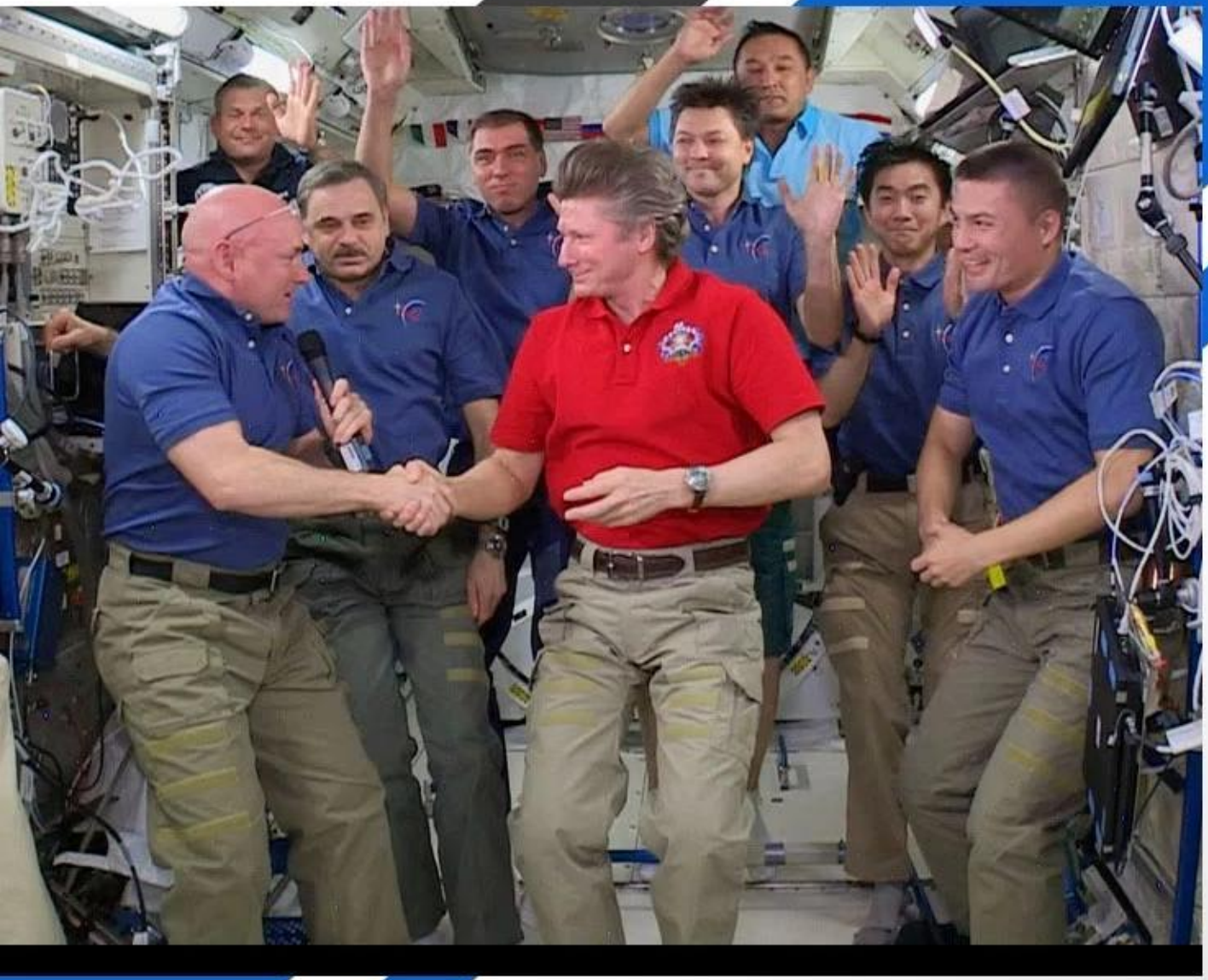

SPACE TO GROUND

1
00:00:04,789 --> 00:00:03,030
houston station on space to ground

2
00:00:06,389 --> 00:00:04,799
welcome to space to ground your weekly

3
00:00:08,070 --> 00:00:06,399
look at what's happening on board the

4
00:00:10,230 --> 00:00:08,080
international space station i'm dan

5
00:00:11,990 --> 00:00:10,240
hewitt it was a full house this week on

6
00:00:13,509 --> 00:00:12,000
the station and one of the cast members

7
00:00:15,270 --> 00:00:13,519
is even a twin

8
00:00:17,189 --> 00:00:15,280
nine crew members from five different

9
00:00:19,269 --> 00:00:17,199
countries packed the orbital laboratory

10
00:00:21,429 --> 00:00:19,279
this week working fast and furious on a

11
00:00:23,509 --> 00:00:21,439
range of different projects including

12
00:00:25,990 --> 00:00:23,519
in-depth research on muscle loss

13
00:00:28,070 --> 00:00:26,000

readying small satellites to be deployed

14
00:00:30,230 --> 00:00:28,080
conducting earth observations and even

15
00:00:32,870 --> 00:00:30,240
driving rovers on earth from a control

16
00:00:34,950 --> 00:00:32,880
panel in space but it's back home on

17
00:00:37,190 --> 00:00:34,960
friday september 11th for the visiting

18
00:00:39,430 --> 00:00:37,200
crew members andreas mogensen and idean

19
00:00:42,869 --> 00:00:39,440
avatar along with cosmonaut gennady

20
00:00:45,270 --> 00:00:42,879
padalka who's now spent a total of 879

21
00:00:47,590 --> 00:00:45,280
days in space more than any other human

22
00:00:49,190 --> 00:00:47,600
in history and scott kelly who is just

23
00:00:50,950 --> 00:00:49,200
about midway through his year-long

24
00:00:53,110 --> 00:00:50,960
mission took the reins as commander of

25
00:00:55,270 --> 00:00:53,120
the international space station

26
00:00:57,029 --> 00:00:55,280
kelly took command back on september 5th

27
00:01:00,709 --> 00:00:57,039
and will keep the job until he comes

28
00:01:04,469 --> 00:01:00,719
home in march of 2016. i'm ready to link

29
00:01:09,030 --> 00:01:06,469
and i assume command of the

30
00:01:11,429 --> 00:01:09,040
international space station a

31
00:01:13,910 --> 00:01:11,439
a great ship and one that not only

32
00:01:16,149 --> 00:01:13,920
serves us very well but serves our

33
00:01:17,990 --> 00:01:16,159
various countries well this week we have

34
00:01:19,830 --> 00:01:18,000
a twitter question from mariana who

35
00:01:22,230 --> 00:01:19,840
wants to know why it sometimes only

36
00:01:24,469 --> 00:01:22,240
takes a few hours as opposed to days for

37
00:01:25,990 --> 00:01:24,479
crews to reach the station well it's all

38
00:01:27,109 --> 00:01:26,000

about being in the right place at the

39
00:01:28,870 --> 00:01:27,119
right time

40
00:01:31,030 --> 00:01:28,880
in order for a soyuz to be able to

41
00:01:33,190 --> 00:01:31,040
complete its trip in only four earth

42
00:01:35,350 --> 00:01:33,200
orbits the station has to be at just the

43
00:01:37,030 --> 00:01:35,360
right altitude at the time of liftoff

44
00:01:39,350 --> 00:01:37,040
for the most recent launch the station

45
00:01:41,429 --> 00:01:39,360
was a bit higher than needed due to

46
00:01:43,270 --> 00:01:41,439
solar weather conditions the atmosphere

47
00:01:45,429 --> 00:01:43,280
wasn't thick enough to cause sufficient

48
00:01:47,749 --> 00:01:45,439
drag to lower the station's altitude to

49
00:01:50,069 --> 00:01:47,759
the expected range so that spacecraft

50
00:01:52,149 --> 00:01:50,079
took the longer 34-orbit two-day

51
00:01:53,670 --> 00:01:52,159
rendezvous route make sure to keep

52
00:01:55,670 --> 00:01:53,680
sending us your questions and comments