



**Space**to**Ground**

1  
00:00:02,696 --> 00:00:04,656  
"HOUSTON, STATION  
ON SPACE TO GROUND."

2  
00:00:05,186 --> 00:00:07,256  
WELCOME TO SPACE TO  
GROUND, I'M ISIDRO REYNA.

3  
00:00:07,656 --> 00:00:09,616  
THIS WEEK THREE NEW  
CREW MEMBERS LAUNCHED

4  
00:00:09,616 --> 00:00:10,996  
TO THE INTERNATIONAL  
SPACE STATION.

5  
00:00:13,576 --> 00:00:15,516  
THE NEW CREW IS ADJUSTING  
TO LIFE ON STATION

6  
00:00:15,856 --> 00:00:17,566  
AFTER A SUCCESSFUL  
LAUNCH AND DOCKING

7  
00:00:17,566 --> 00:00:18,836  
OF THEIR SOYUZ SPACECRAFT.

8  
00:00:19,356 --> 00:00:21,786  
THE SOYUZ SPACECRAFT CARRYING  
NICK HAGUE AND CHRISTINA KOCH

9  
00:00:21,786 --> 00:00:25,096  
OF NASA AND ALEXEY OVCHININ  
OF ROSCOSMOS LAUNCHED

10  
00:00:25,096 --> 00:00:27,656  
ON THURSDAY MARCH 14 FROM  
THE BAIKONUR COSMODROME

11

00:00:27,656 --> 00:00:28,306  
IN KAZAKHSTAN.

12  
00:00:29,146 --> 00:00:31,206  
HAGUE, KOCH AND OVCHININ DOCKED

13  
00:00:31,206 --> 00:00:34,426  
TO THE SPACE STATION'S RASSVET  
MODULE AFTER A FOUR-ORBIT,

14  
00:00:34,636 --> 00:00:37,496  
SIX-HOUR JOURNEY, AND OPENED  
THE HATCH ABOUT TWO HOURS LATER.

15  
00:00:38,416 --> 00:00:39,736  
THE ARRIVAL OF HAGUE, KOCH

16  
00:00:39,736 --> 00:00:42,056  
AND OVCHININ RESTORES THE  
STATION'S CREW COMPLEMENT

17  
00:00:42,056 --> 00:00:42,456  
TO SIX.

18  
00:00:43,076 --> 00:00:45,786  
THEY HAVE JOINED ANNE MCCLAIN  
OF NASA, DAVID SAINT-JACQUES

19  
00:00:45,786 --> 00:00:47,226  
OF THE CANADIAN SPACE AGENCY

20  
00:00:47,416 --> 00:00:50,676  
AND EXPEDITION 59 COMMANDER  
OLEG KONENENKO OF ROSCOSMOS.

21  
00:00:51,296 --> 00:00:53,596  
THE CREW MEMBERS WILL SPEND  
MORE THAN SIX MONTHS CONDUCTING

22

00:00:53,596 --> 00:00:57,416  
ABOUT 250 SCIENCE INVESTIGATIONS  
IN FIELDS SUCH AS BIOLOGY,

23

00:00:57,726 --> 00:01:00,676  
EARTH SCIENCE, HUMAN  
RESEARCH, PHYSICAL SCIENCES

24

00:01:00,676 --> 00:01:02,376  
AND TECHNOLOGY DEVELOPMENT.

25

00:01:02,996 --> 00:01:05,386  
THIS WEEK'S QUESTION COMES  
FROM HENNING WHO WANTS

26

00:01:05,386 --> 00:01:07,556  
TO KNOW WHY SPACESUITS  
HAVE SUCH LOW PRESSURE.

27

00:01:07,966 --> 00:01:10,866  
GREAT QUESTION HENNING -  
IT HAS TO DO WITH MOBILITY.

28

00:01:12,326 --> 00:01:16,196  
THE SPACE STATION IS PRESSURIZED  
TO 14.7 POUNDS PER SQUARE INCH,

29

00:01:16,366 --> 00:01:18,086  
PRETTY MUCH WHAT YOU  
WOULD FIND HERE ON EARTH.

30

00:01:18,556 --> 00:01:21,226  
IT'S COMFORTABLE AND YOU CAN  
KEEP THE SPACE STATION AIR

31

00:01:21,226 --> 00:01:23,186  
IN A MIXED NITROGEN-OXYGEN  
ENVIRONMENT.

32

00:01:23,446 --> 00:01:24,966

AGAIN, VERY MUCH LIKE ON EARTH.

33

00:01:25,686 --> 00:01:27,786

U.S. SPACESUITS, THOUGH,  
ARE PRESSURIZED CLOSER

34

00:01:27,786 --> 00:01:29,706

TO 4.3 POUNDS PER SQUARE INCH.

35

00:01:30,396 --> 00:01:33,016

ASTRONAUTS HAVE TO SPEND A  
LOT OF TIME PRE-BREATHING

36

00:01:33,186 --> 00:01:35,296

AND PURGING NITROGEN  
FROM THEIR BLOOD STREAM

37

00:01:35,566 --> 00:01:38,116

TO MAINTAIN A 100%  
OXYGEN ENVIRONMENT,

38

00:01:38,536 --> 00:01:41,326

BUT THE LOW PRESSURE ALLOWS THE  
SUIT TO BE A LOT MORE FLEXIBLE,

39

00:01:41,626 --> 00:01:44,096

WHICH IS MUCH NEEDED WHEN  
YOU HAVE TO SPEND SIX

40

00:01:44,096 --> 00:01:47,256

AND A HALF HOURS FLEXING  
RIGID SPACE GLOVES TO DO WORK

41

00:01:47,256 --> 00:01:48,656

ON THE OUTSIDE OF  
THE SPACE STATION.