1 00:00:00.030 --> 00:00:05.220
and that dot on your screen to the left

2 00:00:03.810 --> 00:00:06.810
hand side of your view from this

3 00:00:05.219 --> 00:00:09.089
external camera on the International

4 00:00:06.809 --> 00:00:12.239
Space Station is a Tallyho on the Soyuz

5 00:00:09.089 --> 00:00:14.669
TMA 12m spacecraft better late than

6 00:00:12.240 --> 00:00:17.190
never the Soyuz now about to approach

7 00:00:14.669 --> 00:00:18.480
the neighbourhood of the complex as the

8 00:00:17.190 --> 00:00:23.130
Soyuz and the International Space

9 00:00:18.480 --> 00:00:26.449
Station pass beyond New Guinea about to

10 00:00:23.129 --> 00:00:26.448
begin a swing over the South Pacific

11 00:00:36.619 --> 00:00:43.109
during the two-day sojourn from the

12 00:00:40.109 --> 00:00:46.939
launchpad to this point the crew on

13 00:00:43.109 --> 00:00:49.590
board the Soyuz Swanson quartz RF and

14 00:00:46.939 --> 00:00:52.289
artemiev had an opportunity to doff
15 00:00:49,590 --> 00:00:54,180
their sokol launch and entry suits to

16 00:00:52,289 --> 00:00:58,200
stow them they have an upper compartment

17 00:00:54,179 --> 00:01:01,289
called the orbital module that has potti

18 00:00:58,200 --> 00:01:03,390
as well as a bit of room for the crew to

19 00:01:01,289 --> 00:01:06,060
stretch out as well as where their

20 00:01:03,390 --> 00:01:09,989
provisions are located they were able

21 00:01:06,060 --> 00:01:11,579
then to enjoy the view of Earth and to

22 00:01:09,989 --> 00:01:12,989
communicate with the flight controllers

23 00:01:11,579 --> 00:01:15,750
here in Korea over Russian ground

24 00:01:12,989 --> 00:01:19,349
stations over the course of these two

25 00:01:15,750 --> 00:01:22,349
days in transit this is again the old

26 00:01:19,349 --> 00:01:25,289
way that rendezvous used to be conducted

27 00:01:22,349 --> 00:01:27,809
from a Soyuz vehicle both in the days of

28 00:01:25,290 --> 00:01:29,700
the MIR space station as well as the
international space station until a year ago when Chris Cassidy and his crewmates
alexander mazurkin and pavel vinogradov executed the first single day launched a
docking in the space station era the international space station era the next three crews also executed that single
day six hour four orbit rendezvous a procedure it was to have occurred again this time but the failure of a critical rendezvous burn just a few hours after launch back on Tuesday evening US time caused a default in the rendezvous plan to the backup 34 orbit plan that is
currently in the final minutes of being
executed as you see the Soyuz very calmly very gently approaching the International Space Station now about a half a kilometer away from the Poisk module its rate of closure now down to less than two meters per second rate is a two or a one nine fiver okay we see the same values sailing serenely over the South Pacific at an altitude of 252 statute miles of the Soyuz TMA 12m spacecraft is aligning itself with the Poisk module in about eight minutes it will put on the brakes for the start
58
00:02:56.750 --> 00:03:01.128
of just a couple of minutes or so of

59
00:02:59.209 --> 00:03:04.938
station keeping at a range of a hundred

60
00:03:01.128 --> 00:03:07.459
95 meters everything is continuing to go

61
00:03:04.938 --> 00:03:09.769
as planned all of the Soyuz systems in

62
00:03:07.459 --> 00:03:12.500
excellent shape in the final minutes

63
00:03:09.769 --> 00:03:15.318
before Swanson sports off and Artemyev

64
00:03:12.500 --> 00:03:28.430
reached their destination and their home

65
00:03:15.318 --> 00:03:32.738
for the next 167 days the radio six to

66
00:03:28.430 --> 00:03:37.150
250 meters or eight is the rate

67
00:03:32.739 --> 00:03:37.150
flying around and approaching

68
00:03:37.150 --> 00:03:46.030
I'm packaging

69
00:03:47.650 --> 00:03:54.920
look it's a very smooth slow way around

70
00:03:52.460 --> 00:03:57.460
it's almost like we're station-keeping

71
00:03:54.919 --> 00:03:57.459
almost
I find it sort of here the range to 4804

eight okay

but of course I was always searching

over to there so I want a girl that can

compartmentalize everything is nominal

with flying around rain arranged to 40 o

0 for 8 with the closing rate pitch

maneuver

yes carcinoma brothers Misha you should

be getting a really nice visual arrest

from your crew quarters window Moscow

inaudible as you can see the automated

computers on the Soyuz currently

conducting a roll of the vehicle this
enables this maneuver enables the so

used to have its solar arrays oriented

positions to different just prior to the

initiation of station keeping

torino step you must 180 meters one

eight zero zero seven the rate and the

Soyuz now has completed its breaking its

roll maneuver now complete and we're in

station keeping keeping right in front

of the lists this is likely to last only

a couple of minutes everything should be

assessed very quickly by the Russian

flight controllers before they give the
go for the initiation of the automated

00:05:53.978 --> 00:06:03.149
commanding for final approach we confirm

00:05:57.668 --> 00:06:03.149
the final approach other monitor copying

00:06:07.389 --> 00:06:14.479
you see

00:06:09.680 --> 00:06:18.740
get ready for final approach copy in

00:06:14.480 --> 00:06:26.230
work switching formats moving on to the

00:06:18.740 --> 00:06:26.230
other display a bit better

00:07:03.300 --> 00:07:07.780
this docking will not be occurring over

00:07:06.069 --> 00:07:09.909
Russian ground stations of the docking

00:07:07.779 --> 00:07:16.990
expected to occur over northern Brazil

00:07:09.910 --> 00:07:16.990
and as such the video of the approach of

00:07:13.810 --> 00:07:18.639
the soyuz for its docking to the

00:07:16.990 --> 00:07:20.980
International Space Station is handled

00:07:18.639 --> 00:07:23.800
by US communications assets we'll be

00:07:20.980 --> 00:07:25.810
handing over between tracking and data
widely. The Soyuz is flying over Paraguay now. The Soyuz is inside 20 meters to docking, with a perfect approach rate of one tenth of a meter per second. The automated rendezvous systems on the Soyuz precisely aligning.
the forward docking probe on the vehicle
to the poisk module docking port
everything in preparation now for
contact and capture momentarily
metacenter so not argue the Senate
everything's a nominal copy copy in
concur
of course very activist mother now we
read is about zero one
anybody for contact
now just a handful of meters away flight
controllers here in coral Java and in
Houston standing by for contact and
capture of the International Space
00:09:26,710 --> 00:09:28,769 Station

144
00:09:42,179 --> 00:09:45,169 standing by for contact

145
00:09:49,669 --> 00:09:58,289 we have contact including tensor contact

146
00:09:54,210 --> 00:10:01,200 confirmed docking confirmed docking

147
00:09:58,289 --> 00:10:02,849 confirmed at 6:53 p.m. Central Time we

148
00:10:01,200 --> 00:10:05,730 can accept the International Space

149
00:10:02,850 --> 00:10:08,570 Station of the Soyuz flew 252 miles over

150
00:10:05,730 --> 00:10:08,570 southern Brazil