



1  
00:00:19,750 --> 00:00:17,189  
thank you

2  
00:00:21,830 --> 00:00:19,760  
store outside huntsville alabama

3  
00:00:23,509 --> 00:00:21,840  
fourteen years ago amy lost her left

4  
00:00:25,910 --> 00:00:23,519  
hand in a car accident

5  
00:00:26,710 --> 00:00:25,920  
today her job's a little easier thanks

6  
00:00:29,189 --> 00:00:26,720  
to a simple

7  
00:00:30,630 --> 00:00:29,199  
but unique device derived from nasa

8  
00:00:35,830 --> 00:00:30,640  
robotics technology

9  
00:00:39,030 --> 00:00:37,750  
after her accident amy was fitted with a

10  
00:00:41,910 --> 00:00:39,040  
standard prosthetic

11  
00:00:44,389 --> 00:00:41,920  
hook as it's commonly called she founded

12  
00:00:47,510 --> 00:00:44,399  
strap suspension system cumbersome

13  
00:00:50,790 --> 00:00:47,520

putting the prosthesis on is

14

00:00:52,310 --> 00:00:50,800

one of the problems how about operating

15

00:00:54,229 --> 00:00:52,320

your terminal device

16

00:00:55,990 --> 00:00:54,239

moving her right shoulder to operate the

17

00:00:57,830 --> 00:00:56,000

device was painful

18

00:00:59,189 --> 00:00:57,840

and she couldn't do all she needed to

19

00:01:02,470 --> 00:00:59,199

with something that simply

20

00:01:05,189 --> 00:01:02,480

opened and closed and so shortly

21

00:01:08,710 --> 00:01:05,199

thereafter i just put it aside

22

00:01:13,510 --> 00:01:08,720

and um just went back to using

23

00:01:15,429 --> 00:01:13,520

what i had my one hand

24

00:01:16,950 --> 00:01:15,439

the new devices developed for mrs

25

00:01:18,950 --> 00:01:16,960

bradley at nasa marshall

26

00:01:23,830 --> 00:01:18,960

attached to a socket which slides on

27

00:01:31,670 --> 00:01:25,590

she works with this spatula type

28

00:01:34,870 --> 00:01:33,190

and she's come up with a number of other

29

00:01:38,149 --> 00:01:34,880

applications for the clip

30

00:01:38,630 --> 00:01:38,159

she uses at work i'm able to do things

31

00:01:41,670 --> 00:01:38,640

that

32

00:01:43,789 --> 00:01:41,680

i have not been able to do before and so

33

00:01:46,789 --> 00:01:43,799

they've just given me a little more

34

00:01:48,870 --> 00:01:46,799

self-confidence

35

00:01:50,870 --> 00:01:48,880

they've relieved a lot of pain that i

36

00:01:52,830 --> 00:01:50,880

was having from overusing my right

37

00:01:57,350 --> 00:01:52,840

shoulder

38

00:01:59,749 --> 00:01:57,360

and and of course i can curl my hair

39

00:02:01,109 --> 00:01:59,759

it was jim carden who got nasa started

40

00:02:03,429 --> 00:02:01,119

on this project

41

00:02:05,749 --> 00:02:03,439

an engineer at marshall for 30 years

42

00:02:06,789 --> 00:02:05,759

cardin lost his left hand in his small

43

00:02:09,350 --> 00:02:06,799

lumber business

44

00:02:10,790 --> 00:02:09,360

shortly before he retired when i looked

45

00:02:12,630 --> 00:02:10,800

out there and there was nothing

46

00:02:15,830 --> 00:02:12,640

available but a hook

47

00:02:19,350 --> 00:02:15,840

i said it's it's a sad

48

00:02:21,270 --> 00:02:19,360

case for us amputees cardin talked to

49

00:02:23,030 --> 00:02:21,280

some of his co-workers at marshall

50

00:02:25,110 --> 00:02:23,040

including aerospace engineer pete

51

00:02:27,110 --> 00:02:25,120

belcher designer tommy vest

52

00:02:29,110 --> 00:02:27,120

and john richardson from the technology

53

00:02:31,830 --> 00:02:29,120

utilization office

54

00:02:34,390 --> 00:02:31,840

borrowing from robotics technology they

55

00:02:35,990 --> 00:02:34,400

came up with a number of devices

56

00:02:37,910 --> 00:02:36,000

though simple this bell-shaped

57

00:02:38,869 --> 00:02:37,920

attachment is one of jim carden's

58

00:02:40,790 --> 00:02:38,879

favorites

59

00:02:42,309 --> 00:02:40,800

it lets him crank his fishing reel

60

00:02:45,350 --> 00:02:42,319

something he just couldn't do

61

00:02:48,390 --> 00:02:47,509

the project has also produced this heavy

62

00:02:50,710 --> 00:02:48,400

lift design

63

00:02:52,070 --> 00:02:50,720

which cardin uses around his ranch and

64

00:02:53,830 --> 00:02:52,080

lumber business

65

00:02:56,550 --> 00:02:53,840

i think still do the things i want to do

66

00:02:58,390 --> 00:02:56,560

and smile about it

67

00:02:59,990 --> 00:02:58,400

the people at marshall are now working

68

00:03:02,390 --> 00:03:00,000

on a lightweight alternative to the

69

00:03:03,430 --> 00:03:02,400

standard hook for small tasks around the

70

00:03:05,589 --> 00:03:03,440

house

71

00:03:07,270 --> 00:03:05,599

rather than the bulky shoulder harness

72

00:03:08,470 --> 00:03:07,280

it is triggered by the rotation of the

73

00:03:10,790 --> 00:03:08,480

forearm

74

00:03:12,550 --> 00:03:10,800

the simplicity of all these devices not

75

00:03:15,750 --> 00:03:12,560

only makes them easy to use

76

00:03:17,589 --> 00:03:15,760

but inexpensive to produce nasa is now

77

00:03:18,470 --> 00:03:17,599

negotiating with a rehabilitation

78

00:03:23,270 --> 00:03:18,480

facility

79

00:03:27,990 --> 00:03:25,830

nasa's prosthetics project developing

80

00:03:29,430 --> 00:03:28,000

simple economical alternatives from