

A woman with short dark hair, wearing a white sleeveless dress and high-heeled sandals, stands on a dark platform. She is looking upwards at a large, complex satellite component that is being held or positioned by a robotic arm. The component is metallic and has a grid-like structure. The background is dark, suggesting an industrial or laboratory setting.

**GODDARD
SPACE FLIGHT
CENTER**

SPACEBACK

**MARJORIE TOWNSEND &
DON YA DOUGLAS-BRADSHAW**

1

00:00:01,568 --> 00:00:04,237

A very great deal of effort and testing goes

2

00:00:04,237 --> 00:00:06,373

into building a successful spacecraft.

3

00:00:06,639 --> 00:00:07,307

For example,

4

00:00:07,307 --> 00:00:11,144

every transistor and integrated circuit
is tested with an X-ray machine

5

00:00:11,144 --> 00:00:15,515

to see if there's anything inside
that could cause a problem later on.

6

00:00:15,882 --> 00:00:18,852

In 1951 Townsend became the first woman to earn an engineering degree

7

00:00:18,852 --> 00:00:21,621

from George Washington University.

8

00:00:23,056 --> 00:00:26,326

She later became the first female project manager for a satellite mission at NASA

9

00:00:26,359 --> 00:00:30,030

and worked on the Small Astronomy Satellite series, launching three satellites in the 1970s.

10

00:00:30,630 --> 00:00:32,932

I'm the project manager for Lucy.

11

00:00:32,932 --> 00:00:37,170

But before I became the project manager
for Lucy, I was actually an engineer

12

00:00:37,170 --> 00:00:38,338

at NASA Goddard.

13

00:00:38,338 --> 00:00:40,707

So I've actually been working here

14

00:00:40,707 --> 00:00:44,010

for 30 years, and when I started,
I was actually a co-op student.

15

00:00:44,010 --> 00:00:48,381

I mean, when things I do as a project
manager is to assemble

16

00:00:48,415 --> 00:00:51,451

a team of scientists and engineers

17

00:00:51,451 --> 00:00:55,955

and technicians and business people
to develop the concept,