: 12:42 CDT, 77:22 GET

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CC-M (The next question is to - is for Alexey Leonov.  
What type of space flight would you like to participate in the future?)

SCDR (I am deeply convinced that all of us now - those that are flying aboard spacecraft and those who are not flying but who are watching and listening to us - all of us are participants of only the beginning of a great human journey into outer space and there will be all kinds of various space missions in the future. Of course, I would like to once again to be aboard some other spacecraft which would be able to fly for a long time around the earth so that with the eyes of an artist I could see the multi-faceted appearance of our earth a very varied colors and appearances to forever retain it into memory and to give it to people. But also we would like - I would like to be at altitudes higher than we are now. From there, the earth looks completely different. I think that at the beginning of our journey - I think that I am at the beginning of my journey and still we have - we have still a reserve of strength and age and I think we will participate in future space missions.)

MCC-H The next question is for General Stafford and it's the same as the one Colonel Leonov just answered. What kind of mission would you two like to fly in space yourselves?

ACDR Well, you're talking about the next mission. I would think, naturally, with the background and flight tests that you'd always like to fly a new and a better - well modern device and we have one coming along called the Shuttle and I would certainly like to fly that. And I would hope that if Alexey would have a vehicle developed by their country that we could fly maybe in a joint mission. And that would be why my wish that mans progress has always been a geometric progress and the benefits derived from science and technology have always helped all of mankind. I would hope that the next mission - if I do fly one - will be one of the more modern type of vehicle that could have more benefit for everybody.

SCDR (And I also agree with Tom and I'd like to say that it's - the spacecraft is one thing but another thing is with whom you're flying and I'd - this is what I'd like to point out, that I would always like to fly in space with friends to whom one trusts and who trusts in one and with whom it is not dull to work with.)

MCC-H The next question is also for General Stafford. From a practical standpoint, did you find talking to each other in the listener's native tongue a desirable way to communicate during the complicated rendezvous and docking maneuvers?

ACDR (Of course it is very important) and I say of course it was necessary again - we developed this technique out of working together over a period of nearly a year and that was over a year and a half ago that we determined that, if we would listen to the other person speak in your own tongue, the individual would speak slower, also more distinctly, and would make fewer mistakes. And so it worked out beautiful as you saw in the rendezvous and the end results you saw on television and what you're seeing now is. It's also been a great experience for us

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as far as a - way of communicating with each other. Over.

CC-M (And the last question to Alexey Leonov. How do you think that - how important do you think the rescue capabilities that was demonstrated on this flight will be in future space missions?)

SCDR (We - when we began working on the Apollo/Soyuz program, the first part of our program was the working - out of a rescue system and of a single, andrygnaus docking unit and testing of that unit. And now we can say that we have done - we have completed the major part - basic part of this program. We have tested these docking units. They work well and they hold us together tightly - strongly. This was the beginning of a large effort in standardizing future systems not just with both our governments or both our countries because future spacecrafts of our country and of the United States would use such units, but we will suggest that other states - other countries which will dev - begin developing in this direction, we suggest that they should also have standardized docking units so that they would be able to perform any kind of service and render any type of assistance to other crews in space. And it is pleasant to us that the beginning of this great grandiose human effort in space has been initiated by our crews here - by our crews of the spacecraft Apollo and the crew of the spacecraft Soyuz. Thank you very much.)

MCC-H The next question is for Vance Brand. Now that Americans have met Russians in space on an international venture for the first time, what do you think the chances are for a joint manned exploration of a planet?

CMP Well I - I think frankly that the chances are very good.

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MCC-H                Russians in space on an international venture for the first time. What do you think the chances are for a joint manned exploration of a planet?

CMP                 Well, I think frankly that the chances are very good but I don't think it will happen right away. They say that - well, it would probably take at least 20 or 30 years before we would be ready as a world to go out and explore a planet. I think that's probably reasonable. The only thing, in everything else that we have done, in aviation for example, we've found that progress is always much faster than we expected. So perhaps the time will come when we will be thinking of exploring planets, probably together - within the next 20 years. I think that would be the way to do it. I think it would save us time, effort, money; it would pool resources, it would - in other words, it would be interesting and it would bring ben - bring back benefits to the whole world.

MCC-H                Thank you, Vance. The last question is for General Stafford. And it is the same as Colonel Leonov just answered, and that is how important do you think the rescue capability demonstrated on this flight will be in future missions?

ACDR                Well, when - as long as you have motion, you're going to have accidents. Needless to say that - we do all our - our utmost of our efforts to minimize all the risk. However, after a long period of time, you could conceivably and possibly have some mishap that would require a rescue. The total system we have demonstrated here - the new docking device, the rendezvous system using techniques from both countries, the communications procedures and techniques - could be available in the future if required. Not on an instant's notice but it could be available. So I think we have taken a great step that indeed we have opened a new era in the history of man on this and it will be beneficial. Over.

MCC-H                Roger, Tom. Thank you. That was the last question. I'll now bring the press conference to a close and you gentlemen can get back and continue your work. (Press conference is over. Thank you.)

SPKR                (Garble)

MCC-H                (Good flight.)

USSR                Thank you very much.

SPKR                Thank you.

SCDR                Valeriy, can you read me?

SFE                 Loud and clear.

SCDR                Thank you.

SFE                 Okay.

CC-H                Command module, Houston.

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SCDR Valeriy, how do you read me?  
SFE Loud and clear.  
CMP Thank you.  
SCDR Okay.  
CC-H Command module, Houston.  
DMP Go ahead, Bo.  
CC-H On panel 181 we would like the 3 TV power switches  
OFF.  
CC-H Command module, Houston.  
DMP Go (garble).  
CC-H Roger. We've been having some problem with one of  
the TV cameras and we would like to take the TV camera that is now on  
871 in the DM and substitute it for the camera that is now in the TSC  
which will go into bracket 11 for the tour.  
DMP Okay, you want to use the 871 camera on panel 11.  
CC-H Roger. There is a camera now in the TSC that's going  
on to 11 and we would like the 8 - camera that's in 871 to go onto 11.  
DMP (Garble.)  
CC-H And you'll have to disconnect them and hook them up  
again as they are swapped.  
CC-H And Apollo, those cameras may be a little warm, so  
you may have to hold off for a few minutes before you can change them  
out. And we have on other thing and that is TV 2.9, the shoe should be  
on the right instead of the left.  
DMP That's TV 2.9. Stand by and let me check that.  
CC-H That's the one that's going to be looking out the  
window.  
ACDR Hey, Vance - -  
USSR (Russian)  
ACDR Houston, (garble).  
CC-H Roger.  
ACDR Apollo. How do you read?  
CC-H Houston reads you loud and clear if you have a moment.  
MS (Garble)  
DMP They read you fine, Tom.  
ACDR Okay. The battery finally went dead on the Nikon  
flash. When you come over on transfer 4 will you or Vance, either one,  
dig out a spare battery for the Nikon. I think it's in B5.  
DMP Yeah. I think you're right. Okay.  
ACDR Thank you.  
ACDR Bo, how's the weather back in Houston?  
CC-H I'll have to ask somebody; I haven't been out in  
quite a while.  
ACDR Yeah, I could imagine; I could imagine.  
CC-H And we'd like the phone-mike connect switch OFF.  
ACDR Mike connect to OFF. (Garble) Houston.  
CC-H And we're just about to go LOS; we'll be AOS at MILA  
at 78:21.  
ACDR Copy.  
CC-H Apollo, Houston through Wallops. How do you read?

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USA                   He reads us.  
CC-H                  Apollo, Houston through Orroral. How do you read?

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PAO                    This is Apollo Control. Loss of signal through  
ATS-6 satellite and unsuccessful attempt at communications through  
Orroral Valley tracking Austra - tracking station in Australia. That  
was only about 2 degrees above the horizon to the south of that station.  
Unsuccessful in establishing contact at that low elevation angle.  
We're some minutes away from Merritt Island Launch area, acquisition  
through that station in Florida. During the last revolution, the  
in-flight joint press conference was conducted with the commanders aboard  
Soyuz and the other 3 crewmen aboard Apollo. Questions from the two  
control centers were read up as submitted by correspondents in Moscow  
and Houston. Houston cap comms were Carol (Bo) Bobko and Valeriy (garble).  
In Moscow were Bob Overmeyer and Vladimir Johnny Bekov. We'll return  
in 29 minutes at Merritt Island launch area. This is Apollo Control  
at 77:52 ground elapsed time.

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PAO Apollo Control. Ground elapsed time 78 hours 20 minutes. 56 - 36 minutes away from the 4th transfer of the Soyuz and Apollo crews, with Kubasov and Slayton going to the Soyuz. On this pass across the States, Deke Slayton will be performing the Earth Observation Experiment. As Apollo crosses the Yucatan Peninsula, he will take photographs, looking for the eddies in the Yucatan Channel. And also, as the spacecraft passes over the Gulf, he'll be trying to determine if he can photograph and visually observe the Florida current in the strait of Florida. As Apollo passes over Tampa, he'll be asked to describe whether or not he's able to see the Red Tide, west of Tampa Bay. And again, Red Tide will be the object of photographs as the vehicle passes over the Cape Cod area. On this pass up the east coast, Vance Brand will describe in Russian, as he photographs in television, as the vehicle passes up the east coast of the United States. Acquisition in 19 seconds, through MILA. We'll bring the line up for Cap - Capcom Bo -

CC-H - Apollo. Over.

CMP Roger, Houston. How do you read?

CC-H Roger. We read you loud and clear. We need the camera switches on, on 181.

CMP Okay. We have all 3 on.

CC-H Roger. We're not getting any TV here yet. We should, in a second, and I can tell you about the picture.

CC-H Command Module Pilot, Houston. We have about a 90-second wait here, until we get a warmup. Let me give you a bit of a weather briefing. Florida looks like it will probably be clear, as will New York. But there are quite a few clouds over the middle Atlantic coast.

CMP Okay.

CMP Okay. I can see the coast of the U.S. coming up.

CC-H Vance, we're getting a good picture. You're clear to start your tour.

CMP (Good day, dear friends. We find ourselves now - Okay. (Garble), Deke Slayton, and I - )

CC-H (Garble) your phone mike connect switch to ON.

SPEAKER (Garble.)

DMP Okay. We got the phone mike on, Bo.

USSR (Moscow, this is Soyuz. How do you read me?)

CMP (Dear television viewers of the Soviet Union. At the present time, we're going to make a little tour over the eastern part of the United States. This is a 6-minute tour, since we're flying with the speed of approximately 8 kilometers a second. This part of the United States is - about 200 years ago - This place developed about 200 years ago. Here, most of the industrial concentration of the United States is located. It's composed now of 50 - the United States is composed of about 50 states, and it will start with Florida. At the present time, we're flying over sunny Florida. It's a very warm

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climate in Florida - about - over 200 sunny days a year. There's much exotic forms of nature, a lot of citrus fruits. In this peninsula, there are many palms, citrus groves, and various other types of growth. Also, many alligators and crocodiles. Here, there is located the Kennedy Space Center. Among all the flights that took off from the Kennedy Space Center we, also, took off - on this flight. It's very difficult to see the Earth at the present time, because there is some cloudiness below us. At the - in the middle of your screen we see North Carolina. Only 72 years ago, the first airplane flew in this state. At the present time, in the horizon, we see the Blue Ridge Mountains. On the right, there is the state of Virginia.)

USSR (Apollo, this is Soyuz.)

CMP (The state of Virginia is a very historical state - the site of many battles, the birthplace of many presidents. In the 17th century, the first settlements appeared in the state of Virginia. We now can almost see Washington, to the left of us. Of course, this is the capital of the United States - the political and cultural center of the United States. To the left - now, there is - you can see New York, the largest - one of the largest cities in the world. Around us, also, we see several other states: Massachusetts - the Goddard Space Center. In 1920, Dr. Goddard flew one of his first rockets - experimental rockets. We hope that the cooperation and understanding between our two countries is developing with the same speed as the speed that Dr. Goddard's rocket first flew. Thank you for your attention and for listening to us on this tour.)

CC-H Thank you, Vance. You came through loud and clear. Unfortunately, there were quite a few clouds there, and we couldn't see an awful lot of the east coast.

CMP (New England, to the north and in the center of our screen. We saw a lot of - )

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CMP ( - New England to the North and in the center of our screen, we saw a lot of cloudiness, so we couldn't really tell you enough.)

CC-H (Russian)

CMP Rog.

USSR Thank you very much, Vance.

USSR (I got ya. Be nice for us to get a geologist in here, so you could measure some of the things we see.)

USSR (I couldn't understand you. Why don't you repeat that? Over)

USSR (I'm repeating again. 3:37 MILA, 3:47 (garble).)

USSR (That's good, okay.)

SFE (You want Valeriy, right?)

SCDR Valeriy, how do you read me?

ACDR (Russian)

SFE (Russian)

CC-H Command module, Houston. Standing by for ATS acquisition.

CMP Okay. You should have it, Bo.

SFE (We had a connection 347 hooked up. 347.10)

SCDR (347.10 we had two connectors hooked up.)

CC-H And, Apollo, Houston. We'd like to remind you go to POO at this time.

SFE (Russian)

CC-H Apollo, Houston. We;d like to remind you to go to POO at this time.

SFE (Russian)

CMP Okay. You have POO.

CC-H Thank you.

USSR (He connected - connected 347.10 to TK 1.)

SCDR (Kubasov - Dubasov -)

SFE (Valeriy, yeah, who's calling me?)

SCDR (Kubasov)

SFE (Yeah, who's calling Soyuz II?)

SPKR (Garble)

SFE (What's the matter?)

SFE (Listen, did you connect TK3 connector, ober there?)

CC-H Command module, Houston.

SCDR (I roger that.)

CMP Go ahead.

CC-H Just a reminder -

SCDR (Moscow, this is Soyuz, how do you read me?)

USSR (Russian)

CMP Gee, Bo, would you try again. You were cut out over there.

CC-H Roger. It was just a reminder to give Valeriy his meal, so he can take it back to the Soyuz with him.

CMP Roger.

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CC-H Apollo commander, Houston.  
ACDR Go ahead, Bo.  
CC-H I know you don't have a docking module checklist,  
but on this next transfer on step number 26 we would like you to  
delete the steps where you take the DM/Soyuz tunnel vent isolation and  
open it, and a DM Soyuz tunnel vent to vent. I'll call those out  
again when we get into the transfer. And the reason is, that Soyuz is  
going to be performing a check on the tunnel 2 integrity and we do not  
want this dumped to tunnel 2 vent, to vacuum.  
ACDR Okay, Roger. Do you want to take it out and get to  
the normal pressure down to - norm pressure minus to 60?  
CC-H It goes down to 50 and then we'll just leave it there  
and we'll finish it at some later time.  
ACDR Okay, I understand that you just want us to  
take it to 50.  
CC-H Roger.  
ACDR Okay, real good.  
MS (Garble)

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ACDR Houston, Apollo.  
CC-H Apollo, Houston. Go ahead.  
ACDR Roger. Do you want to cover this presentation of seeds and these medals on TV? Over.  
CC-H Roger. And we see you on TV now.  
MS (Garble)  
MS (Russian)  
CC-H Command module, Houston.  
USA (Garble)  
CC-H On panel 10, we would like to request you to check the S-band thumbwheel to 3.  
MS (Russian)  
CC-H Command module, Houston. Over.  
MS (Russian)  
CC-H Command module, Houston. That was the FM thumbwheel to 3.  
ACDR Okay, Bo. You ready?  
CC-H Roger. We can see you holding the box there.  
ACDR Okay. (I'm beginning. Allow me to present to you on behalf of the United States of America to give your people and your government a present of the United States; a present to your people.)  
SCDR I am sure good trees must grow from these seeds.  
CC-H Apollo commander, Houston. We're not reading Alexey.  
ACDR Okay. Say again, Bo. See that?  
CC-H We read you but we didn't read Alexey during the last part of his acceptance.  
USSR (How do you read me?)  
CC-H Now we read you, Alexey.  
ACDR (This joint medal for the Soyuz- Apollo mission between the United States of America and the Soviet Union.)  
CC-H Just hold it for a second, Tom. It's a little bright. Maybe the camera will be able to pick it up. We can see that it says Apollo-Soyuz and it shows - -  
SCDR (Good evening dear television friends. It's 22 hundred hours in Moscow time. The terminating final activities are going on on - board our two spacecrafts.)  
CC-H Still lower, a little lower.  
SCDR (The present time onboard the Soyuz spacecraft we have the Apollo commander, Tom Stafford, and in the Apollo, Valerey Kubasov together with Deke Slayton and Vance Brand. Our joint activities are coming to an end and we will have our fourth and final transfer coming up soon. The joint operations include Tom Stafford's transmittal to me of a box of seeds of, very fast and rapidly growing pine trees. They should grow very well and very rapidly in a good climate when they are planted on our Soviet territory. The joint operations also include an exchange of medals. One-half of the medal was placed on the Apollo spacecraft, and the second half of the medal was placed on the Soyuz spacecraft. And now here together in a orbit of the Earth, we will be connecting these two halves of the medal. The medal is an emblem of our joint flight, joined in docked spacecrafts, Apollo and Soyuz with the two U.S. and U.S.S.R. flags side by side. I'm

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taking this medal and handing it over to Tom Stafford, and Valeriy Kubasov will be taking the other medal from the other spacecraft and bringing it here back to us.)

ACDR Okay. (Thank you very much.)

SCDR (What have we done in this time? We had very saturated program - had to do quite a number of operations in a very limited amount of time. We had to do a series of transfers, also watch the systems on board our spacecraft. All this requires very careful monitoring, very careful observations. Also, at the same time we had to perform a whole series of reports, still pictures, movies. We only had five people here between the two spacecrafts - five crew members, and that's really not enough people to do all the things that we had to do, but we had to find a way to do it.)

ACDR Okay, Houston.

CC-H Roger, Apollo. We saw the joining the medallion. We got a good picture of the medallion on our TV.

ACDR Okay. Command module (garble).

SCDR (Who turned it off? We really shouldn't have anything bother anybody.)

CC-H Vance, how do you read?

CC-H Deke, how do you read?

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ACDR Deke, how do you read?  
CC-H Apollo Commander, Houston.  
ACDR Okay. I was just trying to get through to see if  
the - Deke or Vance are putting the dias together with Valeriy. We're  
going to say something on TV and I was listening to (garble).  
CC-H Roger.  
USA (Garble)  
CC-H Command Module, Houston.  
CMP Go ahead.  
CC-H We see you there with the medallion and we'd like  
to have the filter adjusted so that the couch lights don't blossom in  
the picture.  
CMP (Yea, we don't have the filter. Roger.)  
CC-H And Command Module, Houston. We'll be standing by  
for the clock sync in 3 minutes here.  
CC-H Command Module, Houston. We didn't hear you, although  
you looked like you were talking to us here just a minute ago.  
ACDR Vance, how do you read, I haven't been reading you  
at all.  
CMP Okay Houston. Reading you loud and clear and Tom  
reading you loud and clear.  
ACDR Okay. I can read you now.  
CC-H Roger. We can understand you now, Vance and we'd  
suggest you get the clock sync on time and then proceed with some  
of these other activities.  
CMP Okeydoke.  
CMP (Soyuz, this is Apollo.)  
SCDR (Garble now do you read me?)  
CMP (Good Alexey. We've got about 50 seconds to time sync.)  
CMP (Getting count down now. 7, 6, 5, 4, 3, 2, 1, MARK.)  
SCDR We are synchronized.  
CMP (That's good.)  
CC-H We copy that clock sync.  
CC-H Apollo, Houston - or Command Module, Houston.  
CMP Go ahead.  
CC-H The lights are in - in our picture are blossoming  
pretty badly, perhaps you could either get the filters on them or block  
them in some manner.  
CMP Filters are on, Bo.  
DMP We're looking for the big camera filter, Bo.  
CC-H Understand.  
ACDR Hey Vance, it was either back on the one in 605 or in F2.  
CMP Roger. Not in F2.  
CC-H Command Module, Houston. We ho - heard the Apollo  
Commander before ask for a set of Nikon batteries, to save you the  
problem of looking up where they are, they're in B5.

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CC-H Command Module, Houston. We hold - heard the Apollo commander, before ask for set of Nikon batteries, to save you the problem of looking up where they are, they're in B-5.

ACDR Got you.

ACDR Okay, Bo, if you're reading, I got the 35 flash battery.

CC-H Negative, we did not read, but we do now, thank you.

CC-H Apollo Commander, Houston.

ACDR Go ahead, Bo.

CC-H Looks like you're having fun - if you'd like to tell us about any of the things you're doing, we'd be anxious to hear.

ACDR Oh, okay. - well, we're just finishing up - the third period up here, and - relaxing a little bit. We've had a wonderful experience here. And Alexey, and I are looking at the procedures to go through now. We also had a snack.

CC-H We saw the snack.

ACDR Bo, are you sending the TV over to the Soviet Union at this time? Over.

CC-H Roger. All the TV we get goes to the Soviet Union.

ACDR I'd like to just say hello to the people there.

CC-H I think we've got time.

ACDR Okay. It will take about a minute or two.

CC-H Roger. I think we've got the time.

ACDR (Dear Soviet television viewers, allow me as the representative of the United States of America to transmitt to you best regard, from the people of the United States. This is a happy time for the whole crew. We're happy, very happy to receive - to be together here in the first international flight after two years of joint preparation and training. We astronauts, and cosmonauts, - not only - not only have worked together, but we've become good friends. I'm sure that our joint work, friendship, will continue, even after this flight. I too am sure dear television viewers, that this flight will open the way to further cooperation and friendship between our two countries. The - yesterday's - let the things that went on yesterday in our flight and today be a good thing for both of our peoples. Thank you, and good luck.)

CC-H (Russian)

DMP Say, Bo, are you reading the DM?

CC-H Roger, docking module pilot, read you loud and clear.

DMP Okay, which TM's or TV do you want back here. We took one out, you know, and I'm supposed to check the monitor and we got nothing here right this minute.

USSR Ladies and gentlemen of the press. You can see with me Tom Stafford, the Soyuz - Apollo commander.

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DMP --(garble) which the TM's or TV do you want back in here. We took one out you know. I'm supposed to check the monitor and we've got nothing here right this minute yet.

SCDR Ladies and gentlemen of the press. You can see with me Tom Stafford Soyuz Apollo Commander. Today in space the orbital module of the Soyuz spacecraft the representatives of two countries Soviet Union and the United States - United States and Soviet Union. We are conducting our Soviet - our joint with American flight because our people have - our governments wants to work together in spirit of cooperation between our countries, because in order (garble in American and in the Soviet Union did a great job to make this flight possible. We worked together during - for 2-1/2 years. We - I know each other very well. I know Tom Stafford, Deke Slayton, and Vance Brand like a very hard-working guys. We like to work together again. Before our joint flight we were a lot of times in the United States and their American astronauts were a lot of times in the Soviet Union. Everytime we knew each other better and better. We know a lot about American people - about American customs. We know what the American people want. I am very glad that today we work, we are working in space together with our good friends, Tom, Deke, and Vance. I'm sure that our joint flight is the beginning of very great cooperation in space. Thank you very much.

CC-H (Thank you very much Alexey.)

CC-H Docking module pilot, Houston.

DMP Go ahead, Bo.

CC-H Deke, we would like you to place the camera in the position of H71 where you got the old one out.

DMP Yeah, but which one?

DMP You just want to replace the one underneath 71 that was there?

CC-H The one that was in the TSB that should have gone on position 11 - -

SPKR Hey Deke, (garble).

CC-H - - should go into H71, because you took the one from H71 and put it in 11.

DMP Okay, I thought you wanted the TSB (garble) because it was a bad camera.

CC-H Roger, it is but we think it will work better in the DM.

DMP Okay.

SCDR Deke, how do you read me?

DMP (Russian)

SCDR (Garble) now?

DMP (Russian)

SCDR (How do you read me?)

CC-H Command module, Houston.

DMP Go ahead, Bo. (Garble). I'm in the DM.

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CC-H This is for the Command module. We are going to have a couple minutes of date here. We're finished with TVs. We would like you to go down to 181 and turn the TV power switches OFF.

USA Hey Bo, for your information, I'm looking up this in H71 TV to (garble).

CC-H Command Module Pilot, or Docking Module Pilot say again please. You had quite a bit of background noise.

DMP Let me take to the TV on H71 to (garble) TV station.

CC-H I understand you're putting it on H71.

DMP Yeah, that's where you said to put it.

CC-H And we've got about a minute and a half until we go LOS. We're gonna be at Vanguard at 79:31. That's about 36 minutes transfer time and if the command module did not hear, we would like the TV power switches OFF.

PAO This is Apollo Control. Ground elapsed time 79 hours, 20 minutes. Loss of signal through the ATS-6 satellite. Next acquisition will be Vanguard. We'll start the change of shift briefing with flight director Pete Frank in a few moments at the main auditorium, Building 2. We'll record any air-to-ground through the Vanguard and stateside pass and play - play that back when the change of shift is completed. Change of shift briefing will begin in the Building 2 auditorium immediately with Flight Director Pete Frank. At ground elapsed time 79 hours, 20 minutes, this is Apollo Control.

END OF TAPE



ASTP (USA) MC295/1  
Time: 15:14 CDT, 79:54 GET  
7/18/75

PAO Apollo Control. Ground elapsed time 79 hours and 54 minutes. Acquisition coming through Goldstone tracking station in 2 minutes and 55 seconds as the crew slightly behind in their timeline, approximately 10 minutes behind in the flight plan. They're getting close to the final farwells between the Apollo and Soyuz crew. Closing out of hatches and pressurizing the tunnel. We have 1 minute and 45 seconds accumulated tape taped during the press change of shift briefing. We'll play that now and then go live through the Goldstone pass.

CC-H Apollo, Houston. Through Vanguard for 7 minutes, standing by.  
DMP (Russian)  
ACDR (Russian)  
USSR Docking module pressure 24 minus millimeters.  
DMP (Russian)  
USSR Deke, (garble) pressure equalization (garble) seven minutes.  
DMP (Russian)  
DMP Houston, Apollo.  
CC-H Apollo, Houston. Go ahead.  
DMP Bo. You want to pass on this action. (Garble)  
CC-H Apollo, Houston. We don't think you can gain any time by deleting, since Soyuz is going to be doing their pressurization.  
DMP Roger.  
CC-H Apollo, Houston. Through Rosman, over.  
CMP Roger. Loud and clear.  
CC-H We have you for a couple of US stations and then ATS.  
CMP Okay.  
DMP (Garble) Bo, we're all over the (garble) microbial exchange.  
CC-H Roger. Understand, you're in the microbial exchange.  
DMP Right.  
CC-H Apollo, Houston. There are 30 seconds until LOS, we'll pick you up at Newson-Newfoundland for a few seconds and then ATS.  
CMP Okay, Bo.  
USA (Garble)  
CC-H Apollo, Houston. Through Newfoundland and then ATS.  
CMP Okay Bo.  
DMP - - step 16. (Garble)  
CC-H Roger, understand. Step number 16 and if you have a DM checklist in your hand, would you go to page 516, step 26.  
DMP Go ahead.  
CC-H Deke, did you answer me. I thought I heard you very weakly.

ASTP (USA) MC295/2  
Time: 15:14 CDT, 79:54 GET  
7/18/75

DMP Rog. Standing by for your info on step  
26.

CC-H Roger. Where it says AC DM Soyuz tunnel vent iso-  
lation OPEN and DM Soyuz tunnel vent VENT cross those two steps out  
temporarily and the Soyuz crew will give you an okay to vent the tunnel  
to VACUUM.

DMP Can we do that later (garble).

USSR (Russian)

CC-H They'll give you that okay later perhaps 20 minutes  
or half hour later.

DMP Okay.

DMP (Garble).

USSR (Garble).

USSR (Russian)

DMP (Garble)

USSR (Russian)

USSR (What time did you say?)

END OF TAPE

ASTP (USA) MC296/1  
Time: 15:24 CDT, 80:05 GET  
7/18/75

USSR (What time did you say?)  
USSR (It is 54:20 - Bravo,)  
CC-H Command module pilot, Houston.  
CMP Go ahead, Bo.  
CC-H In your flight plan down on page 4234, there's a note  
to roll left to 60 degrees. We would like to change that to 100 degrees.  
CMP Roger. At 80:54 roll left 100 degrees instead of  
60.  
CC-H Roger.  
USSR (Russian)  
USSR (Russian)  
USSR (We'd like to sleep some more but we don't have the  
time. Last night we only got five hours actually. It's okay. We feel  
pretty good.)  
CC-H Command module, Houston. On panel 181 we would like  
the three TV camera switches on.  
CC-H Command module, Houston. We would like the three  
TV camera power switches on panel 181 turned on.  
CMP They're on Bo.  
CC-H Thank you.  
CMP All ready.  
USSR Yes, Soyuz. We're experimenting (garble) with  
(garble) liquid nitrogen.  
CC-H And Vance, we're getting a good picture of you there  
in the command module.  
CMP Okay.  
ACDR Okay.  
ACDR Okay, Bo. We're hooking up the TV cameras in  
the orbital module to DM 1 on the docking module.  
CC-H Thank you for the report.  
USSR (Russian)  
ACDR Hey, Bo. (garble) switching these things is that we've  
got 2 hooked into 1 and vice versa from what the checklist called for  
after we got through with the switching around here. I think we got the  
right cameras but they're going to reach in different (Garble).  
CC-H Okay.  
USA Okay. DM 2 power's ON and that's the power that  
goes into the orbital module 1, Bo.  
CC-H Roger. Understand.  
USA I'm sorry, it's DM 1 goes into the orbital module  
now.  
CC-H Understand.

END OF TAPE

ASTP (USA) MC297/1  
Time: 15:34 CDT, 80:14 GET  
Date: 7/18/75

USA (garble)  
ACDR Bo, how do you read me now?  
CC-H Apollo, Commander, we read you fine.  
ACDR Okay, I'm hooked up back on the docking module audio.  
CC-H Understand.  
USSR (garble)  
CC-H Command module, Houston.  
CMP Go ahead.  
CC-H On panel number 10, we would like to check the VHF,  
FM, thumbwheel no higher than 3.  
CMP Okay, you're echoing - echoing, but, understand on  
9 and 10. The VHF - VHF FM thumbwheels on 3.  
CC-H Negative, on panel 10. Panel 10 only, VHF thumbwheel  
on 3.  
CMP Okay, you're echoing badly, but I took that to mean  
those two panels VHF thumbwheel on FM on 3.  
CC-H Negative, only on 10.  
CMP For sure. Thank you.  
ACDR That's good.  
CC-H And the S band thumbwheel all the way decrease.  
CMP Which thumbwheel?  
CC-H S-band decrease.  
CMP For sure, S-band decrease. It's already there.  
Full decrease.  
CC-H Roger. Copy.  
CC-H Command module, Houston. Are we still echoing?  
CMP No, you just got rid of it, Bo.  
CC-H Thank you.  
ACDR Sound good now Bo.  
CC-H Thank you.  
CC-H Docking module, Houston. Are your televisions set  
up yet so that we can turn on the TV in the DM?  
DMP Roger, you're all set. Yea, they've been up for a while  
Bo. They're already turned on.  
CC-H Thank you.  
CC-H Command module, Houston.  
CMP Go ahead.  
CC-H On panel 181, we'd like you to check or verify that  
the CM-DM camera power switch is ON.  
CMP Okay. Yea, that's verified. It's ON.  
CC-H Thank you.  
CMP TV station select is on CM however. Would you like  
that - UP TELEMETRY?  
CC-H Roger. We'd like that UP TELEMETRY.  
CMP You've got it.  
CC-H And docking module, we have a good picture.  
DMP Okay.

END OF TAPE

ASTP (USA) MC298/1  
Time: 15:44 CDT, 80:24 GET  
7/18/75

MS (Russian)  
DMP (Russian) (We hope - -)  
DMP (We wish you the best of success. I'm sure that  
we've opened up) a new era in history of man.  
DMP (Our next meeting will be on the ground.)  
DMP (Step 20, Valeriy.)  
SFE 20 is completed.  
DMP Hey Vance, do you read?  
DMP Vance, you read?  
CMP Yes, I read. Go ahead Deke.  
DMP Okay they're delivering (garble) 6 VHF FM to RECEIVE,  
AM OFF, audio control NORMAL, verify power OFF.  
CMP Okay. That should work.  
CMP Power coming OFF now.  
DMP Okay Vance. At (garble) FM PR, AM PR (garble).

END OF TAPE

ASTP (USA) MC299/1  
Time: 15:54 CDT, 80:34 GET  
Date: 7/18/75

ACDR (Yeah, this is your step.)  
ACDR Okay, Bo. Valeriy is working on their hatch getting  
things set up for the EVA eclipse.  
CC-H Roger. Copy.  
ACDR Solar eclipse.  
ACDR Okay, They're closing hatch 4.  
CC-H Roger. We see it on TV.  
ACDR (Garble) is closed, hatch 3 is closed (garble)  
CC-H Hatch 3 is closed.  
ACDR Vance, you read?  
DMP Vance, you read? Read us? Hello, there.  
ACDR Vance, how do you read?  
ACDR Vance, you read?  
USSR (Garble)  
ACDR Soyuz, how do you read me?  
CC-H Houston, read you.  
CMP How do you read, Tom?  
ACDR Loud and clear, Vance.  
CMP Okay, I assume you got the cable disconnected okay.  
ACDR Yeah, right, yeah, the cable's disconnected. We  
called you.  
CMP Okay, we must be out of configuration. Didn't get it.  
ACDR Okay, Vance would you set MASTER on the CM camera?  
CMP Roger, MASTER on the CM.

END OF TAPE

ASTP (USA) MC300/1  
Time: 16:04 CDT, 80:44 GET  
7/18/75

CMP Houston, Apollo.  
ACDR Houston, - -  
CMP Houston, Apollo.  
CC-H Apollo, Houston. Go ahead.  
CMP Roger. I have the P52 results for you.  
CC-H Ready to copy.  
CMP Okay, stars 33 and 35, down 05, all balls, down 93,  
plus 00129, minus 00084, minus 00088 and it was torqued at 4300.  
CC-H Roger, I understand. 33, 35, all balls, plus 00129,  
minus 00084, minus 00088 and that was torqued at 080 4300.  
CMP Roger.  
ACDR (Soyuz, this is Apollo. We're getting ready to DUMP  
the pressure in tunnel 2, over.)  
USSR Roger. Copy.  
ACDR (I'm beginning dumping the pressure.)  
CMP Hey, Tom. I've got the probe and the drogue in the  
tunnel. When you come through we might temporarily put them in the DM  
so we got a little working room here.  
ACDR Yeah, I think that's a great idea. Let's go ahead and  
we'll stow them up here for the night, what do you think?  
CMP Super idea.  
CC-H Apollo, Houston. We're going to terminate the TV  
here until we can get some data for this last few minutes before LOS.  
Would you please cut the three power switches on 181 off.  
CMP Roger. Switches going OFF, Bo. See ya soon.  
ACDR (You dumped the pressure, right? This is our operation.  
4.60 millimeters HG.  
DMP Alexey this is step 24. Yes, Yes, I'm continuing  
the dumping of pressure.)  
ACDR Bo, we're taking it down to 50. I heard some-  
body say "Enough! Enough!" and I thought he meant us.  
CC-H Tom, you're - you're supposed to take it down to 50.  
ACDR That's what I thought. That's what we've calculated.  
CC-H Apollo, Houston. There are 2 minutes until LOS. We'll  
see you at Vanguard at 81:04.  
ACDR Roger, Bo.  
CMP (Soyuz, this is Apollo. How do you read me?)  
USSR (Real good.)  
CMP (I'm beginning the maneuver for solar orientation.)  
SPKR Okay.  
PAO Apollo Control, ground elapsed time 80 hours, 53  
minutes. Final farewells aboard Apollo/Soyuz. Tom Stafford shaking  
the hands of his Soviet friends at about ground elapsed time 80 hours  
29 minutes. The hatch is - hatch 4 on the Soyuz side was closed about 80  
hours, 40 minutes and about 22 seconds later Tom Stafford closed hatch  
number 3. The crew has about 30 or 40 minutes of housekeeping within the  
docking module at which time Tom Stafford will transfer back into the Command  
module. Sleep period tonight begins at 7:20 p.m. central daylight time

ASTP (USA) MC300/2  
Time: 16:04 CDT, 80:44 GET  
7/18/75

with wakeup at 3:20 a.m. Saturday morning eastern daylight time. Next acquisition through Vanguard in 10 minutes and 50 seconds. At ground elapsed time 80 hours 53 minutes, this is Apollo Control.

END OF TAPE



ASTP (USA) MC301/1  
Time: 16:23 CDT, 81:03 GET  
7/18/75

PAO Apollo control. Ground elapsed time 81 hours, 3 minutes. Acquisition coming through Vanguard, a brief pass. A low elevation of only 5 degrees. The crews have closed out hatch 3 and 4, and the Apollo crew completing closeout right now housekeeping in the docking module before returning to the command module for the rest of the evening. Sleep period begins at 7:20 a.m. eastern daylight time with wake up Saturday morning at 3:20 a.m. eastern daylight time.

CC-H Apollo, Houston. Through Vanguard for five and a half minutes.

ACDR Roger, Bo. We're in the middle of the purge now.

CC-H Say again, Tom. You were very low.

ACDR Roger. We are purging the DM now. We'll be able to drop the pressure shortly.

CC-H Understand. You're purging the DM.

CC-H Docking module, Houston. Have you heard from the Soyuz concerning their integrity check?

DMP Roger. They said theirs was good.

CC-H Understand.

DMP But we're just going to stand by with that pressure we got in here until we hear from them - you know, as far as dropping the rest of the way. That's no problem. We'll go ahead and - we're gonna equalize with the command module shortly.

CC-H Roger. We agree.

CC-H Apollo, Houston. There is less than a minute until LOS at Vanguard. We'll see you at Goldstone at 81:22.

ACDR Okay, Goldstone.

PAO Apollo control. Ground elapsed time 81 hours, 12 minutes. Loss of signal through Vanguard. Next acquisition in 9 minutes 42 seconds, will be the Goldstone tracking station. Tom Stafford completing a closeout of the docking module, transferring equipment back to the command module. They've got approximately - -

PAO Apollo control. Ground elapsed time 81 hours, 13 minutes. Acquisition through Goldstone in 9 minutes. Tom Stafford completing closeout of the docking module. Approximately 20-some minutes left to complete this task. Then the crew will settle down for evening meal and an early rest period. The crew has only had 5 hours sleep last night, and 5 and 1/2 hours sleep the night before. Flight director Neil Hutchinson telling his flight controllers that he would like to have the crew go to bed early tonight. Next acquisition in 8 minutes and 33 seconds. At ground elapsed time 81 hours, 13 minutes this is Apollo control.

END OF TAPE