

Nanoracks



Spaceto**Ground**

1
00:00:03,110 --> 00:00:05,200
"HOUSTON, STATION ON SPACE TO GROUND."

2
00:00:05,200 --> 00:00:07,920
WELCOME TO SPACE TO GROUND, I'M SANDRA JONES.

3
00:00:07,920 --> 00:00:09,370
THIS WEEK, PREPS ARE UNDERWAY

4
00:00:09,370 --> 00:00:12,835
FOR THE UPCOMING SPACE-X CARGO RESUPPLY MISSION.

5
00:00:13,863 --> 00:00:15,220
SPACE X IS SET TO LAUNCH

6
00:00:15,220 --> 00:00:18,130
ITS 21ST COMMERCIAL RESUPPLY SERVICES MISSION

7
00:00:18,130 --> 00:00:20,070
TO THE INTERNATIONAL SPACE STATION

8
00:00:20,070 --> 00:00:21,970
FROM LAUNCH COMPLEX 39A

9
00:00:21,970 --> 00:00:24,040
AT KENNEDY SPACE CENTER IN FLORIDA.

10
00:00:24,040 --> 00:00:25,150
THE FLIGHT OF THIS DRAGON

11
00:00:25,150 --> 00:00:26,770
WILL MARK A COUPLE OF FIRST.

12
00:00:26,770 --> 00:00:28,090
THIS WILL BE THE FIRST FLIGHT

13
00:00:28,090 --> 00:00:29,230

OF AN UPGRADED VERSION

14

00:00:29,230 --> 00:00:30,500

OF THE CARGO DRAGON,

15

00:00:30,500 --> 00:00:31,970

DESIGNED TO CARRY MORE SCIENCE

16

00:00:31,970 --> 00:00:33,550

TO AND FROM THE SPACE STATION.

17

00:00:33,550 --> 00:00:35,220

ALSO, THIS WILL BE THE FIRST TIME

18

00:00:35,220 --> 00:00:37,010

THAT TWO DRAGON SPACECRAFT WILL

19

00:00:37,010 --> 00:00:39,336

BE DOCKED TO THE STATION AT THE SAME TIME.

20

00:00:39,780 --> 00:00:41,390

CRS-21 WILL DELIVER

21

00:00:41,390 --> 00:00:43,550

MORE THAN 6,400 POUNDS

22

00:00:43,550 --> 00:00:45,390

OF SCIENCE INVESTIGATIONS,

23

00:00:45,390 --> 00:00:48,930

SUPPLIES AND PAYLOADS TO THE SPACE STATION.

24

00:00:48,930 --> 00:00:50,710

ONE STUDY BEING DELIVERED ON DRAGON

25

00:00:50,710 --> 00:00:52,890

IS LOOKING INTO HOW THE HEART CHANGES

26
00:00:52,890 --> 00:00:55,320
IN THE MICROGRAVITY ENVIRONMENT OF SPACE,

27
00:00:55,320 --> 00:00:57,149
WHICH COULD LEAD TO A BETTER UNDERSTANDING

28
00:00:57,149 --> 00:00:58,630
OF HEART PROBLEMS ON EARTH,

29
00:00:58,630 --> 00:01:00,870
NEW TREATMENTS, AND SUPPORT THE DEVELOPMENT

30
00:01:00,870 --> 00:01:03,579
OF SCREENING MEASURES PRIOR TO SPACEFLIGHT.

31
00:01:03,579 --> 00:01:05,390
CRS-21 WILL ALSO DELIVER

32
00:01:05,390 --> 00:01:06,969
A PAYLOAD WHICH PROVIDES QUICK

33
00:01:06,969 --> 00:01:08,680
AND ACCURATE COUNTS OF TOTAL

34
00:01:08,680 --> 00:01:10,720
AND DIFFERENTIATED WHITE BLOOD CELLS

35
00:01:10,720 --> 00:01:13,094
IN MICROGRAVITY CALLED HEMOCUE.

36
00:01:13,094 --> 00:01:14,890
DOCTORS ON THE GROUND COMMONLY USE

37
00:01:14,890 --> 00:01:16,760
THE TOTAL NUMBER OF WHITE BLOOD CELLS

38
00:01:16,760 --> 00:01:18,850

TO DIAGNOSE ILLNESS ON EARTH.

39

00:01:18,850 --> 00:01:21,310

VERIFICATION OF AN AUTONOMOUS CAPABILITY

40

00:01:21,310 --> 00:01:23,659

FOR BLOOD ANALYSIS IS AN IMPORTANT STEP

41

00:01:23,659 --> 00:01:25,050

IN MEETING THE HEALTHCARE NEEDS

42

00:01:25,050 --> 00:01:27,298

OF CREWMEMBERS ON BOARD STATION.

43

00:01:27,921 --> 00:01:30,050

LAUNCHING IN THE TRUNK OF THE DRAGON CAPSULE

44

00:01:30,050 --> 00:01:33,140

WILL BE A NEW AND IMPROVED DOOR TO SPACE.

45

00:01:33,140 --> 00:01:34,900

THE NANORACKS BISHOP AIRLOCK

46

00:01:34,900 --> 00:01:36,741

IS ROUGHLY 5 TIMES LARGER THAN

47

00:01:36,741 --> 00:01:39,270

THE AIRLOCK ON THE JAPANESE EXPERIMENT MODULE

48

00:01:39,270 --> 00:01:41,110

ALREADY IN USE ON THE STATION,

49

00:01:41,110 --> 00:01:43,590

AND WILL ALLOW ROBOTIC MOVEMENT OF PACKAGES,

50

00:01:43,590 --> 00:01:45,190

LARGER IN SIZE AND QUANTITY,

51
00:01:45,190 --> 00:01:47,619
TO THE EXTERIOR OF THE SPACE STATION,

52
00:01:47,619 --> 00:01:50,159
INCLUDING HARDWARE TO SUPPORT SPACEWALKS.

53
00:01:50,159 --> 00:01:52,350
THE AIRLOCK ALSO PROVIDES CAPABILITIES

54
00:01:52,350 --> 00:01:54,750
SUCH AS POWER AND ETHERNET REQUIRED

55
00:01:54,750 --> 00:01:57,070
FOR EXTERNAL PAYLOADS AND WILL ALSO HAVE

56
00:01:57,070 --> 00:01:59,960
THE ABILITY TO DEPLOY FREE-FLYING PAYLOADS,

57
00:01:59,960 --> 00:02:03,049
HOUSE EXTERNAL PAYLOADS, AND JETTISON TRASH.

58
00:02:03,049 --> 00:02:05,650
CHECK OUT [NASA.GOV/NTV](https://www.nasa.gov/ntv)

59
00:02:05,650 --> 00:02:08,978
FOR THE LATEST SCHEDULE ON CRS-21's LAUNCH.

60
00:02:09,810 --> 00:02:11,170
KEEP SENDING IN YOUR QUESTIONS