



AHEAD OF ITS TIME: HUBBLE'S CONTROL CENTER

1
00:00:05,110 --> 00:00:02,550
just about everyone has seen and been

2
00:00:07,590 --> 00:00:05,120
amazed by the hubble space telescope's

3
00:00:10,230 --> 00:00:07,600
incredible images of our universe

4
00:00:12,789 --> 00:00:10,240
from star-forming nebula and gigantic

5
00:00:15,749 --> 00:00:12,799
galaxies to the beautiful planets in our

6
00:00:17,910 --> 00:00:15,759
solar system for over 30 years hubble

7
00:00:19,510 --> 00:00:17,920
has been rewriting the textbooks as it

8
00:00:22,150 --> 00:00:19,520
continues to expand our own

9
00:00:24,710 --> 00:00:22,160
understanding of the universe

10
00:00:27,509 --> 00:00:24,720
but operating a telescope in space isn't

11
00:00:30,150 --> 00:00:27,519
an easy task as hubble orbits the earth

12
00:00:32,229 --> 00:00:30,160
once every 90 minutes it's not exactly

13
00:00:34,069 --> 00:00:32,239

as simple as just spinning the telescope

14

00:00:35,270 --> 00:00:34,079

around and telling it to take a quick

15

00:00:39,030 --> 00:00:35,280

picture

16

00:00:42,950 --> 00:00:39,040

and that's where the stock comes in

17

00:00:46,069 --> 00:00:42,960

dedicated on february 14 1984 at nasa

18

00:00:48,549 --> 00:00:46,079

goddard space flight center the stock or

19

00:00:50,790 --> 00:00:48,559

the space telescope operations control

20

00:00:53,990 --> 00:00:50,800

center operates the hubble space

21

00:00:56,470 --> 00:00:54,000

telescope on its important mission

22

00:00:58,790 --> 00:00:56,480

built in the early 1980s this historic

23

00:01:01,990 --> 00:00:58,800

location was one of the most complex

24

00:01:04,149 --> 00:01:02,000

satellite control centers ever developed

25

00:01:06,230 --> 00:01:04,159

the amazing mines working at the stock

26

00:01:08,149 --> 00:01:06,240

maintain the health safety and

27

00:01:10,710 --> 00:01:08,159

performance of the telescope as it

28

00:01:14,149 --> 00:01:10,720

speeds around earth at 17

29

00:01:17,270 --> 00:01:14,159

500 miles per hour

30

00:01:19,270 --> 00:01:17,280

crewed 24 hours a day seven days a week

31

00:01:21,910 --> 00:01:19,280

the team at the stock evolved with

32

00:01:24,789 --> 00:01:21,920

changes to computing technology

33

00:01:26,710 --> 00:01:24,799

in 1999 goddard upgraded the stocks

34

00:01:28,789 --> 00:01:26,720

computers from mini computers to

35

00:01:31,429 --> 00:01:28,799

personal workstations

36

00:01:33,510 --> 00:01:31,439

and in 2011 the stock utilized

37

00:01:36,469 --> 00:01:33,520

smartphone technology and automated

38

00:01:38,950 --> 00:01:36,479

processes relieving the need for 24 7

39

00:01:40,710 --> 00:01:38,960

staffing

40

00:01:43,270 --> 00:01:40,720

while the stock has undergone some

41

00:01:45,590 --> 00:01:43,280

changes over the years one thing remains

42

00:01:48,310 --> 00:01:45,600

the same the team's commitment to the

43

00:01:49,830 --> 00:01:48,320

hubble space telescope

44

00:01:52,230 --> 00:01:49,840

the women and men of the mission

45

00:01:54,310 --> 00:01:52,240

operations team have been relentless in

46

00:01:56,389 --> 00:01:54,320

finding ingenious ways to prolong

47

00:01:58,550 --> 00:01:56,399

hubble's life so we can do science as

48

00:02:01,270 --> 00:01:58,560

long as possible

49

00:02:03,830 --> 00:02:01,280

today the operations team members at the

50

00:02:06,230 --> 00:02:03,840

stock continue to operate the telescope

51

00:02:08,630 --> 00:02:06,240

capturing data and images of the cosmos

52

00:02:10,630 --> 00:02:08,640

for all of us to enjoy allowing hubble