



1  
00:00:00,200 --> 00:00:03,336



2  
00:00:03,369 --> 00:00:05,805  
[Erik Conway] Recently, one of  
our audio technicians discovered

3  
00:00:05,838 --> 00:00:08,741  
a cache of audio  
recordings that have been

4  
00:00:08,774 --> 00:00:12,145  
sitting in a box some place  
at the Lab for decades.

5  
00:00:12,178 --> 00:00:15,248  
So the audio technician set  
out to digitize them

6  
00:00:15,281 --> 00:00:18,618  
and as a result is some really  
fantastic old recordings

7  
00:00:18,651 --> 00:00:20,219  
that sound new.

8  
00:00:20,252 --> 00:00:23,489  
This is Robertson Stevens  
of the California Institute

9  
00:00:23,522 --> 00:00:26,659  
of Technology, Jet  
Propulsion Laboratory.

10  
00:00:26,692 --> 00:00:28,928  
[Conway] One was of  
President Eisenhower

11  
00:00:28,961 --> 00:00:33,433

on a early recorded radio  
transmission between JPL

12

00:00:33,466 --> 00:00:35,501

and Bell Labs on  
the East Coast,

13

00:00:35,534 --> 00:00:38,671

via what was called the  
Echo Balloon.

14

00:00:38,704 --> 00:00:40,973

It was a satellite  
balloon intended to be

15

00:00:41,006 --> 00:00:42,776

a communications satellite.

16

00:00:43,476 --> 00:00:47,313

This is President  
Eisenhower speaking.

17

00:00:47,346 --> 00:00:51,050

It is a great personal  
satisfaction to participate

18

00:00:51,083 --> 00:00:54,720

in this first experiment  
in communications

19

00:00:54,753 --> 00:00:58,925

involving the use of the  
satellite balloon known as Echo.

20

00:00:59,458 --> 00:01:00,393

[Narrator] This is  
the satellite.

21

00:01:00,426 --> 00:01:02,128

A huge empty balloon

22

00:01:02,161 --> 00:01:04,864

here, shown while  
still in its hanger.

23

00:01:04,897 --> 00:01:07,633

The inflated balloon is  
ten stories high,

24

00:01:07,666 --> 00:01:10,369

made of a strong new  
aluminized plastic.

25

00:01:10,402 --> 00:01:13,906

Strong, yet only half as  
thick as the cellophane

26

00:01:13,939 --> 00:01:16,008

around a package  
of cigarettes.

27

00:01:16,041 --> 00:01:18,778

[Conway] One of the other tapes  
that our audio technician found

28

00:01:18,811 --> 00:01:21,047

was of a conversation  
between Jack James,

29

00:01:21,080 --> 00:01:24,150

who was the Mariner  
Interplanetary Program manager

30

00:01:24,183 --> 00:01:26,953

at the time here at JPL and  
Astronaut John Glenn.

31

00:01:26,986 --> 00:01:28,121

[John Glenn] Hello?

32

00:01:28,154 --> 00:01:29,455

[Jack James] Yes, can you read me better now, Colonel?

33

00:01:29,488 --> 00:01:30,389

[Glenn] Yes.

34

00:01:30,423 --> 00:01:31,958

Hear you loud and clear now. In good shape.

35

00:01:31,991 --> 00:01:34,627

This was an active satellite called, "Project Relay,"

36

00:01:34,660 --> 00:01:38,364

which retransmitted the conversation.

37

00:01:38,397 --> 00:01:40,099

[Glenn] Now, I understand we're on rather a long,

38

00:01:40,132 --> 00:01:41,234

long-distance hook-up.

39

00:01:41,267 --> 00:01:43,603

[James] Yes sir, I think so.

40

00:01:43,636 --> 00:01:46,372

This Relay Satellite is doing a very good job, is it not?

41

00:01:46,405 --> 00:01:48,574

[Glenn] Well, I was thinking the same thing here.

42

00:01:48,607 --> 00:01:51,410

This just sounds like normal  
telephone conversation.

43

00:01:51,443 --> 00:01:55,615

At the time we had our first  
satellite, I don't think any

44

00:01:55,648 --> 00:01:58,851

of us ever thought that we'd  
be talking to each other

45

00:01:58,884 --> 00:02:03,189

via satellite, just in this  
short time later.

46

00:02:03,222 --> 00:02:06,492

[Conway] JPL takes the expertise  
it developed in communications

47

00:02:06,525 --> 00:02:09,629

generally and builds its own  
interplanetary network,

48

00:02:09,662 --> 00:02:11,664

which we call the  
Deep Space Network.

49

00:02:11,697 --> 00:02:14,767

And carries it on in to  
doing what it wanted to do,

50

00:02:14,800 --> 00:02:17,303

and explore the planets.

51

00:02:17,336 --> 00:02:19,972

I love this kind of stuff  
because I'm a historian!

52

00:02:20,005 --> 00:02:22,074

It's critical for us  
to save our past

53

00:02:22,107 --> 00:02:25,077

because it can help  
inform our future.

54

00:02:25,110 --> 00:02:28,981

[Lyndon Johnson] Let us all  
continue to work to see

55

00:02:29,014 --> 00:02:33,352

that these new means of  
communication replace

56

00:02:33,385 --> 00:02:39,559

suspicion with understanding,  
hostility and isolation

57

00:02:39,592 --> 00:02:43,095

with cooperation  
and ignorance