



1  
00:00:00,786 --> 00:00:03,926  
>> And our first view  
from external cameras

2  
00:00:03,926 --> 00:00:06,006  
on the International  
Space Station showing the

3  
00:00:06,006 --> 00:00:07,466  
Soyuz vehicle.

4  
00:00:07,466 --> 00:00:09,576  
You can clearly see  
its thruster firings,

5  
00:00:09,846 --> 00:00:13,426  
all automatically  
commanded as the Soyuz

6  
00:00:13,426 --> 00:00:16,666  
and the International Space  
Station passed 252 miles

7  
00:00:16,666 --> 00:00:17,996  
over Western Algeria.

8  
00:00:21,506 --> 00:00:23,446  
Yuri Malenchenko  
has begun his fly

9  
00:00:23,446 --> 00:00:26,686  
around to precisely align  
the forward docking probe

10  
00:00:26,686 --> 00:00:30,376  
on the Soyuz with the docking  
port of the Rassvet module.

11  
00:00:30,746 --> 00:00:36,116

Again, Rassvet was the docking module, if you will,

12

00:00:36,116 --> 00:00:39,336

that was delivered to the nadir or Earth-facing port

13

00:00:39,756 --> 00:00:42,406

of the Zarya module of the International Space Station

14

00:00:42,406 --> 00:00:45,876

on the STS132 mission of Atlantis.

15

00:00:49,776 --> 00:00:54,826

As the Kurs Automated Rendezvous System positions the Soyuz

16

00:00:54,826 --> 00:00:57,476

for its precise alignment to the Rassvet module

17

00:00:57,476 --> 00:00:59,796

on the Earth-facing port of the Zarya module

18

00:01:00,316 --> 00:01:02,536

in the lower portion of your screen,

19

00:01:02,536 --> 00:01:05,186

you can see various elements of the U.S. segment

20

00:01:05,186 --> 00:01:06,906

of the International Space Station just right

21

00:01:06,906 --> 00:01:08,036

at the cross hairs.

22

00:01:08,596 --> 00:01:10,676

You can see the Quest  
airlock just

23

00:01:10,676 --> 00:01:13,396

on the upper right quadrant.

24

00:01:13,856 --> 00:01:18,006

That Quest airlock to be used in  
late August in just a few weeks

25

00:01:18,006 --> 00:01:19,976

by Sunni Williams  
and Aki Horsehide

26

00:01:20,436 --> 00:01:22,486

for a U.S.-based space walk

27

00:01:22,516 --> 00:01:26,216

to replace an ailing main bus  
switching unit, a power unit

28

00:01:26,216 --> 00:01:28,236

on the truss of the  
International Space Station

29

00:01:28,596 --> 00:01:33,506

and to lay some cabling for  
the arrival in late 2013

30

00:01:33,506 --> 00:01:36,526

of the next Russian module  
called the Multi-Purpose

31

00:01:36,526 --> 00:01:38,796

Laboratory module  
that will be launched

32

00:01:38,796 --> 00:01:40,346

to the International  
Space Station

33

00:01:40,346 --> 00:01:46,806

to replace the Pairs  
docking compartment.

34

00:01:46,866 --> 00:01:48,316

>> [talking in foreign  
language] we confirm this is the

35

00:01:48,386 --> 00:01:49,616

[inaudible] everybody's on.

36

00:01:50,086 --> 00:01:55,376

General approach  
parameters are nominal,

37

00:01:55,456 --> 00:01:57,476

and we are aligned with you.

38

00:01:57,816 --> 00:02:01,246

>> Now flying over Northwest  
Kazakhstan just 40 meters away

39

00:02:01,246 --> 00:02:02,816

from the International  
Space Station,

40

00:02:02,816 --> 00:02:04,806

the three-section Soyuz vehicle.

41

00:02:04,806 --> 00:02:06,486

The forward section  
is the orbital module

42

00:02:06,486 --> 00:02:09,376

with the forward docking

probe extended, ready to come

43

00:02:09,376 --> 00:02:11,886  
into contact with the  
Rassvet module docking port.

44

00:02:12,376 --> 00:02:15,536  
The crew, Malenchenko,  
Williams, and Hoshide are

45

00:02:15,776 --> 00:02:18,756  
in their contoured,  
custom-made seat liners

46

00:02:19,176 --> 00:02:22,166  
in the center section, the  
descent module, the only portion

47

00:02:22,166 --> 00:02:25,146  
of the Soyuz that returns to  
Earth, and at the very back end,

48

00:02:25,146 --> 00:02:27,036  
that white section with  
the solar rays is the

49

00:02:27,036 --> 00:02:29,886  
instrumentation and  
propulsion module, obviously,

50

00:02:29,886 --> 00:02:32,566  
where the propellant tanks  
and the engines are located.

51

00:02:32,566 --> 00:02:32,886  
>> [inaudible] Loud and clear.

52

00:02:33,516 --> 00:02:39,056  
[ Pause ]

53

00:02:39,556 --> 00:02:45,096

[ Background Talk ]

54

00:02:45,596 --> 00:02:48,246

>> You can see the Kurs  
Automated Rendezvous System,

55

00:02:48,246 --> 00:02:51,026

the cross hairs and this  
engineering view just

56

00:02:51,026 --> 00:02:53,046

about perfectly aligned  
with the docking target

57

00:02:53,046 --> 00:02:54,246

on the Rassvet module.

58

00:02:55,386 --> 00:02:59,396

>> [inaudible] With a small  
misalignment, but, again,

59

00:02:59,396 --> 00:03:00,856

everything is within the range.

60

00:03:00,856 --> 00:03:02,526

It's been compensated.

61

00:03:03,116 --> 00:03:04,246

Rate is normal.

62

00:03:04,446 --> 00:03:05,766

Standing by for contact.

63

00:03:08,626 --> 00:03:09,296

>> Missile.

64

00:03:09,376 --> 00:03:13,886

>> The target is  
almost at the center.

65

00:03:14,206 --> 00:03:17,796  
[Inaudible] Contact confirmed.

66

00:03:18,206 --> 00:03:19,226  
Capture confirmed.

67

00:03:19,806 --> 00:03:20,846  
>> Docking confirmed.

68

00:03:22,126 --> 00:03:26,176  
Docking confirmed at  
11:51 P.M. Central Time,

69

00:03:26,176 --> 00:03:29,636  
12:51 A.M. Eastern Time  
over Northeast Kazakhstan.

70

00:03:31,136 --> 00:03:34,336  
So on the 37th anniversary of  
that famous handshake in space

71

00:03:34,376 --> 00:03:37,656  
by Tom Stafford and Alexei  
Leonov during the Apollo-Soyuz