

ASTP (USA) MC258/1
Time: 06:49 CDT, 71:09 GET
7/18/75

ACDR (- indicator. And here's the backup indicator. We have a main and also a backup inertial plat - gyro platform. Here we have a fuel cell plus a battery.)

SCDR And, Tom, does it take much time to learn to operate all spacecraft systems? (Russian) (I ask, did it take a long time to learn how to operate all these systems?)

ACDR (Yes, it does take a long time, Alexey. I think about a year - a year's work - should take a year before the astronauts know all the systems.)

SCDR (Garble.)

ACDR (Here is the place where I sleep. This is the Apollo commander's place. You know who the Apollo commander is?)

ACDR (Dear viewers, with this we are ending our short TV coverage. I think we'll meet again in space at least once, or more - and, certainly, we'll see each other on Earth after we return - after we all return, each of us to his own homeland - in the Soviet Union and in the United States of America.)

SCDR Thank you, Tom. Thank you very much.)

ACDR (Here we have a small kitchen aboard.)

MCC-H Tell them we're going to switch over to the descent vehicle.

ACDR (There is very little room here but, after all, nobody has to do any dishes.)

CMP Okay, Bo. How are you reading us down in Soyuz, now?

MCC-H Fine.

CC-H Vance, we're reading you well.

SCDR Just now, Vance, (garble).

CMP Okay, -

CC-H Tom, we've had an interesting tour, there. And we're about ready to switch over to Soyuz now.

ACDR (All right.)

CMP Okay. Valeriy and I are down in the descent vehicle, that part of the Soyuz that is really the control center and the part that comes down for landing. And Valeriy's on the - in the right seat - (garble) engineer's seat - about ready to give you a few words. But first I'd like to make sure that we have communications with Valeriy now. We lost him a little while ago.

USA Tangled in cables.

SFE How do you read me?

CC-H Vance, would you relay that we read Valeriy.

CMP (Russian)

SFE Okay! We are in the descent vehicle now. Deke, you control certain - monitor the operation of the spacecraft main system from the descent vehicle. There is an instrument board. Here it is. You can see it on your TV screens now. I - I would like to illustrate the purpose of this panel to you.

USA Try to get it stowed, for now, is all.

SFE (Garble) globe instrument. Shows automatically the - point of the Earth our spacecraft is flying over at this moment. In front of me - in front of me there is a - -

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DMP (Russian)
SFE - - there is a (garble) panel. It shows us how the system is operating - now. This panel has the caution and warning displays. There is one more unit - here. Here it is. We can send digital data - use this panel in automatic systems. Here are 2 command signal devices. The right one and the left one. We can send about 380 (garble) - -
DMP Tell them where we can find it.
SFE - - (Garble) to control the spacecraft. You can see the 2 couches now. The left one is - Soyuz commander, and the right one is mine. Vance is now in - Soyuz commander couch. We take these seats during landing and lifting off. At this time, we have a pressure garment assembly on. Now (garble) are in the orbital module. There are 2 controllers. The left one - left one. oh. (laughter) Left one!
CMP Pretty hard to see.
SFE Uh huh. Left one - is used to - for orientation when you are in relative (garble) central gravity. The right one - is used to translate the spacecraft central gravity - relative the orbit and change the spacecraft orbit. The descent vehicle has two windows and the special lighting device - special light - -
SPEAKER (Garble)
SFE Generally speaking, the descent vehicle has more equipment than the orbital module. That's why you - we prefer spend our free time in the orbital module. And, Vance, would you - would you like to say how do you like the Soyuz spacecraft?
CMP Of course, Valeriy. I wouldn't be in here right now if I didn't enjoy coming in and looking around and - looks to us like it'd be a good air - - a good spacecraft to be flying in. We've really enjoyed your tour here.
CC-H Roger, Vance. We heard that well.
CMP Okay, Valeriy says that will be the end of his tour down here. It's a real interesting place down here. First time I've had a chance to be here in flight. And I guess we'll turn it back to you now, Bo.
SPEAKER (We'll be finishing our daily session.)
USA Right.
USSR (What time do we finish the session? Tell us.)
CC-H Command module, Houston.
USA Go ahead, Bo.
CC-H On panel 181 - we would like to have you turn the 3 television camera power switches off.
USA Okay. Stand by, Bo.
SPEAKER (Garble.)
SFE (Continuation of familiarization.) (Russian)

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CC-H Apollo, Houston. There are 2 minutes until ATS
LOS. The next station is Vanguard at 71:41.

ACDR Okay, Bo. And we've got the 3 cameras off for
you.

CC-H Thank you.

ACDR Also, I got that helium injection on about - time
there for you.

CC-H Roger.

SPEAKER (Garble.)

END OF TAPE

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Time: 06:40 CDT, 71:20 GET
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SCDR (Moscow, this is Soyuz. Turn it on.)
SCDR Tom.
ACDR (Russian)
SCDR (Garble)
SCDR Oh, okay.
SCDR (We have the American TV camera here. Good evening comrade TV viewers. We are on the - onboard of the spacecraft. Onboard we have - Leonov is now in the Apollo and here we have Vance Brand. In Soyuz with Brand; we are in the orbital module of the Soyuz spacecraft. We have just had two TV sessions for the American people in regard to the - about the Soyuz spacecraft vehicle and now we want to tell you about our program and also tell you somewhat about our spacecraft. Yesterday at 4 o'clock, we completed the first transfer. And here we have our TV session where there were a lot of movies made and a lot of still pictures, and also we exchanged - we will have to exchange souvenirs and also we are scheduled to perform a number of joint experiments. As you see, the program is very tight; here in the orbital module we have everything that is necessary for us to work comfortably.)
CC-M (We have too much light on the right; you - you look like negatives on film. That's excellent. Take the light off completely.)
SCDR (How is it now?)
CC-M (Excellent.)
SCDR (We just put the light in a different place.)
CC-M (Roger.)
SCDR (Here in the orbital module, we have many different lights; the light of which we use for picture taking, for television, and for movie photography. Our TV session is coming to a close, so with this, we will say goodbye to you our dear comrade TV viewers; and the best of everything. Goodby.)
CC-M (Thank you Soyuz 2 and Soyuz 1. Everything went well.)
PAO This is Apollo Control. Several minutes ago we had loss of signal through ATS-6 satellite. However the tour of the Soyuz spacecraft by Valeriy Kubasov to the Soviet people was carried through their Ussurisk station and it appears that Kubasov has terminated that discussion and to coincide with loss of signal at the station in western - in eastern Siberia. We'll return in 17 minutes for tracking ship Vanguard. Everything pretty well on the timeline today thus far in this second transfer. At 71:24 ground elapsed time, Apollo Control.
PAO This is Apollo Control at 71:40 ground elapsed time. Tracking ship Vanguard will acquire the Apollo and Soyuz spacecraft midway into the second transfer of crewmen aboard the two spacecraft. Soyuz commander Alexey Leonov aboard Apollo at this time and command module pilot Vance Brand aboard Soyuz. While aboard Soyuz, Vance Brand during this transfer will exercise with a Soviet exercise device called an expander. This will be the final Vanguard pass for this morning; we should have acquisition at this time.
CC-H Apollo, Houston through Vanguard for 7 minutes.

ASTP (USA) MC259/2
Time: 06:40 CDT, 71:20 GET
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DMP Okay, Bo.
CC-H Roger. We read you, Deke. And we would like on
panel 10, the VHF-FM thumbwheel positioned to 4, which should be about
1 number lower.

DMP Okay, stand by, Bo. We're working the area.
CC-H Roger.
DMP (Soyuz, this is Apollo. Ready for orientation.)

END OF TAPE

ASTP (USA) MC260/1
Time: 07:05 CDT, 71:45 GET
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ACDR Okay, Vance. We're maneuvering to inertial attitude.
And once we get there, we'll set up a B20.

CMP (Valeriy says he's ready for the maneuver.)

SCDR Tom, (garble) this.

SCDR (Garble) systems (garble).

CC-H Apollo, Houston. There is 1 minute until LOS. ATS
acquisition at 72:03.

USA Roger, Bo. And we're maneuvering to the inertial
attitude for comm and we'll be all set to proceed on the orbital orien-
tation for the tour.

CC-H Roger.

USA And it looks like we are right on the timeline today.

CC-H Very good.

ACDR (Soyuz, this is Apollo. Inertial orientation
established.)

CC-H Apollo, Houston. We'd like to remind you not to probe
until 72:05.

PAO This is Apollo. Loss of signal for the final time
this morning through tracking ship Vanguard. ATS-6 satellite will re-
acquire Apollo and Soyuz in 13 minutes for a cook's tour of the Soviet
Union on television with commentary by Alexey Leonov. We'll return
at that time - in about 12 minutes. This is Apollo Control at 71:51.
This is Apollo Control; 72:02 ground elapsed time. 50 seconds until
acquisition by ATS-6 satellite or about 55 minutes. Scheduled during
this orbit across the Soviet Union will be a television tour with
commentary from the Apollo spacecraft by Alexey Leonov and from the
orbital module of Soyuz by flight engineer Valeriy Kubosov.

CC-H Apollo, Houston, through ATS. How do you read?

ACDR Bo, read you loud and clear. About ready to proceed
in 10 seconds on that B20.

CC-H Roger. I understand.

ACDR And we're on the way. We're maneuvering.

END OF TAPE

ASTP (USA) MC261/1
Time: 07:26 CDT, 72:06 GET
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ACDR Houston, Apollo.
CC-H Apollo Commander, Houston. Go ahead.
ACDR Okay, Bo. Is all the TV cameras set up the way you
want them here?
CC-H We're not watching TV right now. First, on panel
181, we'd like you to turn the 3 TV power switches ON.
ACDR Roger.
ACDR Okay, Bo. We got the 3 power switches ON.
CC-H Roger. And - when we get the camera on, I'll give
you a call so we can adjust them.
ACDR All right.
ACDR Okay. We got 1 camera shooting out the window
and the other one shooting across the spacecraft.
CC-H Roger.
ACDR The out the window looks pretty good.

END OF TAPE

ASTP (USA) MC262/1
Time: 07:36 CDT, 72:16 GET
7/18/75

SPKR (Garble)
CMP-OM Apollo, Soyuz.
ACDR-CM Go ahead.
CMP-OM Are you - Tom, are you in the local horizontal at-
titude yet.
ACDR-CM Oh yeah. Well, we're - we're - Deke's doing earth OBS
and we're in local - and we're in a earth OBS attitude.
CMP-OM Okay. So you'll be staying in this attitude for
awhile for this tour we're going to have, right?
ACDR-CM Yep.
ACDR-CM Hey Vance, have you had your (garble) on? I'm skipping
back in the flight plan. Go ahead.
CMP-OM (Garble)
ACDR-CM Oh yeah. Okay I've. got that in here.
CC-H Apollo, Houston. We're getting an inside view of
the command module now and we'd like you to move that camera a little
bit to the left and down to get a better view.
ACDR How's that, Bo?
CC-H Could you move it a little more left please?
CC-H Okay. That looks pretty good to the left, now
let's move it down a little bit.
CC-H All right, hold on there for a second and watch the
(garble) light.
ACDR All righty.
CC-H Apollo commander, Houston. Over.
ACDR Go ahead.
CC-H We're having some difficulty with noise here, would
you ask the Soyuz commander to please give us the voice test.
ACDR Roger.
SCDR Oh.
SCDR Houston, this is Soyuz commander. How do you read
me?
CC-H Roger. We read him. Now can we have Valeriy to
listen to?
SCDR Houston, how do you read me?
ACDR Say again Bo.
CC-H We read Alexey well. Could we have Valeriy give us
a voice test?
ACDR (Valeriy please give a COMM to MCC Houston.)
ACDR Okay. Vance, are you ready? Have Valeriy give Houston
a count will you?
SFE Houston, Houston. This is Soyuz. How do you read
me?
CC-H Roger. Whoever spoke that time, we read them well.
SFE How do you read me?
ACDR That was Valeriy giving you a call.
CC-H Okay. We read him.
ACDR All right.
CMP-OM Okay. Was the communication satisfactory?

ASTP (USA) MC262/2
Time: 07:36 CDT, 72:16 GET
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CC-H We have some annoyance and we're trying to track it
down. We feel that, however; we read Valeriy quite well.

CMP-OM Very good.

CMP Hey Bo. Can somebody there tell me quick where - where
our IR film's stashed?

CC-H Say that again, please.

DMP IR film, for the 70 millimeter solar camera

CC-H You're saying you want the film location for the
70 millimeter camera.

DMP IR

CC-H IR. Roger.

SCDR He looks like Vance. He looks like Vance.

CC-H Deke, the IR film is located in A6.

SPKR (Garble)

CC-H Apollo, Houston. Over.

END OF TAPE

ASTP (USA) MC263/1
Time: 07:46 CDT, 72:26 GET
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CC-H Apollo, Houston. Over.
ACDR Go ahead.
CC-H We're having some voice problems here with the
S-band. My voice is being turned around to us. We'd like you to -
check S1 - 40 again. And reverify the position of the switches.
ACDR S1-40. In work.
CC-H Roger. Not so much the VOX but the thumbwheel
setting.
ACDR Okay.
ACDR Okay, Bo. I got VOX sensitivity on panel 10,
it's about 5. The checklist call is 8, you want it up or down?
CC-H I'll check with ENCO.
CC-H Tom, we'd like you to leave the VOX at 5.
ACDR Okay.
MCC-H We're the -
ACDR VHF FM thumbwheel is 5 (garble).
SPKR (Garble)
ACDR The S-band and - -
USSR (Where's the experiment with the fish?)
ACDR - thumbwheel is (garble) decreases you want that
full decrease?
SPKR (Russian)
ACDR How do you read, Bo?
CC-H Go ahead. We read you, but you have a background
noise.
DMP (Laughter)
ACDR Yeah. Anytime that I get the S-band thumbwheel out
of full decrease it goes.
CC-H Understand S-band thumbwheel goes full decrease.
ACDR (Russian) And the power is at audio, the master
is 5 like the checklist. The intercom is GR, intercom thumbwheel is
full decreased. VHF AM is off. Audio control panel is back up, and
the phone/mike connector is on.
CC-H Roger, Tom. And we would like the VHF FM thumbwheel
down to 2.
ACDR Roger. Okay, it's down to 2.
CC-H Roger. Could we have a check with one of the
Soviet crewmembers now?
ACDR Okay.
ACDR Okay, did you read Alexey?
CC-H Negative, we did not.
ACDR Okay, Vance have Valeriy give Houston a call.
CC-H Tom, if Valeriy gave us a call, we did not hear
him. Would you please move the FM thumbwheels up to 3?
ACDR You didn't read Valeriy at all then?
CC-H Negative.
CMP Okay, Valeriy was just speaking to you. Let's try
it again.
CC-H Roger. We'd like to try the thumbwheel in 3 - -
SFE Houston, Houston, this is Soyuz. How do you read
me? How do you read me?

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CC-H Now we read him well.
CMP Good.
SCDR Houston, this is Soyuz Commander. How do you read me?
SCDR Apollo, Apollo, this is Soyuz. How do you read me?
SFE Apollo, I read you loud and clear. Soyuz -
ACDR (Alexey how do you read? I read you excellently.
Valeriy I hear you excellently. Where are we flying over now? Over what? Well, take a look at the globe - it's easiest to tell. I'm now in the orbital module. So, come on down - take a look at the globe.)
CMP Houston, Soyuz.
CC-H Go ahead, Vance.
SFE (This is the Mediterranean.)
CMP (Garble) Coming up over the Mediterranean Sea, now. Just left North Africa, and soon you'll be ready to carry some words from Valeriy on - on looking down on the Soviet Union, shortly is that correct?
CC-h That's affirmative. And - be advised that the weather is going to be a bit cloudy under you and to the north and south it may be clear.
CMP Okay.
SFE (We've just passed over Africa and we're now over the Mediterraneanian.)
SFE (Moscow, this is Soyuz 2. How do you read me? Over.)
SFE (Moscow this is Soyuz 2. How do you read? Over.)
SFE (I also hear you well. We're now in the orbital module, near the port-hole, and - getting ready for the TV coverage. That's why you are not seeing us well.)
SPKR (Garble)
SFE Much better.
SFE (On the TK3 bracket.)
USSR (It's better than to have it hand held.)
CMP Okay, Bo. I think we're about ready to go here. Looks like we're coming up over the Black Sea, and - right now, Valeriy is getting in position. Got a little bit of spaghetti in the cabin here; various cables and cords. He's ready to tell you a little about his homeland here, the Soviet Union, very big country. Okay, Valeriy, please go ahead.

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CMP - - that is all one near us; the Soviet Union, a very big country. Okay, Valeriy. Please, go ahead.

SCDR I see my airfield where I go 10 years ago in Graberin (?) (Laughter).

SFE Dear American TV people, you show feelings about the Soviet Union. Some of you visited my country and you enjoyed the beauties of its cities and towns, rivers, forests, mountains, and fields. Alexey Leonov and me visited the United States several times and really did enjoy its beautiful landscape.

CMP-OM Are you reading him, Bo?

CC-H Roger. We hear Valeriy.

SFE Roger. It would be wrong to ask which country's more beautiful. It would be right to say there is nothing more beautiful than our blue planet. You will enjoy the sight of it together with us and we shall help you, explaining what flows below this spacecraft. They are going to tell you about a little part of our country which you will see on your TV screen. Our spacecraft Soyuz is approaching the USSR territory. Our country occupies 1/6th of the Earth's surface. Its population is over 250 billion people. It consists of the fifteen Union Republics. The biggest of them is the Russian Federal Republic with the population of 135 billion people.

SCDR Valeriy, please. Tell our people about me.

SFE (Alexey, where are we flying now?)

SCDR (Past the Volga.)

MS (Garble).

SCDR (Just past the Little Volga.)

SFE We are approaching the Volga River now. This river is the biggest in the universe. At the moment we are flying over the place where the Volgograd City is. It was called Stalingrad before. In winter 1942 - 1943, German fascist troops were defeated by the Soviet army here. 330,000 German soldiers and officers were killed and taken prisoner here. (Russian)

SFE (I won't have time to finish it in 3 minutes.)

SCDR-CM (Moscow, this is Soyuz. How do you read?)

CC-M (I read you excellently.)

SCDR-CM (I am now in the command module of the Apollo spacecraft. I am here together with Deke Slayton and Tom Stafford. We are flying over the Soviet Union's territory and we are observing everything which is speeding by below us. We began our observations over the Crimean peninsula and now we're approaching the Ural Mountain range. It's a beautiful Earth below us; blue, covered with slight cloud.)

CC-M (Would you do that in English, please.)

SCDR-CM (It looks like today's a very beautiful day on - over the entire territory of the Soviet Union. There's a lot of sunshine everywhere. Green fields - -)

CC-M (Soyuz in English, please.)

CMP-OM Houston, Soyuz.

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CC-H Command module pilot, go ahead.
CMP-OM Okay. I guess Valeriy's finished, and you got a word - a few words at the end there from Alexey talking to his people on the ground. It's a very long tour over the Soviet Union; we're still passing over it. The eastern part here is steppe, or desert, and there's just a lot of country here - a lot of farmland down here on the steppes, apparently. I think very shortly we'll be at the Pacific and here's some more words from Valeriy.

SFE-OM - - of April, 1961. From that time we celebrated the 12th - the 12th of April every year as a Cosmonaut Day. Our spacecraft was launched from here, too.

SCDR-CM By the way, 3 years - 3 days before Valeriy Kubasov and me was launched from this Baykonur launch pad.

SFE-OM We are going to land here after the end of the mission. This part of Kazakhstand was not cultivated until 15 years ago. Today it is one of our breadbaskets. A new city, Kaliningrad, was - Kaliningrad appeared here. It was only 10 years ago. Not far from here, begins the Siberia, the biggest part of our country, rich in natural resources.

CC-H Command module pilot, Houston.
SCDR-CM We are over mountains now.
CMP-OM Okay. Go ahead.
CC-H We've been getting a good picture here; we can see the clouds and the mountains pass below; you might tell Valeriy we've been enjoying it.
CMP-OM Okay.
CMP-OM Okay. Apparently it's a little hard to see the ground now; Valeriy's still looking at the clouds.
USSR (Monitoring pressure integrity. Everything's normal.)
CMP-OM Go ahead.
CC-H We've lost our TV. Tell Valeriy that we enjoyed the tour. I remember how interesting and pretty a country it is from my visits there.
CMP-OM Right. We'll just call this the end of the tour, because we are coming up on the Pacific very shortly. Of course, a lot of interesting cities here in the Soviet Union, especially in the eastern part, and as you can tell, Soviets very much remember the war 30 years ago. Fortunately, we've come a long way since then for around the world. Okay. You've got it, Bo.
CC-H Thank you very much.
SCDR (Russian)

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USSR (Where are we sliding over now?)
USA (Mongolia)
USSR (Russian)
USSR (Russian)
USA (Roger. We know how. We turned it off. I just turned it on specially for this session. Roger. (Garble) was at 20.' Right? We'll turn it OFF - after the session.
ACDR Loud and clear.
USSR (Roger. Understood.
USSR I move my (garble) next time. (Garble) (laughter)
USSR (pressure in tunnel 2 is know 280. Initial 265 pressure.)
CC-H command module pilot, Houston.
CMP Go ahead.
CC-H We've still been having some comm problems and we think possibly Valeriy has got his mike and constant key and that's on the orbital module panel. (Russian) and if it is, maybe you could ask him to only go to the press to talk mode.' Apollo commander, Houston.
ACDR Go ahead, Bo.
CC-H Sir, before on page 4-2, I had you change some of the furnace operations. Now it seems that the furnace is cooling down as it should and we would like you do all of the furnace operations without any exceptions as scheduled.
ACDR Okay. What place you want me to pick up then?
CC-H The changes I gave to you were on D4-2 and I had you make a few deletions. You'll have to do those steps that I previously had noted to delete and continue as if everything was normal because it is now.
CMP Okay. I'll get up there in just a minute. I'm changing lens on the TV camera.
CC-H Okay. Roger.
USSR (Russian)
USSR (Russian)
USSR (Russian)
ACDR Houston, Apollo. What you are talking about is the shutdown sample 150 as normal. Right?
USSR (Russian)
CC-H That's affirmative.
ACDR Roger.
CC-H Apollo, Houston. There is about a minute and a half until LOS. Next station is Guam at 72:57.
USSR (Russian)
USSR (Russian)
USSR (Question is from where to do the transmission.)
USSR (Russian)
USSR (Russian)
USSR (Soyuz - this is Soyuz. This is Soyuz 2. How do you read? Over.)

END OF TAPE

ASTP (USA) MC266/1
Time: 08:16 CDT, 72:56 GET
7/18/75

PAO This is Apollo Control. 72:56 we're loss - have loss of signal through ATS-6 satellite. 40 second gap remaining here till the final Guam Island tracking station pass during this last revolution a fairly comprehensive tour of the Soviet Union by television with commentary by the two Soyuz crewmen. Considerable amount of cloud cover noticed across Asia and the better part of the Soviet Union. Should have acquisition at this time through Guam and we're standing by.

CC-H Apollo, Houston through Guam for about 6 minutes.

ACDR Okay Bo.

CMP Loud and clear, Bo.

SPKR (Garble)

SPKR (Garble)

ACDR Okay, Vance. Drive motor on. Mode is record.

CMP Okay, here we are in Apollo-Soyuz in the Soyuz spacecraft. Valeriy Kubasov and myself. And at the moment, we want to show you a few interesting demonstrations.

SFE (Garble)

CMP And I'm going to do a little talking in English and explaining. Valeriy will explain to you in Russian. First thing we have to show is a book gyro. A book gyro is simply something shaped like a book that can be re - rotated about 3 axes. Interestingly enough, it's stable about 2 of those axis and unstable about the third. It's stable about the minimum - about the axes of minimum and maximum moment of inertia and unstable about the middle axis. Now let's give you a little demonstration of this.

CMP First, maximum. As you can see we have a stable situation here.

CC-H (Garble) LOS. ATS at 73:38.

USA Roger.

USA (Garble)

CMP Well that's fairly stable anyway. (Garble) the in-between axis, and this should be unstable.

PAO This is Apollo Control. Apollo and Soyuz spacecraft have gone over the hill from the Guam Island tracking station for the final time this morning. Command module pilot Vance Brand and Soyuz flight engineer Valeriy Kubasov are now recording on the video tape onboard recorder the science demonstrations as scheduled in the flight plan. Most of the activities today are following very closely to the flight plan, including the MA-0150 furnace sample which will be run today. Here in the control center a replay of earlier onboard television is underway. It is not live television inasmuch as we're loss of signal at the time. Next station Santiago, Chile in 28 minutes. This is Apollo Control at 73:05.

END OF TAPE

ASTP (USA) MC267/1
Time: 08:54 CDT, 73:34 GET
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PAO This is Apollo Control at 73:33 ground elapsed time. Acquisition through Santiago, Chile in about 40 seconds and of course overlapping coverage as we continue a second transfer; activities in the second transfer upcoming during this pass will be a meal aboard both spacecraft with some subjective commentary from the crewmen on the other hosts spacecraft menu. In one of the back rooms here in Mission Control Center, there are three air-to-ground interpreters working 3 shifts to interpret voice over on the Soyuz communication loop. And attached to the top of there console is a handwritten sign which says "Happiness is LOS". These interpreters who rotate through this position; there names are Ross Lavroff, Pete Afanasenko, Anatole Forostenko. We have 58 continuous minutes of coverage now. Should be AOS through Santiago and we're standing by.

CC-H Apollo, Houston. Through Santiago and then ATS.
ACDR Roger, Bo.
ACDR Alexey, Soyuz commander.
CC-H Apollo, Houston. Over.
ACDR Go ahead, Bo.
CC-H Just a stowage note. You'll find Soyuz commander's meal is in L3 which is stowed at the opposite end of L3 from the pantry.
ACDR We've already got it cut, thank you.
CC-H Roger. And I have one other thing. At 17:18 Moscow time, 73:58 GET which is over Madrid, Moscow would like to talk to the Soyuz commander and we'd like you to have him relay to Soyuz - to have simplex A and the other items necessary to do that.
ACDR Okay. Simplex for him.
CC-H Roger. Moscow would like to talk to the Soyuz commander and it'll have to be set up.
ACDR Okay.
ACDR Okay, Bo. I'm going to simplex A now.
ACDR Houston, Apollo.
CC-H Roger. Stand by for a second please. Apollo, Houston. We'd like our spacecraft to remain on Bravo and we'd just like the Soyuz commander to set up so that he can speak through his own spacecraft, simplex A on radio.
ACDR Oh, Okay. I understand.
USA (Garble)
ACDR Vance, did you read that?
CMP (Garble).
ACDR Okay.
CC-H And I'll give you a call a minute or so before Madrid.
ACDR Okay.
CMP (Russian)
ACDR Okay. He wants simplex Alfa for the setup for the Soyuz commander. Moscow wants to talk to him over Madrid and set it up for 5:10. It's about 10 minutes. 5 plus 10.
ACDR Go ahead.
USA (Garble)

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ACDR No, it'll go through yours. Go through Soyuz.
CMP Okay.
ACDR That would be AM. That's affirmative. Okay. Houston,
Apollo.
CC-H Go ahead.
ACDR Okay, Soyuz is configured for A simplex.
CC-H Roger. Understand. It will be about 5:12 transfer
time when we will be over Madrid, 5:15 transfer time.
ACDR Roger. 5:12 to 5:15.
CC-H Roger. I'll give you a call a minute or so before we
get to Madrid.
ACDR Real good.
CC-H And I have a flight plan note for you. When you
have a chance, please call me.

END OF TAPE

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ACDR Real good.
CC-H And I have a - a flight plan note for you. When you have a chance please call me.
ACDR Okay, Bo. What have you got on the flight plan change?
CC-H At 76 hours and about 42 minutes.
ACDR Go ahead.
CC-H We understand the president of Ecuador and the ambassadors of the United States and the USSR will be visiting the Quito site during that pass. These gentlemen are President Rodriguez, Ambassador Brewster and Ambassador Shlyapnikov. And I'll spell those if you wish.
ACDR Yeah. I got the Brewster.
CC-H Okay. Rodriguez: Romeo, Oscar, Delta, Romeo, India, Quebec, Uniform, Echo, Zulu. Brewster and - -
ACDR Okay.
CC-H Sierra, Hotel, Lima, Yankee, Alpha, Papa, Nector, India, Kilo, Oscar, Victor.
ACDR Okay. I got those two and that's at 76:40 something, right?
CC-H Roger. 76:42 over Quito. And it's requested that you relay our thanks to Ecuador and its people for their support to the AST Program after sending your greetings to the station visitors.
ACDR Will do. Be glad to.
CC-H Thank you.
ACDR Oh Bo, one thing. On the furnace shutdown, it's still too hot on that sample.
ACDR We don't have the cool light yet.
CC-H Roger. Understand. We don't want to shut it down until the start of the third transfer as per the normal procedures.
ACDR Okay.
ACDR Okay. I told Alexey about the pass at Quito. We're all squared away.
CC-H Roger.
CC-H Apollo, Houston. Over.
ACDR Go ahead.
CC-h Apollo, it seems that we don't have any TV from the DM and on panel 808 - 808 in the DM we would like TV station powers on for cameras - for TV stations 1 and 2.
ACDR Okay.

END OF TAPE

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ACDR Okay, Bo. The TV power is on there for you.
CC-H Thank you.
CC-H Apollo, Houston. We're getting the TV from inside
the command module. We see Alexey preparing his food, there. And
we'd like you - to ask you to put the shades into the windows, to keep
the light from shafting in our picture.
ACDR Stand by. It's kind of hard to move around, here.
ACDR Okay, Bo. I guess you want the (garble) bigger
window shade up - probably the worst one would be the left one.
CC-H We can't really tell yet, Tom. You're kind of in
front of the camera right now.
ACDR How's that, Bo?
CC-H We'll have to wait for the camera to settle down,
and we'll tell you in just a second.
ACDR Okay. I got the center hatch one down.
ACDR Right now we're preparing the meal and putting
hot and cold water with the food items.
CC-H Roger. We can see that.
ACDR That's how we keep -
CC-H And we'd like you to check the camera and, if it's
in PEAK, we'd like to have you put it in AVERAGE.
ACDR Okay.
CC-M (Soyuz 1, Soyuz 1, this is Moscow. Over.)
ACDR Karol, it's in the AVERAGE right now.
CC-H Roger. Thank you. And we're just about over the
Madrid site.
ACDR Okay. I can see you're getting some bright spots
in there. I can't tell where they're coming from.
CC-M (This is Moscow. How do you read? Over.)
CC-M (Soyuz 1, Soyuz 1. This is Moscow. How do you
read? Over.)
CC-H Tom, we're still getting some light there. Could
you just try turning off the strut lights, and see if that helps?
ACDR Yeah.
CC-M (Soyuz 1, Soyuz 1. This is Moscow. How do you
read? Over.)
ACDR Is that better?
CC-H No. It really isn't.
ACDR Yeah, it's a - the strut, I can see (garble) - I
can see, it's a reflection of the strut lights down there. I turned off
off the righthand one. I don't get anymore down where my hand is.
CC-H It's the lefthand one, or the lefthand area of the
LEB, that's getting us the light shafting.
CC-M (Russian)
SCDR (Russian)
CC-H Apollo, Houston. We'd like the battery B charge
terminated.

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USSR (Garble) power. Go ahead.
ACDR Okay. We got the strut lights off.
SCDR (Now Soyuz 2 is starting.)
CC-H Apollo, Houston. It doesn't look like the lights.
It looks like it's probably coming from the windows. If you can get
to them, we'd appreciate your putting up the shade.
SCDR (Garble.)
USA Okay. (Garble.)
USA Hey, Tom?
ACDR Yeah.
USA (Garble), there -
ACDR Keep talking to him.
USSR (Russian)
ACDR Okay, Bo. I think this stuff's coming in from
the right window over there - I mean the lefthand window.
CC-H Roger. We agree. If you can get to it, we'd
appreciate you putting up the shade.
USSR (Garble.)
CC-H Apollo, Houston. If you're at the shades, perhaps
you could put it up in all the windows. And then we'll have constant
light.
USSR (Russian)
SPEAKER (Garble.)
ACDR Say again, Bo.
CC-H I say, if you've got the shades there, maybe you can
put them in all the windows, and then we could probably have constant
lighting.
USSR (Russian)
SPEAKER (Garble) 9-6-7-9-. Across the top -

END OF TAPE

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CC-H - then we could probably have constant lighting.
SCDR (Russian)
SPKR 967 plus time 14:43 plus or minus 3 minutes.
SPKR Time: 2152 (garble)
SPKR 52
SPKR (Garble)
SPKR (Garble)
USSR (Russian)
ACDR Okay, Bo.
ACDR Okay, Bo. How does that look? That was a real chore,
I'll clue you.
CC-H Hold on just a second while we wait till the camera
settles.
SPKR (Garble)
USSR (Russian)
ACDR No, we're got to have some (garble) a little bit.
CC-H It's starting to look a lot better, just wait another
second please.
ACDR Okay.
USSR Okay. (Russian)
ACDR Okay. Alexey said he doesn't have COMM with Moscow.
CC-H Roger. Understand. No COMM with Moscow for Alexey.
Could we ask you to turn the lights up on 5 and 8 a bit?
ACDR (Garble)
ACDR How's that.
CC-H I think that'll probably be good.
USSR (Russian)
USSR (Russian)
USSR (Dear TV viewers, I am now with Vance Brand in the
orbital module. I would like to ask him to say a few words.) Say some
words for the Russian people, please.
CMP (Hello. Okay. Good day. I'm very happy to be here.
This is my first time in orbit and we have found very good hospitality
here aboard the Soyuz. Soon we shall eat and I think that I very much
would like to try to taste this food. It can be said that our pro-
ject here are - is a very important one and, as you know, everything is
proceeding according to program. I think that everything is going very
well. Of course, we are friends, we understand each other very well.
And I think - -
ACDR Some bread fell off, Deke.
CMP - - that soon we'll have dinner. I think we'll soon
have dinner.)
USSR I want to ask one more question for. Do you like
to fly in Soyuz spacecraft?
CMP (Of course. Soyuz is a good spacecraft. It's very
good here. Very comfortable.)

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SFE (Now we will continue our TV coverage. Our joint activities with Vance Brand who was visiting here, will soon come to an end. For this joint activity began at 4 hours at sun - very little is left. The only procedure that we have left to do is our joint dinner. We have conducted all of our joint experiments, all our joint tastings, we have held several TV coverage sessions about the flight and now the concluding stage of our joint stay here is approaching. To Vance, for you to remember your stay here, I would like to present to you from the Soviet - the Russian people a medal of the Soyuz and Apollo. Now you would - you can be able to see it on your screens. The same kind of metal was presented yesterday to Stafford and Deke Slayton - yesterday. And today I am presenting this medal to Vance Brand.)

CMP (That's wonderful. Thank you very much.)

SFE It is a gold medal from Russian people to you.

SFE (This is the emblem of the Apollo/Soyuz, yes?)

SFE (Garble)

CMP The Apollo-Soyuz.

SFE (Now we are beginning the - really we are beginning the final - the conclusion portion of our joint activities here in the Soyuz spacecraft before - no because soon both of you - both of us will go into the Apollo. We are now beginning our space dinner because we have worked a great deal of time already and we need some subsidence. Space dinner, as you know, - There's some background noise here. There's some interference I don't understand what it is.)

SPKR (Garble)

SFE (Space food consists of several courses. I can't even here myself. There's some interference here.)

END OF TAPE

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SFE (I can't even hear, myself. There's some interference here. Moscow, this is Soyuz 2. How do you read? Over.)
SFE ((Garble) interference. Moscow, this is Soyuz 2. How do you read? Over.)
MCC-M (I hear you normally.)
SFE (Moscow, this is Soyuz 2. How do you read? Over.)
MCC-M (We read you. Let go of your intercom button.)
SFE (Roger. How was the picture (garble)?)
USSR ((Garble) Our space food consists of several courses. Steki with sauerkraut. And - some people like green - sounds like sauerkraut soup (garble). Second course we have meat; for the third course we have juices, black current juice with sugar. We have coffee. Here we have black plums - plums and strawberries. Here we have everything that is necessary in order to prepare this food. On my right, here is our unique - kitchen. It's very small, miniaturized, very convenient kind of kitchen. And I think that our house - housewife at home might be envious of such a kitchen. If I can call this a first course, it's right here. It's already heated. This is a tub which contains the food inside and I've placed it inside and now am heating it. I would like to ask Vance how he likes our space food.)
CMP (Yes, very much. I like, especially, the pate, the meat, and also the steki - the soup. I think that Russian food is basically similar to American food. There is not too much of a difference.)
USSR (And this evening we're scheduled to be in your spacecraft, so we'll try your food.)
ACDR Houston, Apollo. (Garble.)
CC-H Apollo, Houston. Go ahead.
ACDR Roger. You want Alexey to give a commentary about food here?
CC-H Roger. We would like - some commentary by Alexey.
USSR Tom.
SPKR (Are you ready?)
SCDR (Soyuz 2 is ready.)
CC-H Apollo, Houston. We would like a commentary by Alexey about space food, if he's ready.
ACDR Okay. We're here now on our lunch. In fact, Deke has prepared most of it, since he's in that part of the spacecraft. Alexey's here in the center getting ready to eat? We'll have Alexey say a few words to you.
CC-H Apollo commander, Houston. When you move forward your hat comes into the picture and it causes it to bloom. Also, there's a checklist on panel 3 that's causing it to bloom a bit. That's good.
ACDR (Garble.)
USSR (Russian)
ACDR Are you reading Alexey?
CC-H Negative. We have not read Alexey yet.

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ACDR Houston, are you reading Alexey?
CC-H Negative. We have not read Alexey yet.
SCDR (Where is this to be plugged in? To which connector?
But I don't have the DK3. It's in the Apollo, now.)
ACDR Now Alexey is eating some steak, some beef steak.
SPKR (Russian)
ACDR Looks like it's barbecued, even. Looks like it's
roasted on a grill, but it's in a pack with that preserves it.
SCDR (Garble.)
SCDR (Garble.)
ACDR Have you been reading Alexey before, Houston?
SCDR (Garble.)
CC-H We have before, but not lately. And we do not
read him now.
ACDR Okay. I think that's switched over to Soyuz is
what - Hey, Vance, would tell Valeriy to set Alexey up so he can talk
into Houston?)
ACDR While they're taking care of that, Alexey's con-
tinuing to eat his beef steak. He also has strawberries, almonds,
USSR (Russian)
USSR (How do you read? Over.)
CC-H I can see Alexey depressing his mike, but we're
not reading - -
SPKR (Garble.)
CMP Tell you what, Bo. If you want, while we're
getting the comm squared away, we can talk a little about our food
over here.
CC-H Roger, Vance. That seems like a good idea. We've
got a good picture of you and we see you fine. If you'd like to, you
can call us about the Soviet food.
ACDR Also - hey, Vance, tell Valeriy that Alexey reads
him and the rest of us loud and clear, but he can't transmit.
CMP Okay, Bo. Well let's press on.
USSR (So in the third - in the third - transfer you
don't have to do TV coverage 11.1 from the docking module. This is
what Moscow said. Your TV - 11.1 TV session is cancelled. Did you
lo - did you copy?)
CMP Okay, Bo. Let's start in the meal there. If
you're all set. I think you can see - I think you can see that Valeriy
has spread out a meal for us on the table. We have a little collapsible
table here on Soyuz and right now it's covered with food that's under
little rubber band type devices, such that it won't float away. Most
of the food comes in either in tubes, such as what you see here, or
in cans - like a tuna can. Or just in packages - cellophane packages.
The - there is an example of something in cellophane package. It's
bread. Now, also, there's a heater for heating up these tubes. The
heater's over here on the wall. I don't know if you can quite see it.

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It's anyhow, it's an electric heater. And - Valeriy just a short time ago put two tubes of soup in there, and heated them up for us. And, it didn't take long for them to heat up, so now Valeriy's just opened up one of his tubes and he's trying a little of this soup. This is called Stcki. Very common and delicious soup. Incidentally, the -

END OF TAPE