



1
00:01:19,330 --> 00:01:26,719

you

2
00:01:32,700 --> 00:01:29,880

good morning Columbia we're looking

3
00:01:38,070 --> 00:01:32,710

forward to today's events including this

4
00:01:39,510 --> 00:01:38,080

space walk by Winston into cow hey good

5
00:01:41,430 --> 00:01:39,520

boy accused that we're looking forward

6
00:01:43,620 --> 00:01:41,440

to that also I haven't been out yet but

7
00:02:00,050 --> 00:01:43,630

I think it's a great mass of day for a

8
00:02:05,940 --> 00:02:03,080

Scott and doy in their restraints on the

9
00:02:10,770 --> 00:02:05,950

television live from Columbia showing uh

10
00:02:12,300 --> 00:02:10,780

on the Left astronaut Winston Scott and

11
00:02:14,460 --> 00:02:12,310

on the right to astronaut to cowboy

12
00:02:21,090 --> 00:02:14,470

Scott the distinguishable by red stripes

13
00:02:25,440 --> 00:02:21,100

on his space suit in position for the

14

00:02:27,240 --> 00:02:25,450

retrieval of the Spartan satellite as we

15

00:02:30,030 --> 00:02:27,250

continue to watch a live television over

16

00:02:50,510 --> 00:02:30,040

the Spartan satellite also in view is

17

00:02:59,660 --> 00:02:53,020

commander Kevin criolla flying a

18

00:03:03,880 --> 00:02:59,670

Columbia around a two-position Scott and

19

00:03:20,800 --> 00:03:06,560

scott and i have been space walking now

20

00:03:32,860 --> 00:03:23,470

columbia is above the Pacific Ocean off

21

00:03:35,650 --> 00:03:32,870

the coast of Southeast Asia it's a

22

00:04:58,360 --> 00:03:35,660

course we'll take it to South above the

23

00:05:27,400 --> 00:05:20,830

you

24

00:05:32,200 --> 00:05:27,410

after let's hold right here let's stop

25

00:05:34,870 --> 00:05:32,210

right here okay never get you ready

26

00:05:37,750 --> 00:05:34,880

we'll do our thing okay I'm treacherous

27

00:05:41,080 --> 00:05:37,760

you got to go okay fixed account yes now

28

00:05:44,950 --> 00:05:41,090

wonder that kid you reach the scope yes

29

00:05:47,379 --> 00:05:44,960

I can reach it okay on my signal my

30

00:05:49,870 --> 00:05:47,389

opponent will be fit and the CCF

31

00:05:51,640 --> 00:05:49,880

sergeant okay as I understand it you're

32

00:05:57,219 --> 00:05:51,650

going to grow up a scope that collects

33

00:05:59,710 --> 00:05:57,229

subscribe okay I'm gonna give you a then

34

00:06:02,740 --> 00:05:59,720

bye standby captured that's what I will

35

00:06:08,530 --> 00:06:02,750

face a bit then save dead okay are you

36

00:06:13,990 --> 00:06:08,540

ready that's it there by then by capture

37

00:06:17,140 --> 00:06:14,000

okay now got my it I am i okay so now

38

00:06:19,450 --> 00:06:17,150

that we've got it destroy yes Assad what

39

00:06:22,810 --> 00:06:19,460

we gonna do with it hold on to your

40

00:06:25,270 --> 00:06:22,820

canister yes let's roll the spot right

41

00:06:27,610 --> 00:06:25,280

so that it's smaller than the bait I can

42

00:06:38,370 --> 00:06:27,620

reach my cannabis be able to say yes

43

00:06:46,510 --> 00:06:42,339

that's we go we are going to pick the

44

00:06:49,529 --> 00:06:46,520

spot now okay just for the dog okay

45

00:06:51,969 --> 00:06:49,539

let's do that fairly slowly right now

46

00:07:11,930 --> 00:06:51,979

that's a good way right there that's

47

00:07:11,940 --> 00:07:25,190

Pacific looking good

48

00:07:37,310 --> 00:07:28,550

we're becoming epidemic that can really

49

00:07:40,400 --> 00:07:37,320

get okay let's stop right there papi

50

00:07:46,360 --> 00:07:40,410

what we got I think that looks pretty

51
00:07:48,890 --> 00:07:46,370
good okay now tell you what we need to

52
00:07:53,810 --> 00:07:48,900
level it out let's just just normal it

53
00:07:57,170 --> 00:07:53,820
it ok now let's bring it in my

54
00:08:00,020 --> 00:07:57,180
direction just maybe in it okay okay

55
00:08:04,460 --> 00:08:00,030
let's stop there and let's bring it

56
00:08:08,180 --> 00:08:04,470
forward about it hit now let's stop

57
00:08:10,610 --> 00:08:08,190
there okay now can you see your guy jack

58
00:08:12,530 --> 00:08:10,620
I can say I can see mileage and let's

59
00:08:24,200 --> 00:08:12,540
bring it back until go to the top of the

60
00:08:24,210 --> 00:08:34,940
but it got my droid

61
00:08:43,470 --> 00:08:39,420
bodies in getting to the facts LJ same

62
00:08:48,030 --> 00:08:43,480
here be good he's become my direction

63
00:08:59,910 --> 00:08:48,040

just maybe having it suck it up bring it

64

00:09:04,860 --> 00:08:59,920

on down and bring it down or okay stop

65

00:09:09,480 --> 00:09:04,870

stop I think God 1q we need to discuss

66

00:09:31,880 --> 00:09:09,490

the criteria we rectify you need to keep

67

00:09:31,890 --> 00:09:52,930

looks good I do i beez cut it back ok

68

00:10:19,319 --> 00:09:55,660

the booboo small horizontal are pitching

69

00:10:23,319 --> 00:10:21,759

I'm with us in Mission Control providing

70

00:10:28,329 --> 00:10:23,329

insights as astronaut timmy jernigan

71

00:10:30,160 --> 00:10:28,339

Tammy takada is extending the crane

72

00:10:32,559 --> 00:10:30,170

turning that handle without foot

73

00:10:35,049 --> 00:10:32,569

restraint and from a body position that

74

00:10:38,169 --> 00:10:35,059

looks somewhat difficult is that on

75

00:10:40,059 --> 00:10:38,179

purpose well one of the things that we

76

00:10:43,090 --> 00:10:40,069

hope to evaluate during the screen

77

00:10:45,400 --> 00:10:43,100

checkout is various body positions to

78

00:10:47,769 --> 00:10:45,410

facilitate operation of the crane and

79

00:10:49,179 --> 00:10:47,779

also to have insight as to where that

80

00:10:52,419 --> 00:10:49,189

crane boom is going that crane

81

00:10:53,350 --> 00:10:52,429

boomsticks tends out to over 17 feet so

82

00:10:56,259 --> 00:10:53,360

obviously you have to have good

83

00:10:58,210 --> 00:10:56,269

visibility into where the cranes going

84

00:10:59,650 --> 00:10:58,220

so you don't bump into anything but you

85

00:11:01,449 --> 00:10:59,660

also have to be able to operate the

86

00:11:03,819 --> 00:11:01,459

mechanisms and right now to cara's

87

00:11:15,920 --> 00:11:03,829

trying different body positions to see

88

00:11:24,560 --> 00:11:21,470

lumbia Houston for Kevin in the

89

00:11:27,050 --> 00:11:24,570

foreground you can see the power tool

90

00:11:29,750 --> 00:11:27,060

called the pistol grip tool that you

91

00:11:32,210 --> 00:11:29,760

just read to us and to Kelly has used

92

00:11:35,360 --> 00:11:32,220

that to extend the crane the crane can

93

00:11:37,670 --> 00:11:35,370

be extended in a motorized fashion or

94

00:11:41,780 --> 00:11:37,680

can be extended manually by rotating a

95

00:11:44,300 --> 00:11:41,790

handle there are there are three handles

96

00:11:46,880 --> 00:11:44,310

on the crane one is to move the crane

97

00:11:48,440 --> 00:11:46,890

from side to side or yaw the crane the

98

00:11:50,660 --> 00:11:48,450

other is to move the crane up and down

99

00:11:53,150 --> 00:11:50,670

or pitch the crane and then the third

100

00:12:37,639 --> 00:11:53,160

handle is for the manual extension and

101
00:12:37,649 --> 00:13:19,960
call your backpack is very close to the

102
00:13:31,590 --> 00:13:27,249
a car ran counterclockwise okay one

103
00:13:37,079 --> 00:13:31,600
contact replies oh boy oh boy step later

104
00:13:40,780 --> 00:13:37,089
all that said that's 2 3.5 3.5 is fit

105
00:13:42,340 --> 00:13:40,790
and Tammy with with the battery now on

106
00:13:44,350 --> 00:13:42,350
the end of the arm but they're going to

107
00:13:46,769 --> 00:13:44,360
be doing the same evaluations that were

108
00:13:49,629 --> 00:13:46,779
done earlier with the arm by itself

109
00:13:51,369 --> 00:13:49,639
that's correct they will be again

110
00:13:55,300 --> 00:13:51,379
maneuvering the crane from side to side

111
00:13:57,519 --> 00:13:55,310
and up and down and in and out roll in

112
00:14:00,090 --> 00:13:57,529
pitch and yaw and extension and

113
00:14:02,559 --> 00:14:00,100

retraction with the battery on board

114

00:14:04,389 --> 00:14:02,569

again the battery and sub carrier weigh

115

00:14:05,619 --> 00:14:04,399

close to 500 pounds and so you're going

116

00:14:08,920 --> 00:14:05,629

to look at the handling characteristics

117

00:14:10,420 --> 00:14:08,930

of the crane when it's loaded up as

118

00:14:30,410 --> 00:14:10,430

opposed to the handling characteristics

119

00:14:36,480 --> 00:14:34,920

having completed most of the operations

120

00:14:39,030 --> 00:14:36,490

with the crane loaded with the battery

121

00:14:41,970 --> 00:14:39,040

and subcarrier the crew is now ready to

122

00:14:44,520 --> 00:14:41,980

remove that sub carrier from the end of

123

00:14:48,860 --> 00:14:44,530

the crane and then rebirth the sub

124

00:14:53,820 --> 00:14:51,510

cacao is extending the battery across

125

00:14:56,040 --> 00:14:53,830

the payload bay to its stowage location

126

00:15:11,600 --> 00:14:56,050

on be houston we're getting beautiful

127

00:15:23,250 --> 00:15:14,970

and it's just the doxies comes with you

128

00:15:26,490 --> 00:15:23,260

oh please there's relief okay the

129

00:15:37,940 --> 00:15:26,500

Coptics the claim boundaries a bit down

130

00:15:43,580 --> 00:15:40,550

we are relief provisions what position

131

00:15:46,940 --> 00:15:43,590

lead position and soft opposition if

132

00:15:49,100 --> 00:15:46,950

they are secured itself the actuator

133

00:15:52,370 --> 00:15:49,110

activity all that mechanism works really

134

00:15:55,370 --> 00:15:52,380

nicely okay stage would you move me pork

135

00:16:01,760 --> 00:15:55,380

chop rice fibers on open a bleep temper

136

00:16:04,730 --> 00:16:01,770

cover Takeo is moving the crane out of

137

00:16:09,230 --> 00:16:04,740

the way so that Winston with the help of

138

00:16:11,810 --> 00:16:09,240

the RMS operator Steve Lindsey can put

139

00:16:16,880 --> 00:16:11,820

the subcarrier and battery into position

140

00:16:22,670 --> 00:16:16,890

to birth back into the payload Bay it's

141

00:16:24,560 --> 00:16:22,680

relatively easy to control okay pop stop

142

00:16:25,790 --> 00:16:24,570

and also Winston I had to move you up a

143

00:16:28,310 --> 00:16:25,800

little bit to make sure your tethers for

144

00:16:31,940 --> 00:16:28,320

Claire so that maven one okay that's

145

00:16:34,280 --> 00:16:31,950

great no prob Bigfoot let me know your

146

00:16:39,430 --> 00:16:34,290

little box which you go out on your jaw

147

00:16:43,280 --> 00:16:39,440

their dollars please don't overdraw

148

00:16:46,400 --> 00:16:43,290

reveal a pathetic don't pony public

149

00:16:49,670 --> 00:16:46,410

spirit Oh to come buttes q no food at

150

00:16:53,330 --> 00:16:49,680

the home but it's all day okay even

151

00:16:57,710 --> 00:16:53,340

though we drop it off deep down there

152

00:17:05,000 --> 00:16:57,720

are not today sweetie I have younger in

153

00:17:09,770 --> 00:17:05,010

total photo IDs 930 convert drops dude I

154

00:17:20,110 --> 00:17:09,780

a perpetual member your mask yes what's

155

00:17:28,299 --> 00:17:25,870

okay kitty okay raise you've had enough

156

00:17:41,350 --> 00:17:28,309

fun ice we show that way come back in

157

00:17:44,590 --> 00:17:41,360

okay okay feathers are configured at me

158

00:17:47,530 --> 00:17:44,600

they're inside of the tire box they're

159

00:17:50,680 --> 00:17:47,540

all latched on like retract it and yours