

A woman with dark hair tied back, wearing a bright blue t-shirt and blue nitrile gloves, is shown in profile. She is holding a black rectangular device with a grid of circular holes and a white arrow pointing downwards. The background is filled with the complex equipment and wiring of a space station interior.

**EPISODE SIX:
ON STATION**

1
00:00:01,167 --> 00:00:03,370
>> CHOOSE YOUR LETTUCE LEAF!

2
00:00:03,370 --> 00:00:04,571
[CHUCKLING]

3
00:00:04,571 --> 00:00:05,372
>> CHEERS.

4
00:00:05,372 --> 00:00:06,339
>> CHEERS!

5
00:00:06,339 --> 00:00:07,574
[LAUGHING]

6
00:00:07,574 --> 00:00:09,042
>> DO WE GET BALSAMIC?

7
00:00:13,012 --> 00:00:14,013
OH, THAT'S PRETTY GOOD!

8
00:00:14,013 --> 00:00:15,648
>> WOW!

9
00:00:15,648 --> 00:00:16,483
>> THAT'S A SALAD.

10
00:00:16,483 --> 00:00:17,584
>> I KNOW.

11
00:00:17,584 --> 00:00:19,252
>> IT'S A SALAD.

12
00:00:20,019 --> 00:00:22,155
>> JC, THAT WAS DELICIOUS.

13
00:00:26,893 --> 00:00:28,495

[CHUCKLING]

14

00:00:30,697 --> 00:00:31,498
>> WELL, WHEN YOU HAVEN'T

15

00:00:31,498 --> 00:00:32,899
HAD A SALAD IN SIX MONTHS,

16

00:00:32,899 --> 00:00:34,134
IT'S DELICIOUS.

17

00:00:34,134 --> 00:00:35,468
[CHUCKLING]

18

00:00:36,436 --> 00:00:51,384
[MUSIC]

19

00:00:55,422 --> 00:00:56,256
>> I'M STILL STATIONED

20

00:00:56,256 --> 00:00:58,258
ON TWO FOR NANORACKS.

21

00:01:00,593 --> 00:01:01,394
>> WITH YOU ON TWO

22

00:01:01,394 --> 00:01:03,129
FOR NANORACKS.

23

00:01:04,764 --> 00:01:05,965
>> RIGHT, HOW'S YOUR VIEW?

24

00:01:05,965 --> 00:01:06,800
DO YOU WANT, UH,

25

00:01:06,800 --> 00:01:08,368
ANYTHING DIFFERENT?

26

00:01:11,638 --> 00:01:09,402

>> VIEW LOOKS GREAT.

27

00:01:11,638 --> 00:01:12,672

>> NO, THE VIEW LOOKS GREAT,

28

00:01:12,672 --> 00:01:13,973

THANK YOU.

29

00:01:13,973 --> 00:01:14,974

>> NOW THAT THE EXPERIMENT

30

00:01:14,974 --> 00:01:16,476

IS ABOARD THE SPACE STATION,

31

00:01:16,476 --> 00:01:17,877

IT'S TIME FOR THE ASTRONAUTS

32

00:01:17,877 --> 00:01:19,279

TO GET TO WORK.

33

00:01:19,279 --> 00:01:20,680

ELAINE AND PARASTOO ARE BACK

34

00:01:20,680 --> 00:01:21,714

IN VIRGINIA,

35

00:01:21,714 --> 00:01:22,715

AND THE NANORACKS TEAM

36

00:01:22,715 --> 00:01:23,850

IS BACK IN TEXAS

37

00:01:23,850 --> 00:01:24,851

WHERE THEY WILL PERFORM

38

00:01:24,851 --> 00:01:26,085

A GROUND-CONTROL VERSION

39

00:01:26,085 --> 00:01:27,020
OF THE EXPERIMENT

40

00:01:27,020 --> 00:01:28,388
BEING CONDUCTED BY THE CREW

41

00:01:28,388 --> 00:01:29,856
IN SPACE.

42

00:01:29,856 --> 00:01:30,857
>> THE CREW MEMBERS ARE USING

43

00:01:30,857 --> 00:01:31,925
THE NANORACKS PLATE READER

44

00:01:31,925 --> 00:01:33,560
TO READ, UH, THE PLATES.

45

00:01:33,560 --> 00:01:34,461
THEY'RE ANALYZING WHAT'S IN

46

00:01:34,461 --> 00:01:35,662
THE PLATE AND THE MIGRATION

47

00:01:35,662 --> 00:01:36,863
OF FLUIDS BETWEEN

48

00:01:36,863 --> 00:01:37,730
THE TWO CHAMBERS

49

00:01:37,730 --> 00:01:38,565
THAT ARE ON THE PLATES.

50

00:01:38,565 --> 00:01:39,532
AND SO WE HAVE OUR

51
00:01:39,532 --> 00:01:41,201
GROUND, UH, SAMPLES HERE.

52
00:01:41,201 --> 00:01:42,235
THESE ARE IDENTICAL

53
00:01:42,235 --> 00:01:43,203
TO THE ONES THAT ARE ON

54
00:01:43,203 --> 00:01:44,604
THE SPACE STATION.

55
00:01:44,604 --> 00:01:45,638
AND WHAT WE'RE GONNA DO IS

56
00:01:45,638 --> 00:01:47,073
AS THE CREW MEMBER INSERTS

57
00:01:47,073 --> 00:01:48,675
THE PLATES INTO THE PLATE READER

58
00:01:48,675 --> 00:01:50,276
ON THE SPACE STATION, WE'RE ALSO

59
00:01:50,276 --> 00:01:51,211
GONNA INSERT THE PLATE

60
00:01:51,211 --> 00:01:52,612
ONTO THE GROUND UNIT

61
00:01:52,612 --> 00:01:53,880
WE HAVE BEHIND ME.

62
00:01:53,880 --> 00:01:55,014
AND THAT'S JUST TO CONFIRM

63
00:01:55,014 --> 00:01:56,182

THAT WHAT WE'RE SEEING

64

00:01:56,182 --> 00:01:57,083
ANY EFFECTS THAT WE DO

65

00:01:57,083 --> 00:01:58,485
END UP SEEING IS EFFECTIVE

66

00:01:58,485 --> 00:02:00,019
IN THE SPACE ENVIRONMENT,

67

00:02:00,019 --> 00:02:02,255
UM, COMPARED TO THE GROUND UNIT.

68

00:02:02,255 --> 00:02:03,022
IN SUMMARY, WHAT

69

00:02:03,022 --> 00:02:04,023
THE PLATE READER DOES IS--

70

00:02:04,023 --> 00:02:05,658
IT'S CALLED A BIG FANCY WORD,

71

00:02:05,658 --> 00:02:07,160
IS A SPECTROPHOTOMETER.

72

00:02:07,160 --> 00:02:08,228
AND IT'S GOT A BIG LAMP IN IT

73

00:02:08,228 --> 00:02:09,596
THAT, UH, SHINES WHITE LIGHT.

74

00:02:09,596 --> 00:02:10,530
AND THEN IT'S GOT A PRISM

75

00:02:10,530 --> 00:02:11,998
OR A GRATING.

76
00:02:11,998 --> 00:02:13,299
AND THE WHITE LIGHT SHINES

77
00:02:13,299 --> 00:02:14,200
ON THE GRATING.

78
00:02:14,200 --> 00:02:15,468
AND THEN IT MOVES TO

79
00:02:15,468 --> 00:02:16,636
ORIENTATE WHICH--

80
00:02:16,636 --> 00:02:17,604
TO-TO KIND OF SEPARATE

81
00:02:17,604 --> 00:02:18,905
THE LIGHT INTO A WAVELENGTH.

82
00:02:18,905 --> 00:02:19,939
AND YOU GET TO SELECT

83
00:02:19,939 --> 00:02:20,807
WHICH WAVELENGTH YOU WANT

84
00:02:20,807 --> 00:02:21,941
TO SHINE THROUGH YOUR SAMPLES.

85
00:02:21,941 --> 00:02:23,643
WE HAVE SIX PLATES.

86
00:02:23,643 --> 00:02:24,744
EACH PLATE TAKES ABOUT

87
00:02:24,744 --> 00:02:25,879
FOUR MINUTES--

88
00:02:25,879 --> 00:02:27,313

SO IT'S ABOUT 30 MINUTES EACH.

89

00:02:27,313 --> 00:02:28,248
AND EVERY TIME IN BETWEEN,

90

00:02:28,248 --> 00:02:29,115
WE'LL BE LISTENING FOR

91

00:02:29,115 --> 00:02:29,983
THE CREW MEMBER TO SAY THAT

92

00:02:29,983 --> 00:02:31,084
THEY INSERTED THE PLATE.

93

00:02:31,084 --> 00:02:31,885
UH, THEN WE'LL HIT

94

00:02:31,885 --> 00:02:33,152
THE COMMAND HERE.

95

00:02:33,152 --> 00:02:34,087
ONCE THE RUN IS DONE,

96

00:02:34,087 --> 00:02:34,854
THE CREWMEMBER WILL COME OVER

97

00:02:34,854 --> 00:02:35,622
AND TAKE THE PLATE OUT,

98

00:02:35,622 --> 00:02:36,289
PUT THE NEW PLATE IN

99

00:02:36,289 --> 00:02:37,524
AND IT'LL REPEAT FOR,

100

00:02:37,524 --> 00:02:39,526
UH, FIVE MORE TIMES.

101
00:02:40,693 --> 00:02:41,861
>> STILL STATION ON THREE,

102
00:02:41,861 --> 00:02:43,796
PLATE 1003 IS IN THE TRAY.

103
00:02:45,365 --> 00:02:46,165
>> OH, YEAH.

104
00:02:46,165 --> 00:02:47,367
IT'S READING THE PLATE.

105
00:02:47,367 --> 00:02:48,668
IT'S GOT A LITTLE--

106
00:02:48,668 --> 00:02:50,303
THE PLATE SITS IN THERE.

107
00:02:50,303 --> 00:02:51,304
MOVES THE PLATE THIS WAY

108
00:02:51,304 --> 00:02:52,171
AND THEN THE READ HEAD

109
00:02:52,171 --> 00:02:53,006
MOVES THIS WAY.

110
00:02:53,006 --> 00:02:53,706
AND THE LITTLE

111
00:02:53,706 --> 00:02:54,474
"BEEP-BEEP-BEEP-BEEP"

112
00:02:54,474 --> 00:02:55,275
YOU HEAR, THAT'S KIND OF

113
00:02:55,275 --> 00:02:56,075

THE LITTLE LAMP THAT'S IN THERE.

114

00:02:56,075 --> 00:02:57,610

THAT TURNS THE LAMP ON.

115

00:02:57,610 --> 00:02:59,078

SO IT MAKES THAT LITTLE NOISE.

116

00:02:59,078 --> 00:03:00,713

SOUNDS LIKE BAD TECHNO MUSIC.

117

00:03:00,713 --> 00:03:02,549

[MACHINE BEEPING]

118

00:03:02,549 --> 00:03:03,783

>> MY CREW MATE ACTUALLY

119

00:03:03,783 --> 00:03:04,684

WAS THE FIRST ONE TO START

120

00:03:04,684 --> 00:03:05,785

THIS EXPERIMENT.

121

00:03:05,785 --> 00:03:06,986

AND I TOOK OVER FOR HIM

122

00:03:06,986 --> 00:03:08,187

AND SAID, "HEY, WHAT--

123

00:03:08,187 --> 00:03:09,022

"WHAT EXPERIMENT IS THIS?

124

00:03:09,022 --> 00:03:09,923

"WHAT ARE WE DOING?"

125

00:03:09,923 --> 00:03:11,124

AND HE LOOKS AT ME AND HE SAYS,

126

00:03:11,124 --> 00:03:12,525

"I'M NOT SURE."

127

00:03:12,525 --> 00:03:14,227

SO WE CALLED DOWN, UM, TO

128

00:03:14,227 --> 00:03:15,562

THE GROUND, TO MISSION CONTROL.

129

00:03:15,562 --> 00:03:16,429

>> AND I KNOW THAT PART

130

00:03:16,429 --> 00:03:17,530

OF THIS IS LOOKING AT A GEL

131

00:03:17,530 --> 00:03:19,766

THAT CAN RELEASE THE ANTIBIOTICS

132

00:03:19,766 --> 00:03:21,034

KIND OF SLOW RELEASE

133

00:03:21,034 --> 00:03:23,036

TO A WOUND SITE.

134

00:03:23,036 --> 00:03:24,170

UM, BUT I DON'T KNOW

135

00:03:24,170 --> 00:03:25,471

WHAT HAPPENED TO THAT PLATE

136

00:03:25,471 --> 00:03:26,639

IN THE NANORACKS READER

137

00:03:26,639 --> 00:03:27,774

THIS MORNING AND THEN KIND OF

138

00:03:27,774 --> 00:03:29,375

WHAT'S GOING ON THIS AFTERNOON.

139

00:03:29,375 --> 00:03:30,476

>> UM, WHAT WE'RE LOOKING FOR

140

00:03:30,476 --> 00:03:31,878

IS HOW THE DRUG MIGRATES

141

00:03:31,878 --> 00:03:33,580

TO THE GEL OVER TIME.

142

00:03:33,580 --> 00:03:34,747

WHICH IS WHY WE'RE SCANNING

143

00:03:34,747 --> 00:03:35,982

THE PLATES TWO TIMES A DAY

144

00:03:35,982 --> 00:03:38,184

FOR THIS TWO WEEK RUN.

145

00:03:38,184 --> 00:03:40,153

>> AH, I LIKE THAT ANSWER.

146

00:03:40,153 --> 00:03:41,054

THAT'S VERY COOL.

147

00:03:41,054 --> 00:03:43,656

THANK YOU FOR FINDING THAT OUT!

148

00:03:43,656 --> 00:03:45,291

>> NO PROB.

149

00:03:46,559 --> 00:03:48,194

>> SO THIS IS 15 DAYS.

150

00:03:48,194 --> 00:03:49,362

UH, IT'S TWICE A DAY

151
00:03:49,362 --> 00:03:50,363
AND THEY'RE TYPICALLY

152
00:03:50,363 --> 00:03:51,331
IN THE MIDDLE OF THE NIGHT,

153
00:03:51,331 --> 00:03:52,632
WHICH IS THE MORNING FOR

154
00:03:52,632 --> 00:03:54,100
THE CREW ON SPACE STATION.

155
00:03:54,100 --> 00:03:55,234
AND THEN USUALLY SOME TIME

156
00:03:55,234 --> 00:03:56,836
IN THE LATE MORNING,

157
00:03:56,836 --> 00:03:58,071
EARLY AFTERNOON HERE.

158
00:03:58,071 --> 00:03:58,871
BUT KYLE'S BEEN RUNNING

159
00:03:58,871 --> 00:03:59,672
THE SHOW.

160
00:03:59,672 --> 00:04:00,440
HE'S BEEN GETTING UP

161
00:04:00,440 --> 00:04:01,741
EVERY SIX HOURS, EIGHT HOURS,

162
00:04:01,741 --> 00:04:02,976
SEVEN HOURS TO DO THIS.

163
00:04:02,976 --> 00:04:03,977

IT'S KIND OF FUN IN A WAY.

164

00:04:03,977 --> 00:04:04,944

I GET TO PLAY ASTRONAUT

165

00:04:04,944 --> 00:04:05,745

ON THE GROUND,

166

00:04:05,745 --> 00:04:08,247

SO THAT'S ALWAYS FUN.

167

00:04:08,247 --> 00:04:09,616

>> AFTER 15 DAYS OF RUNNING

168

00:04:09,616 --> 00:04:11,317

THE EXPERIMENT, THE RESEARCHERS

169

00:04:11,317 --> 00:04:12,919

HAVE A LOT OF VALUABLE DATA

170

00:04:12,919 --> 00:04:13,953

ABOUT HOW HYDROGELS

171

00:04:13,953 --> 00:04:15,655

BEHAVE IN MICROGRAVITY.

172

00:04:15,655 --> 00:04:16,756

TO LEARN EVEN MORE,

173

00:04:16,756 --> 00:04:17,924

THE SAMPLES WILL COME BACK

174

00:04:17,924 --> 00:04:20,193

TO EARTH FOR FURTHER ANALYSIS.

175

00:04:20,193 --> 00:04:21,361

FOR THE LAST LEG OF

176
00:04:21,361 --> 00:04:22,662
THEIR JOURNEY, THE SAMPLES

177
00:04:22,662 --> 00:04:23,763
WILL RETURN TO EARTH

178
00:04:23,763 --> 00:04:25,231
IN THE SAME DRAGON CAPSULE

179
00:04:25,231 --> 00:04:26,232
THAT GAVE THEM A RIDE

180
00:04:26,232 --> 00:04:28,067
TO MICROGRAVITY.

181
00:04:28,067 --> 00:04:29,836
AFTER DRAGON SPLASHES DOWN

182
00:04:29,836 --> 00:04:31,170
IN THE PACIFIC OCEAN,

183
00:04:31,170 --> 00:04:32,472
IT'S TAKEN TO THE PORT OF

184
00:04:32,472 --> 00:04:33,740
LONG BEACH, WHERE NASA

185
00:04:33,740 --> 00:04:34,907
WILL BE READY TO RETRIEVE

186
00:04:34,907 --> 00:04:37,210
THE PRECIOUS CARGO.

187
00:04:37,210 --> 00:04:38,478
>> SPLASHDOWN FOR DRAGON WAS

188
00:04:38,478 --> 00:04:40,780

ON, UH, SUNDAY I BELIEVE?

189

00:04:40,780 --> 00:04:43,383
AND SO NASA HAS A GROUP

190

00:04:43,383 --> 00:04:44,417
CALLED COLD STOWAGE

191

00:04:44,417 --> 00:04:45,852
AND, UH, CARGO MANIFEST.

192

00:04:45,852 --> 00:04:47,220
AND THEY GO OUT AND PICK UP

193

00:04:47,220 --> 00:04:48,888
THE PAYLOADS FROM DRAGON.

194

00:04:48,888 --> 00:04:50,189
AND THEN THEY DISTRIBUTE IT

195

00:04:50,189 --> 00:04:52,592
TO PEOPLE AT LA OR WHOEVER

196

00:04:52,592 --> 00:04:53,593
NEEDS THEM THERE,

197

00:04:53,593 --> 00:04:54,594
AND THEN THEY BRING THEM ALSO

198

00:04:54,594 --> 00:04:55,928
HERE TO JOHNSON SPACE CENTER.

199

00:04:55,928 --> 00:04:58,064
UM, AND SO NOW I'M IN OUT FRONT

200

00:04:58,064 --> 00:04:59,499
OF THE COLD STOW OFFICE.

201
00:04:59,499 --> 00:05:00,633
AND I JUST PICKED UP,

202
00:05:00,633 --> 00:05:01,901
UH, MODEL 74, WHICH IS

203
00:05:01,901 --> 00:05:03,369
OUR TYMPANOGEN PROJECT.

204
00:05:03,369 --> 00:05:04,370
AND THEY HAND IT TO ME,

205
00:05:04,370 --> 00:05:05,638
AND I PUT IT IN MY COOLER.

206
00:05:05,638 --> 00:05:06,773
AND THEN I DRIVE IT OVER

207
00:05:06,773 --> 00:05:08,174
TO, UH, OUR OFFICE

208
00:05:08,174 --> 00:05:09,242
WHERE IT'S GONNA SIT

209
00:05:09,242 --> 00:05:10,309
UNTIL WE FLY UP TO,

210
00:05:10,309 --> 00:05:11,911
UH, THE TYMPANOGEN OFFICE

211
00:05:11,911 --> 00:05:13,012
IN, UH, RICHMOND, VIRGINIA

212
00:05:13,012 --> 00:05:14,414
TO, UH, DO THE FINAL PHASE

213
00:05:14,414 --> 00:05:15,882

OF THE EXPERIMENT,

214

00:05:15,882 --> 00:05:16,849

UH, WHICH IS REMOVING

215

00:05:16,849 --> 00:05:18,084

THE SAMPLES OUT OF THE--

216

00:05:18,084 --> 00:05:19,652

THE REACTOR MICROPLATES.

217

00:05:19,652 --> 00:05:20,853

WE'RE REALLY PROUD TO

218

00:05:20,853 --> 00:05:22,522

TAKE PART IN THIS REALLY, UH,

219

00:05:22,522 --> 00:05:24,357

REALLY INTERESTING EXPERIMENT.

220

00:05:28,661 --> 00:05:29,362

>> WHEN WE FIRST GOT

221

00:05:29,362 --> 00:05:30,163

OUR GELS BACK,

222

00:05:30,163 --> 00:05:30,930

IT WAS ALREADY EXCITING

223

00:05:30,930 --> 00:05:31,564

BECAUSE SPACE NEVER LOSES

224

00:05:31,564 --> 00:05:32,432

ITS COOL, AND SO WE

225

00:05:32,432 --> 00:05:33,166

HAD THESE PLATES

226

00:05:33,166 --> 00:05:33,866

AND WERE LIKE, "OH MY GOD!

227

00:05:33,866 --> 00:05:34,600

"THESE ARE WHAT

228

00:05:34,600 --> 00:05:35,601

"THE ASTRONAUTS TOUCHED!"

229

00:05:35,601 --> 00:05:36,736

AND SO WE OPENED 'EM,

230

00:05:36,736 --> 00:05:37,804

AND THEY'VE BEEN TO