



1  
00:00:20,840 --> 00:00:18,470  
space probes like Voyager have visited

2  
00:00:24,080 --> 00:00:20,850  
many of our nearby planets sending back

3  
00:00:27,200 --> 00:00:24,090  
stunning pictures as robots they accept

4  
00:00:30,529 --> 00:00:27,210  
commands and perform tasks remotely for

5  
00:00:33,280 --> 00:00:30,539  
millions of miles from Earth today NASA

6  
00:00:36,020 --> 00:00:33,290  
is developing a new generation of robots

7  
00:00:38,090 --> 00:00:36,030  
robotics will play a major role in the

8  
00:00:40,810 --> 00:00:38,100  
construction and maintenance of NASA's

9  
00:00:45,650 --> 00:00:40,820  
manned space station dude rebuilt in

10  
00:00:48,410 --> 00:00:45,660  
1990s a Jet Propulsion Laboratory in

11  
00:00:51,020 --> 00:00:48,420  
Pasadena California simulations are

12  
00:00:53,420 --> 00:00:51,030  
underway with a robotic gripper capable

13  
00:00:56,569 --> 00:00:53,430

of transmitting the sense of feel back

14

00:00:58,849 --> 00:00:56,579

to it's User other NASA centers are also

15

00:01:01,580 --> 00:00:58,859

involved in robotics research for the

16

00:01:04,640 --> 00:01:01,590

space station at Ames in Mountain View

17

00:01:06,620 --> 00:01:04,650

California a unique system for operating

18

00:01:10,070 --> 00:01:06,630

robots is being explored using

19

00:01:13,700 --> 00:01:10,080

especially sensing some lipton glove as

20

00:01:18,770 --> 00:01:13,710

I make a fist gesture the pictures on

21

00:01:20,870 --> 00:01:18,780

the end effector clothes robotics

22

00:01:23,539 --> 00:01:20,880

research at NASA's Johnson Space Center

23

00:01:26,749 --> 00:01:23,549

in Houston is being done on this robotic

24

00:01:28,910 --> 00:01:26,759

retriever the free-flying helper will be

25

00:01:31,010 --> 00:01:28,920

used to retrieve loose tools and even

26

00:01:35,319 --> 00:01:31,020

astronauts who get separated from the

27

00:01:40,340 --> 00:01:38,270

taking the lead in robotics research is

28

00:01:43,100 --> 00:01:40,350

Goddard Space Flight Center Greenbelt

29

00:01:45,649 --> 00:01:43,110

Maryland they have evaluated most

30

00:01:48,529 --> 00:01:45,659

present day technology used in robotics

31

00:01:50,810 --> 00:01:48,539

and are designing a specialized robot

32

00:01:54,710 --> 00:01:50,820

called the flight teller robotic

33

00:01:57,980 --> 00:01:54,720

servicer or fts researchers plan to

34

00:02:03,319 --> 00:01:57,990

evaluate its design using these arms in

35

00:02:06,410 --> 00:02:03,329

a series of Space Station passes robots

36

00:02:09,020 --> 00:02:06,420

will play a key role in space endeavors