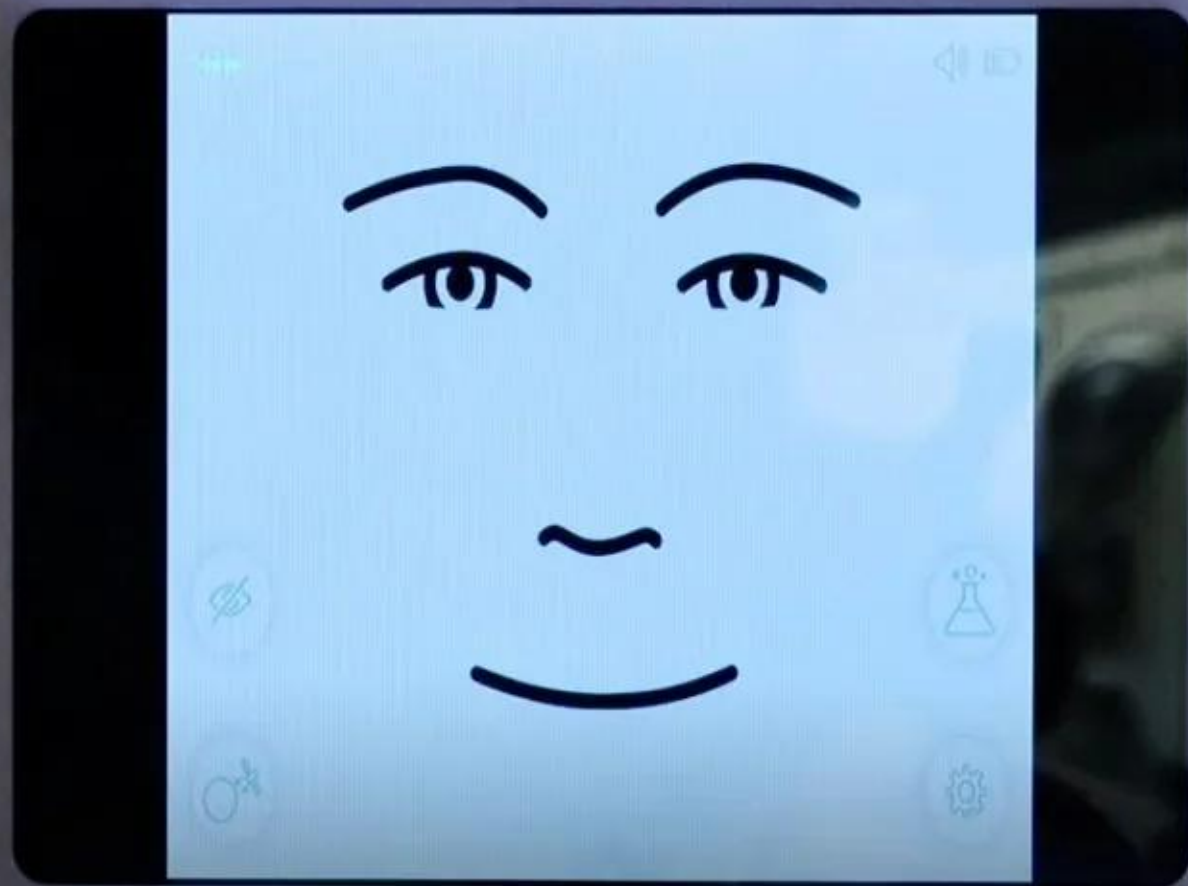


CIMON



Spaceto**Ground**

1
00:00:03,040 --> 00:00:05,000
"HOUSTON, STATION
ON SPACE TO GROUND."

2
00:00:05,220 --> 00:00:07,580
WELCOME TO SPACE TO
GROUND, I'M RYON STEWART.

3
00:00:07,780 --> 00:00:08,580
YOU WANT SCIENCE?

4
00:00:08,680 --> 00:00:11,420
HOW ABOUT THE 17 NASA
PAYLOADS JUST ADDED

5
00:00:11,440 --> 00:00:13,060
TO THE INTERNATIONAL
SPACE STATION

6
00:00:13,680 --> 00:00:16,240
WITH THE BERTHING OF
SPACE-X DRAGON 15.

7
00:00:17,340 --> 00:00:20,100
AFTER THREE DAYS OF CIRCLING
THE EARTH WITH GROUND TEAMS

8
00:00:20,160 --> 00:00:22,960
IN HAWTHORNE AND HOUSTON
WATCHING ITS EVERY MOVE,

9
00:00:23,080 --> 00:00:25,820
DRAGON WAS CAPTURED BY NASA
ASTRONAUT RICKY ARNOLD.

10
00:00:26,360 --> 00:00:28,920
THE SPACECRAFT CARRYING
NEARLY 6000 POUNDS

11

00:00:29,000 --> 00:00:31,660
OF CARGO WAS ATTACHED TO
THE NODE 2 HARMONY MODULE

12
00:00:31,700 --> 00:00:35,200
ABOUT 250 MILES HIGHER THAN
IT WAS A FEW DAYS BEFORE.

13
00:00:36,120 --> 00:00:38,760
ALONG FOR THE RIDE AND NOW
JOINING THE STATION CREWMEMBERS

14
00:00:38,940 --> 00:00:41,900
IS CIMON - A CREW
INTERACTIVE MOBILE COMPANION.

15
00:00:42,420 --> 00:00:45,680
CIMON WILL BE THE FIRST
ARTIFICIAL INTELLIGENCE-BASED

16
00:00:45,780 --> 00:00:46,860
ASSISTANT USED ON STATION.

17
00:00:47,100 --> 00:00:49,460
ITS PRIMARY DESIGN IS TO
HELP WITH ROUTINE TASKS.

18
00:00:50,000 --> 00:00:53,480
HOWEVER, THANKS TO ITS NEURAL
AI NETWORK AND ABILITY TO LEARN,

19
00:00:53,900 --> 00:00:55,780
CIMON MAY VERY WELL
OFFER SOLUTIONS

20
00:00:55,860 --> 00:00:57,720
TO ONBOARD PROBLEMS
SHOULD THEY OCCUR.

21
00:00:58,300 --> 00:01:00,700

IN ORDER TO SERVE AS A TEST
CASE FOR THE NEW TECHNOLOGY,

22

00:01:00,920 --> 00:01:04,160
THE FIRST MISSION FOR CIMON WILL
ONLY UTILIZE A SELECTED RANGE

23

00:01:04,160 --> 00:01:04,900
OF CAPABILITIES.

24

00:01:05,520 --> 00:01:07,760
IF ALL GOES WELL,
AI-BASED ASSISTANTS

25

00:01:07,760 --> 00:01:09,560
LIKE CIMON WILL BE
A CRITICAL PART

26

00:01:09,640 --> 00:01:11,940
OF LONG-DURATION HUMAN
SPACE FLIGHT IN THE FUTURE.

27

00:01:12,420 --> 00:01:15,100
UNTIL THEN, ONLY TIME
WILL TELL WHAT CIMON SAYS.

28

00:01:16,560 --> 00:01:18,880
THIS WEEK'S TWITTER QUESTION
COMES FROM OZZY WHO WANTS

29

00:01:19,040 --> 00:01:21,720
TO KNOW HOW WE KEEP TRACK
OF WHERE WE ARE IN SPACE.

30

00:01:22,180 --> 00:01:24,480
THIS IS A GREAT QUESTION AND
YOU'LL FIND OUT THAT IT'S NOT

31

00:01:24,640 --> 00:01:28,200
THAT DIFFERENT THAN WHAT YOU

PROBABLY USE ON A DAILY BASIS.

32

00:01:28,400 --> 00:01:30,120
YOUR POSITION IN SPACE IS PART

33

00:01:30,160 --> 00:01:31,600
OF WHAT IS KNOWN AS
YOUR STATE VECTOR.

34

00:01:32,260 --> 00:01:34,100
THIS INCLUDES YOUR
POSITION AND VELOCITY

35

00:01:34,120 --> 00:01:35,620
IN THREE DIMENSIONS AND TIME.

36

00:01:36,300 --> 00:01:38,720
THE INTERNATIONAL SPACE STATION
ACQUIRES ITS STATE VECTOR

37

00:01:38,800 --> 00:01:41,940
AND THUS POSITION USING GPS,
NOT UNLIKE YOUR SMART PHONE.

38

00:01:42,460 --> 00:01:45,200
USING SIGNALS FROM GPS
SATELLITES ABOVE, THE COMPUTERS

39

00:01:45,200 --> 00:01:47,740
ON STATION CAN FIGURE OUT WHERE
IT IS WITH RESPECT TO EARTH

40

00:01:47,940 --> 00:01:49,020
AND WHICH DIRECTION
IT IS HEADING.

41

00:01:49,840 --> 00:01:51,700
IN FACT, THE SAME
SIGNALS ARE USED

42

00:01:51,880 --> 00:01:54,300

TO DETERMINE THE ORIENTATION,
OR ATTITUDE, OF STATION.

43

00:01:54,620 --> 00:01:57,000

SO NEXT TIME YOU FIND
YOURSELF NAVIGATING VIA GPS,

44

00:01:57,440 --> 00:02:00,180

JUST KNOW THAT THE INTERNATIONAL
SPACE STATION IS DOING THE EXACT

45

00:02:00,460 --> 00:02:00,960

SAME THING.

46

00:02:02,400 --> 00:02:05,500

KEEP SENDING IN YOUR QUESTIONS
USING THE HASHTAG SPACETOGROUND,

47

00:02:05,900 --> 00:02:07,380

WE'LL SEE YOU NEXT WEEK.