



Р 002,2 ФИЛЬТР  
СО/00000

00ЕК ГСО 12

$\omega X$  0,009

$\omega Y$  0,017

$\omega Z$  0,059

РАЗБОРОТ

КУРС

$\gamma$  00,00

$\eta П$  00,00

$\theta П$  00,00

$\rho$  00,000

$\rho$  000,00

$\Omega Z$  0,000

$\Omega Y$  0,000

$\rho$  00,000

$\rho$  000,00

А НЕТ

$\Omega Z$  0,000

$\Omega Y$  0,000

00 ИИ

ЗАПРЕТ ИКВ

1  
00:00:20,230 --> 00:00:15,430  
undocking confirmed at 7 38 pm central

2  
00:00:29,830 --> 00:00:22,550  
and um

3  
00:00:44,150 --> 00:00:32,470  
undocking occurring over northern china

4  
00:00:49,510 --> 00:00:46,869  
station you look great backing away guys

5  
00:00:51,990 --> 00:00:49,520  
it's been great sharing space with you

6  
00:00:53,750 --> 00:00:52,000  
safe journey and soft landing my friends

7  
00:01:09,429 --> 00:00:53,760  
got speed from the international space

8  
00:01:09,439 --> 00:01:36,149  
uh

9  
00:01:40,630 --> 00:01:38,710  
final farewell words from

10  
00:01:43,030 --> 00:01:40,640  
space station commander mike fossum

11  
00:01:44,550 --> 00:01:43,040  
wishing uh the crew on board the soyuz

12  
00:01:47,190 --> 00:01:44,560  
tma-21

13  
00:01:50,069 --> 00:01:47,200

a soft landing and god speed

14

00:01:52,789 --> 00:01:50,079

yes that's the ground

15

00:01:56,630 --> 00:01:54,789

one minute away from a separation burn

16

00:01:58,709 --> 00:01:56,640

that will be initiated by soyuz

17

00:02:00,069 --> 00:01:58,719

commander alexander samokutyayev to

18

00:02:22,790 --> 00:02:00,079

increase the opening rate from the

19

00:02:26,229 --> 00:02:24,470

looking right down the barrel of the

20

00:02:28,630 --> 00:02:26,239

poisk module

21

00:02:31,509 --> 00:02:28,640

to which uh this soyuz was attached

22

00:02:33,830 --> 00:02:31,519

since april 7th this is the same docking

23

00:02:36,470 --> 00:02:33,840

port to which dan burbank anatoly

24

00:02:44,229 --> 00:02:36,480

ivanishin and anton shkaplerov will dock

25

00:02:44,239 --> 00:02:56,390

since the indicators

26

00:03:00,390 --> 00:02:58,630

we were waiting for the physical

27

00:03:03,589 --> 00:03:00,400

separation

28

00:03:09,750 --> 00:03:06,550

we yes deep reward activation uh we are

29

00:03:15,670 --> 00:03:09,760

watching the pro activation

30

00:03:20,869 --> 00:03:18,070

separation burn now in effect a 15

31

00:03:23,270 --> 00:03:20,879

second burn of the soyuz engines

32

00:03:24,550 --> 00:03:23,280

this increases the opening rate

33

00:03:26,390 --> 00:03:24,560

to the point

34

00:03:27,910 --> 00:03:26,400

at which the deorbit burn will be

35

00:03:31,190 --> 00:03:27,920

conducted

36

00:03:33,910 --> 00:03:31,200

at 10 05 pm central time tonight

37

00:03:35,509 --> 00:03:33,920

as the soyuz will move to a distance of

38

00:03:39,350 --> 00:03:35,519

12 kilometers away from the

39

00:03:44,470 --> 00:03:41,589

with the undocking of this vehicle

40

00:03:46,550 --> 00:03:44,480

expedition 29 has now officially begun

41

00:03:48,550 --> 00:03:46,560

under the command of mike fossum

42

00:03:51,110 --> 00:03:48,560

along with sergey volkov and satoshi

43

00:03:53,509 --> 00:03:51,120

furukawa

44

00:03:55,670 --> 00:03:53,519

and you can see in this view as it darts

45

00:03:57,190 --> 00:03:55,680

back and forth amongst the clouds over

46

00:04:01,270 --> 00:03:57,200

the pacific ocean

47

00:04:04,309 --> 00:04:01,280

you can see the soyuz tma-21 spacecraft

48

00:04:05,990 --> 00:04:04,319

as it continues an opening rate

49

00:04:08,630 --> 00:04:06,000

from the international space station

50

00:04:10,949 --> 00:04:08,640

eventually to be at a position some 12

51

00:04:13,429 --> 00:04:10,959

kilometers away from the station for the

52

00:04:15,990 --> 00:04:13,439

deorbit burn that is scheduled two hours