ASTP (USSR) MISSION SR117/2
Time: 04:46 CDT, 93:26 GET
7/19/75

CC-M Roger, zero.
CC-M Soyuz, this is Moscow, did you adjust the glove?
SCDR We do not understand you.
CC-M Soyuz, this is Moscow. Did you perform the glove adjustment?
SCDR Performed nominally.
CC-M Roger. Thank you.
CC-M Soyuz, this is Moscow. I will give you the schedule for communication sessions.
SCDR Go ahead.
CC-M Moscow: 14:03-14:26;
Vanguard: 14:44-14:51, backup.
How did you receive me? This is Moscow.
SCDR Backup?
CC-M Backup.
SCDR We do not understand you.
CC-M I repeat. VHF communication session ...
SCDR Transmit the backup time!
CC-M Backup: 14:44-14:51 through Vanguard. How did you receive me? This is Moscow.
SCDR Backup, 14:44-14:51.
CC-M Roger.
CC-M Soyuz, this is Moscow. Please stand by to receive a message.
SCDR Ready.
CC-M Next part of TV-14.1 will be on TK-1. How do you read me? This is Moscow.
SCDR Next communication session is going to be on TK-1.
CC-M On TK-1, instead - instead of TK-2
SCDR On TK-1 instead of TK-2.
SFE What transmission?
CC-M That will be TV-14.1, second part.
SFE What time?
CC-M At 14:19, according to schedule.
SCDR Roger, we found it: TV-14.1 according to program, TK-1 on A-1, but listen - there is no TK there - Oh, this is continuation. I've got it. I've got it.
CC-M Not TK-1 but TA-1.
SCDR Everything is correct, everything is clear, we got it.
CC-M Soyuz, this is Moscow. There will be TV transmission TV-14.1. But instead of TV-2 camera the TK-1 camera will be used.
SCDR Roger, Roger. That's it. Thank you until the next communication session.

END OF TAPE

ASTP (USSR) MISSION SR118/1
Time: 05:35 CDT, 94:15 GET
7/19/75

(Garble)

KIO ... time of passing the equator - 13 hours 53 minutes. Apogee - 223.58 km; perigee - 218.88 km; orbital period - 88.86 minutes; inclination - 51.79 degrees. The spacecraft will enter darkness at 14:25 Moscow time, and will leave darkness at 15:01 Moscow time. Mission Control Center, Moscow.

KIO This is the Soviet Mission Control Center. Moscow time is 13:43. The Soyuz spacecraft has been in flight for 94 hours 23 minutes. It is completing its 64th revolution. The following parameters are planned for the 65th revolution ... The following crew activities are planned for the 65th revolution: The crew will don PGAs, and carry out TV transmissions and communications with the Moscow Mission Control Center. After that, the cosmonauts will transfer into the descent vehicle, close hatch number 5, and perform undocking with the Apollo spacecraft. During undocking, the Artificial Solar Eclipse experiment and several nominal rotations will be performed. Mission Control Center, Moscow.

END OF TAPE

ASTP (USSR) MISSION SR119/1
Time: 06:02 CDT, 94:42 GET
7/19/75

KIO This is Soviet Mission Control Center. In 57 seconds the spacecraft will enter coverage zone of Soviet tracking stations.

CC-M Soyuz, this is Moscow, how do you read me? Soyuz, this is Moscow, how do you read me? Soyuz, this is Moscow. How do you read me? Soyuz, Soyuz, this is Moscow. How do you read me? Soyuz, this is Moscow. How do you read me? Soyuz, this is Moscow. We can see you on our TV screens.

KIO We have a picture from the onboard camera showing how the cosmonauts are donning their PGAs. They are getting ready to perform undocking with Apollo. On the screen Alexey Leonov is helping Valeriy Kubasov to put on his PGA. The cosmonauts are preparing for undocking from Apollo. After communications session and PGA donning, the cosmonauts will transfer to the descent vehicle. Artificial Solar Eclipse experiment will be performed in the interval between the undocking and test docking. During this experiment the Apollo spacecraft will hide the Sun and will go away from the Soyuz for up to 220 meters. During the experiment the cosmonauts will observe the plume gas flow around the Apollo. This is a unique experiment, it is being done for the first time. After communications session the cosmonauts will transfer into the descent vehicle and will inform Apollo of their readiness for undocking.

CC-M Roger (garble).

ACDR How do you read me?

SFE Apollo, how do you read? Tom, we are now in the orbital module. In 2 minutes we are going to go to the descent vehicle. (English)

SCDR Moscow, this is Soyuz. How do you read me?

CC-M Soyuz, this is Moscow. I hear very well. How do you read me?

SCDR Yes, we hear you very well. We are in the orbital module in our PGAs and are transferring to descent vehicle.

CC-M We received your report on Soyuz.

SCDR Everything is normal onboard. The pressure is excellent everything is on schedule (garble).

SFE Pressure equalization valve (PEV), should it be open or closed?

CC-M PEV should be closed. To verify press on it. Place the cap on. How do you read me?

SFE We did not understand. Please repeat.

CC-M Soyuz 1 and 2, this is Moscow. Please close PEV and place the PEV cap on. How do you read me? Soyuz 1 and 2, this is Moscow.

SFE What about the PEV cap?

CC-M Close, put it on.

SFE Roger. There is a lot of interference.

CC-M Read you, Soyuz 2.

SFE There is no time now, there are ...

CC-M Soyuz 1 and 2, switch on the PRV (pressure relief valve) in OM.

SFE There was interference again we didn't understand you.

CC-M Switch on PRV in OM.

ASTP (USSR) MISSION SR119/2
Time: 06:02 CDT, 94:42 GET
7/19/75

SFE Roger, thank you.
CC-M Command module almost doesn't hear us.
SFE Moscow, this is Soyuz. We are transferring to descent vehicle.
CC-M Roger, Soyuz. Perform planned operations to the end of AOS for about 6 minutes. We will stand by in a receiving mode.
SCDR Apollo, this is Soyuz. How are you?
SCDR Apollo, this is Soyuz. How do you read me? (English)
SCDR I read you well.
KIO Cosmonauts have completed donning their PGAs, have performed systems checks, and are now transferring into descent vehicle.
SFE We have this (garble). (English)
CC-M Soyuz, this is Moscow. If possible please get ready for voice taping.
SFE Moscow, this is Soyuz 2. Do you have a picture?
CC-M We have quite a good picture. We can see your transfer to descent vehicle. Take with you your onboard operations checklist for undocking.
SFE I read you. Roger. It is there.
CC-M Roger, this is Moscow.
SFE No, later we will shut it off.
CC-M Soyuz 1 and 2, this is Moscow. Soyuz 1 and 2, this is Moscow. How do you read me? Soyuz 2, this is Moscow. Soyuz 2, this is Moscow.
SFE This is Soyuz 2. I am in descent vehicle.
CC-M Soyuz 2. Soyuz 1 did not transfer to DV yet?
SFE Not yet. He will right now.
CC-M Tell him to shut off PLU on the panel of orbital module.
SFE PLU should be shut off on OMP (orbital module panel).

END OF TAPE

ASTP (USSR) MISSION SR120/1
Time: 06:24 CDT, 95:04 GET
7/19/75

CC-M Tell him to turn off the PLU.
SFE Alexey, switch off PLU on OMP.
CC-M Soyuz 2, if you can, then copy the VHF communication sessions. This is Moscow.
SFE Go ahead.
CC-M Moscow, 15:43-15:57.
SFE Moscow?
CC-M That's Moscow. Backup, Guam, 15:59-16:07. How do you read me? This is Moscow.
SFE I do not read the last part.
CC-M Backup, Guam, 15:59-16:07.
SFE Roger.
CC-M And that's - that, Soyuz 1 and 2. Wish you everything nominal.
KIO This is Soviet Mission Control Center. Moscow time is 14:52. The Soyuz spacecraft has been in flight for 95 hours and 32 minutes. It has completed 65 revolutions. The Soyuz and Apollo spacecraft are in docked configuration. They are flying over the Pacific Ocean. At 95:43:20 Moscow time there will be - - At 95:43:20, GET, undocking of the Soyuz and Apollo will take place. The cosmonauts, after undocking, will conduct a series of programmed maneuvers. Between the moment of undocking and the second test docking, the Artificial Solar Eclipse experiment will be conducted. This is Moscow Mission Control Center.
KIO This is the Soviet Mission Control Center. Moscow time is 15:07, GET is 95:47:00. The Soyuz and Apollo spacecraft have performed undocking. The Artificial Solar Eclipse experiment is being conducted. Photographs of the upper part of the Sun's corona are being taken from the Soyuz spacecraft. Apollo is taking pictures of Soyuz with a motion picture camera. This is Soviet Mission Control Center.
KIO The Soyuz and Apollo spacecraft are conducting the Artificial Solar Eclipse experiment. The spacecraft have separated. Orientation lights have been turned on the Soyuz spacecraft. The astronauts are viewing the Soyuz. The TV cameras are showing the Soyuz spacecraft. Astronauts report a good view. They can see the Soyuz spacecraft very well. This is Soviet Mission Control Center.
KIO This is Soviet Mission Control Center. Moscow time is 15:14. GET is 95:54:00. The Soyuz spacecraft is completing its 65th orbit around the Earth. The spacecraft have conducted the Artificial Solar Eclipse experiment. At the present time the Soyuz spacecraft is completing orientation. On the 66th revolution the following programmed crew activity is planned: Test docking, after that cosmonauts will have communication session with Mission Control Center. They will perfrom systems checks and rough integrity check. After that the cosmonauts will open hatch number 5 from the descent vehicle to the orbital module, and will transfer into the orbital module, unlace PGAs, and perform exact integrity check. After completing all these operations, cosmonauts will have personal time and they will have dinner. Moscow Mission Control Center.
KIO This is Soviet Mission Control Center. Moscow time is 15 hours 27 minutes. GET is 96 hours and 07 minutes. The Soyuz and Apollo spacecraft continue their flight in an undocked configuration and are preparing for docking. Crews informed each other their readiness for docking. This is Soviet Mission Control Center.

ASTP (USSR) MISSION SR120/2
Time: 06:24 CDT, 95:04 GET
7/19/75

KIO This is Soviet Mission Control Center. In 18 seconds the spacecraft will enter the coverage zone of Soviet tracking stations. The second test docking of Soyuz and Apollo was performed.

CC-M Soyuz, this is Moscow, how do you read me? Soyuz, Soyuz, this is Moscow. How do you read me? Soyuz, this is Moscow. Switch on duplex.

SFE This is Soyuz 2. We have capture and interface mate. We are waiting for the hooks to close. We are in hooks-closing mode - - indicator light "INTERFACE MATE" is on. Artificial Solar Eclipse experiment is done. Everything is nominal.

CC-M Your report is received Soyuz 2. Now we read you well. We watched docking attentively and saw you on TV screens.

SFE Moscow. This is Soyuz 2. Interface seal is compressed. The mode is completed. Docking is accomplished.

SCDR Apollo, this is Soyuz. Interface seal compressed. APDS mode accomplished. (English)

CC-M Soyuz, this is Moscow. How are things onboard after docking?

SCDR Moscow, this is Soyuz. Do you read me?

CC-M I read you poorly. How do you read?

SCDR I read you well. How do you read me?

CC-M Now I read you normally, Soyuz. This is Moscow.

SCDR Everything is normal. We are performing a hard-dock integrity check. The pressure has remained the same for 3 minutes. Therefore, contact was soft. I think everything is normal. For the third day now we have been bothered by some station. As we fly over the territory of the Soviet Union we begin to pick up weather forecasts from an airport - 194 degrees "radar landing course" - it interferes with everything.

CC-M Roger Soyuz. Now we will get rid of it.

SCDR Yes? Just at the crucial part of docking and undocking it begins to transmit.

CC-M Roger, Soyuz.

CC-M Soyuz, this is Moscow.

SCDR Read you.

CC-M On what receiver do you hear the airport call sign?

SCDR Well, we have VHF and nothing more. This is already the third day and it [the interference] occurs all the time. They transmit the radar landing course - 194 degrees - Right now the temperature is 27 degrees C and the humidity is 43. This kind of thing is being transmitted, endlessly.

END OF TAPE

ASTP (USSR) MISSION SR121/1
Time: 07:46 CDT, 96:26 GET
7/19/75

SCDR ... the radar landing course 184 degrees, right now, the temperature is 27 degrees C and the humidity is 43. These kind of things are being transmitted endlessly.

CC-M So in your opinion, we should ...

CC-M Roger. These are simplex receivers and VHF duplexes. Roger. Thank you.

CC-M Soyuz, this is Moscow.

SCDR Over.

CC-M Write down the next VHF communication session time.

SCDR Go ahead.

CC-M Moscow, 17:07-17:22.
Orroral, backup, 17:42-17:49.
How do you read me? This is Moscow.

SCDR Moscow, 17:07-17:22. Orroral, 17:42-17:49.

CC-M Roger, this is Moscow.

DMP (Garble)

SCDR I don't understand you, Deke. (English)

DMP (Garble)

SCDR Roger, okay. (English)

CC-M Soyuz, this is Moscow. There are 4 minutes left before the end of the coverage zone. How is the integrity check?

SCDR To 10 minutes the pressure has without not changed - 800 mmHg in OM and 810 mmHg in DV.

CC-M Roger, thank you.

CT-M Houston Comm tech, Moscow Comm tech GY-1. (English)

CT-H Moscow Comm tech, Houston GY-1. Read you loud and clear. How me? (English)

CT-M Read you loud and clear. (English)

CT-H Roger. Would you send me a series of keys, please. (English)

CT-H Moscow Comm tech, Houston GY-1. Would you send me a test count and series of keys, please. (English)

CT-M (Garble)

CT-H Moscow Comm tech, Houston GY-1. I received all of your keys but only approximately half of your test count.

CT-H Would you please repeat it.

CC-M Soyuz, this is Moscow. We are coming to the end of coverage zone. Wish you everything nominal.

KIO This is the Soviet Mission Control Center. Moscow time is 16 hours and 22 minutes. The spacecraft Soyuz has been in flight for 97 hours and 102 minutes and is presently on its 66th orbit. According to the latest communication session the 66th orbit is being carried out as planned. There is no report on crew health status. All onboard systems are operating nominally. During the 66th orbit Soyuz and Apollo spacecraft undocked and performed the Artificial Solar Eclipse experiment. The crew

reported the implementation of the experiment as nominal. The Soyuz crew made photographs of the solar corona as Apollo occulated the Sun and produced an artificial solar eclipse. Then, upon the completion of the orientation, Apollo approached the Soyuz and second docking was performed. This was televised from Apollo by the onboard TV camera. We could see the Soyuz spacecraft very well, as well as the whole docking process. During the communication session with the Mission Control, the Soyuz crew reported on the completion of all the operations during the second docking. The Soyuz docking assembly was active. Upon completing the docking the cosmonauts performed integrity checks and transferred into the orbital module. Mission Control Center, Moscow.

KIO This is the Soviet Mission Control Center. Moscow time is 16 hours 46 minutes. Soyuz has been in flight for 97 hours and 26 minutes and it is completing its 66th revolution. The following parameters are projected for the 67th orbit: apogee - 223.38 km; perigee - 218.69 km; orbital period - 88.85 minutes; orbital inclination in relation to equatorial plane - 51.79 degrees. At this time Soyuz and Apollo spacecraft are continuing their flight in a docked configuration. The following crew activities are planned for the 67th orbit: Presently the cosmonauts will begin their dinner. Then they will have a communication session with Mission Control Center and will prepare for the final undocking from the Apollo. They will lace up their PGAs, then they will transfer into the descent vehicle and close hatch number 5, which is between the orbital module and the descent vehicle. Mission Control Center, Moscow.

KIO This is the Soviet Mission Control Center. AOS in 42 seconds; both spacecraft will enter the zone of Soviet Mission.

SCDR Moscow, Moscow, this is Soyuz. I read you well, over.

CC-M Soyuz, this is Moscow. I read you very well. How is everything onboard? How is integrity check of Soyuz and interface seal?

SCDR Well, after rough integrity check, the results are excellent, and the precise check of 10 minutes and results are very good. Well, pressure drop in docking module, (that is in interface volume) check. Results are very good as well ...

CC-M Roger.

SCDR I don't understand you.

CC-M Roger.

SCDR Okay.

CC-M Soyuz 1 and 2, this Moscow. Turn channel separation and communicate with Moscow from the right chair.

CC-M Soyuz 1 and 2, this is Moscow.

END OF TAPE

ASTP (USSR) MISSION SR122/1
Time: 09:08 CDT, 97:48 GET
7/19/75

CC-M Soyuz, this is Moscow.
SFE Standing by.
CC-M Prepare to receive a radiogram of permission for undocking.
SFE One minute. ... dividing channels.
CC-M Roger, Soyuz 2.
SFE Moscow, this is Soyuz 2. How do you read me? Over.
CC-M Read you excellently, Soyuz 2. I'm ready to transmit to you a radiogram of permission for undocking.
SFE Ready to receive.
CC-M Form 63. 99:03 GET, you have permission to begin active undocking. How do you read? This is Moscow.
SFE Number 63. 99:03:00 GET, begin active undocking.
CC-M You received correctly. Confirmed. Note the next session of VHF communication.
SFE This is Soyuz 2.
CC-M I read you well, Soyuz 2. Prepare to note the next session of VHF communication.
SFE Ready.
CC-M 18:40-18:54, Moscow. How did you receive?
SFE 18:40-18:54.
CC-M Received correctly. This is Moscow. We have 8 minutes until the end of the zone. We are in a standby mode. We have already transmitted everything which needed to be transmitted.
SFE Okay. Thank you, then I'll transfer again into the OM. I'll turn off the divided communication channel.
CC-M Roger, Soyuz 2.
USSR ... this is Soyuz.
SFE How do you read me? The time to initiate undocking is 99:03:00 flight time. (English)
SFE Apollo, Mission Control - Moscow Mission Control Center told us that the time is 99:03:00. The time to initiate undocking. (English)
SCDR How do you read me? How do you read me? Tom, this is the the GO for undocking. The time of undocking - 99:03. (English)
ACDR Okay. (English)
KIO This is the Soviet Mission Control Center. Moscow time is 17 hours 28 minutes. The Soyuz spacecraft has been in flight 98 hours 8 minutes and is in its 67th orbit. The communication session between the Soyuz crew and the Mission Control Center ended. The Mission Control Center gave permission to the Soyuz crew to conduct undocking at 99 hours 03 minutes GET. The Mission Control Center has no comment on the crew health status. The spacecraft systems are working nominally. The 68th orbit will be conducted according to the nominal plan. Mission Control Center, Moscow.
KIO This is the Soviet Mission Control Center. Moscow time is 17 hours 57 minutes. The Soyuz spacecraft has been in flight 98 hours 37 minutes and is in its 67th orbit. According to the processed telemetry data, the atmospheric parameters of the Soyuz spacecraft are as follows: Descent vehicle pressure - 783.7 mmHg; descent vehicle temperature - 19.1 degrees C; orbital

ASTP (USSR) MISSION SR122/2
Time: 09:08 CDT, 97:48 GET
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module pressure - 775.7 mmHg; orbital module temperature - 22.18 degrees C; instrument module pressure - 857.2 mmHg; instrument module temperature - 11.34 degrees C. In the 68th orbit, the following orbital parameters are projected: Crossing over the equator - 18:19 Moscow time; maximum altitude - 223.28 km; minimum altitude - 218.59 km; orbital period - 88.85 minutes; angle of inclination to the equatorial plane - 51.79 degrees. The Soyuz and Apollo spacecraft continue their flight in the docked configuration, and will enter the shadow ... Undocking of the spacecraft is expected at 99:03 GET and will continue from 99:07 GET until 99:09 because the undocking process takes a long time. The Soyuz spacecraft in its 68th orbit and will enter the Earth's shadow at 18 hours 52 minutes, Moscow time and come out of the shadow at 19 hours 28 minutes Moscow time. Mission Control Center, Moscow.

END OF TAPE

ASTP (USSR) MISSION SR123/1
Time: 10:17 CDT, 98:57 GET
7/19/75

KIO This is the Soviet Mission Control Center. Moscow time is 18:17. GET is 98:57. The spacecraft Soyuz is completing its 67th orbit of the flight. The following program of crew activities is predicted for the 68th orbit: At the very beginning of the orbit, the undocking of the spacecraft Soyuz and Apollo will be carried out. The command for the undocking will be given at GET 99:03. Then the cosmonauts will perform a check of onboard systems and integrity of the spacecraft. After this, a few maneuvers will be carried out: manual attitude maneuver, switching on of orbital orientation mode at plus ... The cosmonauts will open the hatch connecting the descent vehicle and orbital module. They will monitor the orientation. Then they will take off and dry their PGAs. At the end of the orbit the condensate dump will be carried out. The undocking of Apollo and Soyuz is at GET 99:03. Mission Control Center, Moscow.

KIO This is the Soviet Mission Control Center. Moscow time is 18:26. GET is 99:06. The spacecraft Soyuz and Apollo have performed the undocking. The spacecraft Apollo is moving away from the Soyuz. The Apollo TV camera is showing the spacecraft Soyuz moving away. The spacecraft Soyuz and Apollo continue separately their flight in space. Mission Control Center, Moscow.

KIO This is the Soviet Mission Control Center. In one minute the spacecraft Soyuz will enter the coverage zone of the USSR tracking station.

USSR Apollo, Soyuz. We initiated orbital orientation. (English)

CC-M Soyuz, Soyuz, this is Moscow. How do you read me? Soyuz, Soyuz, this is Moscow. How do read me?

USSR I don't under - we did not understand you. (English) Soyuz, we did not understand you. Do you have stationkeeping? (English)

CC-M Soyuz, Soyuz, this is Moscow. How do you read me?

USSR Apollo, Soyuz. Orbital attitude established. (English)

CC-M Soyuz, Soyuz, this is Moscow. How do you read me? Soyuz, Soyuz, this is Moscow. How do you read me? Soyuz, Soyuz, this is Moscow. How do you read me? Soyuz, Soyuz, this is Moscow. How do you read me?

USSR Communication. Moscow.

CC-M Roger. Soyuz. Ready to get your report about the undocking. How did it go?

USSR The undocking was performed at scheduled time. The pressure is nominal. We are now in the orbital orientation mode - approach mode. Apollo is out of sight. We don't see it yet.

CC-M Roger.

USSR The covers of the retroreflector are open.

CC-M Roger. (Garble).

CC-M Soyuz, this is Moscow.

USSR Standing by.

CC-M Did you switch on the power supply of the ship?

USSR Yes, we did.

CC-M Thank you. Soyuz, this is Moscow.

USSR Standing by.

ASTP (USSR) MISSION SR123/2
Time: 10:17 CDT, 98:57 GET
7/19/75

CC-M Can you accept our short recommendation? It is about TV camera and the performance of the TV transmission.
USSR Is it now?
CC-M Yes, right now.
USSR We don't have time. Oh, no.
CC-M Roger.
USSR Should we work now with TV camera?
CC-M No. It is about further TV transmissions. This is Moscow.
USSR (Garble) We are conducting the experiment S4.
CC-M Soyuz, go ahead with your work. Roger.
USSR Beacon on. Orientation lights on. (English)
CC-M Soyuz, this is Moscow.
SFE Soyuz 2.
CC-M Take note of the next session VHF communication.
SFE (Garble)
CC-M Communication channel with Moscow, 20:12-20:23. How did you receive?
USSR (Garble) Soyuz, this is Moscow. For TV-18 use camera TK-1 instead of TK-2.
USSR Roger.
CC-M You copied correctly.
CC-M Your nominal work is switched on.
USSR Roger.

END OF TAPE

ASTP (USSR) PRESS CONFERENCE SR124/1
Time: 11:13 CDT, 99:53 GET
7/19/75

KIO This is the Soviet Mission Control Center. The Soyuz has been in flight for 100 hours. It has just had LOS over the American tracking station Orroral Valley, Australia. The Soyuz is continuing the joint flight and experiments with the American spacecraft Apollo. The 68th revolution of the orbital flight is now in progress. Mission Control Center, Moscow.

KIO According to the television data, telemetry data obtained during the initial communication sessions early in the 68th revolution, the Soyuz has the following atmospheric parameters: DV pressure - 766.9 mmHg; temperature - 18.2 degrees; OM pressure - 774.3 mmHg; temperature - 20.75 degrees; gas pressure in the equipment bay - 845.7 mmHg; temperature - 11.14 degrees. Mission Control Center, Moscow.

KIO This is the Soviet Mission Control Center. Press conference will begin at the Soviet Press Center, Moscow in a minute. The briefing will be transmitted on the GY-8 circuit.

MCC-M Good evening. This is the Soviet Press Center in Moscow. We are beginning our next briefing. Vadim Georgeevich Kravets, the 2nd shift leader, will participate in the briefing.

KRAVETS I hope you all have been closely following on TV the today's activities. I'd like to familiarize you with the crew - (garble) - Leonov's and Kubasov's work day began today at 9:(garble). During this pass the spacecraft commander reported that the cosmonauts had a sound sleep. After breakfast the spacecraft commander and flight engineer continued the biological experiments the Growth - (garble). After the scheduled TV transmission on the 64th orbit, during which the cosmonauts monitoring onboard systems were shown, the crew began the Soyuz Apollo undocking activities. The first one of the undocking preparation procedures was increasing the Soyuz module pressure to level of 800 mmHg, accepted for the spacecraft's autonomous flight. This procedure began at 13:25 Moscow time. Twenty minutes later the cosmonauts donned space suits. The TV transmission from aboard the Soyuz dealt with spacecraft preparation for undocking. After that the spacecraft commander and flight engineer transferred from the orbital module to the Soyuz 19 descent vehicle. The TV coverage of the undocking preparation activities was continued from there. At 14:46, Moscow time, the hatch connecting the Soyuz 19 module was closed. At 15:03 the Soyuz and Apollo spacecraft separated. The joint Soviet American experiment Artificial Solar Eclipse was performed in the process of separation. The experiment consists in obtaining from Soyuz 19 a series of photos of the solar corona and atmosphere surrounding the Apollo, in the conditions of an artificial solar eclipse (glitch) Apollo. During this flight the possibility of experimental checking of new methods for investigating the solar corona and spacecraft atmosphere was realized for the first time. After the experiment had been completed, the cosmonauts took movie pictures of the Apollo. Soyuz 19 performed the rotations required for the second docking, during which the Soyuz docking assembly is going to be active. After the rotations, the cosmonauts oriented the spacecraft and activated the androgynous peripheral docking system. At 15:33:40 contact and capture occured. The

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Time: 11:13 CDT, 99:53 GET
7/19/75

Soyuz Apollo docking was completed at 15:40:41. By 16 o'clock the Soyuz 19 had performed 66 orbits around the Earth, 33 of which were performed in docked configuration with the Apollo. According to the telemetry data and crew's report, the Soyuz 19 onboard systems are functioning normally. The DV and OM microclimate parameters are within nominal limits. On the 68th orbit, the Soyuz 19 - Apollo undocking was performed at the scheduled time. And now I'll turn it over to the shift flight director Vadim Georgeevich Kravets. Go ahead if you please.

KRAVETS As was said at all times of today's events, I'll briefly - (garble) - areas of docking and undocking, since there have been many questions, maybe there will be fewer. (You were told in detail of the operations (garble) interested. I know there were a lot of questions, I won't go into greater detail on the geographical places on the map where the various functions took place.)

KRAVETS First a few words about the beginning of operations. (The crew arose at 9:40 this morning, they slept until 11:40. Oh, I'm sorry. The Soviet crew, the cosmonauts, rose at 9:40 and the astronauts at 11:20. Then, both crews had breakfast, not together, each in their corresponding ships. After breakfast the Soyuz ship brought its pressure to normal. If you remember during the joint flight when the two ships were joined, the pressure in the Soyuz was 500 to 520 millimeters. Now it is 800. Then preparations were started for undocking. During the first undocking maneuver, the Apollo was the active ship. Undocking took place at 15 hours 03 minutes Moscow time (?) over the Pacific Ocean, at the very southern tip of South America. This maneuver was followed by photography of the artificial eclipse of the Sun. After this experiment, Apollo docked once again with the Soyuz. This time the Soyuz was active, the docking system, and the Apollo was passive. The ships touched at the second maneuver at 15 hours 33 over the Medeterranean. At 15 hours 40 minutes 40 seconds the second docking maneuver was completed. At that time the ships were over the lower regions of the Volga. Then the pressure integrity was checked, it was normal, and both crews sat down to dinner. Then at 18:23 the Soyuz was given the instructions for final dedocking. At this time the ships were over the northern coast of North America - northern coast of South America. The ships undocked completely at 18:26. The Soyuz turned on its engines and started separ - separating from Apollo. This was over Africa. And so we see that the androgynous peripheral docking system completed its functions and its work completed. Remember the first docking was on the 17th when the Apollo was active and Soyuz passive? Then there was the first undocking maneuver with again the Apollo being active. And today the same thing happened, only the Soyuz was active during docking and undocking. At present, the Apollo and Soyuz ships are carrying out joint Ultra-Violet ray experiment, which should be completed somewhere around 22 hours Moscow time.)

QUERY (Byelorussian radio. Tell us about - anything about the communications between the Salyut and the Soyuz when their orbit was crossed.)

ASTP (USSR) PRESS CONFERENCE SR124/3
Time: 11:13 CDT, 99:53 GET
7/19/75

KRAVETS (Prior to the launching of the Soyuz, these communications were not foreseen. These contacts - these contacts were not foreseen, they were purely psychological, one ship supporting the other, one of them had been up for almost 2 months. There was no doubt that both communication systems could work jointly. The experiment was successful. Naturally the crew on the Salyut 4 was very happy. They haven't heard the voices of their friends for some time. And the crew on the Soyuz were also very happy that they maintained contact with Salyut.)

KIO (Trans Press Agency correspondent would like to know whether or not when the Soyuz was photographing the solar eclipse, did it also photograph the Apollo ship?)

KRAVETS (Yes, the corona of the Sun was photographed and the Apollo also because mainly the Apollo was the body that was eclipsing the Sun.)

QUERY (Was the Apollo televised back to Earth from the Soyuz at that time?)

KRAVETS (No, at that time, the external TV camera on the Soyuz was not functioning.)

QUERY (Sobotchov, Hungary. Number 1, now that we have ascertained that the docking system functions fully, is there any chance that there will be a docking system between the American shuttle and the Soviet Salyut programs? And number 2, we know that there was telephone communications between the 2 crews after they dedocked. Could you tell us what they talked aobut and what the subject was?)

KRAVETS (On the Salyut at the present time, is a non-adrogynous docking system. As far as I know, I think that the shuttle also has a similar system. We think that the success of this latest experiment will allow us to reconsider this - these docking systems. Now, after the success of this docking system, there are no principle differences or difficulties in carrying out the - what you are ... Regretfully, I left the center when the ships were approximately 5 meters from each other. You will - your question will be answered tomorrow morning by my colleague Comrad Tsibin who will be here, and he was at the Mission Center when this took place.)

QUERY (The magazine Pragomazo-Prague, Czechoslovakia. We saw on our television screens during the undocking maneuvers Soyuz rolled on its axis. Could you tell us why this happened? Was it technical, or was that accidental? What was the purpose of this movement?)

KRAVETS (Purely accidental, it was an accidental maneuver that seemed like that because after the undocking, the Apollo left the Soyuz ship in order to get into a position to eclipse the Sun. As the Soyuz maintained its orientation in the needed direction, and what you saw on your screens is the movement of the Apollo, not the Soyuz.)

QUERY (Garble), you said that after ... (English)

KIO Would you identify yourself? (English)

QUERY Mark Cramer, CBS news. Earlier in this briefing you said that after the second undocking the Soyuz ... (English)

ASTP (USSR) PRESS CONFERENCE SR124/4
Time: 11:13 CDT, 99:53 GET
7/19/75

KIO It was included on the schedule. (English)
KRAVETS (When the Soyuz ship is active then it leaves the Apollo. And that was on the schedule.)
QUERY The flight plan indicates that the Soyuz maneuvers in attitude - rolling and ... (English)
KIO You're speaking of the second undocking?
QUERY Yes. (English)
KRAVETS (During the second undocking the Soyuz leaves the Apollo.)
KIO ((Garble). Do you think that after the success of this mission that such missions can continue or is there some principle reason why there should be further experiments continued before this is introduced as a system?)
KRAVETS (Mr. Jones, I personally do not think that the experiment has to be repeated, I think that it has been carried out completely. For the future I can just say that this experiment was prepared for more than 3-1/2 years. I think that the more complicated experiments will take even a longer period of time.)
KRAVETS (Television is as previously. The two color cameras function, the two black and white are not functioning.)
QUERY (Garble) there are no color cameras, I presume, in the descent module, then? (English)
KRAVETS ((Garble) TV cameras can transmit images from the descent and from the orbiting modules. That is if the hatch is open between the two. If the hatch is closed, then the color TV cameras will not show from the descent point.)
QUERY (This morning the two cosmonauts that were here, Rukavishnikov and Filipchenko, said that they were relieved of their duties, actually, when the docking took place. I would like to know why were they detained so long in Baikonur, in that case, because they said they only returned yesterday.)
KRAVETS (... were the backup crew of the Soyuz flight and also they were the (garble) Leonov and Kubasov. (Garble) crew, the second ship had two goals. The first task was if Apollo was held back more than four days, then the second, backup, crew would go up. The second task of the backup crew was if something happened with the docking apparatus in the Soyuz, then the second ship would go up to carry out the docking. Docking took place on the 17th, so there was no need to (garble) ship up. Yesterday was the 18th and the crew was in Moscow.)
SPEAKER ... question? (English)
QUERY (Do you know the maximum distance between the Soyuz and the Apollo during photography of the artificial eclipse? And do you know whether or not the axes of the two ships with the Sun were strictly aligned?)
KRAVETS (The maximum distance was approximately 200 meters. As far as the axis alignment, it was not off more than one or two degrees.)
SPEAKER (Question.)
QUERY (You told us that immediately after the second docking the pressure was raised in the Soyuz module. Could you tell us if the pressure could have remained at 500 until the ship landed?)

ASTP (USSR) PRESS CONFERENCE SR124/5
Time: 11:13 CDT, 99:53 GET
7/19/75

KRAVETS (The pressure was increased just prior to the dedocking. This was about 13 hours Moscow time. But in principle, - in principle the ships could have come down to Earth with the fi - with the pressure at 500.)

QUERY (Japanese television. I would like to know very much could you tell us in detail how during the ship's descent, we will receive - what television image we will receive? Will it be covered from the ground or will it be from the ship?)

KRAVETS (The image will be transmitted from helicopter, and the image will be sent to the ground antennas, and then through the communication Sputnik to the corresponding receiving end.)

SPKR (We express our thanks to Vadim Kravets who came here and gave us this interesting information. Today was an informative day in general. The next briefing is tomorrow at 10 in the morning.)

KIO This is the Soviet Press Center. Good evening.

END OF TAPE

ASTP (USSR) MISSION SR125/1
Time: 12:06 CDT, 100:46 GET
7/19/75

KIO This is the Soviet Mission Control Center. Moscow time is 20:05. The Soyuz and Apollo are continuing the Ultra-Violet Absorption experiment. Due to the fact that the planned experiments utilizing the retroreflector on the Soyuz side did not produce satisfactory results, at the request of the Apollo crew and the MCC-H, impulses are being measured with a retroreflector mounted in the rear part of the Soyuz. The Soyuz has performed rotations and the Apollo is now positioning itself at the distance required for the experiment. The Soyuz has performed manual Earth orientation with an angle of 270 - 290 degrees. Mission Control Center, Moscow.

(Garble)

USSR Orientation lights on. (English)

MCC-M Soyuz 1, Soyuz 2, Moscow. LOS is coming up. Wish you nominal operation.

USSR Thank you.

KIO This is the Soviet Mission Control Center. Moscow time is 20:48. The Soyuz is continuing its orbital flight and joint experiments with the Apollo. The 69th orbit of the flight is now in progress. The following crew activities are planned for the next, 70th, orbit: manual Soyuz orientation to the Apollo, activation of orientation along the Y-axis, and of the Doppler ranging, i.e., using orbital orientation with a repetition of the local vertical, the spacecraft performs a retrograde maneuver along the velocity vector. Then the crew will perform photography, TV transmission and will monitor the spacecraft orientation systems. Then, Alexey Leonov and Valeriy Kubasov will prepare for, and perform, the S81, i.e., photography of light effects around the spacecraft. The experiment is continuing on a modified schedule. The Mission Control Center had determined the orbital parameters on the basis of the radio trajectory measurement data obtained during the previous orbit. On the 70th orbit the parameters will be as follows: Time of equator crossing - 21:17:41 Moscow time; equatorial longitude for this moment - 106.38 degrees; apogee - 233.09 km; perigee - 218.4 km; orbital period - 88.85 minutes; inclination - 51.78 degrees. The Soyuz and Apollo are now approaching the terminator line. They will leave darkness on the 70th orbit at 21:50. Mission Control Center, Moscow.

KIO This is the Soviet Mission Control Center. Moscow time is 21:18. The 70th orbit of the Soyuz orbital flight - orbital revolution - The 70th revolution of the Soyuz orbital flight has begun. 102 hours have passed since the launch. In a minute, the Soyuz, continuing the joint experiments with the Apollo, will gain AOS over the Soviet tracking ship Academician Sergei Korolev. Mission Control Center, Moscow.

MCC-M Soyuz, Moscow. How do you read? Soyuz, Soyuz, Moscow. How do you read me? Soyuz, Soyuz, Moscow. How do you read? Soyuz, Moscow. How do you read? Soyuz, Soyuz, Moscow. How do you read? Soyuz, Soyuz, Moscow. How do you read me? Soyuz, Soyuz, Moscow. How do you read me? Soyuz, Soyuz, Moscow. How do you read?

END OF TAPE

ASTP (USSR) MISSION SR126/1
Time: 13:29 CDT, 102:09 GET
7/19/75

CC-M Soyuz, this is Moscow. How do you read me? Soyuz, Soyuz, this is Moscow. How do you read me?
SCDR Moscow, this is Soyuz. How do you read me?
CC-M Soyuz, this is Moscow. I read you very well.
CC-M Soyuz.
SCDR Go ahead.
CC-M What would you like to report? This is Moscow.
SCDR We are now approaching the final phase. Apollo is 30 meters away. We are performing photography. In a few seconds Apollo will begin a pitch maneuver and we will take pictures. This is the last phase of our experiment.
CC-M Roger. What is your spacecraft attitude?
SCDR The spacecraft is now on 90-270. Everything is according to the rules.
CC-M Roger. Thank you, Soyuz.
CC-M Soyuz, this is Moscow.
SCDR Go ahead.
CC-M We have a request for you. After the Apollo separates from you, would you transfer TK-1 to the DV? How do you read me?
SCDR TK-1 in the DV? Okay, okay, we'll transfer it.
CC-M Roger. Also request you mount TK-1 on TA-4 bracket. How do you read me, Soyuz. This is Moscow.
SCDR Yes, we know, TK-1 on TA-4.
CC-M Received correctly.
SCDR Apollo has already rotated more than 90 degrees. It's a very beautiful view. Yes, (garble). All this is taking place at a distance of 10 meters.
CC-M Roger. You are observing Apollo well. AOS between spacecrafts is about to end in Soyuz. We will wait for you in the Moscow zone.
KIO This is the Soviet Mission Control Center. The 70th orbit of the Soyuz spacecraft continues. Moscow time is 21:43. The Apollo and Soyuz spacecraft are now completing the photography experiment. They are now flying over London. In accordance with the flight plan, the Soyuz crew is conducting maneuvers. Directional angle is 90-270 degrees. They are maintaining an orbital orientation mode along the plotted infrared vertical using angular rate sensors. In 1-1/2 minutes the Soyuz will enter the coverage zone of the Eupatoria and Tbilisi tracking stations. Mission Control Center, Moscow.
CC-M Soyuz, Soyuz, this is Moscow. How do you read me?
SFE Moscow, this is Soyuz 2. I read you well.
CC-M Roger, Soyuz 2.
This is the other side. Side. The other side. Good picture. (English)
CC-M Soyuz, this is Moscow.
SCDR Go ahead.
CC-M Request you turn off CO_2 absorber and turn on automatic control on OMP.
SCDR CO_2 absorber off and turn on auto. Roger.
CC-M Received correctly.

ASTP (USSR) MISSION SR126/2
Time: 13:29 CDT, 102:09 GET
7/19/75

SCDR	Apollo is now going to leave and we will do it.
CC-M	Roger.
SCDR	We have completed all photography. We are just now entering darkness. The spacecraft is still in light and it is already dark on Earth.
CC-M	Roger.
SCDR	A beautiful picture, especially when the thrusters are working.

END OF TAPE

ASTP (USSR) MISSION SR127/1
Time: 13:50 CDT, 102:30 GET
7/19/75

CC-M Soyuz, get ready to receive a radiogram without a pad.
USSR (Garble)
CC-M Number 65. At the end of experiment S82 at 22:55:00, go into solar orientation mode at a rate of 3 degrees per second on DO. How did you copy? This is Moscow.
SFE At the end of experiment S82 at 22:55:00, go into solar orientation mode at a rate of 3 degrees per second on DO. How did you read? Over.
CC-M You copied correctly.
SFE Alexeiy asks on which side, left or right?
CC-M As you wish.
SFE I know. That's what I told him.
CC-M Soyuz 2, this is Moscow. Please make a note that the next communication session will be on VHF.
CC-M Soyuz, this is Moscow.
SFE On the line.
CC-M Write down that the next session will be VHF through KYG at 23:02.
SFE Just a minute, just a minute. Ready.
CC-M 23:02.
SFE What's at 23:02?
CC-M KYG, communication through KYG, 23:02 to 23:09. Vanguard at 00:07 to 00:19, backup. Did you copy? Moscow out.
KIO This is the Soviet Mission Control Center. Moscow time is 22:54. The Soyuz spacecraft has begun its 71st orbit. GET is 103:34. According to reports from the spacecraft, the crew has finished photographing the Apollo, and thus ends the performance of the planned program of joint experiments. Mission Control Center sent to the spacecraft a radiogram in which were given recommendations for crew activities. After photography experiment S82, a manual orientation towards the Earth is to be executed, and a solar orientation mode will be performed with a rate of 3 degrees per second. After this, according to the flight plan, the crew will be involved in stowing their PGAs, the closing down of experiments AS4, and the performance of unilateral experiments concerning genetic research: experiment S2, and experiment S1, Growth of Micro-Organisms. The flight engineer will continue to observe the progress of the Zone-Forming Fungi experiment, an experiment that was carried out together with the American cosmonauts [sic]. According to telemetry data sent to the Mission Control Center, an analysis has been made of the onboard systems status; they are nominal. The atmosphere of the Soyuz spacecraft has the following parameters: pressure of the descent vehicle, 767 mmHg; temperature, 18.9 degrees; pressure of the orbital module, 774.3 mmHg; temperature of the orbital module atmosphere, 20.75 degrees; pressure of the gas mixture in the equipment bay, 845.7 mmHg; temperature, 11.14 degrees. In 5 minutes, the Soyuz will enter the coverage zone of Soviet tracking ship Cosmonaut Yuri Gagarin. Mission Control Center, Moscow.

END OF TAPE

ASTP (USSR) MISSION SR128/1
Time: 15:04 CDT, 103:44 GET
7/19/75

SFE ... 31, and load is 20. Everything is nominal onboard.
CC-M Thank you. Are you ready to receive a radiogram with pad 03, system status report?
SFE One second. Go ahead.
CC-M Soyuz 1 and 2. We've got questions for you. Did you switch off CO_2 absorbtion?
SFE Yes we switched it off. We switched it off.
CC-M And did you switch off automatic device?
SFE Yes, yes.
CC-M Did you unplug the portable condensate collection in OM?
SFE Yes, yes. I unplugged container 1 and then plugged it to connector E-12 in OM.
CC-M Roger. Thank you. Did you turn off VFH/AM?
SFE Yes we turned it off.
CC-M Roger. Thank you.
SFE We turned off the ranging system, only simplex TM is left.
CC-M Roger. Thank you, Soyuz 2. Soyuz 1 and 2, is pad 03 ready?
SFE We were just going to do that, wait a little.
CC-M Roger. At that time take from our radiogram pad 3 about system status report.
SFE Go ahead.
CC-M Number 66, 70th revolution: buffer battery capacity - 164 amperes per hour; propellant, main (power) - 88 kg; propellant, backup (power) - 20 kg. How did you read me? This is Moscow.
SFE Capacity 164, main 88, backup 20 kg.
CC-M Correct. Write down next VFH comm session time.
SFE ... 00:34-00:41.
CC-M Plus one minute to the first and second times. Everything is correct, KYG.
SFE Does it mean that there also will be one minute added to 20:07-02:14. Is that correct?
CC-M Yes, that's correct.
CC-M Soyuz, this is Moscow. LOS until next coverage.
KIO (This is Moscow MCC. Moscow time is 23 hours 52 minutes. The spacecraft Soyuz 19 is now in it 104th hour, 30 minutes. Through the Yuri Gagarin tracking vessel there have been carried out a series of checks on the - concerning the onboard system. There are no comments concerning the status of the onboard systems. Based on the reports of the crew, the cosmonauts' health is excellent. The program that was planned for the spacecraft has been fully carried out. Based on the flight plan the spacecraft has - is in a solar spin orientation towards the Sun. Based on the flight program, the - the crew is finishing up the experiment for Artificial Solar Eclipse. After this the crew will be carrying out a series of other experiments in - in which is included Micro-organic Growth. In - at - in 105th hour 10 minutes in their flight the cosmonauts will eat their dinner. They will be dumping the condensate, and in the 106th hour of the flight they will be preparing for sleep. This is Moscow MCC. Over.)

END OF TAPE

ASTP (USSR) MISSION SR129/1
Time: 16:02 CDT, 104:42 GET
7/19/75

KIO (Moscow MCC. Moscow time is night time, 09 minutes. The Soyuz spacecraft - Soyuz 19 spacecraft left the shaded area. At the present time finds itself in the southeast portion of Australia. Based on telemetric data the parameters are the following: The pressure of the descent vehicle - the pressure is 788 mmHg; the temperature is 19.7 degrees Celsius. This is Moscow MCC.)

KIO (This is Moscow MCC. It's now zero hours 11 minutes. The Soyuz spacecraft is now in 184th hour 51st minute of flight. At the present time the Soviet spacecraft is finishing the 101st orbit. It's over the Pacific Ocean. Based on the telemetric data sent down from the spacecraft, all the systems are go. The pressure in the descent vehicle is 787 mmHg; the temperature in the descent vehicle is 19.7 degrees Celsius. The pressure in the orbital module is 573 and the temperature in the orbital module is 20.6 Celsius. The service module: The pressure is 720; temperature is 13 degrees Celsius. On the next, 102nd orbit, the program for the crew is as follow: The crew will finish carrying out the experiments S1, S2, Micro-Organic experiment, will eat dinner, and after evening toilet activities [personal hygiene] in the 106th hour of flight the crew will go to sleep. The next communication will take place in 22 minutes over the Cosmonaut Yuri Gagarin tracking vessel. This is the MCC in Moscow.)

KIO (This is Moscow MCC. Moscow time is 00:15. We just finished a communication with the Soyuz spacecraft through the Yuri Gagarin tracking vessel. Telemetric data was received on the condition of the spacecraft. There have been trajectory changes; so certain information has been passed out concerning these systems. The program has been fulfilled fully. The conditions of the onboard systems are standard and in the allowed norms. The spacecraft at the present time is in the shaded area of the Earth and is over the western coast of Africa. This is Moscow MCC. Out.)

END OF TAPE

ASTP (USSR) MISSION SR130/1
Time: 18:07 CDT, 106:47 GET
7/19/75

KIO This is the Soviet Mission Control Center. In a minute the Soyuz 19 will enter the zone of coverage of tracking ships Cosmonaut Yuri Gagarin. The communications session will include the transmission of telemetric information together with trajectory measurements and the issue of a command on the command radio link. Radio conversations will be initiated solely at the wish of the cosmonauts, at their request. Mission Control Center, Moscow.

KIO (This is Moscow MCC. It is now 2 o'clock 34 minutes Moscow time. The Soyuz spacecraft is now in its 103rd hour of flight. It finds itself now over the Atlantic Ocean. The program of the last communication with the spacecraft has been fully accomplished. During this communication the telemetric data was sent downlink concerning the condition of the onboard systems. Based on the telemetric data, the pressure is 767 in the descent vehicle. In the descent vehicle the temperature is 18.9 degrees Celsius. The humidity in the descent vehicle is 9.9 millimeters of pressure. In the orbital module, the pressure is 550 and the temperature is 19. Temperature is 13.11 degrees Celsius - -. In accordance with the program of the flight the spacecraft is now - is in an orbital spin orientation toward the Sun. Based on the instructions of the day, the crew members are now asleep. The following - the next communication with the spacecraft during the 74th orbit will take place through the Yuri Gagarin tracking vessel in about 40 minutes. Based on the trajectory measurements, the changes in the orbit are as follows: the apogee will be 219.9 and the perigee will be 216.6. The period of rotation will be 88.8 minutes. The temperature should be 51.6 degrees Celsius. This is Moscow MCC giving the latest parameters. Over.)

INTER Procedures, A/G Interpreter. Procedures A/G interpreter. Come in, please. Procedures, A/G interpreter. There's a problem with my reception. I'm getting a very low signal from the USSR PAO commentary and - which forces me to miss out on some of the specific figures. Is there any way we can up the volume? Thanks a lot. (English)

INTER Go ahead. (English)

KIO This is Moscow MCC. Moscow time is 3 hours 2 minutes. The Soyuz spacecraft, Soyuz 19, is now in its 10 - 107th hour - 108th hour. At the present time the Soyuz spacecraft is terminating - is finishing its 73rd orbit. It is located above the Australian continent, in the lighted area of the Earth's surface. Based on the flight plan it's now sleeping time for the cosmonauts. The crew - - sleeping now and - - will be sleeping until approximately the 42nd - 142nd hour. In the next orbit we're planning to hold a communication with the crew, rather with the spacecraft through the Gagarin tracking vessel. In the 3rd or 4th hour of the communication, we will - 1st - 3rd or 4th hour of Moscow time we will be holding another communication session through the Gagarin tracking vessel. This is Moscow MCC. Over.

END OF TAPE

ASTP (USSR) MISSION SR131/1
Time: 19:42 CDT, 108:22 GET
7/19/75

KIO (This is Moscow MCC. Moscow time - 5 hours 16 minutes. Soyuz spacecraft is carrying out its 76th revolution around the Earth. Cosmonauts continue sleeping. The spacecraft at this time finds itself above the North American continent. The orbit parameters forecast for the 76th orbit are as follows: It'll go over the equator at 6 hours 21 minutes [sic] 219.65 is the apogee. The perigee is 216.33 kilometers. The period of revolution is 88.8 minutes. The equatorial angle is 51.71 degrees [sic]. Next communication will take place at 6 hours 23 minutes Moscow time. At that time the spacecraft will go into the Petropavlovsk AOS. This is Moscow MCC. Out.)

KIO This is Moscow MCC. Moscow time is 6 hours 7 minutes. The Soyuz 19 spacecraft is finishing its 75th orbit around the Earth. At the present time it is located over the equator around Asia. The regular communication session with the spacecraft will take place at 6 hours 23 minutes Moscow time. At that time the Soyuz will come into the AOS of the Petropavlovsk tracking station. Moscow MCC. Out.)

KIO (This is Moscow MCC. Moscow time is 6 hours 20 minutes. The Soyuz spacecraft has begun its 76th orbit. It is now coming up to the Petropavlovsk AOS and finds itself in the lighted area of the Earth's surface. Cosmonauts are sleeping. In the 108 hour flight time the distance between Soyuz and Apollo was about 100 and some odd kilometers. The communication now will be Petropavlovsk-Kamchatsky. Telemetric data is coming down. Trajectory data and different commands are uplinked to the spacecraft. This is Moscow MCC. Out.)

KIO (This is Moscow MCC. Moscow time is 6 hours 40 minutes. The spacecraft Soyuz 19 finds itelf in the 111th hour and 20th minute of the flight. At the present time it is located over North America. 12 minutes ago the communication was terminated over Petropavlovsk-Kamchatsky. Based on the telemetric data received from the Petropavlovsk station the parameters of onboard systems are as follows: pressure in the descent vehicle is 748.1 millimeters; temperature in the descent vehicle is 82.9 degrees Celsius [sic]. Partial pressure of oxygen is 190.3 millimeters of Mercury. Partial pressure of nitrogen [sic] is 7.4 millimeters. 9.2 percent is the humidity. In the orbital vehicle 748 is the pressure. The temperature is 19 degrees Celsius. In the service module the pressure is 859 millimeters. The regular communication session will take place over the Sergei Korolev tracking vessel in - at 6 hours 45 minutes Moscow time and will last about 53 minutes. This is Moscow MCC. Out.)

END OF TAPE